

Report to the Congress

December 2011

# RECOVERY ACT

Progress and Challenges in Spending Weatherization Funds





Highlights of GAO-12-195, a report to the Congress

### Why GAO Did This Study

The American Recovery and Reinvestment Act of 2009 (Recovery Act) provided \$5 billion to the Department of Energy's (DOE) Weatherization Assistance Program to help low-income families by making long-term energy efficiency improvements to their homes. The Recovery Act requires GAO to conduct bimonthly reviews of how recipients such as state-level agencies use the act's funds. As part of this review, GAO examined if the act is achieving its stated purposes. The act also requires GAO to comment and report quarterly on estimates of jobs funded and counted as full-time equivalents (FTE), as reported by recipients of Recovery Act funds. GAO examined (1) the status and use of weatherization grant program funds under the Recovery Act; (2) the challenges, if any, that recipients faced in implementing the weatherization program under the Recovery Act; (3) the extent to which the weatherization program under the Recovery Act has achieved its energy and cost savings goals; and (4) the changes, if any, over time in the quality of FTE data reported by Recovery Act recipients, particularly by program recipients. GAO surveyed the 58 statelevel grant recipients of the act's weatherization funds, reviewed DOE and recipient-reported data, and interviewed state and local agency officials.

GAO makes no new recommendations in this report but provides the status of prior recommendations that remain open and not implemented from GAO's Recovery Act—mandated reports. DOE generally concurred with GAO's findings and provided clarifications, which were incorporated as appropriate.

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#### December 2011

### RECOVERY ACT

# **Progress and Challenges in Spending Weatherization Funds**

### What GAO Found

As of September 2011, the 58 state-level grant recipients were awarded approximately \$4.75 billion from DOE to implement the Weatherization Assistance Program under the Recovery Act and reported spending about \$3.46 billion (about 73 percent). DOE expects to meet or exceed its production target of 607,000 homes and spend most of the act's funds because some recipients have been able to exceed their production targets because of a lower average cost of weatherizing homes and lower training and technical assistance expenses than anticipated. In response to GAO's prior recommendation that DOE clarify production targets and funding deadlines, among other things, DOE officials provided documentation showing actions taken concerning targets but failed to provide clarification of the consequences for not meeting the targets.

Most recipients reported experiencing more implementation challenges in the first year of the Recovery Act than in the third year. Initial challenges included implementing new wage and reporting requirements and balancing training and technical assistance requirements with production targets. In the absence of a spending deadline for the weatherization grant program, DOE established a deadline of March 31, 2012, for recipients to complete spending Recovery Act weatherization funds. Recipients reported concerns with completing final Recovery Act requirements by DOE's deadline, and continuing to support weatherization efforts after the deadline. Officials from state and local agencies reported seeking alternative sources of funding to mitigate the loss of federal funds. DOE weatherization officials said they requested a 2-year extension from the Secretary of Energy to allow some recipients, on a case-by-case basis, to spend any remaining Recovery Act funds after March 2012. However as of November 2011, it had not been determined if an extension would be available for recipients. In the interim, the Office of Management and Budget released a September 2011 memorandum stating that Recovery Act funds should be spent by September 2013.

A long-term Weatherization Assistance Program goal is to increase energy efficiency through cost-effective weatherization work. March 2010 estimates from an Oak Ridge National Laboratory study project that energy savings will likely exceed the program's costs, so that every \$1 spent on the weatherization program for 2009 through 2011 would result in almost \$2 in energy savings over the useful life of the investment; the laboratory plans to issue more definitive estimates in 2013. In response to GAO's prior recommendation that DOE revisit methodologies used to determine the most cost-effective work, DOE officials stated that the results of this 2013 study will be used to strengthen current protocols for determining the most cost-effective weatherization work.

According to GAO's analysis, the quality of FTE data reported by recipients to FederalReporting.gov has improved over time. DOE performs quality assurance steps on the data that recipients provide to FederalReporting.gov, and DOE officials reported that data quality continues to improve. According to Recovery.gov, the Recovery Act funded approximately 14,090 FTEs for the quarter ending September 30, 2011. FTEs are declining since the quarter ending December 2010 as weatherization work is completed.

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### **Abbreviations**

DOE Department of Energy

DOT Department of Transportation

EECBG Energy Efficiency and Conservation Block Grant

FHWA Federal Highway Administration

FTE full-time equivalent

HHS Department of Health and Human Services
HUD Department of Housing and Urban Development
LIHEAP Low Income Home Energy Assistance Program

NEAT National Energy Audit Tool

OHS Office of Head Start

OMB Office of Management and Budget ORNL Oak Ridge National Laboratory

PAGE Performance and Accountability for Grants in Energy

SERC Sustainable Energy Resources for Consumers

TCAP Tax Credit Assistance Program

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## United States Government Accountability Office Washington, DC 20548

December 16, 2011

Report to the Congress

In response to the recent economic crisis, Congress enacted the American Recovery and Reinvestment Act of 2009 (Recovery Act) to. among other things, preserve and create jobs and promote economic recovery. Since the Recovery Act was enacted, the Department of the Treasury has paid out approximately \$420 billion in Recovery Act funds for use by, among others, state and local governments.<sup>2</sup> The Recovery Act directed states to use the funds for various purposes, including assisting those most affected by the recession and investing in transportation, environmental protection, and other infrastructure to provide long-term economic benefits. Furthermore, the Recovery Act gave preference to activities that could be started and completed expeditiously. The Recovery Act provided \$5 billion to the Department of Energy's (DOE) Weatherization Assistance Program (weatherization program), which assists low-income families in reducing their energy bills by making long-term energy efficiency improvements to their homes. These improvements include installing insulation, sealing leaks, and modernizing heating equipment and air conditioning equipment. DOE distributed the Recovery Act funds for weatherization assistance to 58 recipients (state-level agencies), including all 50 states, the District of Columbia, 5 territories, and 2 Indian tribes, to be spent by March 31, 2012.

The Recovery Act requires that GAO conduct bimonthly reviews of how the act's funds are used by recipients. As part of this review, we examined whether the act is achieving its stated purposes. The Recovery Act also requires GAO to comment and report quarterly on estimates of jobs funded and counted as full-time equivalents (FTE), as reported by

<sup>&</sup>lt;sup>1</sup>Pub. L. No. 111-5, § 3, 123 Stat. 116 (2009).

<sup>&</sup>lt;sup>2</sup>This amount was current as of October 14, 2011. For updated information, see Recovery.gov.

recipients of Recovery Act funds.<sup>3</sup> In this report, we update our May 2010 report and include new information on the use of Recovery Act funds provided for the weatherization program.<sup>4</sup> Specifically, our objectives were to examine (1) the status and use of weatherization grant program funds under the Recovery Act; (2) the challenges, if any, that recipients faced in implementing the weatherization program under the Recovery Act; (3) the extent to which the weatherization program under the Recovery Act has achieved its energy and cost savings goals; and (4) the changes, if any, over time in the quality of the FTE data reported by Recovery Act recipients (state-level agencies), particularly by weatherization program recipients.

To address all four objectives, we conducted a web-based survey of all 58 recipients of weatherization funding under the Recovery Act and received 55 responses. We also interviewed officials from DOE and national associations that focus on weatherizing low-income housing, and 10 selected state and territorial offices responsible for overseeing the weatherization program. We selected these states using several criteria, including the percentage of Recovery Act funds spent, the percentage of households weatherized, the size of the Recovery Act grant, the percentage of funding received out of the total funding amount of \$5 billion, and geographic location. We also conducted site visits and spoke with state officials and select local agencies in 7 states and conducted

<sup>&</sup>lt;sup>3</sup>Pub. L. No. 111-5§, 1512(e), 123 Stat. 115, 288. FTE data provide insight into the use and impact of the Recovery Act funds, but recipient reports cover only direct jobs funded by the Recovery Act. These reports do not include the employment impact on suppliers (indirect jobs) or on the local community (induced jobs). Both data reported by recipients and other macroeconomic data and methods are necessary to understand the overall employment effects of the Recovery Act.

<sup>&</sup>lt;sup>4</sup>GAO, Recovery Act: States' and Localities' Uses of Funds and Actions Needed to Address Implementation Challenges and Bolster Accountability, GAO-10-604 (Washington, D.C., May 26, 2010).

<sup>&</sup>lt;sup>5</sup>The grant recipients who did respond may not represent all Recovery Act weatherization grant recipients. Consequently, the survey results may not be generalized to include the Navajo Nation, Northern Arapaho, or the District of Columbia—the recipients who did not respond to the survey.

<sup>&</sup>lt;sup>6</sup>We selected a nonprobability sample of 10 states, which represents 17 percent of the 58 recipients; because this is a nonprobability sample, information derived from this sample is not generalizable to all states but is illustrative. We spoke with officials in Georgia, Maine, Maryland, Massachusetts, Nebraska, Oregon, Puerto Rico, Rhode Island, South Carolina, and Washington.

telephone interviews with officials in the other 2 state-level agencies. 7 In September 2011, we also attended the National Association for State Community Services Programs' Annual Conference in Seattle, Washington, where we met with a number of recipients and DOE weatherization officials. In addition, to determine the status and use of weatherization grant program funds under the Recovery Act, we reviewed the relevant laws, regulations, and program guidance; analyzed funding and production data provided by DOE; and spoke with officials from national associations, DOE, state weatherization offices, and select local agencies. To determine the challenges recipients faced in implementing the weatherization program under the Recovery Act, we analyzed 15 DOE Inspector General reports and 27 state auditors' reports that had examined the Weatherization Assistance Program under the Recovery Act between October 2009 and August 2011. We interviewed DOE, state, and local agency officials on challenges, if any, they faced and continue to face in implementing the program, including monitoring, training, and closing out their Recovery Act weatherization program grants. To determine the extent to which the Recovery Act's weatherization program. is expected to achieve energy and cost savings goals, we reviewed Oak Ridge National Laboratory's (ORNL) 2010 cost-benefit estimates of expected costs and benefits of the weatherization program under the Recovery Act and its plan for a more detailed evaluation of impacts after the program ends in 2012. ORNL is conducting these analyses under a Recovery Act-funded DOE weatherization grant. We also interviewed the laboratory officials who prepared these documents. To determine how the quality of the FTE data has changed over time, as reported by Recovery Act recipients, we reviewed nine rounds of data reported by recipients and made available on a website created for the Recovery Act— Recovery.gov—and spoke with DOE and state weatherization officials about their processes for collecting and verifying the data they report.8 See appendix I for a detailed discussion of our overall scope and methodology and appendix III for further information on our survey.

<sup>&</sup>lt;sup>7</sup>We conducted site visits to all the selected states, except Nebraska and Puerto Rico.

<sup>&</sup>lt;sup>8</sup>In addition to conducting our analyses of recipient report data for the weatherization program under the Recovery Act, we continued, as in prior rounds, to perform edit checks and analyses on all prime recipient reports to assess data logic and consistency and identify unusual or atypical data.

Our oversight of programs funded by the Recovery Act has resulted in more than 100 related products with numerous recommendations since we began reporting on the Recovery Act. This report updates agency actions in response to recommendations from previous bimonthly and recipient reporting reviews that have not been fully implemented (referred to in this report as open recommendations) in appendix IV.

We conducted this performance audit from December 2010 through December 2011 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

DOE's Weatherization Assistance Program was created under Title IV of the Energy Conservation and Production Act of 1976. By making long-term energy efficiency improvements, such as installing insulation, sealing leaks, and modernizing heating and air conditioning equipment, the weatherization program aims to, among other things, increase the energy efficiency of homes owned or occupied by low-income persons, reduce their total residential expenditures, improve their health and safety, and reduce the burden of energy prices. According to DOE, such improvements allow these households to spend the money saved on energy costs for other pressing needs. DOE makes weatherization program funds available through formula-based grants to state-level agencies in the 50 states, the District of Columbia, U.S. territories, and Indian tribes. State-level agencies (recipients) then contract with local

<sup>&</sup>lt;sup>9</sup>See http://www.gao.gov/recovery for related GAO products.

<sup>&</sup>lt;sup>10</sup>"Homes" refers to housing units, which include single-family units, units within a multifamily building, and mobile homes. DOE defines a weatherized unit as a dwelling unit that has received a DOE-approved energy audit or been placed on a priority list and as a unit on which weatherization work has been completed and for which a final energy audit has taken place.

<sup>&</sup>lt;sup>11</sup>DOE is required to allocate a base level of appropriated funds to states each year. According to DOE regulations, when the appropriated amount exceeds about \$209 million, DOE distributes the remaining funds using an allocation formula. The allocation formula considers a number of factors but is particularly affected by the number of low-income households in a state. The grant awards for the two Indian tribes were subtracted from the overall grants to Arizona, New Mexico, and Wyoming.

agencies (also referred to as subrecipients) to deliver weatherization services to eligible residents. In addition to awarding the state-level grants, under the Recovery Act, DOE awarded Sustainable Energy Resources for Consumers (SERC) grants to 27 recipients on a competitive basis. The Energy Independence and Security Act of 2007 included a provision that in any year the weatherization program funding is at least \$275 million; up to 2 percent of the funding can be apportioned for SERC grants to pay for "materials, benefits, and renewable and domestic energy technologies" that are not traditionally allowed under the weatherization program. DOE awarded SERC grants for the first time in August 2010 under the Recovery Act.

The Recovery Act appropriated \$5 billion for the Weatherization Assistance Program, which represents a significant increase for a program that had received about \$225 million per year in recent years. Using Recovery Act funds, DOE awarded grants that will allow local agencies to weatherize approximately 607,000 homes by March 31, 2012, according to agency officials. 12 In the absence of a spending deadline for the weatherization grant program, DOE established a deadline of March 31, 2012, for recipients to complete spending Recovery Act weatherization funds. 13 In addition to receiving Recovery Act funds, DOE continued to receive no-year weatherization funds through regular appropriations for fiscal years 2009, 2010, and 2011: DOE received \$450 million in fiscal year 2009;14 \$210 million in fiscal year 2010; and \$174 million in fiscal year 2011. Recipients of these funds may carry over balances from previous fiscal years. DOE guidance instructs recipients to spend their Recovery Act weatherization funds first, but DOE also encourages recipients to use their appropriations in the year received to avoid carrying over balances.

