



December 2016

DOT DISCRETIONARY GRANTS

Problems with Hurricane Sandy Transit Grant Selection Process Highlight the Need for Additional Accountability

Accessible Version

GAO Highlights

Highlights of [GAO-17-20](#), a report to congressional committees

Why GAO Did This Study

In October 2012, Hurricane Sandy hit the Mid-Atlantic coast causing severe damage to transit systems in the New York City region. In response, the Disaster Relief Appropriations Act of 2013 provided approximately \$10.9 billion for FTA's response, recovery, and resilience efforts. In December 2013, FTA announced discretionary grants to be awarded on a competitive basis for projects to increase the resilience of transit systems to withstand future disasters in the Sandy-affected areas. In November 2014, FTA announced 40 projects selected to receive about \$3.6 billion.

GAO was asked to review FTA's discretionary transit resilience grants. This report examines FTA's process for evaluating and selecting projects and the extent to which the selected projects reflect the grant program's policy priorities. GAO reviewed program documents and guidance; analyzed project proposals; and interviewed FTA officials.

What GAO Recommends

GAO recommends that DOT issue a directive for discretionary grant programs that includes requirements to, among other things, document key decisions and align the grant programs' policy priorities with the evaluation process. GAO also recommends that DOT examine FTA-funded transit resilience projects for potential duplication with other efforts and determine if realigning or rescinding those funds is appropriate. DOT concurred with the recommendations but disagreed with aspects of GAO's findings. GAO continues to believe its findings are valid, as discussed in the report.

View [GAO-17-20](#). For more information, contact Mark Goldstein at (202) 512-2834 or goldsteinm@gao.gov.

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Problems with Hurricane Sandy Transit Grant Selection Process Highlight the Need for Additional Accountability

What GAO Found

The Federal Transit Administration (FTA) evaluated and selected Hurricane Sandy transit resilience projects for award based on a multi-step process, but did not take sufficient steps to ensure the process was consistent or appropriately documented. First, four technical review teams with expertise in infrastructure projects, program management, and hazard mitigation evaluated and rated projects. FTA's program office then conducted a quality assurance review before forwarding the results to FTA and Department of Transportation (DOT) leadership for review and final selection decisions. However, the technical review teams were inconsistent in how they assigned cost-effectiveness ratings, and it is unclear the extent to which the teams screened projects for fulfillment of minimum program requirements, such as whether the project would be built to the appropriate flood standards. Additionally, since DOT lacks clear department-wide requirements for what should be documented when evaluating discretionary grant awards, FTA did not document key decisions including how it addressed high-level concerns, such as potential implementation challenges, raised by reviewers regarding 26 of the 40 funded projects. Without such documentation, FTA cannot definitively demonstrate the basis for many of its project selections—totaling \$3.6 billion—and is vulnerable to questions about the integrity of the selection process.

FTA established the grant program's policy priorities in the notice of funding availability (NOFA), but funded projects that may not address the priorities and that may no longer be needed if other resilience projects in the region are implemented. For example, one policy priority concerned project types that would be outside the scope of the program. However, while reviewers questioned whether two rail bridge replacement projects were outside the program's scope, FTA awarded these projects \$607 million. Program officials told GAO that the policy priorities were to help advise applicants on the project types FTA was seeking and that FTA did not consider them when evaluating or selecting projects for award. While the NOFA did not present the policy priorities as evaluation criteria, it also did not present them as advice and contained specific and clear language, for example, about project types outside the scope of the program. As a result, FTA may have discouraged applicants from submitting projects that may have been funded, and FTA cannot be certain that the selected projects will address its priorities. Another policy priority was that projects should promote a regional approach to resilience. To address this priority, FTA collected information from the U.S. Department of Housing and Urban Development and applicants on potential connectivity or coordination needed between submitted projects and other resilience efforts in the same area. However, FTA did not consider this information in the evaluation and selection process and funded projects that may have benefits that are duplicative of other resilience efforts in the region. Given that FTA has not yet fully obligated funding for most of these projects, determining the extent to which FTA's projects provide duplicative benefits could help ensure that the projects supported by FTA are effectively coordinated with other efforts and help identify cases where FTA-supported projects may need to be revised or may no longer be needed.

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Abbreviations

DOT	Department of Transportation
DRAA	Disaster Relief Appropriations Act, 2013
FTA	Federal Transit Administration
HUD	Department of Housing and Urban Development
MTA	New York Metropolitan Transportation Authority
NOFA	notice of funding availability
TIGER	Transportation Investment Generating Economic Recovery

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December 14, 2016

The Honorable Bill Shuster
Chairman
The Honorable Peter A. DeFazio
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

The Honorable Sam Graves
Chairman
The Honorable Eleanor Holmes Norton
Ranking Member
Subcommittee on Highways and Transit
Committee on Transportation and Infrastructure
House of Representatives

In October 2012, Hurricane Sandy hit the Mid-Atlantic coast during high tide, bringing with it a storm surge and flooding. In response, the President issued major disaster declarations for 12 states, plus the District of Columbia.¹ Parts of New York and New Jersey were the hardest hit, and mobility in the greater New York City metropolitan area was temporarily crippled, including its transit systems, which normally carry more customers than all other systems in the United States combined. In January 2013, the President signed the Disaster Relief Appropriations Act, 2013, (DRAA) which provided approximately \$50.5 billion in supplemental appropriations to 61 programs at 19 federal agencies for expenses related to Hurricane Sandy.² DRAA provided over \$13 billion to the Department of Transportation (DOT), of which \$10.9 billion was for the Federal Transit Administration's (FTA) new Public Transportation Emergency Relief Program, which had gone into effect 28

¹The President issued major disaster declarations under the Robert T. Stafford Disaster Relief and Emergency Assistance Act for specified counties within the following states: Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, and West Virginia, as well as the District of Columbia. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended January 2013, establishes the authority under which states request a presidential disaster declaration. Pub. L. No. 93-288, 88 Stat. 143 (1988). The act also established the programs and process through which the federal government provides disaster assistance to state and local governments, tribes, and certain nonprofit organizations and individuals. 42 U.S.C. §§ 5121-5207.

²Pub. L. No. 113-2, 127 Stat. 4, 35 (2013).

days before Hurricane Sandy struck the United States. FTA announced in December 2013 that almost a third of its Emergency Relief Program funds would be made available for transit resilience projects: projects that address future vulnerabilities to a public transportation facility due to the recurrence of a major disaster.³ FTA made these funds available to states, transit agencies, and other entities in the areas affected by Hurricane Sandy through a discretionary grant program. Through a discretionary grant program, Congress or federal agencies establish desired goals or outcomes, and federal agencies generally review grant applications against published selection criteria before selecting projects to receive awards. In November 2014, DOT announced that it selected 40 resilience projects in six states and the District of Columbia to receive nearly \$3.6 billion in funding.⁴

Weather-related events have cost the nation tens of billions of dollars in damages over the past decade and pose significant financial risks for the federal government. The United States Global Change Research Program has observed that the impacts and costliness of weather disasters will increase in significance as what are considered “rare” events become more common and intense due to climate change.⁵ As a result, in February 2013, we added limiting the federal government’s fiscal exposure by better managing climate change risks to our High Risk List, which calls attention to agencies and program areas that are at high risk

³78 Fed. Reg. 78486 (Dec. 26, 2013). DRAA provided FTA with \$10.9 billion for its Emergency Relief Program with approximately \$10.4 billion still available after a sequestration process was triggered under the requirements of the Balanced Budget and Emergency Deficit Control Act of 1985. FTA allocated approximately: \$3.6 billion for competitive resilience projects; \$6.5 billion for response, recovery, rebuilding, and resilience projects; and transferred \$185 million to the Federal Railroad Administration for resilience projects.

⁴79 Fed. Reg. 65762 (Nov. 5, 2014).

⁵Thomas R. Karl, Jerry M. Melillo, and Thomas C. Peterson, eds. *Global Climate Change Impacts in the United States* (Cambridge University Press: 2009). The United States Global Change Research Program coordinates and integrates the activities of 13 federal agencies that conduct research on changes in the global environment and their implications for society. The United States Global Change Research Program began as a presidential initiative in 1989 and was codified in the Global Change Research Act of 1990 [Pub. L. No. 101-606, § 103, 104 Stat. 3096, 3098 (1990)]. The United States Global Change Research Program-participating agencies are the Departments of Agriculture, Commerce, Defense, Energy, Interior, Health and Human Services, State, and Transportation; U.S. Agency for International Development; Environmental Protection Agency; National Aeronautics and Space Administration; the National Science Foundation; and the Smithsonian Institution.

due to their vulnerabilities to fraud, waste, abuse, or are most in need of transformation.⁶

You asked us to review FTA's evaluation process and awarding of discretionary transit resilience grants. This report addresses: (1) FTA's process for evaluating and selecting projects for award and any steps FTA took to ensure the process was consistent and documented, and (2) the extent to which the projects FTA selected for award reflect the grant program's purpose and policy priorities.

To assess FTA's project evaluation and selection process, we reviewed FTA documents explaining the process, including the notice of funding availability (NOFA) and training materials provided to the technical review teams that conducted the initial review of the project proposals, and FTA's decision memorandum to the Secretary of Transportation. We compared the process to DOT guidance and recommended practices we have previously identified for evaluating and selecting discretionary grant awards, as well as *Standards for Internal Control in the Federal Government*.⁷ We also analyzed FTA's documentation of the evaluation process, such as reviewers' evaluation results from FTA's Discretionary Grant System database, to determine the extent to which results were sufficiently documented at each stage of the process and demonstrated the basis for FTA's award decisions. To assess the reliability of these data, we reviewed relevant documentation and interviewed agency officials about data quality control procedures. We determined that the data were sufficiently reliable for the purposes of describing FTA's efforts to document ratings and comments for each of the evaluated projects. We also interviewed staff from FTA's Office of Program Management and those who assisted in reviewing project proposals. To determine the extent to which the projects FTA selected for award reflect the grant program's purpose and policy priorities, we reviewed and analyzed key descriptive information from all 61 project proposals submitted to FTA and compared this information to the purpose and policy priorities established in FTA's NOFA. In addition, we interviewed officials from the U.S. Department of Housing and Urban Development, which commented on

⁶GAO, *High-Risk Series: An Update*, [GAO-13-283](#) (Washington, D.C.: Feb. 14, 2013).

⁷DOT, *Financial Assistance Guidance Manual* (Washington, D.C., March 2009). GAO, *Intercity Passenger Rail: Recording Clearer Reasons for Awards Decisions Would Improve Otherwise Good Grantmaking Practices*, [GAO-11-283](#) (Washington, D.C.: Mar. 10, 2011) and GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999).

proposed FTA projects, as well as officials from each of the 10 transit agencies that applied for a grant. Appendix I provides a more detailed description of our objectives, scope, and methodology for this review.

We conducted this performance audit from November 2015 to December 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

FTA Announced about \$3 Billion in Funding for Competitive Resilience Projects

In 2012, the Moving Ahead for Progress in the 21st Century Act authorized FTA's Emergency Relief Program and provided FTA with primary responsibility for federal reimbursements for emergency response and recovery costs after an emergency or major disaster affecting public transportation systems.⁸ Following Hurricane Sandy, DRAA provided FTA with \$10.9 billion for its Emergency Relief Program for recovery, relief, and resilience efforts, with approximately \$10.4 billion of that amount still available after a sequestration process was triggered under the requirements of the Balanced Budget and Emergency Deficit Control Act of 1985.⁹ FTA allocated the funding in multiple phases for response, recovery and rebuilding, locally-prioritized resilience projects, direct transfers to other DOT offices, and competitively-selected resilience projects.

