

**United States Government Accountability Office** 

Report to the Ranking Member, Subcommittee on Highways and Transit, Committee on Transportation and Infrastructure, House of Representatives

April 2012

# HIGHWAY INFRASTRUCTURE

Federal-State Partnership Produces Benefits and Poses Oversight Risks





Highlights of GAO-12-474, a report to the Ranking Member, Subcommittee on Highways and Transit, Committee on Transportation and Infrastructure, House of Representatives

## Why GAO Did This Study

The U.S. Department of Transportation (DOT) provides about \$40 billion to the states annually to build and maintain highways and bridges through the federal-aid highway program. While this program has grown and changed over time, the federal-state relationship has been consistently one of "partnership" since 1916. DOT's FHWA has offices in all 50 states that have developed close working relationships with states. Legislation approved by the Senate in March 2012 would establish a more performance-based highway program, introducing performance measures for highways and bridges and requiring FHWA to monitor states' progress in meeting those measures. As requested, GAO examined (1) how the federal-aid highway program and FHWA's oversight have changed over time; (2) the extent to which FHWA's partnership approach produces benefits; (3) the extent to which FHWA's partnership approach poses risks; and (4) how FHWA's partnership with state DOTs could affect a transition toward a performance-based highway program. To do this work, GAO conducted site visits and a survey, reviewed relevant documentation, and interviewed FHWA and state officials.

### What GAO Recommends

Congress should consider restructuring federal surface transportation programs. Based on GAO's review, there may be areas where national interests are less evident and where opportunities exist to narrow FHWA's responsibilities. Also, DOT should address the risks posed by its partnership approach. DOT generally agreed with the recommendation.

View GAO-12-474. For more information, contact Phillip R. Herr at (202) 512-2834 or herrp@gao.gov.

## HIGHWAY INFRASTRUCTURE

# Federal-State Partnership Produces Benefits and Poses Oversight Risks

### What GAO Found

Over the years, the federal-aid highway program has expanded to encompass broader goals, more responsibilities, and a variety of approaches. As the program grew more complex, the Federal Highway Administration's (FHWA) oversight role also expanded, while its resources have not kept pace. As GAO has reported, this growth occurred without a well-defined overall vision of evident national interests and the federal role in achieving them. GAO has recommended Congress consider restructuring federal surface transportation programs, and for this and other reasons, funding surface transportation remains on GAO's highrisk list.

FHWA benefits from using recognized partnership practices to advance the federal-aid highway program and conduct program oversight—such as clear delineation of roles and responsibilities between FHWA and its state partners and formal and informal conflict resolution—that are recognized as leading practices. FHWA's partnership approach allows it to proactively identify issues before they become problems, achieve cost savings, and gain states' commitment to improve their processes.

FHWA's partnership approach also poses risks. We observed cases where FHWA was lax in its oversight or reluctant to take corrective action to bring states back into compliance with federal requirements, potentially resulting in improper or ineffective use of federal funds. For example, while FHWA has made it a national priority to recoup funds from inactive highway projects—projects that have not expended funds for over 1 year—FHWA officials in three states we visited were reluctant to do so because of concerns about harming their partnership with the state. In other cases, FHWA has shown a lack of independence in decisions, putting its partners' interests above federal interests. For example, FHWA allowed two states to retain unused emergency relief allocations to fund new emergencies, despite FHWA's policy that these funds are made available to other states with potentially higher-priority emergencies. In some instances, FHWA became actively and closely involved in implementing solutions to state problems—this can create a conflict when FHWA later must approve or review the effectiveness of those solutions.

If proposals for a performance-based highway program are adopted, FHWA would have to work with states to develop measures and take corrective action if states do not meet them. FHWA's partnership could help states develop measures, but it would need to mitigate the risks posed by its partnership to ensure corrective action was effective when needed. The fundamental reexamination of surface transportation programs, including the highway program, that GAO previously recommended presents an opportunity to narrow FHWA's responsibilities so that it is better equipped to transition to a performance-based system. GAO identified areas where national interests may be less evident but where FHWA expends considerable time and resources—areas where devolving responsibilities to the states may be appropriate.

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Figure 2: Locations of FHWA's Offices

#### Abbreviations DBE **Disadvantaged Business Enterprise** DOT Department of Transportation FHWA Federal Highway Administration MAP-21 Moving Ahead for Progress in the 21st Century Metropolitan Planning Organization MPO NRT National Review Team **Recovery Act** American Recovery and Reinvestment Act of 2009 TMA Transportation Management Area

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United States Government Accountability Office Washington, DC 20548

April 26, 2012

The Honorable Peter A. DeFazio Ranking Member Subcommittee on Highways and Transit Committee on Transportation and Infrastructure House of Representatives

Dear Mr. DeFazio:

Federal funding for highways is provided to the states mostly through a series of formula grant programs collectively known as the federal-aid highway program. Over the years, in response to changing transportation, environmental, and societal goals, the highway program has expanded to encompass broader goals, more responsibilities, and a variety of grant structures. As the highway program grew more complex, the federal government's responsibility to oversee the program expanded as well. The role of the Department of Transportation's (DOT) Federal Highway Administration (FHWA) has grown from overseeing the construction of highway projects to a wide range of activities including overseeing states' transportation planning processes; assessing environmental impacts; and monitoring states' compliance with property acquisition, contracting, civil rights, and other requirements.<sup>1</sup> As we have reported, FHWA has faced challenges in ensuring that federal funds are efficiently and effectively used because the highway program is one in which there is limited federal control—it is a state-administered, federally assisted program.<sup>2</sup> Funds are largely apportioned by formula, and the states enjoy broad flexibility in deciding which projects are supported. Furthermore, for nearly half of federal-aid highway funds, FHWA's responsibility to oversee the design and construction of projects has been assumed by the states.