<sup>&</sup>lt;sup>12</sup>DOE originally set a target of weatherizing 593,000 low-income homes—that is, the total number of homes to be weatherized (production targets) as stated in state weatherization plans. As recipients amended their plans to reflect increased production, DOE revised its overall weatherization target to 607,000 homes.

<sup>&</sup>lt;sup>13</sup>The Recovery Act required that DOE obligate funds for the program by September 2010; as a grant program, the Weatherization Assistance Program faced no spending deadline for recipients until DOE set one.

<sup>&</sup>lt;sup>14</sup>Of the \$450 million appropriation in fiscal year 2009, DOE received \$200 million through its regular appropriations process. The remaining \$250 million was supplemental funding appropriated by the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act of 2009.

In addition to being eligible for DOE funds, states and territories are eligible to receive Low Income Home Energy Assistance Program (LIHEAP) funds administered and distributed by the Department of Health and Human Services; recipients may spend up to 15 percent of these funds on weatherization activities. The maximum amount of LIHEAP funds available to states and territories for weatherization activities was approximately \$750 million in fiscal year 2009, \$750 million in fiscal year 2010, and \$705 million in fiscal year 2011. These funds represent a significant increase from previous years.<sup>15</sup>

The Recovery Act changed a few existing provisions for weatherization. Specifically:

- The income eligibility level to qualify for services increased from 150 percent to 200 percent of the poverty level.
- The statewide average allowable assistance level per home increased from \$2,500 to \$6,500.
- The allowable funding for training and technical assistance increased from 10 percent up to 20 percent.<sup>16</sup>

In May 2010, we reported that recipients varied somewhat in how they determined income eligibility. We recommended that DOE establish best practices in how income eligibility should be determined and

<sup>&</sup>lt;sup>15</sup>Total LIHEAP appropriations in fiscal years 2009, 2010, and 2011 were about \$5 billion, \$5 billion, and \$4.7 billion, respectively. The LIHEAP amounts available for weatherization activities cited above are estimates based on a calculation of 15 percent of the total LIHEAP appropriations in each fiscal year. States may spend up to 15 percent of LIHEAP funds on weatherization activities, but each state agency administering LIHEAP determines the specific percentage of its LIHEAP funding to use on weatherization. In recent years, states have spent about 10 percent of their LIHEAP funds on weatherization, but state agencies may ask for a waiver in order to spend up to 25 percent. The Department of Health and Human Services submitted a request for \$2.6 billion in LIHEAP funding for fiscal year 2012; of this total, 15 percent—about \$390 million—would potentially be available for weatherization. Before the Recovery Act, the estimated amount available through LIHEAP for weatherization activities ranged from about \$256 million to about \$362 million.

<sup>&</sup>lt;sup>16</sup>Weatherization program training and technical assistance funds support a range of activities, including measuring and documenting performance, monitoring programs, promoting advanced techniques, collaborating to further improve program effectiveness, training, and developing training tools and information resources.

documented.<sup>17</sup> In response to our recommendation, in September 2010, DOE issued guidance that clarified the definition of income eligibility and strengthened the income eligibility requirements.

The Recovery Act also applied Buy American and Davis-Bacon provisions to DOE's weatherization program for the first time. Under the Recovery Act's Buy American provision, all steel, iron, and manufactured goods used in Recovery Act-funded projects must be produced in the United States, subject to limited exceptions. Under the Davis-Bacon provision of the Recovery Act, recipients are required to pay the prevailing wage rate in the locality in which Recovery Act work is conducted, as determined by the Department of Labor. <sup>18</sup> Davis-Bacon provisions had not previously applied to weatherization projects funded through regular DOE appropriations.

DOE provided the Recovery Act funds incrementally, as recipients completed certain requirements. Initially, each recipient received the first 10 percent of its allocated funds, which could be used for start-up activities, such as hiring and training staff, purchasing needed equipment, and performing energy audits of homes, among other things. Before a recipient could receive the next 40 percent of its funds, the recipient had to submit a weatherization plan outlining how Recovery Act weatherization funds would be used. In this plan the recipient identified the number of homes to be weatherized and the strategies it would use to monitor its funds. To receive access to the final 50 percent of funds, a recipient had to weatherize at least 30 percent of the homes identified in its weatherization plan and meet other requirements. These other requirements included implementing the monitoring and inspection protocols established in its weatherization plan; monitoring its local agencies at least once each year to determine compliance with administrative, fiscal, and state policies and guidelines; ensuring that local quality controls are in place; inspecting at least 5 percent of completed homes during the course of the respective year; submitting timely and accurate progress reports; and conducting monitoring reviews to confirm acceptable performance.

<sup>&</sup>lt;sup>17</sup>GAO-10-604.

<sup>&</sup>lt;sup>18</sup>Furthermore, under Davis-Bacon, contractors and subcontractors are required to pay covered workers weekly and submit weekly certified payroll records to the contracting agency, generally the local agency.

The Recovery Act sought to increase transparency and accountability in a program's use of funds. Accordingly, DOE requires recipients to report detailed expenditure and performance information to the Weatherization Assistance Program through a web-based application—the Performance and Accountability for Grants in Energy (PAGE) system. Recipients are to provide quarterly reports in PAGE within 30 calendar days of the end of each quarter year. The information to be reported includes hours worked, expenditures, and homes completed by each subrecipient. In addition, section 1512 of the Recovery Act requires recipients to report certain information quarterly. Recipients report, among other types of information, expenditures, the progress of their projects, and FTEs. Recipients provide the reports through FederalReporting.gov, and the data are then made available to the general public through the Recovery.gov website.

## Progress in Spending and Production Targets

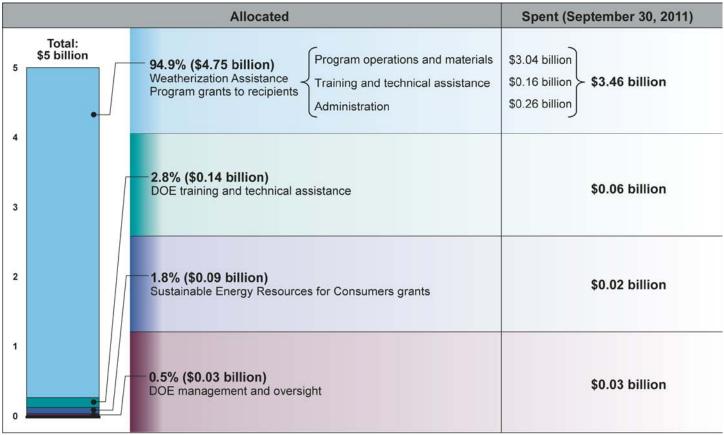
According to DOE data, as of September 30, 2011, recipients had spent most funds, primarily to weatherize low-income housing and provide training and technical assistance to train state and local agency officials as well as private contractors. In addition, DOE weatherization officials told us that the department is on track to meet or exceed its production target of weatherizing 607,000 low-income homes by March 2012, <sup>19</sup> but some individual recipients may not meet the production targets outlined in their state plans.

<sup>&</sup>lt;sup>19</sup>The deadline for completing DOE's Recovery Act funded weatherization training and technical assistance activities varies. Deadlines range from September 2011 through September 2013.

Recipients Spent Most Funds Primarily to Weatherize Low-Income Housing and Provide Training and Technical Assistance

As of September 30, 2011, recipients had been awarded approximately \$4.75 billion for implementing the weatherization program under the Recovery Act and spent about \$3.46 billion, or nearly 73 percent, of this total, according to DOE data. Figure 1 shows how DOE allocated the funds provided by the weatherization program under the Recovery Act, and DOE and recipients' expenditures as of September 2011.

Figure 1: DOE Allocation of the \$5 Billion Recovery Act Weatherization Assistance Program Appropriation and DOE and Recipient Expenditures, as of September 30, 2011



Source: GAO analysis of DOE data.

Recipients spent about 88 percent of their funds—about \$3.04 billion—on weatherizing about 563,000 low-income homes. These expenditures were for labor and materials, transportation of workers and materials to the job sites, and the purchasing of vehicles. Figure 2 shows two examples of weatherization work performed on homes in Maine and Washington states.

Figure 2: Insulation Installed in the Basement of a House in Maine and beneath a House in Washington State





Source: GAO.

As figure 1 also shows, for training and technical assistance, recipients spent about \$0.16 billion of their total allocation, as of September 30, 2011. According to DOE guidance, training and technical assistance expenditures are intended to maintain the efficiency, quality, and effectiveness of the weatherization program. The recipients used these funds to train state and local agency officials, and private contractors. For example, South Carolina reported that the state used its training and technical assistance funds to work with six technical colleges in the state to set up classes, such as Hot Climate Whole House Weatherization—Site-Built and Hot Climate Whole House Weatherization—Mobile-Home. From April 2010 through March 2011, over 1,500 participants received

<sup>&</sup>lt;sup>20</sup>Program operations and materials expenditures also include expenses related to health and safety, financial audits, liability insurance, leveraging, and special projects.

training in these classes. Figure 3 shows a South Carolina weatherization test house used in training. Furthermore, according to Oregon officials we interviewed, the Recovery Act technical assistance and training funds allowed them to administer the weatherization program at two tribal agencies. Before the Recovery Act, these officials told us, the state did not have sufficient funds to initiate a weatherization program with those tribes. With the Recovery Act funds, Oregon officials said they were able to spend a month with each tribal agency to help set up the weatherization programs.



Figure 3: Weatherization Test House at a Training Center in South Carolina

Source: GAO

For program administration, recipients spent about \$0.26 billion, according to DOE data. This amount is about 7.5 percent of total recipient expenditures, or less than the 10 percent that DOE weatherization program regulations generally allow for administrative purposes. Administrative costs include salaries and fringe benefits for fiscal and administrative staff.

As figure 1 also shows, DOE allocated about \$0.25 billion of the \$5 billion in weatherization funds under the Recovery Act for other weatherization purposes, including DOE training and technical assistance, SERC grants, and DOE management and oversight. DOE's weatherization training and

technical assistance plan for the Recovery Act noted that the expansion of the weatherization program under the Recovery Act necessitated a significant growth in training capacity. To that end, the plan outlined a range of program operation activities: training, including developing tools and information resources; and technical assistance, including measuring and documenting performance, monitoring programs, and promoting advanced techniques and collaborations to further improve program effectiveness. Table 1 outlines some of the training and technical assistance efforts that DOE undertook.

Recipient(s)	Training and technical assistance activity	Allocation
34 weatherization training centers in 27 states	Develop and expand weatherization training centers	\$28,760,810
Energy Enterprise Solutions	Develop the National Platform for Weatherization Training to provide interactive online weatherization training	19,658,348
Oak Ridge National Laboratory	Conduct the national evaluation of the weatherization program under the Recovery Act, including estimate of energy savings and cost effectiveness	18,836,000
Oak Ridge National Laboratory and the Institute of Building Technology and Safety	Conduct quality assurance program to ensure proper use of weatherization grants by recipients	10,000,000
National Association for State Community Service Providers	Support DOE's Weatherization Plus Health initiative, including partnership development and regional weatherization training <sup>a</sup>	8,495,293
National Institute of Building Sciences	Develop multimedia modules for training weatherization technical auditors and installers	7,000,000
Data Tree, Inc., of Virginia	Develop the PAGE module for the weatherization program	\$4,795,327

Source: GAO analysis of DOE data.

<sup>a</sup>DOE's Weatherization Plus Health initiative is a national effort to coordinate resources to improve the energy efficiency, health, and safety of low-income homes.

As we reported in May 2010, worker training and certification requirements varied among the recipients. <sup>21</sup> We recommended that DOE accelerate its efforts to develop national standards for weatherization training, certification, and accreditation. DOE stated that it, along with the Department of Labor, released for comment a draft—"Workforce Guidelines for Home Energy Upgrades"—for single-family homes in November 2010. DOE weatherization officials noted that they received nearly 1,000 comments to the draft guidelines, which will likely delay publication of the final product.

<sup>&</sup>lt;sup>21</sup>GAO-10-604.

In August 2010, DOE awarded SERC grants to 101 local agencies in 27 states to install, test, and report on renewable and domestic technologies not currently covered by the weatherization program. Such technologies include solar photovoltaic systems, tankless or on-demand hot water systems, and geothermal heat pumps. As of September 30, 2011, the 27 states had spent about \$16 million of their SERC grants. Figure 4 shows the installation of solar panels on a SERC project in Massachusetts.



Figure 4: Solar Panels Installed at a SERC Project in Massachusetts

Source: GAO

The Recovery Act sets aside up to 0.5 percent of the amount appropriated for the Weatherization Assistance Program for program management and oversight. As such, DOE allocated 0.5 percent of the \$5 billion weatherization appropriation, or \$25 million (\$0.03 billion), for this purpose. According to DOE weatherization officials, these funds were transferred to DOE's Recovery Act administration account with all similar contributions from other programs to support DOE-wide Recovery Act activities. As a result, the weatherization officials could not provide specific information on how these funds were spent. In general, they said the department used these funds to add staff in DOE to enhance the program's capacity to manage the \$5 billion Recovery Act appropriation.

## DOE Expects to Meet Its Overall Production Target

According to DOE weatherization officials, the Weatherization Assistance Program under the Recovery Act will meet or exceed its production target of weatherizing 607,000 homes by DOE's March 2012 grant deadline because some recipients exceeded their target even as others have fallen short. As shown in figures 5 and 6, some recipients greatly increased their rate of production and expenditures over the course of the Recovery Act grant period, but progress has been uneven. Figures 5 and 6 show the percentage of planned weatherization production completed and percentage of total allocation expended, respectively, by each recipient by September 2009, September 2010, and September 2011.

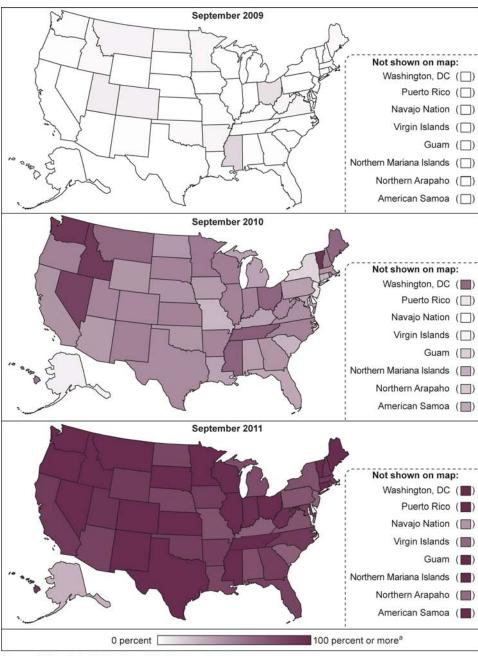


Figure 5: Percentage of Planned Weatherization Production Completed by Each Recipient, September 2009, September 2010, and September 2011

Sources: GAO analysis of DOE data and Map Resources (map).