In December 2013, FTA issued a NOFA announcing about \$3 billion in funding for competitive resilience projects in response to Hurricane Sandy.¹⁰ The purpose of the grant program, as defined in the notice, was to "solicit proposals for capital projects that will protect or otherwise increase the resilience of public transportation equipment and facilities from the future recurrence of hurricanes and similar storms in the areas

⁸Pub. L. No. 112-141, 126 Stat. 405 (2012).

⁹Pub. L. No. 99-177, § 251, 99 Stat. 1037, 1063 (1985).

¹⁰78 Fed. Reg. 78486 (Dec. 26, 2013).

affected by Hurricane Sandy.” FTA defined resilience in the NOFA as “the capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.”^{11, 12} Examples of potential resilience projects included installing flood mitigation measures, strengthening systems that remove rainwater from public transportation facilities, and elevating or relocating assets located in a special flood hazard area. FTA described federal investment in public transportation resilience as necessary to reduce, better manage, and better prepare for the consequences of future disasters, including the cost of rebuilding after the next storm and the social and economic consequences of suspended or inoperable public transportation services. In addition, the notice included a section titled “Policy Priorities” in which FTA described its priorities for the grant program; for example, the notice stated that FTA would give priority to resilience projects involving infrastructure that had been damaged by Hurricane Sandy.

Eligible applicants for this grant program included states, local governmental authorities, tribal governments, and other FTA recipients¹³ that are located in or provide public transportation service in the 12 states, plus the District of Columbia, for which the President declared a major disaster under the Robert T. Stafford Disaster Relief and Emergency Assistance Act in response to Hurricane Sandy.¹⁴ Applicants also needed to meet minimum program requirements, including being a current recipient of FTA funds and identifying their source for the minimum required 25 percent non-federal cost share.¹⁵ In addition,

¹¹49 C.F.R. § 602.5.

¹²FTA defined resilience projects as those projects designed and built to address current and future vulnerabilities to a public transportation facility or system due to future occurrence or recurrence of emergencies or major disasters that are likely to occur in the geographic area in which the public transportation system is located; or projected changes in development patterns, demographics, or climate change and extreme weather patterns.

¹³Eligible applicants included (1) states and Indian tribes, (2) local governmental authorities and public transportation agencies that receive funding through FTA formula programs, (3) other entities responsible for an eligible public transportation capital project that enter into a sub-recipient arrangement with an existing FTA grantee, and (4) entities that provide intercity passenger rail service.

¹⁴Pub. L. No. 93-288, 88 Stat. 143 (1988).

¹⁵If an applicant was not a current recipient of FTA funds, it needed to provide a support letter from a current recipient stating that it was willing to partner on the project, or be an entity that provides intercity passenger rail service.

applicants were required to identify whether a submitted project was “scalable”—meaning that portions of the project had separate and independent benefits and could be undertaken independently of the whole project—and, if so, submit separate cost-effectiveness analyses for any identified scaled projects. This information was intended to help FTA award partial funding to projects when full funding was not possible.

The NOFA also described the seven criteria that FTA would use to evaluate projects that met the minimum program requirements. Table 1 provides an overview of these criteria. In addition, FTA stated that it could consider geographic diversity as well as diversity among project types in its selection of projects.

Table 1: Overview of the Federal Transit Administration’s Seven Criteria for Evaluating Resilience Grant Project Proposals

Criteria	Description of evaluation factors
Hazard mitigation cost effectiveness	Quantitative factors such as the probability of occurrence of future disasters, the potential cost of repair, the number of transit passengers affected if the asset were damaged, and qualitative factors such as the regional importance of the protected asset to overall system performance. ^a
Project implementation strategy	Completeness of the project timeline and readiness of the project to proceed with that timeline if selected for award.
Protection of most essential and vulnerable infrastructure	The vulnerability of the asset to be protected by the project, the criticality of the asset to the public transportation service, and the process used to prioritize assets for resilience improvements.
Local and regional planning collaboration and coordination	Extent of planning, collaboration, and coordination with local, state, and federal agencies to help identify and prioritize the project, and the project’s connectivity with other public transportation systems in the region.
Interdependency of the public transportation resilience project	The interdependencies of the project with other supporting infrastructure elements, such as flood management projects, and the project’s potential to shift risk to other infrastructure elements.
Local financial commitment	The viability and completeness of the project’s financing proposal, the availability of contingency reserves, and evidence of the applicant’s financial condition and ability to manage grants.
Technical capacity	The applicant’s demonstrated technical capacity to undertake the project, such as the applicant’s prior experience with projects of a similar scale and scope.

Source: GAO analysis of Notice of Funding Availability, 78 Fed. Reg. 78486 (Dec. 26, 2013). | GAO-17-20

^aApplicants completed a Hazard Mitigation Cost Effectiveness tool and submitted the resulting analysis to FTA. According to our review of the tool, it is generally more consistent with what would be called a “benefit-cost analysis” rather than a “cost-effectiveness analysis,” since both the project’s benefits and costs are expressed in monetary units, resulting in a benefit-cost ratio. For the purposes of this report, however, we will use FTA’s terminology and refer to projects’ cost-effectiveness.

FTA Selected 40 Resilience Projects to Receive about \$3.6 Billion in Funding

In March 2014, FTA received 61 proposals from 10 applicants. Applicants requested a total of \$6.6 billion, almost twice the amount of funding available. In November 2014, FTA announced that it had selected 40 projects from 9 applicants to receive about \$3.6 billion in funding, the total amount available for resilience projects.¹⁶ Appendix II provides a list of the 40 selected projects and their status as of August 2016. The amount of

¹⁶The Disaster Relief Appropriations Act of 2013 authorized DOT to use up to \$5.383 billion of the \$10.9 billion in emergency appropriation funding—which was later reduced as a result of the Balanced Budget and Emergency Deficit Control Act of 1985—for projects related to reducing the risk of damage from future disasters in areas impacted by Hurricane Sandy. Pub. L. No. 113-2, 127 Stat. 4, 35. In May 2013, FTA allocated \$1.3 billion in locally-prioritized resilience funding to four transit agencies in New York and New Jersey for projects and components intended to increase their resilience to future disasters, leaving approximately \$3.6 billion available for competitive resilience projects.

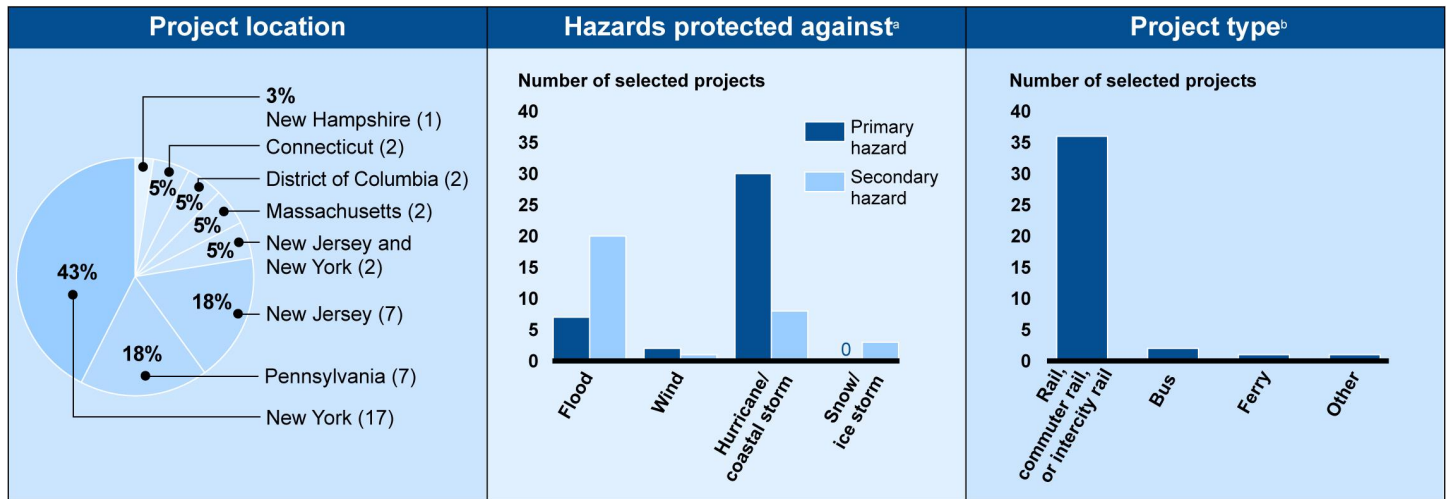
funding FTA allocated to individual projects ranged from about \$26,000 to more than \$600,000,000. Two recipients—the New York Metropolitan Transportation Authority (MTA) and the New Jersey Transit Corporation—account for almost half of the projects selected and 80 percent of the total funding allocated. See table 2 for the number of projects selected and funding allocated by recipient.

Table 2: Federal Transit Administration’s Hurricane Sandy Resilience Project Selections and Funding Allocations by Recipient

Recipient	Number of projects selected	Amount of funding allocated
City of Nashua, NH	1	\$25,781
Connecticut Department of Transportation	2	\$169,957,772
Massachusetts Bay Transportation Authority	2	\$35,065,132
New Jersey Transit Corporation	5	\$1,276,022,811
New York City Department of Transportation	1	\$191,550,000
New York Metropolitan Transportation Authority	14	\$1,598,967,104
Port Authority of New York and New Jersey	6	\$212,537,025
Southeastern Pennsylvania Transportation Authority	7	\$86,758,000
Washington Metropolitan Area Transit Authority	2	\$21,000,000
Total	40	\$3,591,883,625

Source: GAO analysis of Federal Transit Administration information. | GAO-17-20

Selected projects include, for example, flood mitigation efforts—such as the construction of seawalls and flood barriers—rail bridge replacements, and the hardening of critical transit infrastructure. Of the 40 selected projects, 26 are located in New York or New Jersey. Thirty-six of the selected projects protect, among other things, some combination of rail, commuter rail, or intercity passenger rail operations, with the remaining four projects solely protecting bus, ferry, or other operations. In addition, the majority of selected projects are intended to protect public transportation systems from hurricanes and coastal storms and half of the selected projects are to provide secondary protection against floods. Figure 1 describes the location and general characteristics of the projects FTA selected for award.

Figure 1: Location and General Characteristics of Selected Federal Transit Administration Resilience Projects

Source: GAO analysis of Federal Transit Administration information. | GAO-17-20

Note: For project location, percentages do not equal 100 due to rounding.

^aFor one project, the applicant stated that the primary hazard the project was intended to protect against was both a Hurricane/Coastal Storm and Snow/Ice Storm. For another project, the applicant did not list a secondary hazard against which the project was intended to protect. Seven other projects listed multiple secondary hazards.

^bOf the 36 selected projects intended to protect rail, commuter rail, or intercity passenger rail operations, 5 are also intended to protect bus, ferry, and/or other operations.