To adapt to its evolving role, FHWA has relied on its historical partnership with the states in which FHWA and the states work collaboratively to

<sup>&</sup>lt;sup>1</sup>Prior to 1967, the federal-aid highway program was administered by the Bureau of Public Roads, then a bureau in the Department of Commerce. These responsibilities were transferred to the Secretary of Transportation in 1967. Department of Transportation Act, Pub. L. No. 89-670, § 6(a), 80 Stat. 931, 937 (1966), eff. April 1, 1967, 32 Fed. Reg. 5453.

<sup>&</sup>lt;sup>2</sup>GAO, Federal-Aid Highways: FHWA Needs a Comprehensive Approach to Improving Project Oversight, GAO-05-173 (Washington, D.C.: Jan. 31, 2005).

construct highway infrastructure. Specifically, FHWA division offices, which are located in every state, the District of Columbia, and Puerto Rico, have developed close working relationships with state departments of transportation (state DOTs). (For a complete list of division offices, see appendix I.) We have reported that this partnership approach offers benefits, such as more efficient project delivery, but can also create challenges. When an overseer becomes an active partner in a project, the independent perspective important to effective project oversight can be lost.<sup>3</sup>

Legislation approved by the Senate in March 2012<sup>4</sup> would establish performance measures for highways and require FHWA to monitor states' progress in meeting these measures. As a consequence, FHWA's oversight approach could undergo significant change, as FHWA would need to work with the states to develop measurable goals to improve the condition and performance of the nation's highway system and take action when performance measures are not met. Given its history, FHWA is likely to use its partnership with the states to implement such a system. Also, administering a performance-based system would be an addition to FHWA's other duties.

You asked us to examine how FHWA's partnership with state DOTs affects its oversight of the highway program and, in particular, how it might affect the transition to a more performance-based highway program. This report addresses (1) the basis for FHWA's partnership and oversight role in relation to the states, and how the federal-aid highway program and FHWA's oversight have changed over time; (2) the extent to which FHWA's partnership approach produces benefits; (3) the extent to which FHWA's partnership approach poses risks; and (4) how FHWA's partnership with state DOTs could affect a transition toward a performance-based highway program.

To achieve these objectives, we reviewed and analyzed relevant laws and regulations, historical documentation, and stewardship agreements between FHWA and state DOTs that delineate oversight responsibilities. We conducted site visits to 9 of FHWA's 52 division offices, which are located in all 50 states, the District of Columbia, and Puerto Rico, chosen based on a range of criteria, including the size of the state's

<sup>&</sup>lt;sup>3</sup>GAO-05-173.

<sup>&</sup>lt;sup>4</sup>S. 1813 §§ 1106, 1112, 112<sup>th</sup> Cong. (as adopted by the Senate March 14, 2012).

transportation program and proportion of federal funding, the rural and urban composition of the state, and geographic distribution. During our site visits, we interviewed FHWA division office leadership as well as state officials, when possible, to understand how they characterize their relationship. To obtain a broader perspective than site visits provide, we designed and conducted a survey of the division administrators from each of the 52 FHWA division offices; our response rate was 100 percent. We also conducted 4 discussion groups that included representatives from 38 of 52 state DOTs. Through a literature review, we identified best practices and risks associated with partnering, and used these criteria to assess FHWA's current oversight approach by reviewing information from our audit work. We also analyzed available results from states' 2010 Single Audit findings to independently identify areas of concern in oversight activities. See appendix II for more details on our scope and methodology.

We conducted this performance audit from April 2011 to April 2012 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

Federal assistance for highway and bridge infrastructure—about \$40 billion each year—is distributed through multiple formula and discretionary grant programs collectively known as the federal-aid highway program. The federal-aid highway program is financed through the Highway Trust Fund, a dedicated source of federal revenue based on the "user-pay principle"—that is, users of transportation systems pay for the systems' construction through the federal tax on motor fuels, tires, and trucks.

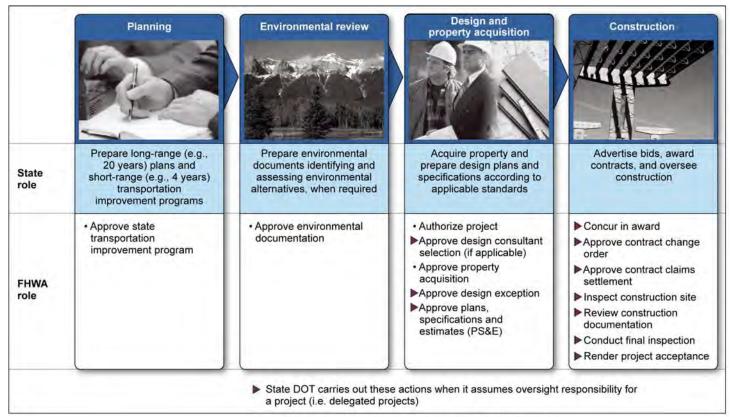
FHWA uses a decentralized organizational structure to administer the federal-aid highway program, meaning that decision-making authority is largely delegated to FHWA's 52 division offices. FHWA division offices have 10 to 61 staff each, depending on the size of the state's highway program. While there are variations in division office organizational structures, each typically has teams that cover areas such as planning, environment, engineering, technical services, finance, and civil rights. As of February 2012, FHWA had 2,960 staff—1,962 in the field and 998 at headquarters.

FHWA's responsibilities for the federal-aid highway program fall into two broad categories: (1) advancing the program and (2) ensuring compliance with federal law and regulations. To advance the program, FHWA engages in a range of activities to encourage the effective and efficient use of federal-aid highway funding and assist states in progressing projects through construction to improve the highway system. To accomplish these tasks, FHWA works with states to identify issues, develop and advocate solutions, approve and obligate project funding for eligible activities, and provide technical assistance and training to state DOTs.<sup>5</sup> To ensure that states comply with federal laws and regulations, FHWA, through its division offices, conducts oversight of federally funded projects and reviews state DOT capacity and systems used to administer approved projects. Actual project-level oversight is divided or shared between FHWA and the state. FHWA oversees major interstate highway projects. FHWA division offices and states jointly decide how to divide oversight responsibility for other National Highway System projects.<sup>6</sup> States assume oversight responsibility for projects that are not on the National Highway System. These can include locally administered projects, which are projects in which a state DOT has given approval to a local public agency (e.g. a city or county) to administer a project or phase of a project such design, property acquisition, or construction.