Note: Some recipients have exceeded their production targets.

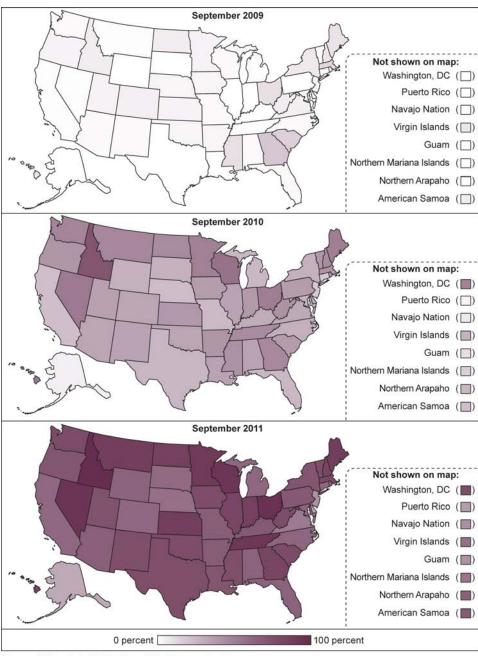


Figure 6: Percentage of Total Allocation Expended by Each Recipient, September 2009, September 2010, and September 2011

Sources: GAO analysis of DOE data and Map Resources (map).

DOE will likely meet or exceed its production target because some recipients have been able to exceed their production targets for the following reasons:

The average cost of weatherizing homes was lower than anticipated. Since 2001, the statewide average expenditure limit per home for DOE weatherization was about \$2,500, but adjusted annually to reflect changes in consumer prices. The Recovery Act increased this limit to \$6,500, and in their state plans, recipients use the average cost per home of \$6,500 to calculate their planned production. As of September 2011, the actual average cost per home was about \$4,900, according to DOE data. As a result, some recipients may be able to weatherize more homes than originally planned. Nebraska officials, for example, cited the current economy as a driving factor for the lower cost of weatherization services. As we reported in May 2010, states were using a variety of methods to calculate the \$6,500 maximum average limit per house.<sup>22</sup> In that report, we recommended that DOE develop and clarify weatherization program guidance that clarifies the specific methodology for calculating the average cost per home. In September 2011, DOE issued guidance that clarifies the methodology for calculating the average cost per unit weatherized and further defines the allowable cost categories used in calculating the average cost per unit.

Additionally, Washington state officials attributed lower weatherization costs to their ability to weatherize more homes for less money when weatherizing multifamily units. For example, they said that when completing weatherization work in multifamily housing, such as caulking wall joints in the attic, the costs are spread out across more units, thereby reducing the cost per unit and hence the overall weatherization cost. We reported in May 2010 that some recipients had limited expertise with weatherizing large multifamily buildings. Some state officials told us that until the Recovery Act, they did not have sufficient funds to justify weatherizing multifamily buildings. Despite this unfamiliarity with weatherizing multifamily units, we reported that some recipients may feel compelled to focus on multifamily houses as a way to quickly increase their production numbers. We recommended in our May 2010 report that DOE consider and address how the weatherization program guidance is

<sup>&</sup>lt;sup>22</sup>GAO-10-604.

affected by the introduction of multifamily units.<sup>23</sup> In response to our recommendation, DOE issued additional guidance in December 2010 to the recipients regarding multifamily housing, including describing eligibility requirements for multifamily housing.

Training and technical assistance expenses were less than originally anticipated. DOE's initial allocation of \$0.83 billion (nearly 17 percent) for training and technical assistance to the recipients represented a substantial increase over past funding under the weatherization program funded with regular appropriations. By the second year of the Recovery Act, DOE noted that many recipients believed that they had sufficiently built up their programs, and DOE provided guidance to allow the recipients to transfer training and technical funds into program operations. As of September 2011, the recipients had transferred about \$0.33 billion from their training and technical assistance allocations, increasing their program allocations to \$4.25 billion. As a result, some recipients now had more funds to weatherize homes. As DOE's March 2012 deadline for spending Recovery Act weatherization funds approaches, DOE weatherization officials anticipate that more recipients will transfer training and technical assistance funds to program funds.

Some recipients may not achieve their spending and production targets. As previously discussed, when DOE obligated \$4.75 billion in formula funds to the states, territories, and tribes, it released the funds to the recipients incrementally as they met certain requirements. By the end of December 2009, DOE had approved the weatherization plans for all 58 recipients, and all recipients had received access to at least 50 percent of their funds. Furthermore, as of September 30, 2010, 26 of the 58 recipients had not received access to their remaining funds; and as of September 30, 2011, with only 6 months to the March 2012 grant deadline, 6 recipients had not been granted full access to the remaining 50 percent of funds.<sup>24</sup>

<sup>&</sup>lt;sup>23</sup>GAO-10-604.

<sup>&</sup>lt;sup>24</sup>DOE has released increments of the remaining 50 percent to some of the recipients who had not received full access to their weatherization funds as of September 2011. As of December 2011, DOE reported that three recipients still had not received access to additional Recovery Act funds.

In our May 2010 report, we found that there was some confusion among some states and local agencies regarding production targets, funding obligations, and the associated consequences of not meeting production and funding targets. We recommended that DOE clarify its production targets, funding deadlines, and associated consequences while providing a balanced emphasis on the importance of meeting program requirements. In response, DOE weatherization officials produced documentation showing extensive communication with the recipients over production and expenditures. However, they did not provide documentation showing how they clarified the consequences for not meeting these targets.

## Recipients Reported Fewer Implementation Challenges over Time

A majority of recipients responding to our survey reported initial challenges in implementing the weatherization program under the Recovery Act, but the percentage continuing to report these challenges had declined by the third year of the program. However, most recipients reported concerns about completing Recovery Act weatherization requirements and continuing to support weatherization efforts.

### Implementation Challenges Declined over Time

In the first year of the weatherization program funded under the Recovery Act, most recipients who responded to our survey reported facing challenges in 26 of the 29 program implementation areas identified. Table 2 shows these 29 implementation areas and recipients' responses to our survey in the first and third program years.

Table 2: Percentage of Recipients Responding to Our Survey That Identified Challenges in the First and Third Years of the Weatherization Assistance Program under the Recovery Act

	Percentage of recipients responding that identified an area as a strong challenge or somewhat of a challenge	
Program implementation area	First program year	Third program year
Balancing the requirements to meet production targets and to ensure the work is done correctly	91	68
Meeting production targets	91	57
Having additional reporting requirements	90	75

<sup>&</sup>lt;sup>25</sup>GAO-10-604.

	Percentage of recipients responding that identified an area as a strong challenge or somewhat of a challenge	
Program implementation area	First program year	Third program year
Implementing new program requirements that were developed as the program progressed	89	63
Implementing Davis-Bacon requirements	88	39
Balancing training and technical assistance requirements with production targets	88	63
Adjusting to changes in existing reporting requirements	87	44
Meeting federal reporting requirements (FederalReporting.gov and PAGE)	84	63
Meeting certification and training requirements	83	57
Lacking expertise weatherizing multifamily units	82	64
Having too few monitoring staff	81	40
Having insufficient number of administrative staff	76	40
Having additional reporting requirements for monitoring	75	47
Lacking expertise in weatherizing multifamily units	74	60
Conducting the required number of monitoring visits	73	42
Adjusting to changes in existing reporting requirements for monitoring	72	48
Ensuring consistency in monitoring results	71	50
Lacking expertise in monitoring multifamily units	71	47
Complying with historic preservation requirements	71	35
Lacking trained monitoring staff	69	26
State-level auditors lacking training or expertise	63	22
Lacking staff to appropriately handle external monitoring (DOE-Inspector General, state-level auditors, consultants)	63	57
Determining how to measure long-term energy savings	60	51
Meeting state's requirements to monitor subgrantees	58	29
Lacking infrastructure at state level to handle the large influx of money from the Recovery Act	57	36
Determining how to measure cost savings (i.e., dollar savings)	55	38
Planning for "cliff effect" (i.e., decline in funding after Recovery Act funding expires in March 2012)	34	89
Determining and documenting income eligibility	25	17
Determining methodology for calculating \$6,500 maximum average cost per home	18	4

Source: GAO analysis of survey responses.

Note: Recipients that responded to the survey could identify each implementation area as either a strong challenge, somewhat of a challenge, or not a challenge.

As the table shows, all but 3 areas were identified as a challenge in the first year of the program by more than 50 percent of the recipients who responded to our survey.<sup>26</sup> Over time, however, the percentage of recipients identifying these areas as a challenge declined, although the amount of the decline varied considerably. In addition, DOE weatherization officials and recipients stated that these challenges initially delayed the weatherization of homes and spending of Recovery Act funds. By early 2011, however, having addressed some of these challenges, some recipients reported that they were weatherizing more homes in 1 month than they had previously weatherized in 1 year. As previously mentioned, however, following the initial delays common to many recipients, recipients' progress in weatherizing homes and spending Recovery Act funds has been uneven. For example, as of September 2011, Idaho had weatherized about 128 percent of its planned houses and spent nearly 99 percent of its total Recovery Act allocation, while Alaska had weatherized about 28 percent and spent about 31 percent.

Among the challenges that declined the most from the first year to the third year was implementing Davis-Bacon requirements. As table 2 shows, 88 percent of the recipients responding to our survey identified implementing Davis-Bacon requirements as a challenge in the first year of the program, but only 39 percent continued to do so by the third year. According to DOE, state, and local officials, after the Department of Labor made the final wage determination for weatherization workers and as the program progressed, the process of complying with Davis-Bacon provisions became routine, and the challenge decreased for many recipients. As we have previously reported, the Recovery Act applied Davis-Bacon provisions to the weatherization program for the first time in 2009. State and local officials delayed weatherization contracts because they were concerned that wage rates for weatherization had not yet been

<sup>&</sup>lt;sup>26</sup>We received responses from 55 of the 58 recipients we surveyed, but not every respondent provided an answer to each question. Every question received a total of from 45 to 54 responses. See appendix III for more information on the survey. Also, the percentage reporting that an implementation action presented a challenge reflects responses identifying the action as a strong or somewhat of a challenge.

<sup>&</sup>lt;sup>27</sup>We received 45 of 51 survey responses that identified implementing Davis-Bacon requirements as a strong challenge or somewhat of a challenge in the first program year.

<sup>&</sup>lt;sup>28</sup>GAO-10-604.

determined by the Department of Labor, and they therefore waited for the department to determine county-by-county prevailing wage rates. <sup>29</sup> In addition, some recipients reported facing challenges in complying with the Davis-Bacon requirement for local agencies to submit weekly certified payroll records for workers paid under Davis-Bacon wage provisions. Some recipients told us that the requirement to certify payroll discouraged some local agencies from participating. For example, in Maryland, state officials told us that this requirement was a considerable challenge because many local agencies handling weatherization work are small organizations with limited staff and therefore may face difficulty in meeting the requirement to certify payroll every week.

However, large numbers of survey respondents reported that their initial year challenges continued into the third year of the program. For example:

Having additional federal reporting requirements. As table 2 shows, 90 percent of recipients responding to our survey identified having additional federal reporting requirements as a challenge in the first program year, and by the third year 75 percent still found this area to be a challenge. For example, under the Recovery Act, recipients are to report program information quarterly, such as the amount of funds spent, and full-time jobs created, to FederalReporting.gov and to DOE. Oregon officials told us meeting these requirements was challenging initially because state and local agencies had to learn how to manage, collect, and submit data. Additionally, state auditor and DOE Inspector General reports identified challenges for some recipients meeting federal reporting requirements. For example, the North Carolina State Auditor reported in March 2011 that the state did not have effective internal controls—such as internal data review procedures to ensure the accuracy of submitted data—to ensure compliance with federal reporting requirements, specifically with

<sup>&</sup>lt;sup>29</sup>In July 2009, DOE and the Department of Labor issued a joint memorandum to weatherization program recipients, authorizing them to begin weatherizing homes using Recovery Act funds, with the condition to compensate workers for any differences in wage rates based on the final Department of Labor's determination of local prevailing wage rates for weatherization activities. On September 3, 2009, the Department of Labor completed its initial determination of wage rates for weatherization work conducted on residential housing units in each county. These wage rates were later revised in December 2009.

<sup>&</sup>lt;sup>30</sup>We received 47 of 52 survey responses that identified having additional federal reporting requirements as a strong challenge or somewhat of a challenge in the first program year.

submitting quarterly reports to FederalReporting.gov.<sup>31</sup> According to DOE weatherization officials, as the program continued and reporting became routine, recipients began to meet federal reporting requirements and faced minimal challenges.

Adjusting to changes in existing reporting requirements for monitoring. Seventy-two percent of the recipients responding to our survey initially identified this implementation area as a challenge, as table 2 shows; by the third year, 48 percent of recipients responding to our surveyed still identified this as a challenge.<sup>32</sup> Recovery Act guidance directed federal agencies to take steps beyond standard practice to ensure compliance with grant rules and regulations. As a result, DOE enhanced its monitoring requirements for the Weatherization Assistance Program under the Recovery Act. For example, DOE's weatherization project officers track recipients' spending and weatherization of homes through the quarterly information recipients submitted to the PAGE system. The DOE Inspector General and state auditors identified problems with how recipients reported monitoring activities. For example, a DOE Inspector General report found that Virginia did not accurately report information on the number of weatherized homes reported by the local agencies to the state. The state's quarterly monitoring report to DOE indicated that 316 homes had been weatherized from July 2009 through September 2009, but the local agency, which keeps its own records, showed that 978 homes had been weatherized.<sup>33</sup>

The need to develop new systems for monitoring and reporting has also yielded benefits, according to DOE program officials and some recipients we interviewed. DOE weatherization officials told us that monitoring and reporting have made the weatherization program stronger by identifying deficiencies and other weaknesses and having the department resolve them. Recipients also reported that the challenge of meeting federal

<sup>&</sup>lt;sup>31</sup>Office of the State Auditor, North Carolina, *Single Audit Report for the Year Ended June 30, 2010* (Raleigh, N.C.: March 28, 2011).