Before FTA will obligate funds to the selected projects, recipients need to submit a separate grant application to FTA. FTA advised recipients to work with their FTA regional office to develop and submit the grant application, and to develop a timeline for project development and award. As of August 2016, FTA had fully obligated funding for 11 of the 40 selected projects and partially obligated funding for another 8, amounting to about \$268 million. Grant applications for the other 21 projects were in development. As of August 2016, one project—a back-up power supply project—was completed. FTA estimates that the last of the remaining projects will be completed by June 2022.¹⁷ See appendix II for funding status and estimated completion dates for each of the 40 selected projects.

¹⁷The Federal Railroad Administration is administering the grant for 1 of the 40 selected projects.

In light of increasing recovery costs associated with Hurricane Sandy, FTA issued a notice in the Federal Register in July 2016 in which FTA established a procedure for resilience grant recipients to request the realignment of funding previously allocated for resilience projects to fund eligible disaster recovery expenses.¹⁸ Funds realigned under this procedure must be used for disaster recovery expenses or be returned to FTA upon completion of the recovery effort. Further, realigning such funds is subject to the terms and conditions specified in the *Federal Register* notice and must be approved by FTA. According to FTA officials, as of August 2016, none of the grant recipients had applied to realign their competitively-awarded resilience funds for recovery purposes.

FTA Developed a Competitive Selection Process, but Did Not Take Sufficient Steps to Ensure the Process Was Consistent or Document Key Decisions

FTA developed a multi-step process to evaluate and select projects for award, but did not ensure that the process was consistent or appropriately documented. Submitted projects were first evaluated by four interagency technical review teams followed by a quality assurance review by FTA's Office of Program Management. However, FTA's evaluation process was not consistent, and FTA did not prepare an evaluation plan in advance of the competition to help ensure consistency—as DOT guidance requires—raising questions about FTA's funding determinations. Additionally, FTA did not document key decisions resulting from its quality assurance review, including how it addressed high-level project concerns raised by reviewers, and DOT lacks clear requirements for what types of key decisions need to be documented. Without documentation, FTA cannot definitively demonstrate the basis for all of its project selections.

FTA Developed a Multi-Step Competitive Selection Process to Evaluate Projects

FTA followed a multi-step process to evaluate the 61 submitted proposals and select projects for award.¹⁹ Project proposals were received by FTA's Office of Program Management (the program office), which managed and directed the grant program. The proposals were then: (1) evaluated and rated by interagency technical review teams, (2) reviewed by the program office to help ensure that the teams' ratings were consistent and accurate, (3) presented to the FTA Administrator, (4) provided for comment to other

¹⁸81 Fed. Reg. 43705 (Jul. 5, 2016).

¹⁹FTA received 61 proposals in response to the NOFA. FTA combined two proposals due to their similarity, separated one into three distinct proposals, and found one to be ineligible, resulting in 61 project proposals for evaluation.

federal agencies that were involved in rebuilding from Hurricane Sandy, and (5) presented to the Secretary of Transportation, who ultimately approved the funding recommendations proposed by the Administrator.

Technical Review Teams

FTA divided the proposals among four interagency technical review teams, which were responsible for reviewing project proposals and assigning ratings to them. The teams consisted of technical staff from FTA with expertise in infrastructure projects and program management, and staff from the Federal Railroad Administration, the Federal Highway Administration, and the Federal Emergency Management Agency with expertise in flood plains and hazard mitigation. Each team had four members, including an FTA team leader who was responsible for overseeing the team's reviews and coordinating with the program office. The program office assigned each team 15 to 16 projects, taking steps to distribute applicants and project types to teams based in part on regional or technical expertise when possible and to help ensure that closely related proposals were reviewed together.

Once assigned, technical review team members individually reviewed proposals before meeting as a group to discuss projects and develop consensus team ratings. According to training materials provided to reviewers, the teams were to first verify that proposals met four minimum program requirements, that the applicant: (1) was eligible (that is, a current recipient of FTA funds, a non-current recipient of FTA funds with a support letter from a current recipient, or a provider of intercity passenger rail service); (2) demonstrated availability of matching funds; (3) certified that the project would be designed and built to be resilient to one foot above the "base flood elevation;"²⁰ and (4) submitted a cost-effectiveness analysis. The teams then evaluated projects against the seven criteria outlined in the NOFA to determine a "high," "medium," or "low" rating for each criterion. For example, according to training materials provided to reviewers, for a project to receive a "high" rating in the interdependency criterion, the project needed to demonstrate that it would provide direct benefits to other supporting infrastructure and that it would not shift risk to other infrastructure or assets. To evaluate the cost-effectiveness criterion, teams received support from the engineering firm that helped develop

²⁰The "base flood elevation" is the computed elevation to which floodwater is anticipated to rise during a flood that has an estimated 1 percent chance of occurring annually. Specifically, applicants were required to certify that projects would be designed and built to be resilient to the best available Federal Emergency Management Agency flood hazard information as of February 1, 2014, plus one foot.

FTA's cost-effectiveness tool for this grant program. FTA contracted with the firm to review projects' cost-effectiveness analyses and supporting documentation, provide an expert opinion on the quality of the analysis and the overall cost-effectiveness of each project, and provide a "high," "medium," or "low" rating for the criterion. Based primarily on the total number of "high," "medium," and "low" ratings a project received for the seven criteria, the teams then determined an overall rating of "highly recommended," "recommended," or "not recommended." For example, if a project received "high" ratings in four of the seven evaluation criteria, it qualified for an overall rating of "highly recommended."

The technical review teams also provided detailed comments on each project to explain the ratings they provided. While the teams were not to alter scores based on judgments outside the criteria, training materials instructed them to note any unanswered questions, whether projects should be considered at a scalable amount, projects that could be done as part of a recovery project, or projects where the primary purpose might not be resilience. The teams recorded their project ratings and comments in FTA's Discretionary Grant System, an electronic system for organizing grant competition reviews.²¹

Program Office

The program office performed a quality assurance review following the technical review teams' evaluations to help ensure that the teams' ratings were consistent and accurate, according to the project selection memorandum FTA provided to the Secretary of Transportation. Specifically, this review was to focus on ensuring that the teams' comments supported the ratings they provided for each criterion and that the ratings for the seven criteria aligned with the overall project rating. According to program officials, if the ratings did not align, they discussed them with team leaders to ensure the ratings were correct. For example, program officials stated that if a team commented on the high-quality of a project's cost-effectiveness analysis, but rated the cost-effectiveness criterion "low," program officials would have confirmed the rating with the team. Program officials stated that they asked each team leader to confirm the ratings for about five of their team's projects.

²¹In addition, during this phase of the evaluation process, 3 of FTA's 10 regional offices—which are the 3 offices that support the states within the area affected by Hurricane Sandy for which FTA received project proposals—conducted "fatal flaw" reviews of projects to identify any known legal, technical, or financial issues. The regional offices did not find any fatal flaws.

FTA Administrator

Following the quality assurance review, the program office briefed the FTA Administrator on the results of the technical review teams' evaluations, according to program officials. The program office prepared an executive summary for the Administrator that included, among other things, the overall project rating, the amount of funding requested by the applicant, whether the technical review team recommended funding at the full or scaled amount, and notes for each project. The notes summarized the projects and, in some cases, included portions of the technical review teams' comments, such as information about projects' cost-effectiveness or scalability. The summary included 19 projects that were "highly recommended," 35 projects that were "recommended," and 7 projects that were "not recommended" for funding.

Federal Agencies

FTA then conducted outreach with eight federal agencies involved in rebuilding from Hurricane Sandy to identify any gaps in information relating to how submitted projects might affect those agencies' recovery and resilience efforts.²² Specifically, FTA provided the agencies with an unrated list of all 61 submitted projects—including the amount of funding requested and a brief description of each—and asked them whether they were funding the same work, whether the projects would be interdependent with other recovery or resilience efforts, and whether they would need to issue any permitting approvals. FTA received responses from two agencies. The U.S. Department of Housing and Urban Development (HUD) provided comments noting that some projects would need to be coordinated with other ongoing resilience efforts. According to program officials, the Federal Emergency Management Agency stated that it had no comments.

Secretary of Transportation

Finally, FTA provided the Secretary of Transportation with potential funding scenarios that included the overall project ratings, the amount of funding requested by applicants, and FTA's proposed allocations. Each scenario involved funding all 19 "highly recommended" projects at either scaled or full requested amounts—which amounted to about \$1.7 billion—and some combination of "recommended" projects in order to allocate the approximately \$3.6 billion available for resilience projects. To help the Secretary decide which of the projects with "recommended" ratings to

²²FTA conducted outreach with the Army Corps of Engineers, Economic Development Administration (Department of Commerce), National Oceanic and Atmospheric Administration (Department of Commerce), Department of Energy, Federal Emergency Management Agency (Department of Homeland Security), Department of Housing and Urban Development, Department of Interior, and Environmental Protection Agency.

fund, FTA provided the Secretary with two options for prioritizing projects for funding. Both options involved selecting “recommended” projects for award based on their ratings in three of the seven evaluation criteria. The Secretary selected the option that prioritized “recommended” projects for funding based on their ratings in the criteria of: (1) Cost-effectiveness, (2) Protection of Most Essential and Vulnerable Infrastructure, and (3) Interdependency of the Public Transportation Resilience Project. Based on the “recommended” projects’ ratings in those three criteria, FTA assembled a final list of funding recommendations, which the Secretary reviewed and approved without changes.

Of the 35 “recommended” projects, FTA recommended funding those that had received at least one “high” rating and no “low” ratings in the three prioritized criteria. In addition, in the interest of geographic diversity, FTA recommended funding two “recommended” projects that did not have high enough ratings in the criteria prioritized by the Secretary to otherwise be selected for funding. Ultimately, with the Secretary’s approval, FTA funded all 19 “highly recommended” projects and 21 of the “recommended” projects. FTA did not fund any “not recommended” projects.

FTA Did Not Ensure That Proposals Were Consistently Evaluated or Document Key Decisions

FTA did not take sufficient steps to ensure that its evaluation and selection process was consistent and documented. Specifically, we identified inconsistencies in how the technical review teams assigned cost-effectiveness criterion ratings. We also found that it is unclear to what extent the teams consistently screened proposals to ensure that they met the minimum program requirements. In addition, we found that FTA did not document key decisions resulting from its quality assurance review, specifically with regard to rating changes and the resolution of high-level reviewer concerns about projects.

Consistency of the Evaluation Process

We found that the technical review teams did not consistently assign cost-effectiveness criterion ratings. For each project, FTA’s cost-effectiveness contractor provided a cost-effectiveness criterion rating of “high,” “medium” or “low.” Members of three of the four teams that we spoke with stated that they generally assigned projects the same cost-effectiveness criterion rating as the contractor, noting that they did not have the expertise to critique the contractor’s evaluations. A member of the fourth team stated that the team used its discretion when assigning the cost-effectiveness criterion rating for each project and did not always use the contractor’s rating. According to our analysis, for 11 of the 40 funded projects, the teams assigned a cost-effectiveness rating that was different

than that provided by the contractor. Program officials stated that the contractor's rating was advisory and that the teams were to determine their own ratings for this criterion, which could take into consideration qualitative benefits that the contractor may not have considered. However, the technical review training materials did not discuss that the rating was meant to only be advisory, or how teams were to incorporate that rating into the evaluation process. In addition, program officials stated that they did not compare the contractor's ratings to the teams' ratings for the cost-effectiveness criterion as part of the quality assurance review.