For those projects where both FHWA and the state make decisions about oversight responsibilities, the respective responsibilities are generally mapped out in a "stewardship agreement." This agreement defines which projects will receive "full" oversight, in which FHWA oversees most aspects of the construction process, or projects in which states assume oversight responsibility (we refer to these as "delegated" projects). Figure 1 describes aspects of oversight that are led by FHWA or the state depending on the status of the project.

<sup>&</sup>lt;sup>5</sup>FHWA's mission to advance the program is articulated in its national leadership strategic goal, which states that FHWA "leads in developing and advocating solutions to national transportation needs" as well as in its stewardship agreements.

<sup>&</sup>lt;sup>6</sup>The National Highway System consists of approximately 160,000 miles of roadway important to the nation's economy, defense, and mobility. It includes Interstates, principal arterials, roads, and connectors important to the United States' strategic defense policy. These roadways provide access, continuity, and emergency capabilities for defense purposes, and connect to major intermodal facilities, such as airports or transit hubs.



### Figure 1: FHWA and State Oversight and Approval Activities for Full and Delegated Projects

Source: GAO analysis of FHWA information; Art Explosion and Photodisc (photographs).

To evaluate state DOTs' systems and capacity to administer approved projects, FHWA division offices assess internal controls and processes across programmatic areas such as construction, finance, property acquisition, and locally administered projects. A common tool for this type of oversight is a "process review," which involves an analysis of key program components and processes employed by the state DOT. Typically, this includes a file review of a sample of projects, interviews with relevant state DOT staff, and field reviews when applicable. In addition, FHWA, in conjunction with the Federal Transit Administration, performs a federal certification review of Metropolitan Planning Organizations (MPO), which are responsible for transportation planning in

	urban areas with populations larger than 50,000 <sup>7</sup> every 4 years, <sup>8</sup> meaning that periodically FHWA determines if the organization complies with applicable federal requirements. FHWA division offices have a range of corrective actions they can use if a state does not comply with federal requirements. Among other things, it may withhold funding from all or part of a project, deobligate inactive funds, withhold approval until an issue is resolved, or require corrective action plans.
FHWA's Partnership Role Was Established almost a Century Ago, but over Time Its Responsibilities Have Expanded	Over the years, the federal-aid highway program has grown to encompass broader goals, more responsibilities, and a variety of approaches; however, the concept of a federal-state partnership has been an integral feature of the highway program since it was established by the Federal Aid Road Act of 1916. <sup>9</sup> This and other early highway legislation established federal-state responsibilities, wherein states select the placement of roads, construct, and maintain them, and the federal government sets standards and provides a portion of the funding. The Federal-Aid Highway Act of 1973 further refined the federal-state relationship by stating that "the authorization of the appropriation of Federal funds…shall in no way infringe on the sovereign rights of the States to determine which projects shall be federally financed" and defined the federal-aid highway program as a "federally assisted State

<sup>8</sup>Required by 23 U.S.C. § 134(k)(5).

<sup>9</sup>Act of July 11, 1916, ch. 241, § 4, 64<sup>th</sup> Cong., 39 Stat. 355, 357.

<sup>&</sup>lt;sup>7</sup>Federal and state governments oversee this regional planning process. At the federal level, the Federal Transit Administration and FHWA work together to perform federal certification reviews—certifying that each Transportation Management Area (TMA) has carried out its planning according to the applicable federal statutes. More specifically, the certification review requires that the federal government assess TMAs every 4 years to determine how well they are working with the transportation-related organizations, local governments, public transportation operators, and citizens in their area, as well as with the state DOTs, to meet the many statutory and regulatory requirements applicable to the planning documents. The certification review includes a desk review of the MPO's plans and a site visit, among other things. Additionally, all MPOs, including both TMAs and non-TMAs, must also self-certify that their planning process meets the federal requirements.

program."<sup>10</sup> This language helped shape FHWA's interpretation of the federal-state relationship, leading to an understanding of its role that anchors FHWA's approach to oversight in partnership and is cited today in FHWA's policy documents.<sup>11</sup> Almost all the division administrators we surveyed described their work with states as a partnership and in ways that emphasized the importance of partnership in carrying out FHWA's mission to advance the transportation program. In addition, as we previously reported, both FHWA and state officials believe that over the years the partnership has helped to build trust and respect between state transportation agencies and FHWA, ensuring that as partners they can accomplish tasks such as planning and building projects more efficiently and effectively.<sup>12</sup>

The goals and scope of the federal-aid highway program expanded during much of the 20th century, as did the roles and responsibilities of FHWA. Initially, the highway program was administered by the Department of Agriculture through the Bureau of Public Roads, a predecessor to FHWA.<sup>13</sup> The bureau focused oversight at the project level to ensure that materials and construction methods met federal standards. The bureau also brought engineering expertise to the states, many of which either lacked skilled engineers or were not ensuring that

<sup>11</sup>FHWA policy documents and officials have altered this language slightly and widely refer to the program today as a "federally assisted state-administered program."

### <sup>12</sup>GAO-05-173.

<sup>&</sup>lt;sup>10</sup>The act also referred to the federal-state relationship as contractual and authorized withdrawal of a portion of the San Antonio North Expressway as a federal-aid highway project upon repayment into the Highway Trust Fund of funds previously paid by the federal government. Texas' desire to withdraw the Expressway stemmed from an impasse over routing to minimize environmental impact by complying with the National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified, as amended at 42 U.S.C. ch. 55). Congress has enacted legislation authorizing states to withdraw highways from the program in other specific instances as well.