<sup>&</sup>lt;sup>32</sup>We received 36 of 50 survey responses identifying adjusting to changes in existing reporting requirements as a strong or somewhat of a challenge in the first program year.

<sup>&</sup>lt;sup>33</sup>U.S. Department of Energy, Office of inspector General, *Preliminary Audit Report: Management Controls over the Commonwealth of Virginia's Efforts to Implement the American Recovery and Reinvestment Act Weatherization Assistance Program*, OAS-RA-10-11 (Washington, D.C.: May 2010).

reporting requirements provided an opportunity to improve their programs. These improvements included replacing or enhancing their data collection systems, creating specific audit tools for weatherization work, and developing manuals on best practices. For example:

- Officials in Puerto Rico told us that they developed their own specialized audit tool based on the original tool developed by Oak Ridge National Laboratory for the weatherization program. Puerto Rico's specialized tool focuses on the relevant weatherization activities—such as replacing refrigerators, water heaters, and light bulbs—to address the territory's year-round tropical conditions in which, officials told us, the coldest temperature of the year typically reaches 60 degrees Fahrenheit.
- In Maine, officials identified best practices in the weatherization program and created a manual on weatherization procedures that provides additional guidance on the state's program.

Balancing training and technical assistance requirements with production targets. As table 2 shows, 88 percent of recipients responding to our survey initially reported this implementation area as a challenge, and by the third year of the program, 63 percent of recipients still reported that this was a challenge.<sup>34</sup> According to DOE, specialized knowledge and skills are required at the federal, state, and local levels to run an effective weatherization program; these include core competencies in areas such as evaluating buildings to determine weatherization needs, installing weatherization measures, and conducting final inspections of weatherization projects. For recipients to have enough weatherization workers with the specialized knowledge and skills, some recipients focused on increasing their training capacity with Recovery Act funding. According to these officials, many local agencies initially rushed to meet their monthly production targets, and the weatherization work suffered, requiring local agencies to conduct rework. Following the increase in training and experience, state officials found that local agencies have to redo less work. In Washington state, officials faced less of a challenge with balancing training with production targets because officials hired staff who had completed weatherization training previously and therefore could

<sup>&</sup>lt;sup>34</sup>We received 45 of 51 survey responses for the implementation area of balancing training and technical assistance requirements with weatherization production targets as a strong or somewhat of a challenge in the first program year.

complete weatherization projects instead of focusing on meeting training requirements.

Many recipients cited the amount of training weatherization workers received as a positive and lasting impact of the Recovery Act. New weatherization workers were hired to meet the increased production targets under the Recovery Act and as a result received a substantial amount of training. For example, South Carolina officials told us that the training provided through the Recovery Act-funded weatherization program helped individuals gain new skills that are transferable to other areas, such as the private homebuilding industry and local utility energy auditing profession, and will increase their ability to obtain employment in the future. In addition, before the Recovery Act, Puerto Rico had not received weatherization program funding, and territorial officials stated that they used training and technical assistance funds to develop a training center, which will provide weatherization training to individuals in Puerto Rico and other neighboring Caribbean islands.<sup>35</sup> The officials also stated that the center will be sustained with regular appropriations after the Recovery Act funding has ended.

Our interviews with recipients and our reviews of reports by the DOE Inspector General and state auditors, along with our survey data, showed that there were other notable challenges faced by recipients in implementing their programs:

Building operational capacity. Building the operational capacity of
weatherization programs to accommodate greater funding levels—
some of which were more than 10 times larger than their regular
weatherization appropriations—was an initial challenge recipients
faced. With funding increased to \$5 billion over 3 years under the
Recovery Act, recipients needed to scale up their operations—hiring
and training staff and monitors, renting new facilities, and purchasing
more vehicles and equipment—to handle the influx of funding and
meet their individual state targets to weatherize homes and spend
Recovery Act funding by the March 2012 deadline. For example, the

<sup>&</sup>lt;sup>35</sup>The Energy Independence and Security Act of 2007 amended the weatherization program definition of "state" to include the Commonwealth of Puerto Rico and the other territories and possessions of the United States. Consistent with the statutory requirement, in 2009 DOE amended the definition of "state" and amended the allocation procedure to include American Samoa, Guam, Northern Marianas Islands, Commonwealth of Puerto Rico, and the U.S. Virgin Islands.

funding Florida received under the Recovery Act for weatherization was substantially more than the average funding it had received for the weatherization program supported with regular appropriations.<sup>36</sup> Florida officials told us that they welcomed the opportunity to weatherize thousands of additional homes with the higher funding level under the Recovery Act, but it was difficult for the state to increase its capacity for the size and scope of the program. Similarly, funding for Georgia's weatherization program under the Recovery Act was over 10 times larger than the average funding for the state's weatherization program supported with regular appropriations. In response. Georgia contracted with the University of Georgia Cooperative Extension to help manage the increased amount of statelevel monitoring necessary for the weatherization program under the Recovery Act. Georgia officials stated that the University of Georgia hired 24 monitors to conduct monitoring. State officials told us that before the Recovery Act, state-level monitors conducted on-site monitoring at local agencies about once a year, while under the Recovery Act and using the University of Georgia monitors, the local agencies are visited by a monitor at least once a month.

• Monitoring deficiencies. Several DOE Inspector General and state auditor reports identified state-level deficiencies in monitoring efforts. For example, the DOE Inspector General identified significant problems in Illinois with on-site monitoring, inspection, and compliance.<sup>37</sup> Additionally, 14 of the 27 state auditor reports we reviewed identified deficiencies with state-level monitoring of local agencies. For example, the Missouri State Auditor reported that the state had failed to review subrecipient expenditures to ensure costs were allowable, did not have policies and procedures to ensure review of expenditures in monitoring, and did not adequately document subrecipient compliance with federal and state procurement requirements.<sup>38</sup> In May 2010, we recommended that DOE set time

<sup>&</sup>lt;sup>36</sup>The funding data are based on the average amount of funding received by the state from 2004 through 2008. In fiscal year 2009, the weatherization program received regular appropriations that are separate from the Recovery Act funding.

<sup>&</sup>lt;sup>37</sup>U.S. Department of Energy, Office of Inspector General, *Audit Report: Management Alert on the Department's Monitoring of the Weatherization Assistance Program in the State of Illinois*, OAS-RA-10-02 (Washington, D.C.: December 2009).

<sup>&</sup>lt;sup>38</sup>State of Missouri, Missouri State Auditor, *Single Audit Year Ended June 30*, 2010, 2011-11 (Jefferson City, M.O.: March 2011).

frames for states to develop and implement state monitoring programs.<sup>39</sup> As of September 2011, DOE had taken limited action to address this recommendation, and it remains largely unaddressed.<sup>40</sup>

Internal controls. Several DOE Inspector General and state auditor reports identified issues with internal controls. For example, the DOE Inspector General identified numerous internal control challenges for West Virginia, including the lack of adequate financial controls to ensure the accuracy and integrity of financial information and costs incurred. 41 Similarly, a New Jersey state auditor found that the state was not complying with federal regulations on how to handle vehicle and equipment purchases over \$5,000 that were made with Recovery Act funds. 42 We reported previously that the extent of internal controls varied greatly across some recipients. 43 We recommended that DOE, in conjunction with both state and local weatherization agencies. develop a best practices guide for key internal controls that should be present at the local weatherization agency level to ensure compliance with key program requirements. In response to our recommendation, DOE has taken some action, including issuing a memo in May 2011 to all weatherization recipients outlining key internal control requirements. 44 DOE weatherization officials told us they did not intend to issue a best practice guide for key internal controls because they believed there were sufficient documents in place to require internal controls, such as grant terms and conditions, and a training

<sup>&</sup>lt;sup>39</sup>GAO-10-604.

 $<sup>^{40}</sup>$ See appendix IV for more information on the status of GAO recommendations for the weatherization program.

<sup>&</sup>lt;sup>41</sup>U.S. Department of Energy, Office of Inspector General, *Audit Report: The Department of Energy's Weatherization Assistance Program under the American Recovery and Reinvestment Act in the State of West Virginia*, OAS-RA-11-09 (Washington, D.C.: June 2011).

<sup>&</sup>lt;sup>42</sup>New Jersey State Legislature, Office of the State Auditor, *Department of Community Affairs American Recovery and Reinvestment Act Weatherization Assistance Program Weatherization Agencies* (Trenton, N.J.: Nov. 8, 2010).

<sup>&</sup>lt;sup>43</sup> GAO-10-604.

<sup>&</sup>lt;sup>44</sup>See appendix IV for more information on the status of GAO recommendations for the weatherization program.

module available on the Weatherization Assistance Program Technical Assistance Center website.<sup>45</sup>

Challenges Reported for Completing Recovery Act Requirements and Continuing Weatherization Efforts DOE program and state officials we interviewed reported some challenges as they approach DOE's deadline of March 31, 2012, for completing their use of Weatherization Assistance Program grants under the Recovery Act. These challenges included (1) satisfying DOE's requirement to finish spending Recovery Act funds if the March 2012 deadline is not extended<sup>46</sup> and (2) finding alternative funding sources for the weatherization program after March 2012.<sup>47</sup>

Satisfying DOE's requirement to finish spending funds. Some recipients will still have Recovery Act weatherization funds remaining after the March 2012 deadline, even if they have already met their production targets, according to DOE projections based on data as of September 2011. DOE program officials projected that at least 5 percent, or more than \$300 million, of Recovery Act program and training and technical assistance funds may remain unspent by more than 30 recipients. The amount of funds remaining varies greatly among recipients. For example, DOE projections indicate that both Minnesota and Oregon will meet their production targets by March 2012, but the projections also indicate that Minnesota may have a \$148,000 balance and Oregon a \$5 million balance. If these remaining funds were to be spent, recipients might be able to weatherize an estimated additional 50,000 to 60,000 homes, according to DOE projections.

In order to expend any remaining Recovery Act funds, DOE program officials told us that they requested an extension from the Secretary of Energy to allow recipients to spend their remaining Recovery Act weatherization funds until September 2013, rather than the March 2012

<sup>&</sup>lt;sup>45</sup>The website Weatherization Assistance Program Technical Assistance Center is a virtual library of all rules, regulations, policies, and procedures required by DOE's weatherization program. The site is maintained by the National Association of State Community Services Program, which is funded through a DOE grant.

<sup>&</sup>lt;sup>46</sup>DOE's deadline applies not only to the distribution of funds by DOE and state-level agencies, but also to the use of the funds by the ultimate subrecipients to finish weatherizing homes.

<sup>&</sup>lt;sup>47</sup>According to DOE's October 2011 guidance, any Recovery Act weatherization funds that remain unspent after closeout activities for the grant will be returned to the U.S. Treasury.

deadline the department originally set.<sup>48</sup> As of November 2011, it had not been determined if an extension would be available for recipients. DOE weatherization officials told us if an extension is granted, it will be available on a case-by-case basis, using criteria such as the amount of funds remaining, and the rate of expenditures, to determine the recipients who will receive extensions as well as the length of those extensions.

Finding alternative funding sources. As they enter the third and final year of the weatherization program under the Recovery Act. 89 percent of the recipients responding to our survey identified the expected decline in funding after the end of Recovery Act funds as a challenge. 49 As a result, they will need to find alternative sources of funding for their weatherization efforts. DOE program and state officials also told us that without alternative sources of funding, many recipients will be unable to continue providing weatherization services at the current production level. In addition, as the Recovery Act funding has begun to be completely expended, many recipients have begun to lay off weatherization employees. For example, DOE program officials told us that Illinois had spent approximately 82 percent of its Recovery Act grant funds as of September 30, 2011, and had laid off approximately 1,000 employees. Washington state officials also told us that they had hired 15 new staff and 5 inspectors, to help achieve the state's Recovery Act weatherization targets. However, the five inspectors were no longer working for the state weatherization program by May 2011, when it met its Recovery Act production target. Georgia officials told us that neither the state nor the local agencies will have sufficient funding to sustain their current production after their Recovery Act weatherization grant ends.

Officials from several states, local agencies, and training centers stated that they are searching for alternative funding sources in anticipation of the decrease in overall weatherization assistance funding. Recipients have received funding from several sources, such as regular DOE

<sup>&</sup>lt;sup>48</sup>DOE program officials originally told us that they had requested a 2-year extension, so that the new deadline would be March 2014. However the Office of Management and Budget released a memorandum in September 2011 stating that Recovery Act funds should be spent by September 2013.

<sup>&</sup>lt;sup>49</sup>Fifty-two survey respondents answered the question about this implementation area. Of those 52, 47 respondents identified planning for an expected decline in funding after the end of Recovery Act funds as a strong or somewhat of a challenge in the third program year.

weatherization appropriations, LIHEAP funding, and assistance from utility companies. In particular:

- According to DOE data, all 58 recipients currently receive regular DOE weatherization appropriations, which are available until expended, and they have a combined carryover balance of approximately \$317 million in these appropriations that they can spend after March 31, 2012.<sup>50</sup> Some recipients are currently using their regular DOE weatherization appropriations. Recipients such as Idaho and Washington state, which have already spent more than 75 percent of their Recovery Act weatherization grants, are currently using their regular DOE weatherization appropriations and therefore may have fewer funds to carry over and spend after March 31, 2012. In addition, 74 percent of those we surveyed reported that they received LIHEAP funds.<sup>51</sup>
- Weatherization funds from nonfederal sources, such as local utility companies, are also decreasing, according to some state program officials. In Maryland, for example, officials told us that they had previously had two nonfederal sources of weatherization funds: the Regional Greenhouse Gas Initiative and the Electric Universal Service Program. However, because the Regional Greenhouse Gas Initiative has generated only limited revenue recently, no funding has been allocated for the weatherization program through this initiative.<sup>52</sup> The state has not received funding through the Electric Universal Service Program for the past 2 years.<sup>53</sup> Officials in Georgia stated that the grant they received from one utility company ended in May 2011, leaving them with funding from one other nonfederal entity. Two state officials we spoke with, from Rhode Island and Massachusetts, told us that they have sufficient funds from utility companies to compensate for the end of their Recovery Act weatherization grants.