We also found that it is unclear to what extent the technical review teams consistently screened proposals for fulfillment of the minimum program requirements. Technical review training materials instructed teams to first verify that proposals met four minimum program requirements, including eligibility (a current recipient of FTA funds, a non-current recipient of FTA funds with a support letter from a current recipient, or a provider of intercity passenger rail service) and that the project would be designed and built to be resilient to one foot above the base flood elevation.²³ FTA provided us with documentation to demonstrate that the technical review teams attested that all 61 projects met the minimum program requirements. However, when we asked the technical review teams how they documented that applicants had met the minimum program requirements, members of three of the four teams we spoke with stated that they did not confirm that the projects met these requirements. In addition, members of all four teams that we spoke with stated that it was their understanding that the program office had pre-screened proposals to ensure applicants were eligible. One team leader stated that the team did verify that minimum program requirements were met, per the training materials, but that it was the team's understanding that the program office would not forward ineligible proposals for review. According to the program official who oversaw the grant program, the official "informally" reviewed proposals before assigning them to the teams and, through this review, identified one application that was ineligible. This review took place prior to the quality assurance review, and according to program officials, the teams were ultimately responsible for verifying that projects met the minimum program requirements.

²³The two additional minimum program requirements that the teams were to verify, per the technical review training materials, were availability of matching funds and that the applicant submitted a cost-effectiveness analysis, consistent with FTA training.

Our review of the technical teams' evaluation comments identified five instances in which teams raised questions about whether some projects met the minimum program requirements. Specifically, teams expressed concern over whether five projects would meet the requirement that they be built to one foot above the base flood elevation. Three of these five projects were funded, receiving a total of over \$186 million. At the conclusion of our review, program officials told us that they had reviewed the technical review teams' comments and believed that in only one case did a team express concern whether a project met this requirement. This project was one of the three we identified that the technical review teams had raised questions about and that were ultimately funded.²⁴ For the other two projects that were funded, the teams had stated that for one project, it was unknown whether it would meet the elevation requirement and that for the other project, the team had stated that it was "unable to assess" whether it met the requirement. Program officials stated that the teams were only supposed to confirm whether the applicants attested in their applications that projects would meet this requirement. However, the training materials provided to the technical review teams stated that teams were to verify that projects would be built to one foot above the base flood elevation, and did not state they were only to confirm whether the applicants attested that projects would meet this requirement in their applications, or otherwise instruct them how to verify this information.

FTA did not prepare a plan for evaluating project proposals in advance of issuing the NOFA, which could have helped ensure a consistent evaluation process. DOT's *Financial Assistance Guidance Manual*, which provides procedural guidance for the award and monitoring of DOT financial assistance awards, requires that an evaluation plan be prepared prior to the development of a NOFA.²⁵ However, the program office presented a proposed plan for evaluating project proposals to the FTA Administrator in February 2014, 2 months after FTA issued the NOFA. Among other things, FTA's proposed plan described the process for evaluating proposals, including the number and composition of the technical review teams, the evaluation criteria, and the sequence of the review process. FTA generally followed this process, but the plan did not describe the program office's quality assurance review or how the office would ensure a consistent evaluation process. We have previously

²⁴For this project, the team stated that it was "uncertain" if the project would be built to one foot above the base flood elevation.

²⁵DOT, *Financial Assistance Guidance Manual* (Washington, D.C.: March 2009).

identified recommended practices for evaluating and selecting discretionary grant awards that include developing a plan for administering the technical review of applications.²⁶ Such a plan should describe a method for overseeing the technical review panels to ensure a consistent review, among other things.

While DOT's guidance requires an evaluation plan, DOT lacks clear department-wide requirements for what should be included in the plan, such as an oversight process or quality assurance review to ensure a consistent review of proposals. Without preparing a plan for evaluating project proposals, which defined all of the stages of the process, including the program office's quality assurance review, in advance of issuing the NOFA, FTA may not have treated all proposals and applicants consistently. Inconsistencies in the evaluation process raise questions about whether FTA funded projects that best met the minimum program requirements and evaluation criteria. In commenting on a draft of this report, DOT stated that FTA's evaluation and selection process was consistent. However, we disagree. We reviewed our findings and evidence and do not believe that a change is warranted. Further, DOT did not provide additional evidence in its letter to support this contention.

Documentation of Key Decisions

FTA did not document key decisions resulting from its quality assurance review of the technical review teams' evaluations. Specifically, FTA did not document why, when, or by whom changes were made to overall project ratings and individual criterion ratings. According to our analysis of FTA documentation, following the teams' evaluations, changes were made to the overall project ratings for at least 10 of the 61 submitted projects. Of those 10 projects, 8 projects received higher overall project ratings than those initially provided by the technical review teams, including 6 project ratings that changed from "not recommended" to "recommended," moving them forward to the Administrator and Secretary for funding consideration. One of those six projects received funding—

²⁶ [GAO-11-283](#). We developed these recommended practices to assess the Federal Railroad Administration's grantmaking practices. To identify these practices, we reviewed government agency websites and prior work on discretionary grants. Other recommended practices include communicating with potential applicants prior to the competition, developing a technical review panel with certain characteristics, assessing applicants' capabilities to account for funds, notifying applicants of awards decisions, and documenting the rationale for awards decisions.

about \$40 million—potentially as a result of the change.²⁷ In addition, changes were made to at least 38 of the technical review teams' individual criteria ratings, affecting a total of 22 projects. According to *Standards for Internal Control in the Federal Government*, all transactions and significant events need to be clearly documented, and the documentation should be readily available for examination.²⁸ In addition, another GAO-identified recommended practice for evaluating and selecting discretionary grant awards is documenting the rationale for awards decisions, including reasons individual projects were selected or not selected.²⁹

FTA program officials stated that if they asked a team to review a rating during the quality assurance review, they did not always record the discussion that followed, which may have occurred via e-mail or telephone. FTA provided us an e-mail between the program office and technical review team leaders that they said detailed and explained numerous requests for review and updates. However, the e-mail FTA provided discussed 10 projects the program office wanted the technical review teams to revisit but did not indicate what changes, if any, were ultimately made—to include who made the changes, when, and why—nor did it discuss all of the projects for which we identified ratings changes in our analysis. FTA officials acknowledged that this e-mail correspondence was not a comprehensive record and stated that it was not considered part of FTA's decisional documentation. Further, while the teams recorded their evaluations in FTA's Discretionary Grant System, the program office conducted its quality assurance review outside of the System on DOT network drives. According to program officials, any changes made to project ratings during the quality assurance review, which were not previously updated by team leaders or otherwise reflected in the Discretionary Grant System, were updated in the System by program officials after FTA announced its project selections in September 2014.

²⁷Of the 10 projects that experienced overall ratings changes, the two that were assigned lower ratings during the quality assurance review—lowered from “highly recommended” to “recommended”—both received funding.

²⁸GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999).

²⁹[GAO-11-283](#).

In addition, FTA did not document how it addressed high-level project concerns raised by reviewers in their evaluation comments. We found that for 26 of the 40 funded projects, reviewers noted high-level concerns, including, among other things, whether submitted projects were within the scope of the grant program, potential implementation challenges, potential interdependencies with other resilience efforts, and the cost-effectiveness of projects. For example, for two rail bridge replacement projects, reviewers noted that the projects were more routine infrastructure replacement necessitated by the structures' age rather than resilience projects in response to Hurricane Sandy or in response to future major disasters and extreme weather. For one of those projects, the technical review team further stated that it was not well-suited for the grant program. In its evaluation of a backup electric power project, a technical review team noted that the project would experience significant implementation challenges in light of feedback from the community in which it will be located. In addition, for a ferry resilience project, the team noted that the applicant's cost-effectiveness data appeared to be "exaggerated" and "overstated."

Program officials stated that in many cases the program office discussed cases where reviewers noted high-level concerns in their evaluation comments with the technical review teams and addressed them. However, there is no documentation to show how FTA addressed these concerns. In addition, the program office forwarded concerns regarding 13 of the 26 funded projects to the FTA Administrator, and concerns about 3 projects to the Secretary of Transportation. For example, the program office forwarded the teams' concerns about the backup electric power project's implementation challenges and the ferry resilience project's "questionable" cost-effectiveness to the FTA Administrator. There is no documentation of how, if at all, these concerns were addressed, and both projects were selected for funding, receiving about \$410 million and \$192 million respectively. According to program officials, the program office forwarded concerns it considered "informative" and did not forward concerns it did not consider to be informative, or concerns it otherwise addressed through conversations with technical review team leaders. However, program officials did not document these determinations or conversations. For example, for the two rail bridge replacement projects, the program office did not forward the reviewers' concerns—that they may not be resilience projects—and there is no documentation of how it addressed them. These projects were also selected and received over \$600 million in funding. Program officials stated that the teams' comments were intended to explain their initial project ratings and that in some cases the content of the comments

required a more in-depth review by the program office. However, these officials noted that the teams were not required to update their comments to reflect the results of such reviews. Without documentation, it is unclear how, if at all, the program office addressed reviewers' concerns.

DOT lacks clear department-wide requirements for what should be documented when evaluating and selecting discretionary grant awards. Specifically, DOT's *Financial Assistance Guidance Manual* states that the selection of all discretionary projects shall include an explanation of how the projects were selected based on the funding priorities established and that decisions not to fund projects with the highest priority shall be documented.³⁰ However, the guidance does not specify that key decisions should be documented, such as reasons for any rating changes and how any high-level concerns were addressed. As a result, while FTA instructed the technical review teams to record their ratings—as well as comments to support those ratings—in FTA's Discretionary Grant System, FTA did not establish in its proposed plan for evaluating project proposals how the program office would conduct or document its quality assurance review, during which key decisions were made. By not documenting key decisions, including the reasons for any rating changes and the officials responsible for those changes, as well as how any concerns raised during the process were addressed, FTA cannot definitively demonstrate the basis for many of its project selections totaling \$3.6 billion. This leaves FTA vulnerable to questions about the integrity of the evaluation process and whether its funding determinations were appropriate. In commenting on a draft of this report, DOT stated that FTA's evaluation and selection process was appropriately documented. However, we disagree. We reviewed our findings and evidence and do not believe that a change is warranted. Further, DOT did not provide additional evidence in its letter to support this contention.

We have previously found similar challenges with other DOT discretionary grant programs. Specifically, in March 2011 we found that the Federal Railroad Administration did not maintain a detailed record of its selection decisions for a passenger rail discretionary grant program.³¹ We recommended that the agency create additional records that document the rationales for award decisions in future funding rounds, including substantive reasons why individual projects are selected or not selected

³⁰DOT, *Financial Assistance Guidance Manual* (Washington, D.C., March 2009).