<sup>&</sup>lt;sup>13</sup>Responsibility for public roads was at various times with the Department of Agriculture (Act of July 11, 1916, § 1, 39 Stat. 355), Federal Works Administration (Reorganization Plan No. 1 of 1939, § 302, 53 Stat. 1423, 1427), and the Department of Commerce (Reorganization Plan No. 7 of 1949, 63 Stat. 1070). The Department of Transportation Act established a Federal Highway Administration, headed by an administrator, into which was transferred the Department of Commerce Bureau of Public Roads reporting to its former administrator, retitled the Director of Public Roads. (Pub. L. No. 89-670, §§ 3(d), (4), 80 Stat., 932-933 (1066)). The position of Director of Public Roads was abolished by the Federal-Aid Highway Act of 1970, Pub. L. No. 91-605, § 114, 84 Stat. 1713, 1722-1723.

federal dollars were being used to produce quality construction. The Defense Highway Act of 1941 extended the 1916 act to fund a strategic network of highways, including secondary and feeder routes. Eligibility was extended again in 1944 to include an array of other secondary roads, including rural farm-to-market roads, rural mail and bus routes, county roads, and others that became eligible for post-war federal aid.<sup>14</sup> In 1950, Congress made additional roads—including county, township, and urban roads—eligible for aid.<sup>15</sup> By then, however, the focus of the highway program was turning increasingly to constructing the Interstate Highway System. Designated as mandated in 1944,<sup>16</sup> construction of the system began in earnest with passage of the Federal-Aid Highway Act of 1956<sup>17</sup> and establishment of the Highway Trust Fund, a dedicated funding source deriving revenue primarily from taxes on motor fuels, tires, and trucks to finance the construction of the Interstate system.<sup>18</sup>

Construction of the Interstate remained the focus of the federal-aid highway program in the years that followed, and Congress continued to expand the types of projects eligible for federal funds. In the 1970s, Congress expanded the federal role in bridge infrastructure by making highway bridges located on public roads and longer than 20 feet eligible for federal funds.<sup>19</sup> Congress also expanded the eligibility of federal aid beyond initial construction. Under the 1916 Act and Interstate authorizations, the federal government was to fund the *construction* of highways while *maintenance* was the states' responsibility. However, as the Interstate began to age, Congress allowed states to use federal funds for road maintenance on Interstate highways and all eligible bridges by redefining certain activities—such as resurfacing, rehabilitation, and reconstruction—as capital investments rather than maintenance.<sup>20</sup> By

<sup>15</sup>Federal-Aid Highway Act of 1950, ch. 912, § 1(b), (c), 64 Stat. 785, 786 (1950), See, also, the Federal-Aid Highway Act of 1948, ch. 732, 62 Stat. 355 (1948).

<sup>&</sup>lt;sup>14</sup>Act of December 20, 1944, ch. 626, §§ 1, 3(b), 58 Stat. 838-839. Federal-aid-Secondary Program (1952-1991), Urban Extensions (1944-1976).

<sup>&</sup>lt;sup>16</sup>Act of December 20, 1944, § 8, 58 Stat., 842.

<sup>&</sup>lt;sup>17</sup>Federal-Aid Highway Act of 1956, ch. 462., Title I, 70 Stat. 374.

<sup>&</sup>lt;sup>18</sup>Highway Revenue Act of 1956, ch. 462, Title II, 70 Stat. 387.

<sup>&</sup>lt;sup>19</sup>Highway Safety Act of 1970, 91-605, Title II, § 204(a), 84 Stat. 1739, 1741 (1970).

 <sup>&</sup>lt;sup>20</sup>Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Pub. L. No. 102-240,
 § 1007(b)(1), 105 Stat. 1914.

1991, as a result of changes over the years, use of highway funds was authorized to fund a wide range of transportation enhancement activities, including activities connected with highway beautification, historic preservation, and the establishment of bicycle and pedestrian trails.<sup>21</sup>

In addition to expanding the types of projects eligible for federal highway funds, over time Congress adopted legislation to achieve social goals such as advancing civil rights and environmental protection, and enhancing urban planning and economic development, which affected the federal-aid highway program and FHWA's role and responsibilities. For example, the National Environmental Policy Act of 1969<sup>22</sup> required grant recipients to comply with federal environmental requirements by conducting environmental reviews for federally funded transportation projects. The Federal-Aid Highway Act of 1962 established urban transportation planning as a matter of national interest and required all construction projects to be part of a continuing, comprehensive, and cooperative planning process.<sup>23</sup> Other federal requirements have included requiring compliance with prevailing wage standards applicable to federal contracts under the Davis-Bacon Act, a Disadvantaged Business Enterprise program to enhance participation of women- and minorityowned businesses, and Buy America provisions for acquiring steel and other materials. As the goals of the highway program expanded, FHWA added expertise in its division offices beyond civil engineers and hired economists, right-of-way specialists, planners, historians, ecologists, safety experts, civil rights experts, and others.

In the early 1990s, Congress revised FHWA's role and responsibilities. With the Interstate Highway System nearly complete, Congress created the National Highway System and subsequently states began to assume authority from FHWA. In addition, FHWA's staff was reduced from 3,556

<sup>22</sup>Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified as amended at 42 U.S.C. ch. 55).

<sup>23</sup>Pub. L. No. 87-866, § 9, 76 Stat. 1148 (1962).