<sup>&</sup>lt;sup>50</sup>The total amount remaining, about \$317 million, is based on data as of August 2011. The data cover fiscal year 2008, fiscal year 2009, fiscal year 2010, and fiscal year 2011.

<sup>&</sup>lt;sup>51</sup>Fifty-four of the 55 recipients responding to our survey answered the question about LIHEAP funds.

<sup>&</sup>lt;sup>52</sup>The Regional Greenhouse Gas Initiative is a market-based regulatory program in 10 Northeastern and Mid-Atlantic states designed to reduce greenhouse gas emissions.

<sup>&</sup>lt;sup>53</sup>The Electric Universal Service Program provides financial assistance with electric bills. The program is administered by the Maryland Office of Home Energy Programs.

Many recipients and local agencies we spoke with are identifying new sources of funding and strategies to continue providing weatherization services after Recovery Act funding ends. For example, Baltimore Housing officials told us that they are trying to combine weatherization measures along with, for example, health and safety measures in one project so that they can draw upon multiple revenue sources. At training centers in Georgia and Maryland, officials told us that they are looking to fund their programs by converting some of their weatherization courses into fee-based training. Also, in Maryland, the training center officials stated that they will collaborate with a local community college to offer an academic degree in weatherization.

## Early Estimates Indicate Cost-Effective Energy Savings

A long-term goal of the weatherization program is to increase energy efficiency through cost-effective weatherization work, and according to the Oak Ridge National Laboratory's March 2010 preliminary estimates, the Recovery Act weatherization program is expected to result in energy savings whose value will significantly exceed program costs. <sup>54</sup> ORNL plans to issue a report with more definitive estimates of the benefits and costs of the program in 2013 that describes the results of its extensive evaluation of the weatherization program under the Recovery Act. For this purpose, the ORNL plan includes an extensive data collection effort on program costs and impacts on energy consumption for residential units weatherized during the program years 2009 through 2011. <sup>55</sup>

# March 2010 Preliminary Estimates

According to ORNL's March 2010 preliminary estimates, every \$1 spent on the weatherization program for 2009 through 2011 would result in \$1.80 in energy savings over the useful life of the investment.<sup>56</sup> Because

<sup>&</sup>lt;sup>54</sup>Oak Ridge National Laboratories, *Weatherization Assistance Program Technical Memorandum Background Data and Statistics*, prepared by Joel F. Eisenberg, March 2010 (ORNL/TM-2010/66).

<sup>&</sup>lt;sup>55</sup>GAO reviewed an early draft of the ORNL evaluation plan, *Evaluation of the National Weatherization Assistance Program during Program Years 2009-2011 (American Reinvestment and Recovery Act Period)*, prepared by Bruce Tonn, and others, May 20, 2011. (ORNL/TM-2011/87).

<sup>&</sup>lt;sup>56</sup>For its estimates, ORNL considered the 50 states and the District of Columbia and not the Native American tribes and the U.S. territories that are also recipients of the weatherization program under the Recovery Act. ORNL assumed that the weatherization investment would yield energy savings over a 20-year period.

of the prospective nature of the March 2010 analysis—preceding the program's actual implementation and results—ORNL relied on estimates of the costs of weatherization investments and energy savings to be expected over the 3 years covered by the Recovery Act; these estimates were generated using ORNL's computer-based program, the National Energy Audit Tool (NEAT). The detailed ORNL estimates reflect the differences among states in energy consumption for heating and cooling and in the sources of energy used in the residential sector. For example, these differences include the following considerations:

- Energy consumption for home heating in New England is generally much higher than in the Southwestern states of Arizona and New Mexico, where energy consumption for air conditioning is relatively higher.
- Home heating in the Midwest relies heavily on natural gas, which is more economical for this purpose than electricity, which is more heavily used in the Southeast.
- Electric utility rates in New England are, on average, considerably higher than in the Mountain states.

As a result of these differences, the estimated energy savings and the dollar values associated with these savings in the ORNL analysis vary widely from region to region.

ORNL's March 2010 estimates also included estimates of program savings in electric bills from weatherization projects to reduce energy consumption by installing more efficient appliances. However, because ORNL had more limited information on energy consumption by residential electric appliances, it simplified its assumption. It assumed that energy savings from improved efficiency would result in a uniform savings of 870 kilowatt-hours per year regardless of location.<sup>57</sup>

ORNL's March 2010 estimates also accounted for geographic differences in the cost of weatherizing homes. For example, the cost used in the

<sup>&</sup>lt;sup>57</sup>The ORNL estimates did, however, account for differences in electric rates across regions of the United States. Hence, while making the simplifying assumption of a uniform reduction in electric consumption of 870 kilowatt-hours, the value of these savings varied across regions.

model for weatherizing a home in New York City is about 15 percent higher than for a home in Charleston, South Carolina. The difference reflects the need for different weatherization projects for the two locations, as well as differences in the costs of labor and materials. Table 3 shows some of the principal factors considered and the resulting estimates of savings and costs in ORNL's 2010 preliminary estimates.

Table 3: ORNL's 2010 Preliminary Estimates of Energy Savings and Costs under the Recovery Act's Weatherization Assistance Program

Principal factors considered (per household)	Estimates
Average heating and cooling bill reduction for the year 2010	\$440
Savings in electricity bills for electric appliances (excluding heating and cooling) for 2010	\$100-\$180
Average cost of weatherizing a housing unit under the program	\$5,760
Average value of energy saving	\$10,350
Energy benefit cost ratio (benefit of \$10,350 divided by cost of \$5,760)	1.8

Source: ORNL.

Note: All dollar values were converted from 2008 dollar values in the original ORNL report to 2010 dollar values using the "Calendar Year Chain-Weighted GDP Price Index," and we rounded the figures.

In its preliminary estimates, ORNL also examined the nonenergy benefits of the weatherization program under the Recovery Act, such as income generated from indirect employment,<sup>58</sup> reduced emissions of carbon dioxide and pollutants resulting from lower residential fuel and electricity consumption, and improved health and safety for program recipients. According to ORNL's estimates, these nonenergy benefits add an additional \$0.70 in nonenergy benefits for every dollar spent on the program, or about \$4,200 for each home weatherized.

It is beyond the scope of our review to evaluate the reliability of ORNL's 2010 preliminary estimates, but their prospective nature as projections means that there is inherent uncertainty about how well they predict actual future outcomes. As mentioned above, ORNL's 2010 analysis relied on estimates of weatherization investment costs and expected

<sup>&</sup>lt;sup>58</sup>In addition to increasing the number of workers employed directly in weatherizing homes, the weatherization program resulted in increased employment in the manufacture of materials and equipment used in weatherization and support services, according to ORNL.

energy savings generated using ORNL's computer-based program, NEAT; and the ORNL report mentioned that the analysis adjusted the NEAT energy savings downward because of evidence that NEAT tends to overestimate energy savings. ORNL told us, however, that the use of the NEAT energy estimates is one of many uncertainties surrounding the preliminary estimates. In contrast, the forthcoming 2013 report will rely on extensive data from household units actually weatherized over the period 2009 through 2011.

#### ORNL's 2013 Evaluation

DOE has contracted with ORNL to conduct an in-depth evaluation of any energy cost savings achieved through the Recovery Act's weatherization program for homes weatherized across the nation and in U.S. territories from 2009 through 2011. According to ORNL's plan for carrying out this evaluation, ORNL expects to issue its analysis in 2013. ORNL's analysis will be based on an extensive data collection effort. We reviewed the energy cost-effectiveness portion of this evaluation plan and found it to be methodologically sound.<sup>59</sup>

This evaluation of the Recovery Act weatherization program impacts is a more extensive effort and likely to lead to more definitive estimates of costs and benefits than the preliminary, prospective March 2010 estimates, according to our review of ORNL's study plan. With a budget of \$19 million to complete its evaluation, ORNL plans to use more researchers and collect extensive data. The data collection will include a large sample of homes weatherized and cover recipients across the United States and its territories. For example, ORNL will collect data on natural gas and electric utility billing histories and use data from surveys of homes weatherized in 2007 and 2008 to estimate Recovery Act period savings for homes that use fuel oil or propane for heating. State and local government officials involved in administering the program will also be surveyed, and various federal government databases will be used.

In addition, ORNL's 2013 evaluation will be based on an analysis of homes actually weatherized by each state. Because the costs and benefits of weatherization vary by region, the number of homes completed and the distribution of these homes among the regions directly

<sup>&</sup>lt;sup>59</sup>We limited our review of this document to the energy-only benefits discussion. We did not review the nonenergy benefits portion of the study plan.

influence total costs and benefits. The March 2010 estimates avoided this issue and estimated the costs and benefits of a "weighted average" of single homes nationwide, where the weighting was based on each recipient's share of total program allocations. In contrast, the forthcoming evaluation will be based on data on the number of homes actually weatherized by the individual recipients, reflecting differences in performance among them; and it will produce regional, as well as national, estimates of program costs and benefits.

In our May 2010 report, we found variation in how some local officials considered cost-effectiveness in determining what weatherization work should be performed. We recommended that DOE revisit the methodologies used in determining the weatherization work that should be performed based on consideration of cost-effectiveness and develop standard methodologies that ensure that priority is given to the most cost-effective weatherization work. In response to our recommendation, DOE weatherization officials cited ORNL's ongoing 2013 evaluation. Officials told us the study results will be used to strengthen current protocols for determining weatherization work for both single and multifamily homes and to ensure cost-effectiveness.

Quality of FTE Data Has Improved over Time, and the Number of FTEs Is Declining To meet our Recovery Act mandate to comment on recipient reports, we continued to monitor the data recipients reported from October 1, 2009, through September 30, 2011. For this report, we focused our review on the quality of FTE data as reported by recipients of weatherization funds under the Recovery Act to FederalReporting.gov and efforts DOE made to validate those data. Each quarter, DOE performs quality assurance steps on the data that recipients provide to FederalReporting.gov, and officials reported that data quality continues to improve. Through these reviews and their interactions with recipients, DOE weatherization officials concluded that recipients now understand the reporting process and stated that the data reported for each reporting period have been of higher quality than the previous period. Reviewing the weatherization program data in FederalReporting.gov from the second reporting period, which ended on December 31, 2009, to the ninth reporting period, which

<sup>&</sup>lt;sup>60</sup>GAO-10-604.

<sup>&</sup>lt;sup>61</sup>We also used our survey data from the 55 of the 58 weatherization recipients responding to our survey and interviews with selected recipients to identify the validation efforts recipients used.

ended on September 30, 2011, we continued to check for errors or potential problems by repeating analyses and edit checks discussed in previous reports. We reviewed data associated with the 58 weatherization program recipient reports and 34 training center grants made to weatherization recipients posted on Recovery.gov for the ninth reporting quarter. <sup>62</sup>

Overall, the recipients reported on Recovery.gov that the Recovery Act weatherization program funded an increasing number of FTE positions for recipients and subrecipients from the guarter ending December 2009 through the quarter ending December 2010, increasing from about 8,300 FTEs to 15,400 FTEs over that period. After December 2010, the number of FTEs began to decline because some recipients completed weatherization work as the end of the program draws near. As of the quarter ending September 30, 2011, FTEs declined to about 14,090 as weatherization work was completed and funds spent. DOE weatherization officials told us recipients are reducing the number of FTEs by an average of 200 jobs per month, which will continue to decrease until no FTEs remain by the scheduled end of the program in March 2012. Following Office of Management and Budget guidance, recipients reported on FTEs directly paid for with Recovery Act funding and not the employment impact on suppliers of materials (indirect jobs) or on the local communities (induced jobs). DOE weatherization officials and recipients told us that the number of jobs funded by the Recovery Act would be greater than the peak of 15,400 FTEs if the data on jobs funded included the associated jobs from the manufacturers of weatherization products, such as companies producing caulking guns or blower door technologies. Figure 7 shows the changes in the number of FTEs recipients reported from the guarter ending December 31, 2009, through September 30, 2011. According to DOE officials, all weatherization recipients reported to FederalReporting.gov for the quarter ending September 2011.

<sup>&</sup>lt;sup>62</sup>According to Recovery.gov, recipients reported on 58 grants across the weatherization program, in addition to 34 training center grants.

Figure 7: FTEs Recipients Reported for the Weatherization Assistance Program under the Recovery Act, October 2009 through September 2011

Source: GAO analysis of Recovery.gov data.

Note: Beginning in the quarter ending September 2010, FTEs include the Recovery Act weatherization program and the FTEs associated with the 34 training centers funded by the Recovery Act. The number of FTEs associated with the training center funds is minimal compared with the number of FTEs from the 58 recipients for the overall weatherization program. We did not include FTE data for the quarter ending September 2009 because of concerns about comparability with subsequent quarters of FTE reporting.

As in previous quarters, DOE performed a number of quality assurance steps on the data to help ensure the quality of the weatherization program's Recovery Act data. To support recipients' data quality, DOE asks the 58 recipients to report data on expenditures and weatherization production each month in DOE's PAGE system. DOE program officers who work directly with each recipient review the data submitted to ensure consistency. Also, DOE weatherization officials reported that they check data quality for data submitted by the 58 recipients in each recipient report against data collected in internal databases, such as PAGE. According to officials, data that do not correspond to the recipient report are flagged for comment and review. If discrepancies are found, DOE project officers work with the weatherization recipients to resolve them.

According to DOE weatherization officials, DOE does not plan to use recipient-reported data internally, but the officials cited the data's usefulness in providing independent data on the numbers of jobs funded by the weatherization program. DOE weatherization officials told us that these data help support the program and its relevance by highlighting the extent to which DOE has achieved its program targets of funds spent, homes weatherized, and jobs funded.

## Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Energy for its review and comment. In its comments, DOE generally concurred with the majority of the findings and conclusions in our draft report. DOE noted that we characterized grant extensions differently on the first page than we did in the main body of the report; we added clarifying language in the highlights page to address DOE's comment. DOE also noted that, as of December 8, 2011, the number of recipients who have not received access to the additional Recovery Act funds is now three. We have added language to reflect the new number. Also in its comments, DOE provided clarifications to actions it has taken to address recommendations we made in May 2010 on the weatherization program under the Recovery Act. With respect to our May 2010 recommendation that DOE develop and clarify weatherization program guidance that clarifies the specific methodology for calculating the average cost per home, DOE stated that its September 2011 guidance provides a formula for this calculation. We concur and will close this recommendation as implemented. Regarding our May 2010 recommendation that DOE set time frames for states to develop and implement state monitoring programs, DOE identified training events and the issuance of a program notice announcing the rollout of "The Weatherization Toolkit," a compact disc that explains the steps to be followed in procuring materials and contractors. This recommendation remains largely unaddressed because these actions do not set time frames. Because we noted uneven progress among recipients in developing and implementing their monitoring programs, we believe that it is important for DOE to establish time frames. Moreover, the program notice cited by DOE predates our May 2010 recommendation, and we did not find it adequate for satisfying the need for time frames. DOE also provided technical comments, which we incorporated as appropriate. DOE's comments are reproduced in appendix II.