³¹[GAO-11-283](#).

and for changes made to requested funding amounts. The agency implemented this recommendation. In addition, we found challenges with the Transportation Investment Generating Economic Recovery (TIGER) discretionary grant program, through which DOT awarded approximately \$3.6 billion between 2009 and 2013, about the same amount FTA awarded through its discretionary transit resilience grant program. Specifically, in May 2014, we found that DOT did not document key decisions made during the fifth funding round of the TIGER program and that DOT deviated from its established procedures and recognized internal control practices.³² We recommended that the Secretary of Transportation establish additional accountability measures for management of the TIGER program to, among other things, document and approve major decisions in the application evaluation and project selection process through a decision memorandum or similar mechanism that provides a clear rationale for decisions, including decisions not to advance applications rated as “highly recommended.” In summer 2016, we reviewed DOT’s progress in addressing this recommendation. Specifically, we reviewed DOT’s application evaluation process for the 2014 and 2015 TIGER funding rounds and found that DOT improved its internal procedures for documenting major decisions in its application evaluation database, but did not document these procedures through a decision memorandum or similar mechanism to ensure a consistent and transparent process. We also found that DOT altered its procedures for evaluating applications while the review process was ongoing. According to DOT’s *Financial Assistance Guidance Manual*, grant evaluations must be conducted in accordance with the evaluation plan created prior to the announcement and may not be changed once applications have been received. As a result, DOT has not fully implemented this recommendation.

Further, the December 2015 Fixing America’s Surface Transportation Act authorized about a dozen new DOT discretionary grant programs, some of which DOT is already undertaking.³³ For example, in March 2016, the Federal Highway Administration announced \$60 million in available

³²GAO, *Surface Transportation: Actions Needed to Improve Documentation of Key Decisions in the TIGER Discretionary Grant Program*, [GAO-14-628R](#) (Washington, D.C.: May 28, 2014). We also found similar issues in our March 2011 review of the TIGER grant program. GAO, *Surface Transportation: Competitive Grant Programs Could Benefit from Increased Performance Focus and Better Documentation of Key Decisions*, [GAO-11-234](#) (Washington, D.C.: Mar. 30, 2011).

³³Pub. L. No. 114-94, 129 Stat. 1312 (2015).

funding for the Advanced Transportation and Congestion Management Technologies Deployment program.³⁴ In addition, in September 2016, DOT announced its project selections for the first round of the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies grant program totaling approximately \$759 million. We are currently reviewing this program pursuant to a mandate under section 1105 of the Fixing America's Surface Transportation Act.³⁵ Congress has authorized funding for future rounds of this grant program through fiscal year 2020. The Federal Highway Administration also announced \$14 million in funding for projects it selected through the Surface Transportation System Funding Alternatives grant program in August 2016. Congress has also authorized funding for this grant program through fiscal year 2020. Without clear department-wide requirements for evaluating and selecting discretionary grant awards, these and other future discretionary grant programs may be at risk of experiencing the evaluation inconsistencies and limited documentation we found in FTA's discretionary transit resilience grant program, as well as challenges we have found in other DOT discretionary grant programs.

Selected Projects Did Not Fully Reflect the Grant Program's Purpose and Policy Priorities

FTA funded projects that may not address the program's purpose and policy priorities, and that may no longer be needed if other resilience projects in the region are implemented. For example, FTA funded projects with unclear or unknown benefits and, as such, cannot be certain that it selected projects that reflect the program's purpose. Additionally, FTA established policy priorities, including identifying project types that would be outside the scope of the program and prioritizing certain types of projects over others. However, program officials told us that the policy priorities in the NOFA were intended to help advise applicants on the types of projects that FTA was seeking and that FTA did not consider the policy priorities when evaluating or selecting projects for award. Further, while FTA collected information from HUD, applicants, and reviewers regarding potential connectivity or coordination needed with other resilience efforts, FTA did not consider this information in the evaluation and selection process, potentially resulting in the agency funding projects

³⁴81 Fed. Reg. 17536 (Mar. 29, 2016).

³⁵Pub. L. No. 114-94, §1105, 129 Stat. 1312, 1332 (2015) (codified at 23 U.S.C. § 117 (n)(2)(A) and (B)).

with duplicative benefits that may no longer be needed or that may need to be revised.

FTA Used a Cost-Effectiveness Measure to Help Ensure Projects Met the Program's Purpose, but Funded Projects with Unclear or Unknown Benefits

As established in the NOFA, the grant program's purpose was to increase the resilience of public transportation facilities in the areas affected by Hurricane Sandy. According to program officials, FTA used the cost-effectiveness evaluation criterion to help ensure that selected projects would facilitate resilience.³⁶ Applicants completed the cost-effectiveness tool by inputting the project's expected benefits and costs, resulting in a benefit-cost ratio. A project's expected benefits include, among other things, reduced costs to repair or replace assets after a disaster and reduced time out of service. The costs associated with these projects include, for example, the capital costs of construction and future operations and maintenance expenses.

FTA funded projects with an unclear or unknown benefit-cost ratio, calling into question the extent to which the selected projects will facilitate resilience against future disasters and meet the grant program's purpose. For example, MTA submitted three project proposals intended to prevent flood waters from entering the New York City transit system. According to these proposals, the cost-effectiveness of each of the projects was contingent upon all three being implemented concurrently. In its review of these projects, FTA's cost-effectiveness contractor stated that it could be assumed that the damages would be avoided or reduced only if all three projects are implemented. While FTA selected two of these projects for award, the third project was not selected, which calls into question the relevance of the cost-effectiveness ratings for the two selected projects, as the third project was not funded. Program officials stated that they considered the cost-effectiveness analyses of the projects as if they were independent of each other. However, FTA's contractor stated that it could not always determine the independent cost-effectiveness of projects that were contingent on other projects also being funded. In addition, FTA funded two other projects without knowing their cost-effectiveness. For

³⁶According to program officials, FTA also used the Protection of Most Vulnerable and Essential Infrastructure criterion to help ensure that selected projects would facilitate resilience. Under this criterion, the NOFA stated that, projects would "be evaluated based on the vulnerability of the asset to be protected, the criticality of the asset to existing public transportation service, and on the process or methodology used to prioritize assets for resilience improvements." Based on our review of FTA's description of the criterion and the program's purpose as outlined in the NOFA, this criterion generally aligns with the grant program's purpose of contributing to the resilience of public transportation systems.

one project, the applicant identified the project as scalable, but did not provide a funding amount or a cost-effectiveness analysis for a scaled project. For the second project, the applicant did not identify the project as scalable and, as such, did not submit a cost-effectiveness analysis for a scaled project. FTA selected both of these projects for award at scaled amounts totaling about \$166 million based on the cost-effectiveness of the full projects, despite not knowing the cost-effectiveness of the scaled projects. Program officials stated that they did not conduct their own cost-effectiveness analyses for these scaled projects. According to FTA officials, they assumed that both projects would be more cost-effective if scaled because FTA was removing the project components that had the least benefit for resilience based on the project proposal. However, no analysis supports this determination.

In addition, as described earlier, FTA's technical review teams did not consistently use the cost-effectiveness ratings provided by FTA's contractor, resulting in 11 of the 40 funded projects receiving a different cost-effectiveness rating than that provided by the contractor.

FTA Did Not Fully Follow Its Policy Priorities When Considering Projects

Within the NOFA, FTA included a section (titled "Policy Priorities") in which it described policy priorities for the grant program: (1) identifying project types that would be outside the scope of the program, (2) prioritizing projects that involve infrastructure that was damaged or destroyed by Hurricane Sandy, (3) prioritizing projects that protect assets over those that increase system capacity, and (4) providing that projects be designed to increase the resilience of the region and that they be regionally coordinated. Program officials told us that the policy priorities in the NOFA were intended to help advise applicants on the types of projects that FTA was seeking and that they reflected the FTA Administrator's vision for the grant program. Further, program officials told us that they reviewed the policy priorities, but that they were not considered in the evaluation and selection process: projects were ultimately evaluated and selected based on their fulfillment of the minimum program requirements and the seven evaluation criteria outlined in the NOFA.

However, FTA's November 2014 *Federal Register* notice announcing the projects selected for award stated that projects were evaluated based on the seven criteria as well as the policy priorities described in the NOFA.³⁷

³⁷79 Fed. Reg. 65762 (Nov. 5, 2014).

While the policy priorities were not presented in the NOFA as evaluation criteria used to select projects for award, they also were not presented as advice to applicants and the NOFA included clear language about what FTA would and would not prioritize when selecting projects. For example, the NOFA stated that “FTA will prioritize resilience projects that strengthen, protect, or otherwise increase the resilience of existing infrastructure that was damaged or destroyed by Hurricane Sandy.” The NOFA did make clear that projects would be evaluated based on the criteria described in the notice, but there is no language in the NOFA that describes the policy priorities as mere guidance to applicants or that they were intended to reflect the FTA Administrator’s vision for the grant program and not be a consideration in the implementation of the program.

Federal guidance on discretionary grants notes the importance of providing clear information to potential applicants. Specifically, a 2003 policy directive on the management of discretionary grant programs issued by the Office of Management and Budget states that agencies are required to “provide sufficient information to help an applicant make an informed decision about whether to submit a proposal.”³⁸ By including policy priorities in the NOFA that were meant to merely advise applicants and not be considered as part of the overall evaluation and selection process, FTA did not provide applicants with clear information about the grant program’s evaluation and selection process. As a result, FTA may have discouraged applicants from submitting projects that ultimately may have been funded. Further, by not considering the policy priorities when evaluating and selecting projects for award, FTA cannot be certain that the projects it did select will address the policy priorities it established in the NOFA or fulfill the Administrator’s vision for the program.

Project Scope

One policy priority discussed in the NOFA concerned certain project types that were outside the scope of the program. Specifically, the NOFA stated that a “more resilient public transportation system will be the product of many efforts, including some that are outside the scope of this notice; including disaster preparation, risk assessments, enhanced response capabilities, redundant infrastructure, a more complete state of good repair in systems essential to transit operations, evacuation readiness, emergency social support systems, and other efforts.”

³⁸68 Fed. Reg. 37370 (June 23, 2003).

In their review of project proposals, FTA's technical review teams and FTA's cost-effectiveness contractor identified 11 projects for which they questioned whether the project was outside the scope of the program. For example, for two rail bridge replacement projects, reviewers commented that the projects were more routine infrastructure replacement necessitated by the structures' age rather than resilience projects in response to Hurricane Sandy. For one of these projects, the contractor added that even in the absence of Hurricane Sandy or any sea level rise, this bridge would have been required to be replaced, anyway. As previously described, we did not identify documentation to show how, if at all, program officials addressed these types of concerns. Still, both projects were selected by FTA and awarded funding totaling \$607 million, or about 17 percent of all funds awarded under this grant program.

In addition, based on our analysis, we identified four additional FTA-funded projects that, according to the applicant's project description, may be considered as one of the project types that the NOFA stated was outside the scope of the program. For example, in the proposal for an emergency communications project, the applicant described the project as directly improving the quality of response in emergency situations, shortening the total duration of incidents, and reducing the amount of customer impact. This project appears to support "enhanced response capabilities," a project type described in the NOFA as being outside the scope of this grant program. For another project, the applicant stated that the project would provide backup electric power supplies to a transit facility to assist in evacuating residents. As such, this project may be considered as providing "evacuation readiness," another project type outside the scope of this program, per the NOFA. FTA awarded funding totaling over \$400 million to the four projects we identified as being potentially outside the scope of the program.