<sup>&</sup>lt;sup>21</sup>ISTEA, Pub. L. No. 102-240, § 1007(c), 105 Stat. 1914, listed these as making "provision of facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs, landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archaeological planning and research, and mitigation of water pollution due to highway runoff."

in 1998 to 2,960 in February 2012.<sup>24</sup> Recognizing its changing roles, responsibilities, and decline in staff levels, FHWA continued to adapt its oversight approach. In 2006, it began adopting a risk management approach to its oversight, recognizing in part that, while its role had expanded, its resources had not.<sup>25</sup>

FHWA has adapted to changes in demands for its oversight, but its role and responsibilities are complicated by the fact that the current federal approach to surface transportation in general—and to highways in particular—is not working well.<sup>26</sup> The expansion of the program did not result from a specific rationale or plan, but rather an agglomeration of policies and programs since the 1950s without a well-defined overall vision of the national interest and federal role in our surface transportation system.<sup>27</sup> Federal goals and programs are now numerous and sometimes conflicting, and federal roles are unclear. Furthermore, although DOT and FHWA establish national goals and priorities, federal highway funding is apportioned to states without regard to the accomplishment of specific outcomes or the performance of grantees. This makes it difficult to assess the extent to which funding is achieving transportation goals. For these and other reasons, funding surface transportation remains on GAO's high-risk list.<sup>28</sup>

<sup>26</sup>GAO, Surface Transportation: Restructured Federal Approach Needed for More Focused, Performance-Based, and Sustainable Programs, GAO-08-400 (Washington, D.C.: Mar. 6, 2008).

<sup>27</sup>GAO, Surface Transportation: Principles Can Guide Efforts to Restructure and Fund Federal Programs, GAO-08-744T (Washington, D.C.: July 10, 2008).

<sup>28</sup>GAO, High-Risk Series: An Update, GAO-11-278 (Washington, D.C.: February 2011).

<sup>&</sup>lt;sup>24</sup>Congress authorized the final funding apportionments to complete the construction of the Interstate Highway legislation and created the National Highway System, consisting of the Interstate Highway System and other roadways connecting to major transportation hubs such as ports, airports, international border crossings, and public transportation and transit facilities. ISTEA, §§ 2, 1001, 1003(a)(2),1006, 105 Stat. 1914. DOT and the states cooperatively identified these roads and selected 160,000 miles of interstate and other roads that by 1996 carried more than 40 percent of all highway traffic, 75 percent of heavy truck traffic, and 90 percent of tourist traffic. Once the roads were selected, Congress formalized this plan in the National Highway System Designation Act of 1995. Pub. L. No. 104–59, § 101(a), 109 Stat. 568 (1995).

<sup>&</sup>lt;sup>25</sup>FHWA's risk management approach requires field offices to identify risks to the federalaid highway program, assess the risks on the basis of the potential impact and the likelihood that they will occur, develop response strategies for key risks, and include these strategies in the offices' planned oversight activities.

# FHWA Benefits from Using Recognized Partnership Practices

Partnering Activities and Practices	In the face of its evolving roles and responsibilities, FHWA has relied on its historical partnership with the states in which FHWA and the states work collaboratively to construct highway infrastructure. FHWA uses partnering activities and practices with the states that are, based on our review and synthesis of partnering literature, recognized as best practices. These activities and practices enable parties to achieve individual and mutually beneficial goals and results, such as expedited project time frames and cost savings. We observed the following examples of successful partnerships:
	• Open and regular communication includes clear and candid discussions among partners as well as an understanding of the inner workings and decision-making processes of participating organizations. FHWA division and state DOT officials reported having regular formal and informal meetings (at leadership and working levels) as well as frequent contact by e-mail and telephone.
	• Clear delineation of roles and responsibilities involves understanding individual partner roles as well as articulating responsibilities for joint actions and tasks. FHWA stewardship agreements describe the roles of FHWA divisions and state DOTs. Some stewardship agreements that we examined include detailed matrices addressing factors such as work activities and their frequency, legal authority, and specific division office and state DOT responsibilities.
	• Proactive issue identification and resolution, in a mutually agreeable way, is closely linked to open and regular communication between partnering members. FHWA officials in several division offices told us that they work closely with their state DOT counterparts to identify problems early and develop solutions. For example, one division administrator explained that, at times, the division office is forced to tell the state DOT that, because of its approach, a certain portion, or an entire construction project, is not eligible for federal funding. However, the administrator stated that the next question the division staff asks is, "How can we do this?" to work with the state DOT to bring the project into compliance with federal requirements, and therefore allowing the state DOT to use federal funds.

	• Conflict resolution processes include formal (documented protocols or escalation procedures) and informal (verbal agreements between parties) procedures for how to handle disagreements. FHWA division and state officials discussed their commitment to collaborative problem solving and using informal issue escalation procedures, for example, by elevating problematic issues to the leadership level for resolution. One FHWA division incorporated conflict resolution protocols into its formal partnering agreement with the state DOT. The agreement advocated using face-to-face communication for conflict resolution and outlined procedures for escalating issues.
Partnership Benefits in Advancing the Federal-Aid Highway Program	In our survey and interviews, FHWA division administrators reported that FHWA uses its partnering relationship with state DOTs to advance the federal-aid highway program by ensuring that projects move to construction in a timely fashion, facilitating knowledge transfer, and promoting federal transportation priorities. Specifically, 51 of 52 survey respondents stated that their partnering relationship with their state was very or somewhat important to their ability to achieve the mission of the federal-aid highway program. Most division administrators (44 of 52) also indicated that the partnering relationship produces multiple benefits. Some of these benefits—such as expedited project time frames and cost savings—were noted as positive outcomes of partnership in the literature we reviewed. For example, FHWA officials in a northern state with a short summer construction season told us they work closely with state DOT officials to make timely decisions and move projects along to ensure that construction inspections and construction-related process reviews in the winter season so that they and state DOT officials could focus on construction inspections and construction-related process reviews during the warmer months. Similarly, in another state, FHWA and state officials told us that by working together to resolve issues expediently, they were able to complete the environmental review and approval process for a large-scale project to reduce congestion on an important regional highway in about half of the time normally required.
	Forty-four of 52 division administrators indicated in response to our survey that partnering was very helpful in facilitating the transfer of technical knowledge. In our site visits, FHWA officials explained that partnering helps FHWA to use technical knowledge transfer to advance the federal-aid highway program by assisting states in addressing technical or programmatic concerns, closing skill gaps, enhancing compliance, and informing decision making. FHWA division officials in

one state told us that they had financed a trip by state DOT officials to learn about an alternative interchange design. As a result, the state DOT was able to make interchange improvements without removing and replacing an existing bridge, reducing costs from estimated \$10 to \$15 million to \$3 million. Similarly, when FHWA officials observed crumbling materials used for retaining walls and supporting structures, they brought in the technical expertise of the FHWA Resource Center, which resulted in the state DOT revising its materials specifications to ensure higherquality materials are used.