We are sending copies of this report to appropriate congressional committees, the Secretary of Energy, the Director of the Office of Management and Budget, and other interested parties. The report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-3841 or ruscof@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 major contributions to this report are listed in appendix V.

Frank Rusco

Director, Natural Resources and Environment

Frank Rusco

#### List of Congressional Committees

The Honorable Daniel Inouye Chairman The Honorable Thad Cochran Vice Chairman Committee on Appropriations United States Senate

The Honorable Jeff Bingaman Chairman The Honorable Lisa Murkowski Ranking Member Committee on Energy and Natural Resources United States Senate

The Honorable Joseph I. Lieberman Chairman The Honorable Susan M. Collins Ranking Member Committee on Homeland Security and Governmental Affairs United States Senate

The Honorable Harold Rogers
Chairman
The Honorable Norman D. Dicks
Ranking Member
Committee on Appropriations
House of Representatives

The Honorable Fred Upton
Chairman
The Honorable Henry Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives

The Honorable Darrell E. Issa Chairman The Honorable Elijah Cummings Ranking Member Committee on Oversight and Government Reform House of Representatives

# Appendix I: Objectives, Scope, and Methodology

Our objectives were to examine (1) the status and use of weatherization grant program funds under the Recovery Act; (2) the challenges, if any, that recipients faced in implementing the weatherization program under the Recovery Act; (3) the extent to which the weatherization program under the Recovery Act has achieved its energy and cost savings goals; and (4) the changes, if any, over time in the quality of full-time equivalent (FTE) data reported by Recovery Act recipients, particularly by weatherization program recipients.

To address these objectives, we reviewed relevant federal laws and regulations and the Department of Energy's (DOE) program notices on the use of funds, monitoring, reporting, and closeout requirements under the Recovery Act's weatherization program. We analyzed DOE data on production, expenditures, and projections of funds remaining. We interviewed DOE weatherization officials who oversee the program about recipient progress in achieving production targets and spending their allocated funds, the grant closeout process, the program after the end of the Recovery Act, lessons learned, a potential deadline extension, the reliability of recipient reports, DOE's monitoring efforts, and progress on implementing GAO's previous recommendations. 1 We also interviewed one project officer in DOE's field office in Golden, Colorado, and two at the National Energy Technology Laboratory; these project officers oversee several states in which we conducted site visits. We met with officials from the National Association for State Community Services Programs, National Association of State Energy Officials, National Governors Association, and National Community Action Foundation to understand their role in helping their members implement the weatherization program under the Recovery Act and the challenges their members faced in using funds, monitoring projects, and reporting outcomes. In September 2011 we attended the National Association for State Community Services Programs' Annual Conference in Seattle, Washington, where we met with a number of recipients and DOE weatherization officials.

<sup>&</sup>lt;sup>1</sup>In GAO, Recovery Act: States' and Localities' Uses of Funds and Actions Needed to Address Implementation Challenges and Bolster Accountability, GAO-10-604 (Washington, D.C., May 26, 2010), we made eight recommendations to DOE. See appendix IV for a detailed discussion of the status of the remaining five open recommendations.

To examine the status and use of weatherization grant program funds under the Recovery Act, we analyzed DOE-funding and production data provided by DOE. We assessed the reliability of the data by interviewing knowledgeable DOE officials about the quality and potential limitations of the data and what checks and controls were in place to ensure data accuracy. We determined the data were sufficiently reliable for our purposes. We also selected a nonprobability sample of 10 states, which represents 17 percent of the 58 recipients of weatherization funding under the Recovery Act. We selected these states using six criteria: the percentage of funds spent and homes weatherized, the amount of Recovery Act funding, geographic region, percentage of funding received out of the total Recovery Act weatherization funding, the average funds spent per completed household, and survey responses from the 55 of the 58 recipients to our web-based survey. In all 10 states, we interviewed state program representatives. We conducted these interviews by telephone with state officials in Nebraska and Puerto Rico, and we visited state officials in Georgia, Maine, Maryland, Massachusetts, Oregon, Rhode Island, South Carolina, and Washington.<sup>2</sup> In addition, in seven of these states,3 we spoke with officials at a local agency,4 and visited 11 Recovery Act-funded weatherization projects, including three training centers in 3 of the states; and one Sustainable Energy Resources for Consumer Grants project in Massachusetts. For a copy of the survey instrument, see www.gao.gov/special.pubs/gao-12-195/index.html.

To examine the challenges, if any, that DOE and recipients faced in implementing the weatherization program under the Recovery Act, we first conducted a web-based survey of all 58 recipients; the survey went to the 58 state weatherization program managers and was open for 1 month. During that time, we also provided e-mail and telephone reminders. We administered the survey to all 58 Recovery Act grant recipients and received responses from 55 recipients. The grant recipients who did respond may not represent all Recovery Act weatherization grant recipients. Consequently, the survey results may not be generalized to include the Navajo Nation, the Northern Arapaho, or the

<sup>&</sup>lt;sup>2</sup>In Massachusetts, we also spoke with representatives from the Massachusetts Recovery and Reinvestment Office.

<sup>&</sup>lt;sup>3</sup>In Oregon, we spoke with state officials but did not speak with local agencies or visit Recovery Act-funded projects.

<sup>&</sup>lt;sup>4</sup>The local agencies we spoke with in 6 states were selected by the state program offices.

District of Columbia—the recipients who did not respond to the survey. This survey asked recipients about revenue sources; the level of contact with project officers; the timeliness and helpfulness of DOE guidance; any challenges recipients faced in using funds, monitoring, and achieving program goals in the first 2 years of the Recovery Act; and any remaining challenges they face. See appendix III for a detailed explanation of the analysis of the survey data.

To further examine the challenges state program offices had implementing and monitoring their weatherization assistance programs under the Recovery Act, we also analyzed 15 DOE Inspector General and 27 state auditors' reports published between October 2009 and August 2011. In addition, with the DOE project officers we interviewed, we discussed the initial challenges that they faced implementing the Recovery Act requirements, resolving recipient questions on program guidance, and the differences among the recipients they oversee in implementing weatherization programs using Recovery Act funds. With recipients and local agencies, we discussed completing the Recovery Act requirements and finding additional sources of revenue to help continue their programs after March 2012. With officials from the four national associations, we discussed initial implementation challenges their members faced.

To determine the extent to which the weatherization program is expected to achieve energy and cost savings goals, we reviewed Oak Ridge National Laboratory's (ORNL) 2010 cost-benefit estimates of expected costs and benefits of the Recovery Act weatherization program and its plan for a more detailed evaluation of impacts for homes weatherized during the years 2009 through 2011.<sup>5</sup> ORNL provided an electronic spreadsheet containing the model and the data that it used to estimate expected costs and benefits of the program. To better understand the model and sources of data used, including the electronic spreadsheet, we conducted follow-up interviews with the principal ORNL analyst in charge of the study.

<sup>&</sup>lt;sup>5</sup>The estimates come from Oak Ridge National Laboratory, Weatherization Assistance Program Technical Memorandum: Background Data and Statistics, prepared by Joel F. Eisenberg, March 2010 (ORNL/TM-2010/66). See the plan, Oak Ridge National Laboratory, Evaluation of the National Weatherization Assistance Program during Program Years 2009—2011 (American Reinvestment and Recovery Act Period), prepared by Bruce Tonn, et al., May 20, 2011 (ORNL/TM-2011/87).

The recipient reporting section of this report responds to the Recovery Act's mandate that GAO comment on the estimates of jobs created or retained by direct recipients of Recovery Act funds. 6 For our review of the ninth submission of recipient reports, covering July 1, 2011, through September 30, 2011, we built on findings from our eight prior reviews of the reports, which covered February 2009 through June 30, 2011. To understand how the quality of jobs data reported by weatherization program recipients has changed over time, we compared the nine quarters of recipient reporting data that were publicly available at Recovery.gov as of October 31, 2011; performed edit checks; and conducted other analyses on weatherization recipients' reports for the Recovery Act. We also matched DOE-provided data from the PAGE system. As part of the matching process, we examined the reliability of recipient data in the PAGE system with the information recipients reported directly to FederalReporting.gov. Our reliability assessment included interviewing weatherization program officials and state weatherization officials and conducting logic tests for key variables. Our matches showed a high degree of agreement between funding information from the PAGE system and the information recipients reported directly to FederalReporting.gov. However, we observed that for half of the recipients, the discrepancy between the FTE value shown on their quarterly reports and the FTE value derived from the hours they reported to the PAGE system for the same period exceeded 10 FTEs. Our examination of these discrepancies and interviews with DOE program officials indicated that the values observed in the PAGE data were most likely erroneous. DOE program officials stated that they track expenditures, but not FTE data, in PAGE. In general, we consider the recipient data used in this report to be sufficiently reliable, with attribution to official sources for the purposes of providing background information and a general sense of the status of recipients' reporting on the weatherization program.

To update the status of open recommendations from previous bimonthly and recipient report reviews, we obtained information from agency

<sup>&</sup>lt;sup>6</sup>Pub. L. No. 111-5, § 1512(e), 123 Stat. 288.

<sup>&</sup>lt;sup>7</sup>As with our previous reviews, we conducted these checks and analyses on all prime recipient reports to assess data logic and consistency and identify unusual or atypical data. For this ninth round of reporting, we continued to see only minor variations in the number or percentage of reports appearing atypical or showing some form of data discrepancy.

Appendix I: Objectives, Scope, and Methodology

officials on actions taken in response to recommendations. Our findings based on analyses of FTE data are limited to the Recovery Act weatherization program and time periods examined and are not generalizable to any other programs' FTE reporting.

We conducted this performance audit from December 2010 through December 2011 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: Comments from the Department of Energy



#### **Department of Energy**

Washington, DC 20585

DEC 0 8 2011

MEMORANDUM FOR:

FRANK RUSCO

DIRECTOR, NATURAL RESOURCES

AND ENVIRONMENT

U.S. GOVERNEMNT ACCOUNTABILITY OFFICE

FROM:

KATHILEEN BLYGGAN DEPUTY ASSISTANT SECRETARY

FOR ENERGY EFFICIENCY

ENERGY EFFICIENCY AND RENEWABLE ENERGY

SUBJECT:

Response to U.S. Government Accountability Office

Draft Audit Report on Weatherization

The Department acknowledges receipt of the draft GAO Report to Congress – Recovery Act "Progress and Challenges in Spending Weatherization Funds" dated December 2011, and welcomes the opportunity to provide the following comments.

In general, we concur with a majority of the findings and conclusions as provided. The Report appears to accurately capture the progress made in many areas to improve the WAP's Recovery Act activities from its beginning in April 2009 to the present. There are a few areas where further clarification of the Department's position is required:

 GAO report statement: On Page 1, the Report states that, "DOE weatherization officials said they requested a 2-year extension from the Secretary of Energy to allow recipients to spend any remaining Recovery Act funds after March 2012. However, as of November 2011, it had not been determined if an extension would be available for recipients."

DOE Response: The description of the issue of grant extensions on page 1 varies from that on page 27; the latter is more accurate. As such, we would recommend that the description on page 1 be changed to read: "DOE weatherization officials said that they were exploring options to extend the period of performance for Recovery Act grants from March 2012 to, at most, the end of fiscal year 2013. Extensions would be considered on a case-by-case basis. As of November 2011, discussions on this topic were still ongoing."

GAO Report Statement: On Page 17, the Report states that, "In September 2011, DOE issued guidance that further defines the allowable cost categories contained in calculating the



average cost per unit, though it does not specify the methodology for calculating the average cost per unit weatherized."

- DOE Response: It should be noted that the definition of cost categories contained in Program Guidance 11-01A allows for certain expenditures to be classified as one of several allowable categories. The "Background" section also provides the formula for calculating the cost per unit average. Each grantee must decide which category is to be used for certain expenditures before the formula can be used. The Department believes this issue was properly addressed by the policy clarification provided in the aforementioned Program Guidance 11-01A.
- GAO Report Statement: On Page 18, the Report states that, "Some recipients may not
  achieve their spending...and as of September 30, 2011, with only six months to the March
  2012 grant deadline, six recipients had not been granted full access to the remaining 50
  percent of funds."
- **DOE Response**: As of this date, only three grantees have not received access to additional Recovery Act funds. Of the remaining three, we consider it imprudent to release funds because they have not met the requirements for production or monitoring and quality control as stipulated in Program Guidance WPN 10-05.
- GAO Report Statement: On Page 25, the Report states that, "In May 2010, we
  recommended that DOE set time frames for states to develop and implement State
  monitoring programs. As of September 2011, DOE had taken limited action to address this
  recommendation, and it remains largely unaddressed."
- DOE Response: Each grantee is required to submit their monitoring plan as part of their State Plan submission. This Plan is reviewed and must be approved by DOE before the grantee can begin operating the WAP. The grantee's monitoring plan is tested during the Department's on-site review to ensure it is being followed. In addition, the Department has provided a number of training events regarding this component of grantee oversight and provided specific financial management training at the grantee and subgrantee levels. WPN 10-3 Procurement Tool Kit was issued to strengthen the requirements for adherence and oversight of this important component. The Program will soon release WPN 12-4 Financial Management Training Tool Kit and WPN 12-5 Monitoring Updated Policy. Both of the guidance documents strengthen policies governing monitoring issued in 2009 and 2010.
- GAO Report Statement: On Page 26, the Report states that, "DOE weatherization officials told us they did not intend to issue a best practice guide for key internal controls because they believed there were sufficient documents in place to require internal controls, such as grant terms and conditions and a training module available on the WAPTAC website."
- DOE Response: Because grantees are not structured similarly enough to be able to easily
  accommodate a "one size fits all" approach for internal controls, DOE considered the vast
  amount of information already available to grantees in the Grant Terms and Conditions,
  Regulations 10 CFR 600 Financial Rules and 10 CFR 440 Weatherization Rules, policy
  guidance documents governing the WAP and the Recovery Act, and generally accepted

Appendix II: Comments from the Department of Energy

accounting principles and financial audit protocols adhered to by all non-profit organizations and State and local governments. Consequently, DOE chose not to issue a specific best practice guide since each organization would still have had to develop compliance features tailored to their specific system.