Although the NOFA described certain project types as being outside the scope of the program, program officials told us that if FTA received an application for one of these project types, it did not automatically consider the project as ineligible for a grant. Program officials stated that a project would not be deemed outside the scope of the program if it provided, for example, enhanced response capabilities, but also protected assets and provided other resilience benefits within the grant program's scope. However, this additional context was not included in the NOFA, and therefore, potential applicants would not have known such information. Program officials acknowledged that this additional context would have been helpful to include within the NOFA.

Prioritize Projects with Hurricane Sandy Damages

Another policy priority discussed in the NOFA stated that FTA would give priority to “resilience projects that strengthen, protect, or otherwise increase the protection or resilience of existing infrastructure that was damaged or destroyed by Hurricane Sandy.” The application included a field in which applicants attested—by selecting “Yes” or “No”—whether the project would improve the resilience of an asset damaged or destroyed by Hurricane Sandy. While FTA requested applicants to respond to this question in the application, program officials told us that they did not use this information when considering projects for award.

Most of the projects FTA selected and most of the funding awarded followed this policy priority. Based on our analysis of the submitted applications, for 26 of the 40 funded projects, applicants attested that the projects would improve the resilience of an asset damaged or destroyed by Hurricane Sandy; for the remaining 14 projects, the applicants stated that they would not. Based on our analysis of the awarded projects, 89 percent of all funds awarded by FTA went toward projects in which the applicant attested that the project involved an asset damaged or destroyed by Hurricane Sandy. In addition, the preponderance of projects selected in the New York City metropolitan area—which sustained significant damage during Hurricane Sandy—involve facilities that sustained damage during the storm. Based on our analysis, 24 of 26 funded projects in the New York City metropolitan area involved facilities damaged by Hurricane Sandy, and were awarded funding totaling over \$3 billion.

Prioritize Asset Protection

A third policy priority mentioned in the NOFA stated that FTA would prioritize projects that provide asset protection over other types of projects. Specifically, the NOFA stated that asset protection projects would “take precedent over new ‘redundant’ investments whose primary objective is to increase system capacity.” Although elements of this policy priority are described in the Protection of Most Essential and Vulnerable Infrastructure criterion, program officials told us that they did not consider this policy priority when considering projects for award.

Most of the projects FTA selected—and about half of all funds awarded—followed this policy priority. Based on our analysis of applicants’ full project proposals, 28 of the 40 selected projects provide asset protection, such as projects that involve construction of floodwalls or water pumps. The remaining projects either appear to provide primarily operational improvements—such as a bridge replacement project to ensure continued rail operations following a disaster—provide a mixture of both asset protection and other benefits, or it is unclear about the type of

resilience benefit provided. Further, based on our analysis, about half of all funds awarded (53 percent) were for projects that provide asset protection, with the remaining funds awarded to projects that provide a mixture of asset protection or other benefits.

Regional Resilience

A fourth policy priority in the NOFA concerned efforts to contribute to regional resilience. In its August 2013 report, the Hurricane Sandy Rebuilding Task Force recommended,³⁹ among other things, that agencies at all levels of government work collaboratively to promote a regional approach to resilience and to compound individual investments toward shared goals.⁴⁰ In the NOFA, FTA stated that it undertook the grant program in accordance with the recommendations issued by the Task Force, including that Sandy-rebuilding infrastructure projects be designed to increase the resilience of the region and that they be regionally coordinated. Other resilience efforts in the areas affected by Hurricane Sandy are under way, including HUD's Rebuild by Design program, a regional resilience competition that awarded nearly \$1 billion for resilience projects in June 2014.

During the course of the evaluation process, FTA collected information from HUD, applicants, and reviewers on potential connectivity or coordination needed between proposed projects and other resilience efforts. While this could have helped FTA support projects that provide resilience for the region—a stated policy priority—FTA officials told us that they did not consider this information in the evaluation and selection process. By not considering this information, the agency may have funded projects with duplicative benefits that may no longer be needed or may need to be revised. For example, HUD provided FTA with comments on potential connectivity between three HUD-funded projects identified through its Rebuild by Design program and three projects under consideration by FTA, as well as the proposals for the three HUD projects for FTA to review and determine the extent of the connectivity. According to a HUD official, because the Rebuild by Design program aims to facilitate resilience for an entire city or region, some of FTA's more site-

³⁹The Hurricane Sandy Rebuilding Task Force was established by the President and comprised of officials from federal agencies and executive branch offices. The Task Force was tasked with identifying and working to remove obstacles to resilient rebuilding while taking into account existing and future risks and promoting the long-term sustainability of communities and ecosystems in Hurricane Sandy-affected regions.

⁴⁰Hurricane Sandy Rebuilding Task Force, *Hurricane Sandy Rebuilding Strategy: Stronger Communities, A Resilient Region* (August 2013).

specific projects may fall within the same geographic area for which the HUD-funded projects are intended to provide resilience. The three FTA-proposed projects—all of which were funded—were from two transit agencies and were intended to mitigate flooding in railyards, provide backup electric power, and prevent floodwaters from entering underground transit systems. Although the FTA-funded projects fall within the same geographic area that the HUD projects are intended to protect, FTA program officials told us that they did not act on HUD's information because they did not consider the comments "actionable." In commenting on a draft of this report, DOT stated that FTA sought and considered input on proposed resilience projects from other federal agencies involved in the Hurricane Sandy rebuilding effort and that the one set of comments received from HUD did not identify any concerns about duplication. However, we disagree. FTA received information from HUD, as well as applicants and reviewers, that identified instances of potential connectivity or coordination needed between proposed projects and other resilience efforts being performed outside of FTA in the same geographic area. Further, DOT did not provide additional evidence about collaboration for the projects we identified. Program officials further told us that HUD's comments indicated that local coordination between project sponsors would be required or needed. Specifically, these officials stated that such coordination is "to be expected when state and local agencies are undertaking projects within a close proximity, but does not require any specific action by the federal agency making an award for the project" (in this case, FTA). However, based on our review of HUD's comments, which were directed to FTA and not to the project sponsors, FTA was to engage in this coordination, which could help avoid supporting projects with potentially duplicative benefits.

As another example, FTA received information from MTA on four projects it submitted—one of which HUD also commented on—that were intended to either prevent floodwaters from entering the transit system or remove water that enters the system. Within these applications—three of which were selected to receive a total of approximately \$450 million—MTA noted that if a specific HUD Rebuild by Design project were to be selected and constructed, the protection provided by the HUD-funded project might require MTA to revise the design of its projects due to the geographical overlap and benefits provided by the HUD project. When FTA announced its funding determinations in September 2014, it was aware that this HUD project had been selected for award 3 months earlier in June 2014. However, we did not identify documentation to demonstrate how, if at all, FTA considered this information from MTA when evaluating and selecting these projects for award. Program officials told us that this

information would be considered once the projects enter the design and engineering phase. However, FTA regional officials told us that they do not plan to redesign any of the FTA projects as a result of other ongoing resilience efforts and plan to treat them as independent from the projects HUD funded. In so doing, FTA is supporting projects that according to the applicant, may offer benefits duplicative of HUD's projects and potentially require revisions.

A technical review team also identified another MTA project involving potential duplication with a local resilience effort. Specifically, the technical review team commented that New York City had recently issued a request for proposals for a feasibility study for a storm surge barrier. The team stated that if this project were ultimately built, the FTA project would not be needed. We did not identify documentation showing how FTA considered this information before selecting the project to receive over \$24 million in funding. Program officials told us that despite this comment, MTA proposed this project and considered it worthwhile, and that FTA deferred to MTA's judgment. Program officials also told us that the city's project, if implemented, would likely have a longer lead time and that FTA's project could help provide resilience for MTA more quickly.

Because FTA did not consider the information it collected on potential connectivity or coordination needed between proposed projects and other resilience efforts, it funded projects that provide benefits that may be duplicative of other resilience efforts and, therefore, may no longer be needed or may require revisions. In our work on fragmentation, overlap, and duplication, we have reported that fragmentation—circumstances in which more than one federal agency (or more than one organization within an agency) is involved in the same broad area of national need—may create situations in which the federal government could improve how it delivers these services.⁴¹ Further, we have previously reported on fragmentation across federal funding streams for resilience efforts, as well as the need for an improved strategy to guide federal investments in disaster resilience. In July 2015, we reported, specifically, that federal programs that provide disaster resilience funding are fragmented, resulting in challenges for federal agencies and their nonfederal partners to use them effectively and efficiently to enhance the nation's resilience

⁴¹GAO, *2016 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Other Financial Benefits*, [GAO-16-375SP](#) (Washington, D.C.: Apr. 13, 2016).

from future disasters.⁴² Further, we found that there is no comprehensive, strategic approach to identifying, prioritizing, and implementing investments for disaster resilience. We recommended that the federal government establish an investment strategy to identify, prioritize, and guide future federal investments in disaster resilience to help ensure more effective returns on those investments.⁴³ As of August 2016, the relevant agencies were taking steps to implement this recommendation. In the absence of such a strategy, there is a risk that federal agencies and their nonfederal partners will experience a lower return on investment, and therefore, it is incumbent on federal agencies to actively undertake efforts to ensure that their contributions to national resilience are directed as effectively and efficiently as possible—such as by ensuring that disparate projects funded by separate agencies do not conflict with or duplicate each other.

Conclusions

While FTA established a process to evaluate and select projects for award, it took insufficient steps to ensure a consistent evaluation process for competitive resilience projects and had limited documentation of key decisions. Inconsistencies in the evaluation process and limited documentation leave FTA and DOT vulnerable to questions not only about the integrity of the evaluation process, but also whether the project selections were appropriate. Further, without aligning the stated policy priorities for the program with the evaluation and selection process, FTA may have discouraged applicants from submitting projects that ultimately may have been funded, and it also cannot be certain that its project selections will address stated agency policy priorities. Since 2011, we have identified challenges with DOT's implementation of discretionary grant programs. Considering the challenges we have reported, as well as the new discretionary grant programs DOT is undertaking, it would benefit from clear department-wide requirements for evaluating and selecting discretionary grant awards. A directive that requires programs department-wide to develop a plan for evaluating project proposals, document key decisions, and align policy priorities with the evaluation

⁴²GAO, *Hurricane Sandy: An Investment Approach Could Help the Federal Government Enhance National Resilience for Future Disasters*, [GAO-15-515](#) (Washington, D.C.: July 30, 2015).

⁴³This recommendation was directed to the Mitigation Framework Leadership Group, which was created to help coordinate hazard mitigation efforts of relevant local, state, tribal, and federal organizations. DOT is a member of this group.

process would help to ensure the integrity of future DOT discretionary grant programs and that they meet identified agency priorities.

FTA collected information on potential connectivity or coordination needed between FTA's proposed projects and other resilience efforts, but did not consider this information when evaluating and selecting projects for award. As a result, some of the projects FTA selected may potentially provide benefits that are duplicative of other resilience efforts being performed outside of FTA and may no longer be needed because another effort in the same region is moving forward. FTA's discretionary transit resilience grant program is an example of the fragmented nature of the federal government's approach toward disaster resilience: without a comprehensive, strategic approach toward federal investments for disaster resilience, there is a risk of lower returns on investment for these efforts. Given that most of FTA's discretionary transit resilience grants are still in development and have not yet fully obligated funds, now is a good time for DOT, through FTA, to evaluate the \$3.6 billion in DRAA investments it has made toward resilience—including reviewing the information it collected from HUD, applicants, and reviewers—to determine the extent to which FTA-supported projects provide benefits that are duplicative of other regional resilience efforts. Doing so may help ensure that the projects supported by FTA are effectively coordinated with other resilience efforts—such as HUD's Rebuild by Design program—and help minimize the fragmentation of the federal government's disaster resilience efforts. Further, such an evaluation may help identify cases where FTA-supported projects may need to be revised or may no longer be needed. In such cases, realigning funds for other authorized purposes, or requesting a rescission of these funds, may be appropriate.