Forty-nine of 52 division administrators also indicated in response to our survey that partnering helps the agency to advance federal transportation priorities. One respondent stated that "partnering helps us advance more federal priorities and achieve greater public benefit than simply being parochial authoritarians that refuse to discuss anything that doesn't directly involve a federal dollar or regulation." For example, officials in one FHWA division office developed a business case for an approach to address congestion in a key section of highway as an alternative to the state's planned solution. FHWA promoted its alternative to the state DOT and other stakeholders, and ultimately the state accepted FHWA's approach because the data showed it would be more effective and less costly. In another example, FHWA division officials believed they influenced the state DOT to improve safety by using higher-guality barriers and rumble strips on highways to alert drivers straying off the road. Likewise, to improve safety, officials in another FHWA division office promoted cable barriers on highway medians as a risk-based, lower-cost alternative to concrete barriers.

Similarly, during our site visits, some FHWA officials said that their partnering relationship creates an opportunity to promote projects of national or regional significance within a state. For example, FHWA officials in one division office persuaded the state to address congestion around a toll plaza on a major interstate route. The state did not consider the project a high priority, because it did not affect most state residents as much as out-of-state drivers traveling through the state. However, FHWA division officials were able to persuade the state to construct the project when funding from the American Recovery and Reinvestment Act of 2009 (Recovery Act)<sup>29</sup> became available. One of the FHWA officials

<sup>&</sup>lt;sup>29</sup>Pub. L. No. 111-5, Title XII, 123 Stat. 115 (2009).

commented, "Without partnerships, you lose opportunities to do things that would be good for the taxpayer."

Partnership Benefits in Oversight and Effects on Corrective Action Decisions	FHWA relies on its partnering approach with state DOTs to facilitate oversight of the federal-aid highway program by engaging states in open dialogue about risks and obtaining their buy-in on program improvements. In our survey, 50 of 52 FHWA division administrators said that their division office's partnering relationship was very or somewhat helpful in producing more effective oversight. Officials we spoke with during our site visits offered several illustrations of how partnership improves oversight. One FHWA division administrator told us that the state DOT proactively brings problems to FHWA's attention rather than waiting for FHWA to discover them. We observed that this open dialogue about risks allows FHWA to address issues in a timely fashion and adopt a more responsive and problem-solving attitude. According to one FHWA division official, FHWA worked collaboratively with the state DOT to determine which process reviews to conduct during the year and then conducted the majority of those reviews jointly. According to the FHWA official, this practice strengthened oversight by helping to gain the state DOT's buy-in and commitment to improving its processes, facilitating honest communication about risk areas, and creating an opportunity for FHWA to provide on-the-spot training when problems were identified. In another example, an FHWA division office holds annual meetings with state DOT officials where the two parties determine which projects should receive full oversight and which should be assumed by the state. We observed that this approach can strengthen oversight by allowing FHWA to incorporate the state's perception of risk and weaknesses into their oversight plan by engaging in open dialogue with state officials about risks. Additionally, for each summer construction season, the two parties identify one of the state's regions as a focus for full oversight.
	FHWA's partnership with state DOTs also affects its use of corrective action. FHWA emphasizes working with state DOTs to bring them back into compliance through less stringent corrective action instead of more punitive action. Responses to our survey of division administrators showed that the most frequently used corrective action in the last 3 fiscal years was withholding approval of a particular request until an issue was resolved. According to one division administrator, withholding approval provides the greatest ability to address and resolve a particular issue and

encourages the state to take corrective action in a timely manner. Additionally, 43 of 52 division administrators reported that in the last 3 fiscal years they have used the *threat* of a corrective action, which helps to achieve compliance without actual punitive actions. Reportedly, the threat of a corrective action is effective because it communicates the consequences of not complying with federal requirements and helps to bring about problem resolution. In addition, to address deficiencies, 51 of 52 division administrators reported that they had required state DOTs to develop a corrective action plan to outline how the state would change a process or program to comply with federal requirements.

When FHWA moves toward a more punitive corrective action, it is most likely to withhold funding from a part of a project. Withholding partial funding often amounts to not paying for a line item in a project's budget. For example, one division administrator explained that when the state purchases *proprietary* equipment, such as certain types of light posts or signs, when a less expensive *nonproprietary* option is available, FHWA withholds funds for the purchase. The federal-aid highway program is a reimbursement program. As a consequence, if FHWA withholds funds, state DOTs must replace federal funding with state funding. All 52 division offices indicated they withheld partial federal funding from a project in the last 3 fiscal years, and withholding partial funding was the second most frequently used tool for corrective action.

FHWA division offices reported that they rarely use their most punitive corrective actions, such as withholding funding for an entire project or organization. Although 30 division administrators we surveyed reported that they had withheld federal funding from an *entire* project during the past 3 fiscal years, none listed this action as one of their three most frequently used corrective actions. According to FHWA officials, such action is damaging to the state's federal-aid highway program and provokes tension with state DOTs. FHWA officials stated that they see this measure as a last resort and try to use their partnership with the states to elicit compliance. Furthermore, division offices periodically review MPOs, which can receive federal-aid highway funding and implement construction projects. If the office declines to certify an MPO, federal funds for that organization are withheld until the deficiencies identified are corrected.