The Department would like to express its appreciation to GAO staff for their hard work, dedicated efforts, and investment of time in assessing the Program's management, field operations and oversight. The Department remains deeply committed to continually improving the operation of the WAP at all levels. We respectfully request that you consider the above explanations when preparing the Final Report to Congress.

If you have any questions, please contact Ms. Martha Oliver, Office of Congressional and Intergovernmental Affairs, at (202) 586-2229.

Enclosure

## Appendix III: Technical Appendix (Survey)

#### Survey Design, Distribution, and Results

This appendix discusses survey, design, distribution, and results of our web-based survey of the 58 state-level recipients of the Weatherization Assistance Program funds under the Recovery Act and presents the survey we used. For a copy of the survey instrument, see www.gao.gov/special.pubs/gao-12-195/index.html.

To determine the extent to which recipients of the weatherization program funded under the Recovery Act spent Recovery Act funds, met monitoring requirements, and achieved weatherization program goals, we conducted a web-based survey of weatherization program recipients in the 50 states, the District of Columbia, 5 territories, and 2 tribes. We asked recipients to provide information on their experience with the program and the extent to which they found certain aspects of the program implementation challenging, from April 2009 through June 2011.

We conducted pretests on our draft questionnaire to determine whether the (1) questions were clear and unambiguous, (2) terminology was used correctly, (3) questionnaire did not place an undue burden on state-level officials, (4) information could be readily obtained, and (5) survey was comprehensive and unbiased. We chose five pretest sites to include recipients in locations across a wide geographic area and in various stages of meeting spending and production targets. We conducted all five pretests over the telephone. We made changes to the content and format of the questionnaire after each of the pretests, based on the feedback we received.

We developed and administered a web-based questionnaire accessible through a secure server. Recipients were notified that the questionnaire was available online and were given unique passwords and usernames on May 16, 2011. We sent follow-up e-mail messages on May 31, 2011, June 9, 2011, and June 13, 2011, to those who had not yet responded. We contacted all remaining nonrespondents by telephone, starting on May 24, 2011. The questionnaire was available online until June 17, 2011. Questionnaires were completed by 55 weatherization program recipients, for a response rate of 95 percent. We telephoned the remaining three recipients (the District of Columbia, the Northern Arapaho Tribe, and the Navajo Nation), but they declined to participate within the study's time period.

Because this was not a sample survey, it has no sampling errors. However, the practical difficulties of conducting any survey may introduce errors, commonly referred to as nonsampling errors. For example, difficulties in interpreting a particular question, sources of information Appendix III: Technical Appendix (Survey)

available to respondents, entering data into a database, or analyzing data can introduce unwanted variability into the survey results. We took steps in developing the questionnaire, collecting the data, and analyzing them to minimize such nonsampling error.

For example, social science survey specialists designed the questionnaire in collaboration with GAO staff who had subject matter expertise. Then, we pretested the draft questionnaire with a number of state-level officials to ensure that the questions were relevant, clearly stated, and easy to understand. When we analyzed the data, an independent analyst checked all computer programs. Because this was a web-based survey, respondents entered their answers directly into the electronic questionnaire, eliminating the need to key data into a database, minimizing error.

In the report we showed the percentage of recipients responding to the survey who reported that certain program areas were strongly challenging or somewhat of a challenge, as opposed to not challenging. In table 4 we show the percentages of recipients responding who reported each area as initially challenging and not challenging, and still challenging and not challenging at the time of our survey. In almost all cases, there was decline in the percentage of recipients reporting the implementation area as continuing to be a challenge. The only exception was in responding to the challenges of the "cliff effect," or the decline in funding after Recovery Act funding expires in March 2012. For that item, the percentage of respondents who reported that it was challenging increased from 34 percent to 89 percent. For all of the other challenges, the percentage of recipients responding that a program area was challenging decreased and the percentage reporting an area as not challenging increased. For example, implementing Davis-Bacon requirements was reported to be challenging by 88 percent of respondents initially, but by only 39 percent of respondents at the time of the survey, June 2011. Also, lacking trained monitoring staff was reported to be challenging by 69 percent of respondents initially, but by only 26 percent of respondents at the time of our survey.

Table 4: Percentage of Recipients Responding That Certain Areas Were Challenging and Not Challenging in 2009, the First Year of the Recovery Act-Funded Weatherization Assistance Program, and during June 2011

Percentage of recipients responding	Initia			une 2011	
	(first y	(first year)		year)	
Challenges identified in survey	Challenging	Not challenging	Challenging	Not challenging	Number responding
Balancing the requirements to meet production targets and to ensure the work is done correctly	90.6	9.4	67.9	32.1	53
Meeting production targets	90.6	9.4	56.6	43.4	53
Having additional reporting requirements	90.4	9.6	75.0	25.0	52
Implementing new program requirements that were developed as program progressed	88.9	11.1	63.0	37.0	54
Implementing Davis-Bacon requirements	88.2	11.8	39.2	60.8	51
Balancing training and technical assistance requirements with production targets	88.2	11.8	62.7	37.3	51
Adjusting to changes in existing reporting requirements	86.5	13.5	44.2	55.8	52
Meeting federal reporting requirements (FederalReporting.gov and PAGE)	84.3	15.7	62.7	37.3	51
Meeting certification and training requirements	83.0	17.0	56.6	43.4	53
Lacking expertise weatherizing multifamily units	82.0	18.0	64.0	36.0	50
Having too few monitoring staff	80.8	19.2	40.4	59.6	52
Having insufficient number of administrative staff	75.5	24.5	39.6	60.4	53
Having additional reporting requirements for monitoring	74.5	25.5	47.1	52.9	51
Lacking expertise in weatherizing multifamily units	74.0	26.0	60.0	40.0	50
Conducting the required number of monitoring visits	73.1	26.9	42.3	57.7	52
Adjusting to changes in existing reporting requirements for monitoring	72.0	28.0	48.0	52.0	50
Ensuring consistency in monitoring results	71.2	28.8	50.0	50.0	52
Lacking expertise in monitoring multifamily units	71.1	28.9	46.7	53.3	45
Complying with historic preservation requirements	70.6	29.4	35.3	64.7	51
Lacking trained monitoring staff	68.6	31.4	25.5	74.5	51
State-level auditors lacking training or expertise	63.3	36.7	22.4	77.6	49
Lacking staff to appropriately handle external monitoring (DOE-Inspector General, state-level auditors, consultants)	63.3	36.7	57.1	42.9	49
<u> </u>					

Percentage of recipients responding	Initially (first year)		During June 2011 (third year)		
Challenges identified in survey	Challenging	Not challenging	Challenging	Not challenging	Number responding
Determining how to measure long-term energy savings	59.6	40.4	51.1	48.9	47
Meeting state's requirements to monitor subgrantees	58.3	41.7	29.2	70.8	48
Lacking infrastructure at state level to handle the large influx of money from the Recovery Act	56.6	43.4	35.8	64.2	53
Determining how to measure cost savings (i.e., dollar savings)	54.3	45.7	37.0	63.0	46
Planning for cliff effect (i.e., decline in funding after Recovery Act funding expires in March 2012)	34.0	66.0	89.4	10.6	47
Determining and documenting income eligibility	25.0	75.0	17.3	82.7	52
Determining methodology for calculating \$6,500 maximum average cost per home	17.6	82.4	3.9	96.1	51

Source: GAO analysis of recipients' responses.

An overall decline in the percentage of respondents that report a specific item to be challenging could result from a more considerable shift of respondents from challenging to not challenging than from not challenging to challenging or, alternatively, from a smaller shift from challenging to not challenging accompanied by no shift in the reverse direction.

As shown in table 5, all but one challenge (planning for the cliff effect) moves in the direction from challenging to not challenging. In every case, this is more pronounced than moving in the opposite direction—from not challenging to challenging—though for a number of items some respondents identified something as initially not challenging but changed to identify as challenging at the time of the survey. For 16 of the 29 items, however, all of the change moved from challenging to not challenging.

Table 5: Percentage of Recipients Responding That Switched from Challenging to Not Challenging and Not Challenging to Challenging

	Percent			
Challenges identified in survey	Reporting initially challenging	Switching from challenging to not challenging	Switching from not challenging to challenging	
Balancing the requirements to meet production targets and to ensure the work is done correctly	90.6	25.0	0	
Meeting production targets	90.6	37.5	0	
Having additional reporting requirements	90.4	17.0	0	
Implementing new program requirements that were developed as program progressed	88.9	31.3	16.7	
Implementing Davis-Bacon requirements	88.2	55.6	0	
Balancing training and technical assistance requirements with production targets	88.2	28.9	0	
Adjusting to changes in existing reporting requirements	86.5	48.9	0	
Meeting federal reporting requirements (FederalReporting.gov and PAGE)	84.3	25.6	0	
Meeting certification and training requirements	83.0	31.8	0	
Lacking expertise weatherizing multifamily units	82.0	22.0	0	
Having too few monitoring staff	80.8	57.1	30.0	
Having insufficient number of administrative staff	75.5	47.5	0	
Having additional reporting requirements for monitoring	74.5	42.1	15.4	
Lacking expertise in weatherizing multifamily units	74.0	24.3	15.4	
Conducting the required number of monitoring visits	73.1	47.4	14.3	
Adjusting to changes in existing reporting requirements for monitoring	72.0	33.3	0	
Ensuring consistency in monitoring results	71.2	32.4	6.7	
Lacking expertise in monitoring multifamily units	71.1	34.4	0	
Complying with historic preservation requirements	70.6	55.6	13.3	
Lacking trained monitoring staff	68.6	62.9	0	
State-level auditors lacking training or expertise	63.3	64.5	0	
Lacking staff to appropriately handle external monitoring (DOE Inspector General, state-level auditors, consultants)	63.3	19.4	16.7	
Determining how to measure long-term energy savings	59.6	17.9	5.3	
Meeting state's requirements to monitor subgrantees	58.3	53.6	5.0	
Lacking infrastructure at state level to handle the large influx of money from the Recovery Act	56.6	36.7	0	
Determining how to measure cost savings (i.e., dollar savings)	54.3	32.0	0	

## Appendix III: Technical Appendix (Survey)

	Percent			
Challenges identified in survey	Reporting initially challenging	Switching from challenging to not challenging	Switching from not challenging to challenging	
Planning for "cliff effect" (i.e., decline in funding after Recovery Act funding expires in March 2012)	34.0	12.5	90.3	
Determining and documenting income eligibility	25.0	38.5	26	
Determining methodology for calculating \$6,500 maximum average cost per home	17.6	88.9	2.4	

Source: GAO analysis of recipient response.

In this appendix, we update the status of agencies' efforts to implement the 16 recommendations that remain open and are not implemented and 2 newly implemented recommendations that resulted from our Recovery Act mandate reports. Recommendations that were listed as implemented or closed in a prior report are not repeated here. Last, we address the status of our matters for congressional consideration.

<sup>&</sup>lt;sup>1</sup>GAO, Recovery Act: As Initial Implementation Unfolds in States and Localities, Continued Attention to Accountability Issues Is Essential, GAO-09-580 (Washington, D.C.: Apr. 23, 2009); Recovery Act: States' and Localities' Current and Planned Uses of Funds While Facing Fiscal Stresses, GAO-09-829 (Washington, D.C.: July 8, 2009); Recovery Act: Funds Continue to Provide Fiscal Relief to States and Localities, While Accountability and Reporting Challenges Need to Be Fully Addressed, GAO-09-1016 (Washington, D.C.: Sept. 23, 2009); Recovery Act: Recipient Reported Jobs Data Provide Some Insight into Use of Recovery Act Funding, but Data Quality and Reporting Issues Need Attention, GAO-10-223 (Washington, D.C.: Nov. 19, 2009); Recovery Act: Status of States' and Localities' Use of Funds and Efforts to Ensure Accountability, GAO-10-231 (Washington, D.C.: Dec. 10, 2009); Recovery Act: One Year Later, States' and Localities' Uses of Funds and Opportunities to Strengthen Accountability, GAO-10-437 (Washington, D.C.: Mar. 3, 2010); Recovery Act: States' and Localities' Uses of Funds and Actions Needed to Address Implementation Challenges and Bolster Accountability, GAO-10-604 (Washington, D.C.: May 26, 2010); Recovery Act: Opportunities to Improve Management and Strengthen Accountability over States' and Localities' Uses of Funds, GAO-10-999 (Washington, D.C.: Sept. 20, 2010); Recovery Act: Head Start Grantees Expand Services, but More Consistent Communication Could Improve Accountability and Decisions about Spending, GAO-11-166 (Washington, D.C.: Dec. 15, 2010); Recovery Act: Energy Efficiency and Conservation Block Grant Recipients Face Challenges Meeting Legislative and Program Goals and Requirements, GAO-11-379 (Washington, D.C.: Apr. 7, 2011); Recovery Act: Funding Used for Transportation Infrastructure Projects, but Some Requirements Proved Challenging, GAO-11-600 (Washington, D.C.: June 29, 2011); Recovery Act: Funds Supported Many Water Projects, and Federal and State Monitoring Shows Few Compliance Problems, GAO-11-608 (Washington, D.C.: June 29, 2011); and Recovery Act Education Programs: Funding Retained Teachers, but Education Could More Consistently Communicate Stabilization Monitoring Issues, GAO-11-804 (Washington, D.C.: Sept. 22, 2011).