Recommendations for Executive Action

We recommend that the Secretary of Transportation take the following two actions:

1. Given DOT's new discretionary grant programs and similar challenges we have found with previous DOT programs, issue a directive that governs department-wide and modal administration discretionary grant programs. Such a directive should include requirements to:
 - develop a plan for evaluating project proposals in advance of issuing a NOFA that defines the stages of the process, including how the process will be overseen to ensure a consistent review of applications;

-
- document key decisions, including the reason for any rating changes and the officials responsible for those changes, and how high-level concerns raised during the process were addressed; and
 - align stated program purpose and policy priorities with the evaluation and selection process.
2. To better address FTA's stated policy priority of regional resilience and to minimize fragmentation of federal efforts, direct the FTA Administrator to (a) examine the projects FTA funded under the DRAA discretionary transit resilience grant program for potential duplication with other resilience efforts and (b) determine whether it is appropriate to realign funds for FTA-supported projects for other purposes authorized under the DRAA, or request a rescission of funds for any of the FTA-supported projects.

Agency Comments and Our Evaluation

We provided a draft of this report to DOT for review and comment. DOT provided written comments, which we have reprinted in appendix III. DOT also provided technical comments, which we incorporated as appropriate throughout our report.

In its written comments, DOT concurred with our recommendations, but disagreed with certain of our findings. Specifically, DOT stated that FTA established a written evaluation process, provided written instructions and rating guidance to technical reviewers, and recorded all ratings and comments in FTA's Discretionary Grant System. DOT also stated that the evaluation and selection process was consistent, appropriately documented, and based on the criteria established in the NOFA. We agree that FTA established an evaluation and selection process and selection criteria based on the NOFA. However, we disagree that these actions led to a consistent, documented approach to evaluating and selecting projects. As we note in our report, we identified inconsistencies in how the technical review teams assigned cost-effectiveness criterion ratings, and we found that it is unclear to what extent the teams consistently screened proposals to ensure that they met the minimum program requirements. In addition, we found that FTA did not document key decisions resulting from its quality assurance review, including rating changes and the resolution of high-level reviewer concerns about projects. In commenting on the report, DOT did not provide additional evidence to support its contention that the selection process was consistent and appropriately documented. As a result, we made no changes to the report based on these comments.

DOT also stated in its written comments that FTA sought and considered input on proposed resilience projects from other federal agencies involved in the Hurricane Sandy rebuilding effort and that the one set of comments received from HUD did not identify any concerns about duplication. We disagree. FTA received information from HUD, as well as applicants and reviewers, which identified instances of potential connectivity or coordination needed between proposed projects and other resilience efforts being performed outside of FTA in the same geographic area. We maintain that because FTA collected this information but did not consider it in the evaluation and selection process—and DOT’s written comments provide no further evidence of how, if at all, FTA considered this information—FTA may have funded projects with duplicative benefits that may no longer be needed or may need to be revised. DOT concurred with our recommendation to examine the projects FTA funded under this grant program for potential duplication with other resilience efforts. Therefore, we made no changes to the report in response to these comments.

Further details on our responses to comments made by DOT are included at the end of appendix III.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Secretary of Transportation and the appropriate congressional committees. In addition, the report will be available at no charge on GAO’s website at <http://www.gao.gov>.

If you or members of your staff have any questions about this report, please contact me at (202) 512-2834 or goldsteinm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made significant contributions to this report are listed in appendix IV.



Mark Goldstein
Director, Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

This report addresses: (1) the Federal Transit Administration's (FTA) process for evaluating and selecting projects for award and any steps FTA took to ensure the process was consistent and documented, and (2) the extent to which the projects FTA selected for award reflect the grant program's purpose and policy priorities.

To assess FTA's project evaluation and selection process, we reviewed FTA documents explaining the process, including the notice of funding availability (NOFA), training materials provided to the technical review teams that conducted the initial review of the project proposals, and FTA's decision memorandum to the Secretary of Transportation. We compared the process to Department of Transportation guidance, recommended practices we have previously identified for evaluating and selecting discretionary grant awards, and *Standards for Internal Control in the Federal Government*.¹ We also analyzed FTA's documentation of the evaluation process, such as technical review team evaluation results from FTA's Discretionary Grant System database and FTA's contractor's expert opinions, to determine the extent to which results were sufficiently documented at each stage of the process and demonstrate the basis for FTA's award decisions. To assess the reliability of these data, we reviewed relevant documentation and spoke with agency officials about data quality control procedures. We determined that the data were sufficiently reliable for the purposes of describing FTA's efforts to document ratings and comments for each of the evaluated projects. We also conducted semi-structured interviews with members of FTA's four technical review teams, interviewed FTA's cost-effectiveness contractor, and interviewed staff from FTA's Office of Program Management who oversaw the technical review teams and the grant program (see complete list of organizations contacted below).

To determine the extent to which the projects FTA selected for award reflect the grant program's purpose and policy priorities, we reviewed FTA's NOFA.² The NOFA described the grant program's purpose and described its policy priorities. To determine the extent to which the projects FTA selected for award reflect the agency's stated policy

¹DOT, *Financial Assistance Guidance Manual* (Washington, D.C., March 2009). GAO, *Intercity Passenger Rail: Recording Clearer Reasons for Awards Decisions Would Improve Otherwise Good Grantmaking Practices*, [GAO-11-283](#) (Washington, D.C.: Mar. 10, 2011). GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999).

²78 Fed. Reg. 78486 (Dec. 26, 2013).

priorities—(1) identifying the project scope, (2) prioritizing Hurricane Sandy damages, (3) prioritizing asset protection, and (4) providing regional resilience—we interviewed FTA officials and reviewed and analyzed key descriptive information from all 61 project proposals submitted to FTA, such as the project overview, the applicant’s attestation regarding Hurricane Sandy damage, cost-effectiveness, proposed resilience benefits, connectivity or interdependency with other resilience efforts, and technical review team ratings and comments. We compared this information to the purpose and policy priorities established in FTA’s NOFA. We also interviewed officials from the U.S. Department of Housing and Urban Development (HUD), which commented on proposed FTA projects, to determine the extent to which FTA coordinated with HUD when evaluating and selecting projects for award. Additionally, we interviewed officials from each of the 10 transit agencies that applied for a grant, and conducted a site visit to the New York City metropolitan area to interview applicants and observe selected funded projects.

Organizations Contacted

We interviewed representatives from each of the following organizations:

Federal Government

- U.S. Department of Transportation, Federal Transit Administration
 - Office of Program Management
 - Region Two Office
- U.S. Department of Housing and Urban Development

Applicants

- City of Nashua, New Hampshire
- Connecticut Department of Transportation
- Massachusetts Bay Transportation Authority
- National Railroad Passenger Corporation (Amtrak)
- New Jersey Transit Corporation
- New York City Department of Transportation
- New York Metropolitan Transportation Authority
- Port Authority of New York and New Jersey
- Southeastern Pennsylvania Transportation Authority
- Washington Metropolitan Area Transit Authority

FTA’s Cost-Effectiveness Contractor

- Dewberry

We conducted this performance audit from November 2015 to December 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Funding and Status of Selected Resilience Projects

Project sponsor	Project name	Funding allocated	Funding obligated as of August 2016	Estimated completion date
City of Nashua, NH	Nashua Transit Facility Back-up Power Supply	\$25,781	\$25,781	Completed Feb. 2016
Connecticut Department of Transportation	Replacement of Norwalk River Railroad Bridge on the Northeast Corridor (Walk Bridge Replacement Project)	\$160,979,022	\$31,500,000	June 2022
Connecticut Department of Transportation	New Haven Rail Yard Power Upgrade	\$8,978,750	\$8,978,750	Jan. 2017
Massachusetts Bay Transportation Authority	MBTA Green Line Fenway Portal Flood proofing	\$21,673,689	\$21,673,689	Jan. 2017
Massachusetts Bay Transportation Authority	MBTA Charlestown Seawall Replacement	\$13,391,443	\$13,391,443	April 2017
New Jersey Transit Corporation	Delco Lead Safe Haven Storage and Re-Inspection Facility Project	\$184,493,910	\$0.00	June 2021
New Jersey Transit Corporation	Hoboken Long Slip Flood Protection	\$146,548,432	\$0.00	Nov. 2020
New Jersey Transit Corporation	NJ TRANSIT Raritan River Drawbridge Replacement Project	\$446,312,465	\$0.00	Feb. 2022
New Jersey Transit Corporation	NJ TransitGrid	\$409,764,814	\$0.00	Nov. 2021
New Jersey Transit Corporation	Train Controls—Wayside Signals, Power & Communication Resiliency Project	\$88,903,190	\$0.00	Dec. 2020
New York City Department of Transportation	New York City Comprehensive Ferry Transit Resilience Project	\$191,550,000	\$0.00	Sept. 2020
New York Metropolitan Transportation Authority	Emergency Communications Enhancements (NYCT)	\$74,950,000	\$52,425,000	Jan. 2022
New York Metropolitan Transportation Authority	Flood Mitigation in Yards (NYCT)	\$617,200,000	\$0.00	May 2022
New York Metropolitan Transportation Authority	Hardening of Substations in Flood Prone Areas and Purchase of Mobile Substations (NYCT)	\$112,050,000	\$0.00	June 2020
New York Metropolitan Transportation Authority	Protection of Tunnel Portals and Internal Tunnel Sealing (NYCT)	\$43,090,000	\$0.00	Oct. 2020
New York Metropolitan Transportation Authority	Flood Resiliency for Long Island City Yard (LIRR)	\$19,150,000	\$0.00	Jan. 2018
New York Metropolitan Transportation Authority	Flood Resiliency for Critical Support Facilities (NYCT)	\$24,320,000	\$0.00	Sept. 2019
New York Metropolitan Transportation Authority	Protection of Street Level Openings in Flood Prone Areas (NYCT)	\$300,690,000	\$0.00	Dec. 2019
New York Metropolitan Transportation Authority	Metro-North Railroad Power and Signals Resiliency Improvements	\$37,500,000	\$20,797,500	July 2019
New York Metropolitan Transportation Authority	Internal Station Hardening (NYCT)	\$19,730,000	\$4,716,634	Aug. 2019