# Navigating the "Gray Areas"

FHWA division officials use partnering practices, such as open and regular communication, with state DOT officials as they exercise administrative discretion<sup>30</sup> in situations where the rules and how to apply them are not clear-situations we refer to as "grav areas." In administering the federal-aid highway program, FHWA often has discretion to take a less stringent action even when the law permits a harsher one, if circumstances warrant. Such an approach is embodied in a stewardship agreement from one division office, which states that the division office "will make use of available regulatory flexibility when in the public interest." FHWA officials spend time and effort addressing gray areas, as they seek to make a decision that is not only consistent with federal regulations but also appropriate to the particular facts and circumstances of the situation. For example, the federal regulations governing federal-aid contracts call for state DOTs to use reasonable judgment in evaluating contractors' good faith effort to hire women- and minority-owned businesses but do not specify the type of documentation contractors must submit to demonstrate their effort.<sup>31</sup> Because there are no specifications on the type of documentation demonstrating a good faith effort, FHWA and state DOT officials must work through this gray area to determine how best to demonstrate their efforts.

In our interviews and observations, we noted that FHWA officials rely on partnering practices with states when federal regulations and FHWA policies leave room for interpretation and discretion, creating gray areas for FHWA officials to resolve. For example, routine roadway maintenance is not eligible for federal reimbursement,<sup>32</sup> but preventive maintenance

<sup>32</sup>23 U.S.C. § 116(a).

<sup>&</sup>lt;sup>30</sup>Administrative discretion is a public official's ability to decide whether a particular administrative act is to be implemented, and in what manner.

<sup>&</sup>lt;sup>31</sup>49 C.F.R. Part 26, Appendix A. When a state DOT sets Disadvantaged Business Enterprise contract goals on individual U.S. DOT-assisted contracts, bidders on those contracts must make good faith efforts to meet those goals. The bidder can meet this requirement in one of two ways: (1) meet the goal on the individual U.S. DOT-assisted contract, or (2) document that it made an adequate good faith effort—meaning that the bidder took the necessary and reasonable steps to achieve the goal even though it did not succeed in obtaining enough DBE participation to do so. State DOTs are responsible for evaluating whether bidders made good faith efforts to meet their goals, and according to U.S. DOT officials, this evaluation is subject to FHWA review as appropriate.

can be.<sup>33</sup> According to an FHWA division administrator in one state, there is room for interpretation and discretion between the two types of maintenance. This division administrator told us that in recent years the state DOT has sought reimbursement from FHWA for roadway maintenance activities that are typically ineligible for reimbursement—a situation he attributed to the economic environment affecting state budgets. This required time and effort by both FHWA and the state DOT to work through their different interpretations of the regulation. Ultimately, FHWA and the state agreed to develop asset management systems to identify and prioritize preventive maintenance needs in a systematic way. The division administrator explained that this approach would show and document how the maintenance strategies would extend the roadway life and prevent deterioration and higher maintenance costs later, which would make these costs eligible for federal funding.

We also observed FHWA using partnering practices to negotiate the gray areas that may arise when the rules are clear, but practical considerations complicate implementing the rule. When implementing a rule, public officials may need to consider cost-benefit implications, time frames, local economic conditions, or other local circumstances that are not necessarily dealt with explicitly in rules or regulations. For example, FHWA officials in one division office explained that FHWA's regulations require roadside guardrails on National Highway System routes to be a minimum height of 27 <sup>3</sup>/<sub>4</sub> inches from the top of the guardrail to the top of the pavement. The height of a guardrail governs its effectiveness. However, as states overlay pavement with new asphalt to address road deterioration, the height of the guardrail relative to the road surface decreases and the guardrail becomes less effective. This creates practical trade-offs with regard to the costs of guardrail replacement and safety, raising guestions regarding whether to use funds to improve the pavement condition of, for example, 20 miles of road without replacing guardrails or to pave fewer miles of road but replace the guardrails to ensure they are at the full height prescribed in the regulation. Both approaches offer safety benefits. Determining the best course of action requires navigating a gray area and

<sup>&</sup>lt;sup>33</sup>23 U.S.C. § 116(d). Routine maintenance is defined as work that is planned and performed on a routine basis to maintain and preserve the condition of the highway system at an adequate level of service. Preventive maintenance is defined as a planned strategy of cost-effective treatments to an existing roadway system that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system.

	requires FHWA to understand the state's priorities, weigh the safety outcomes, and use its partnership with the state to agree on an approach that meets transportation needs and federal responsibilities.
States' Perspectives on Partnering and Oversight	<ul> <li>While FHWA officials largely viewed their partnering relationship with state DOTs in positive terms, state officials offered a more tempered response. Specifically, our interviews and discussion groups with officials from 38 state DOTs revealed that while states acknowledged having good working relationships with their FHWA division counterparts, they also expressed some frustrations. On the positive side, state DOT officials appreciated regular and ongoing communication with FHWA officials and characterized FHWA staff as accessible, responsive, and solution-oriented. State DOT officials told us that stewardship agreements were helpful in clarifying roles and expectations and that they consider risk-based oversight to be a strength of the FHWA-state relationship. Officials also appreciated FHWA's help in navigating federal requirements and sharing technical expertise and industry best practices. Furthermore, state officials appreciated that FHWA officials recognized the unique needs, context, and features of their state. State DOT officials participating in our discussion groups asserted that they do not want a "one size fits all" FHWA.</li> <li>However, state DOT officials' positive feedback about FHWA was tempered with other perspectives on partnering and FHWA decision making. We noted three themes among the comments of state DOT officials when voicing perspectives different from FHWA.</li> </ul>
	1. State officials viewed partnership less favorably than FHWA. Many state DOT officials characterized FHWA's role as providing oversight and enforcing regulations rather than acting as a partner. Some officials indicated FHWA began emphasizing enforcement over partnership around the time of the completion of the Interstate Highway System, as FHWA responded to legislative changes, adopting what many state officials viewed as an audit-focused approach to oversight. According to some state DOT officials that existed during the building of the Interstate is no longer there, and currently there is "less partnership and more regulation." Reflecting the states' more tempered perspective, one state DOT official characterized the relationship with FHWA as "a partnership within an arranged marriage."