Department of Education			
Newly implemented recommendation	Agency action		
1. To ensure all states receive appropriate communication and technical assistance for the State Fiscal Stabilization Fund (SFSF), consistent with what some states received in response to SFSF monitoring reviews, we recommend that the Secretary of Education establish mechanisms to improve the consistency of communicating monitoring feedback to states, such as establishing internal time frames for conveying information found during monitoring. <sup>a</sup>	1. Education agreed with our recommendation, and on November 21, 2011, submitted a letter to GAO discussing how it has refined its SFSF monitoring procedures to include time frames for communicating monitoring issues and feedback with states. For example, within five days of an exit meeting, the Department will send a state a written summary of the issues identified during the review and request any additional documentation to help resolve the issues. In addition, the Department will communicate in writing with the state at least once a month, if needed, for ongoing monitoring discussions; and twice a month to facilitate the resolution of monitoring issues after the issuance of the draft interim report.		
Department of Energy			
Newly Implemented recommendation	Agency action		
Weatherization Assistance Program			
1. Given the concerns we have raised about whether weatherization program requirements were being met, we recommended that DOE, in conjunction with both state and local weatherization agencies, develop and clarify weatherization program guidance that clarifies the specific methodology for calculating the average cost per home weatherized to ensure that the maximum average cost limit is applied as intended. <sup>b</sup>	<ol> <li>In September 2011, DOE issued guidance that clarifies the methodology for calculating the average cost per unit weatherized and further defines the allowable cost categories used in calculating the average cost per unit.</li> </ol>		
Open recommendation	Agency action		
Weatherization Assistance Program			
Given the concerns we have raised about whether weatherization program requirements were being met, we recommended that DOE, in conjunction with both state and local weatherization agencies, develop and clarify weatherization program guidance that: <sup>b</sup>			
Accelerates current DOE efforts to develop national standards for weatherization training, certification, and accreditation, efforts that are currently expected to take 2 years to complete.	1. DOE stated that it, along with the Department of Labor, released for comment a draft—"Workforce Guidelines for Home Energy Upgrades"—for single-family homes in November 2010. DOE weatherization officials noted that they received nearly 1,000 comments to the draft guidelines, which will delay publication of the final product.		
Sets time frames for development and implementation of state monitoring programs.	2. As of October 2011, DOE had taken limited action to address the recommendation that it set time frames for the development and implementation of state monitoring programs. The recommendation remains largely unaddressed.		

- 3. Revisits the various methodologies used in determining the weatherization work that should be performed based on the consideration of cost-effectiveness and develops standard methodologies that ensure that priority is given to the most cost-effective weatherization work. To validate any methodologies created, this effort should include the development of standards for accurately measuring the long-term energy savings resulting from weatherization work conducted.
- 3. In response to our recommendation that it revisit methodologies used to determine the most cost-effective weatherization work, DOE weatherization officials cited Oak Ridge National Laboratory's ongoing March 2014 evaluation. Officials told us the study results will be used to strengthen current protocols for determining weatherization work for both single and multifamily homes and to ensure cost-effectiveness.
- 4. Given that state and local agencies have felt pressure to meet a large increase in production targets while effectively meeting program requirements and have experienced some confusion over production targets, funding obligations, and associated consequences for not meeting production and funding goals, we recommended that DOE clarify its production targets, funding deadlines, and associated consequences while providing a balanced emphasis on the importance of meeting program requirements.
- 4. In response to our recommendation, DOE weatherization officials produced documentation showing extensive communication with the recipients over production and expenditures. However, they did not provide documentation showing how they clarified the consequences for not meeting these targets.

#### **Energy Efficiency and Conservation Block Grant Program**

- 1. To better ensure that Energy Efficiency and Conservation Block Grant (EECBG) funds are used to meet Recovery Act and program goals, we recommended that DOE explore a means to capture information on the monitoring processes of all recipients to make certain that recipients have effective monitoring practices.<sup>c</sup>
- 1. DOE generally concurred with this recommendation, stating that "implementing the report's recommendations will help ensure that the Program continues to be well managed and executed." DOE also provided additional information on changes it has implemented. DOE added additional questions to the on-site monitoring checklists related to subrecipient monitoring to help ensure that subrecipients are in compliance with the terms and conditions of the award. These changes will help improve DOE's oversight of recipients, especially larger recipients, which are more likely to be visited by DOE project officers. However, not all recipients receive on-site visits. In November 2011, DOE also provided us with an update of its oversight of recipients following the addition of subrecipient monitoring questions to its on-site monitoring checklists. DOE officials stated that since July 2011, of the 171 recipients that have received a site visit by DOE staff, 162 were found to be using at least one of the monitoring practices identified by DOE. In total, only 1 of the recipients visited was formally determined to be insufficiently meeting requirements for subrecipient monitoring. As noted previously, we continue to believe that the program could be more effectively monitored if DOE captured information on the monitoring practices of all recipients.

### Department of Health and Human Services: Office of Head Start

#### Open recommendation

#### Agency action

- 1. To help ensure that grantees report consistent enrollment figures, we recommended that the Director of the Department of Health and Human Services' (HHS) Office of Head Start (OHS) better communicate a consistent definition of "enrollment" to grantees for monthly and yearly reporting and begin verifying grantees' definition of "enrollment" during triennial reviews.<sup>d</sup>
- 1. OHS issued informal guidance on its website clarifying monthly reporting requirements to make them more consistent with annual enrollment reporting. This guidance directs grantees to include in enrollment counts all children and pregnant mothers who are enrolled and have received a specified minimum of services. According to officials, OHS is considering further regulatory clarification.

#### Department of Housing and Urban Development

#### Open recommendation

# 1. Because the absence of third-party investors reduces the amount of overall scrutiny Tax Credit Assistance Program (TCAP) projects would receive and the Department of Housing and Urban Development (HUD) is currently not aware of how many projects lacked third-party investors, we recommended that HUD develop a risk-based plan for its role in overseeing TCAP projects that recognizes the level of oversight provided by others.<sup>6</sup>

#### Agency action

1. HUD responded to our recommendation by saying it must wait for project completion information to be entered into its reporting system in order to identify those projects that are in need of additional monitoring. HUD is currently in the process of identifying funding sources used for all TCAP projects completed as of September 30, 2011, and developing a report on that information. HUD will use the report to identify TCAP projects with little tax credit equity or no other federal funds leveraged that may need additional monitoring. HUD said it will develop a plan for monitoring those projects by November 30, 2011.

#### Office of Management and Budget (OMB)

#### Open recommendation

1. We recommended that OMB provide timelier reporting on internal controls for Recovery Act programs for 2010 and beyond.<sup>f</sup>

#### Agency action

1. We previously reported that to address our recommendation, OMB had implemented a voluntary Single Audit Internal Control Project for states receiving Recovery Act funds. One of the goals of the project was to achieve more timely communication of internal control deficiencies for higher-risk Recovery Act programs so that corrective action could be taken more quickly. The project encouraged participating auditors to identify and communicate deficiencies in internal control to program management 3 months sooner than the 9-month time frame required under statute. The project also required that program management provide corrective action plans aimed at correcting any deficiencies to the federal awarding agency 2 months earlier than required under statute.

In Phase 1 of the project, which commenced in October 2009, 16 states participated and auditors audited 26 Recovery Act programs and reported 127 internal control deficiencies for which corrective action plans were developed by program managers. In Phase 2 of the project, which commenced in August 2010, 14 states participated and auditors audited 36 individual Recovery Act programs and reported 173 internal control deficiencies for which corrective action plans were developed by program managers. In Phase 3 of the project, which commenced in October 2011, 10 states are participating and the project is expected to conclude in June 2012.

While the project was successful in encouraging earlier reporting of internal control deficiencies for the participants, the voluntary nature of the project limited its effectiveness and may also have biased the project's results by excluding from analysis states or auditors with practices that cannot accommodate the project's requirement for early reporting of control deficiencies. We believe that OMB needs to take additional steps to encourage more comprehensive and timely reporting on internal control through single audits for Recovery Act programs. We will continue to monitor OMB's efforts for implementing this recommendation.

- 2. We recommended that OMB evaluate options for providing relief related to audit requirements for low-risk programs to balance new audit responsibilities associated with the Recovery Act. h
- 2. OMB has developed an option for providing some audit relief to the state auditors that participated in the Single Audit Internal Control project by modifying the requirements under OMB Circular No. A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. The relief enabled the participating auditors to reduce the number of low-risk programs that were included in their risk assessment requirements. OMB officials acknowledged that as yet no viable alternative has been established to provide relief to all state auditors or other auditors that conduct single audits. However, according to OMB officials, initiatives are currently under way that, if approved, could provide audit relief in the future to auditors performing single audits. We will continue to monitor OMB's efforts in this area.
- 3. We recommended that OMB issue Single Audit guidance in a timely manner so that auditors can efficiently plan their audit work.
- 4. We also recommended that OMB issue the OMB Circular No. A-133 Compliance Supplement no later than March 31 of each year.
- 3, 4. OMB has worked with federal agencies and other entities involved in developing single audit guidance, and revised production schedules and deadlines in an effort to achieve an earlier issuance date. However, to date OMB has not yet achieved its goal of timely issuance of this important guidance. For example, OMB officials intended to issue the 2011 Compliance Supplement by March 31, 2011, but did not issue this guidance until June 1, 2011. OMB officials have developed a timeline for issuing the 2012 Compliance Supplement by March 31, 2012, and have begun working with federal agencies and others involved in issuing the Compliance Supplement. We will continue to monitor OMB's efforts in this area.
- 5. We recommended that OMB explore alternatives to help ensure that federal awarding agencies provide management decisions in a timely manner.<sup>k</sup>
- 6. We also recommended that OMB shorten the time frames required for issuing management decisions by federal agencies to grant recipients.
- 5, 6. Regarding the need for agencies to provide timely management decisions, OMB officials identified alternatives for helping to ensure that federal awarding agencies provide management decisions for corrective action plans in a timely manner, such as shortening the time frames required for federal agencies to provide these decisions to grant recipients. OMB officials have acknowledged that this issue continues to be a challenge. In fiscal year 2011, most of the federal awarding agencies that had grantees with deficiencies identified as a result of the Single Audit Internal Control Project did not submit all of their management decisions for corrective actions by the specified due date. We will continue to monitor OMB's efforts in this area.

#### Department of Transportation

#### Open recommendation

# 1. To ensure that Congress and the public have accurate information on the extent to which the goals of the Recovery Act are being met, we recommended that the Secretary of Transportation direct the Department of Transportation's (DOT) Federal Highway Administration (FHWA) to develop additional rules and data checks in the Recovery Act Data System, so that these data will accurately identify contract milestones such as award dates and amounts, and provide guidance to states to revise existing contract data.<sup>m</sup>

#### Agency action

1. In its response, DOT stated that it had implemented measures to further improve data quality in the Recovery Act Data System, including additional data quality checks, as well as providing states with additional training and guidance to improve the quality of data entered into the system. We have requested documentation of these changes, but DOT has not yet provided it. We are therefore keeping our recommendation on this matter open.

- 2. We recommended that the Secretary of Transportation direct FHWA to make publicly available—within 60 days after the September 30, 2010, obligation deadline—an accurate accounting and analysis of the extent to which states directed funds to economically distressed areas, including corrections to the data initially provided to Congress in December 2009.
- 2. DOT stated that as part of its efforts to respond to our draft September 2010 report in which we made this recommendation on economically distressed areas, it completed a comprehensive review of projects in these areas, which it provided to GAO for that report. DOT recently posted an accounting of the extent to which states directed Recovery Act transportation funds to projects located in economically distressed areas on its website. We have requested documentation of the underlying data from DOT to verify this accounting, but DOT has not provided it. We are therefore keeping our recommendation on this matter open.
- 3. To better understand the impact of Recovery Act investments in transportation, we believe that the Secretary of Transportation should ensure that the results of these projects are assessed and a determination is made about whether these investments produced long-term benefits. Specifically, in the near term, we recommended that the Secretary direct FHWA and Federal Transit Authority to determine the types of data and performance measures they would need to assess the impact of the Recovery Act and the specific authority they may need to collect data and report on these measures.
- 3. In its response, DOT noted that it expected to be able to report on Recovery Act outputs, such as the miles of road paved, bridges repaired, and transit vehicles purchased, but not on outcomes, such as reductions in travel time, nor did it commit to assessing whether transportation investments produced long-term benefits. DOT further explained that limitations in its data systems, coupled with the magnitude of Recovery Act funds relative to overall annual federal investment in transportation, would make assessing the benefits of Recovery Act funds difficult. DOT indicated that, with these limitations in mind, it is examining its existing data availability and, as necessary, would seek additional data collection authority from Congress if it became apparent that such authority was needed. Because DOT has not committed to assessing the long-term benefits of Recovery Act investments in transportation infrastructure, we are keeping our recommendation on this matter open.

#### Matters for Congressional Consideration—Office of Management and Budget

Matter	Status
1. To the extent that appropriate adjustments to the Single Audit process are not accomplished under the current Single Audit structure, Congress should consider amending the Single Audit Act or enacting new legislation that provides for more timely internal control reporting, as well as audit coverage for smaller Recovery Act programs with high risk.	We continue to believe that Congress should consider changes related to the Single Audit process.

- 2. To the extent that additional coverage is needed to achieve accountability over Recovery Act programs, Congress should consider mechanisms to provide additional resources to support those charged with carrying out the Single Audit Act and related audits.
- 2. We continue to believe that Congress should consider changes related to the Single Audit process.

Source: GAO.

<sup>a</sup>GAO-11-804, 47.

<sup>b</sup>GAO-10-604, 124–125.

°GAO-11-379, 36.

<sup>d</sup>GAO-11-166, 39.

eGAO-10-999, 189.

<sup>f</sup>GAO-10-604, 247.

<sup>g</sup>GAO-10-999.

<sup>h</sup>GAO-09-829, 127.

<sup>i</sup>GAO-10-604, 247.

<sup>j</sup>GAO-10-999, 194.

<sup>k</sup>GAO-10-604, 247–248.

<sup>I</sup>GAO-10-999, 194.

<sup>m</sup>GAO-10-999, 187-188.

<sup>n</sup>GAO-10-999, 187-188.

°GAO-10-604, 241-242.

<sup>p</sup>GAO-09-829, 128.

<sup>q</sup>GAO-09-829, 128.

# Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact	Frank Rusco, (202) 512-3841 or ruscof@gao.gov
Staff Acknowledgements	In addition to the contact above, Kim Gianopoulos, Phyllis Anderson, Thomas Beall, Catherine Bombico, Mark Braza, Swati Deo, Philip Farah, Colin Gray, Sharon Hogan, Yvonne Jones, Jonathan Kucskar, Joshua Ormond, Carol Patey, Beverly Ross, Kelly Rubin, Carol Herrnstadt Shulman, Douglas Sloane, Jonathan Stehle, Kiki Theodoropoulos, Sonya Vartivarian, and Arvin Wu made key contributions to this report.

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