Appendix II: Funding and Status of Selected Resilience Projects

New York Metropolitan Transportation Authority	Pumping Capacity Improvements (NYCT)	\$24,140,000	\$0.00	Oct. 2020
New York Metropolitan Transportation Authority	Right-of-Way (ROW) Equipment Hardening in Flood-Prone Areas (NYCT)	\$63,550,000	\$0.00	March 2020
New York Metropolitan Transportation Authority	New York-New Jersey River to River Rail Resiliency (R4) Project (LIRR)	\$81,007,104	\$0.00	Dec. 2021
New York Metropolitan Transportation Authority	Rockaway Line Protections (NYCT)	\$136,820,000	\$0.00	Dec. 2019
New York Metropolitan Transportation Authority	Flood Resiliency for Critical Bus Depots (NYCT)	\$44,770,000	\$0.00	July 2019
Port Authority of New York and New Jersey	Exchange Place, Newport Station & Grove Street Station Head House Protection	\$37,084,650	\$0.00	Jan. 2020
Port Authority of New York and New Jersey	Harrison Car Maintenance Facility Automatic Flood Barrier	\$14,861,400	\$14,861,400	Sept. 2020
Port Authority of New York and New Jersey	Extension of Rail Yards	\$18,900,000	\$0.00	Feb. 2020
Port Authority of New York and New Jersey	Concrete Sea Wall East of PATH Harrison Car Maintenance Facility	\$16,815,975	\$16,815,975	Sept. 2020
Port Authority of New York and New Jersey	Penn-Moynihan Station Complex Train-shed Hardening Project ^a	\$40,200,000	\$0.00	June 2020
Port Authority of New York and New Jersey	World Trade Center Site and Transit Facilities Flood Mitigation and Resiliency Improvements Program	\$84,675,000	\$0.00	Dec. 2017
Southeastern Pennsylvania Transportation Authority	SEPTA Ancillary Control Center Project	\$9,003,000	\$9,003,000	Dec. 2018
Southeastern Pennsylvania Transportation Authority	SEPTA Railroad Embankment & Slope Stabilization Project	\$18,739,000	\$18,739,000	June 2018
Southeastern Pennsylvania Transportation Authority	SEPTA Sharon Hill Line Flood Mitigation Project	\$3,752,000	\$337,500	June 2018
Southeastern Pennsylvania Transportation Authority	SEPTA Railroad Signal Power Reinforcement Project	\$32,026,000	\$32,026,000	Oct. 2019
Southeastern Pennsylvania Transportation Authority	SEPTA Jenkintown Area Flood Mitigation Project	\$14,987,000	\$2,812,500	Aug. 2021
Southeastern Pennsylvania Transportation Authority	SEPTA Manayunk/Norristown Line Shoreline Stabilization Project	\$4,502,000	\$525,000	Sept. 2017
Southeastern Pennsylvania Transportation Authority	SEPTA Subway Pump Room Emergency Power Project	\$3,749,000	\$3,749,000	June 2018
Washington Metropolitan Area Transit Authority	Protecting the Subway System by Raising Ventilation Shaft Elevations	\$13,500,000	\$8,501,250	Dec. 2018
Washington Metropolitan Area Transit Authority	Protecting WMATA's Existing Subway System Investment by Improving Drainage	\$7,500,000	\$7,500,000	Oct. 2018
Total		\$3,591,883,625	\$268,379,422	

Source: Department of Transportation information. | GAO-17-20

^aThe Penn-Moynihan Station Complex Train-shed Hardening Project is being administered by the Federal Railroad Administration.

**Appendix II: Funding and Status of Selected
Resilience Projects**

Appendix III: Comments from the Department of Transportation

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Assistant Secretary
for Administration

1200 New Jersey Avenue, SE
Washington, DC 20590

NOV 07 2016

Mark Goldstein
Director, Physical Infrastructure Issues
U.S. Government Accountability Office (GAO)
441 G Street NW
Washington, DC 20548

Mr. Goldstein:

We disagree with GAO's characterization of the Federal Transit Administration's (FTA) evaluation process of Hurricane Sandy transit resilience projects. The FTA established a written evaluation process, provided written instructions and rating guidance to technical reviewers, and recorded all project ratings and comments in FTA's Discretionary Grant System. Further, FTA followed a thorough quality control process to ensure the accuracy and consistency of all project ratings, including the appropriate use of the advisory opinion provided by its cost-effectiveness contractor. The FTA review teams determined all final project ratings and no ratings were ever changed.

The FTA's Competitive Resilience program is helping protect vulnerable infrastructure for the transit systems that sustained severe storm damage from Hurricane Sandy. In accordance with the policy priorities established in the December 2013 FTA Notice of Funding Availability (NOFA), over 90 percent of the \$3.6 billion for competitive resilience grants funded resilience projects in New York and New Jersey, with the remaining funds supporting projects in five other surrounding states. The FTA's evaluation and selection process for these projects was consistent, appropriately documented, and based on the criteria established in the NOFA. Further, FTA gave appropriate consideration to comments received from other Federal agencies during the evaluation process and continues to coordinate to prevent duplication.

We also disagree with GAO's assessment of FTA's coordination with other Federal agencies to prevent duplication. Prior to project selection, FTA sought and considered input on proposed projects from other Federal agencies involved in the Hurricane Sandy rebuilding effort. Comments received from these agencies did not identify any concerns about duplication. For several projects, these agencies recommended that coordination continue as projects are implemented. The FTA continues to work closely with local recipients and other Federal agencies as projects move through design and implementation to ensure that FTA-funded projects support regional resilience efforts. For example, we are closely coordinating the Long Island Rail Road's River to River Rail Resilience design with Amtrak to eliminate duplicate resilience measures in shared-use tunnels.

See comment 1 below.

See comment 2 below.

See comment 3 below.

See comment 4 below.

See comment 5 below.

See comment 6 below.

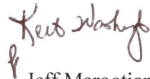
**Appendix III: Comments from the Department
of Transportation**

See comment 7 below.

The U.S. Department of Transportation (DOT) is committed to exercising rigorous management and oversight of its competitive grant programs and ensuring the integrity of the competitive grant award process. Recently, DOT developed and put into place a review process for obtaining Secretarial approval of DOT's competitive grants. The competitive grants review process seeks to ensure an appropriate level of collaboration while minimizing the Department's exposure to risks. We are currently updating the Financial Assistance Guidance Manual to align with the Federal government-wide financial assistance regulations and audit recommendations.

Upon review of the draft report, we concur with both recommendations and will provide a detailed response to each recommendation within 60 days of the final report's issuance. Please contact Madeline M. Chulumovich, Director, Audit Relations and Program Improvement, at (202) 366-6512 with any questions.

Sincerely,



Jeff Marootian
Assistant Secretary for Administration

GAO's Comments

1. In its written comments, the Department of Transportation (DOT) stated that the Federal Transit Administration (FTA) established a written evaluation process, provided written instructions and rating guidance to technical reviewers, and recorded all ratings and comments in FTA's Discretionary Grant System. Our report describes these actions.
2. In its written comments, DOT stated that FTA followed a thorough quality control process to ensure the accuracy and consistency of all project ratings, including the appropriate use of the advisory opinion provided by its cost-effectiveness contractor. We disagree that FTA's technical review teams consistently used the cost-effectiveness contractor's opinion. As discussed in the report, the training materials provided to the technical review teams did not specify that the ratings were "advisory opinions" or discuss how teams were to incorporate that rating into the evaluation process. Members of three of the four teams that we spoke with stated that they generally assigned projects the same cost-effectiveness criterion rating as the contractor, and, based on our analysis, 11 of the 40 funded projects received a different cost-effectiveness rating than that provided by the contractor. Additionally, FTA program officials told us that they did not compare the cost-effectiveness contractor's ratings to the teams' ratings for the cost-effectiveness criterion as part of the quality assurance review, and DOT did not provide documentation to demonstrate that they did.
3. In its written comments, DOT stated that no project ratings were ever changed. This is incorrect. According to our analysis of FTA documentation, following the technical review teams' evaluations, changes were made to the overall project ratings for at least 10 of the 61 submitted projects. FTA did not document why, when, or by whom changes were made to overall project ratings.
4. DOT stated that the evaluation and selection process was consistent, appropriately documented, and based on the criteria established in the notice of funding availability (NOFA). While FTA's evaluation and selection process was based on the criteria established in the NOFA, we disagree that the process led to a consistent, documented approach to evaluating and selecting projects. For example, as discussed in the report, while FTA established a written evaluation process, it did not prepare a plan for evaluating project proposals in advance of issuing the NOFA—as called for in DOT's *Financial Assistance Guidance Manual*—and the proposed plan did not describe the program office's quality assurance review or how the office would ensure a consistent evaluation process. We also found: (1) inconsistencies in how the technical review teams assigned cost-effectiveness criterion ratings, (2) that it is unclear to what extent the teams consistently screened proposals to ensure that they met the minimum program requirements, (3) that FTA did not document key decisions resulting from its quality assurance review with regard to rating changes, and (4) that FTA

did not document the resolution of high-level reviewer concerns about projects, which, according to our analysis, reviewers made for 26 of the 40 funded projects.

5. In its written comments, DOT stated that FTA sought and considered input on proposed resilience projects from other federal agencies involved in the Hurricane Sandy rebuilding effort and that the one set of comments received from the U.S. Department of Housing and Urban Development (HUD) did not identify any concerns about duplication. We disagree. FTA received information from HUD, as well as applicants and reviewers, which identified instances of potential connectivity or coordination needed between proposed projects and other resilience efforts being performed outside of FTA in the same geographic area. While this could have helped FTA support projects that provide resilience for the region—a stated policy priority—FTA officials told us that they did not consider this information in the evaluation and selection process and could provide no evidence of how this was considered.
6. DOT stated in its written comments that FTA continues to work closely with local recipients and other federal agencies as projects are designed and implemented to ensure that FTA-funded projects support regional resilience efforts and DOT provided an example of coordination in its written comments. However, as discussed in the report, during the course of our work FTA regional officials told us that they do not plan to redesign any of the FTA projects as a result of other ongoing resilience efforts in the same geographic area and plan to treat them as independent from projects HUD funded. Further, the project DOT cited as an example was not one of the projects we identified where FTA had collected information from HUD, applicants, and reviewers on potential connectivity or coordination needed between proposed projects and other resilience efforts.
7. In its written comments, DOT stated that it recently developed and implemented a review process for obtaining the Secretary's approval of DOT's competitive grants to ensure an appropriate level of collaboration and minimize DOT's exposure to risks. DOT also stated that it is currently updating the *Financial Assistance Guidance Manual* to align with federal government-wide financial assistance regulations and audit recommendations. DOT did not provide information concerning these efforts, and we did not review this information as part of our review. We will review these new initiatives as part of our ongoing work on the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies grant program.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Mark Goldstein, (202) 512-2834 or goldsteinm@gao.gov.

Staff Acknowledgments

In addition to the contact named above, Steve Cohen (Assistant Director), Daniel Paepke (Analyst in Charge), Amy Abramowitz, Molly Callaghan, Lorraine Ettaro, Michael Hix, David Hooper, Joshua Ormond, and Michelle Weathers made significant contributions to this report.

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Appendix V: Accessible Data

Data Tables for Figure 1 Location and General Characteristics of Selected Federal Transit Administration Resilience Projects

Project location	Number	Percent
NH	1	3
CT	2	5
DC	2	5
MA	2	5
NJ and NY	2	5
NJ	7	18
PA	7	18
NY	17	42

Hazard protected against	Primary hazard	Secondary hazard
Flood	7	20
Wind	2	1
Hurricane/ coastal storm	30	8
Snow/ice storm	0	3

Selected projects	Number
Rail, commuter rail, or intercity rail	36
Bus	2
Ferry	1
Other	1