- 2. State officials viewed FHWA as imposing personal preferences. Many state DOT officials told us that FHWA officials routinely imposed personal preferences-for example, questioning particular design solutions—and would threaten to withhold federal funds or approval even though, in the states' view, the approach the state had developed complied with federal standards and regulations. State DOT officials pointed out that these preferences are not covered in the regulations but rather involve professional judgment regarding such factors as cost, appearance, and durability that are not prescribed in regulation and are often unique to a particular construction project. For example, according to officials at one state DOT, FHWA had a preference for sequencing construction activities in a particular way rather than leaving the decision up to the state DOT, and on this particular project FHWA made its preference a requirement. Some states also said that FHWA gives too much focus to smaller issues and is overly involved in routine matters.
- 3. State officials were frustrated by inconsistencies in FHWA's decision making across states. Many state DOT officials expressed frustration about the inconsistencies they perceived in FHWA's decisions across states. Specifically, several noted that FHWA division offices in other states had been more permissive of certain solutions or requirements compared to the FHWA division office in their state and stated that FHWA does not always use the maximum flexibility it has at its disposal in interpreting federal rules. For example, a state DOT official told us that the division office in his state did not approve a certain material for markings on the state's highways, but he learned that the same material had been approved in 17 other states.

The inconsistencies experienced by state DOTs may not be unreasonable and could stem from the decentralized nature of the federal-aid highway program and the fundamental challenge FHWA and the states face in navigating gray areas on complex projects with unique political, financial, engineering, and other challenges. These complexities likely contribute to FHWA and state DOTs' differing perspectives. For example, we previously reported a case in which a state DOT planned to construct new soundwalls on an existing highway. FHWA noted that the state was planning to widen the road a few years later and that the walls would likely have to be destroyed and rebuilt. FHWA recommended that the state construct the walls at the location envisioned for the widening project, but state DOT officials resisted because of the additional costs to acquire property. FHWA then informed the state that it would only fund construction of the walls once—either at the location along the existing

	highway as the state had planned or at the location needed once the road was widened. <sup>34</sup> This example illustrates a case in which state officials may have viewed FHWA as imposing its personal preferences and may have been aware of similar situations in other states in which FHWA officials made different decisions inconsistent with this approach. FHWA, on the other hand, may have viewed its decision as exercising professional judgment to promote the most long-term cost-effective solution, consistent with its role as a steward of federal funds.
FHWA's Partnership with States Poses Risks in FHWA's Oversight	While successful partnering relationships offer benefits, they also present potential risks, according to the literature we reviewed. First, one partner may grow lax in holding the other to standards. Second, one partner can lose independence in its decisions. We observed cases where FHWA was lax in its oversight by trusting but not verifying state activities and cases where FHWA demonstrated reluctance to take corrective action to bring states back into compliance, which can result in ineffective, wasteful, and potentially improper use of federal funds. We also observed instances in which FHWA sometimes showed a lack of independence in decisions, putting the states' interests above federal ones, and other instances in which FHWA took extraordinary measures to advance the program to the point of becoming actively and closely involved in implementing solutions to state problems. This can create an inherent conflict when FHWA later must review and approve those actions or review their effectiveness. Despite the risks partnership poses, FHWA has good oversight practices in several areas of the federal-aid highway program.
Partnership Created Challenges for FHWA in the Past	We have expressed concerns about the risks posed by FHWA's partnership approach in the past. The Central Artery/Tunnel project in Boston, Massachusetts, provides examples of both lax oversight and a lack of independence that resulted in ineffective and inefficient use of federal funds and damaged FHWA's credibility. <sup>35</sup> This highway project—one of the largest, most complex, and expensive ever undertaken—
	<sup>35</sup> GAO Ederal Aid Highways: EHWA Needs a Comprehensive Approach to Improving

<sup>35</sup>GAO, Federal-Aid Highways: FHWA Needs a Comprehensive Approach to Improving Project Oversight, GAO-05-173 (Washington, D.C.: Jan. 31, 2005), 5.

	experienced widely reported cost increases, growing from around \$2.3 billion in the mid-1980s to almost \$15 billion in 2004. From 1995 through 1997, we reported concerns about cost growth and funding gaps on the project and weaknesses in FHWA's efforts to address them and to hold the state accountable. <sup>36</sup> In March 2000, an FHWA task force charged with reviewing FHWA's oversight of the project concluded that "FHWA's long history of strong Federal/State partnerships failed" and that FHWA "had failed to maintain an independent enough relationship with the state to adequately fulfill its oversight role." The task force attributed lax oversight to FHWA placing too much trust in the state, reporting that FHWA's partnership approach failed to achieve independent and critical oversight of the project. <sup>37</sup>
	As this example illustrates, although FHWA has experienced partnership risks to its programs in the recent past, FHWA division administrators generally do not recognize the risks of partnering as significant. In our survey, more than half (29) stated they did not believe that partnering creates any risks to their oversight of the federal-aid highway program. Of the remainder, 5 said it may create "some risk," 17 said there was a "slight risk," and only one stated partnering was a "significant risk" to oversight.
FHWA Sometimes Was Lax in Its Oversight or Reluctant to Take Corrective Action	<ul> <li>In some instances, FHWA was lax in its oversight in that it did not verify compliance with the requirements of the federal-aid highway program, instead trusting states to ensure its actions were in compliance, which could have resulted in ineffective, wasteful, and potentially improper use of federal funds. For example:</li> <li>Our November 2011 report on the Emergency Relief program (which provides funds to states to repair roads damaged by natural disasters and catastrophic failures) found that many of the project files reviewed</li> </ul>
	<ul> <li><sup>36</sup>GAO, <i>Transportation: Central Artery/Tunnel Project,</i> GAO/RCED-95-213R (Washington, D.C.: June 2, 1995), <i>Transportation Infrastructure: Central Artery/Tunnel Project Faces Financial Uncertainties</i>, GAO/RCED-96-131 (Washington, D.C.: May 10, 1996), <i>Transportation Infrastructure: Progress On and Challenges to Central Artery/Tunnel Project's Costs and Financing,</i> GAO/RCED-97-170 (Washington, D.C.: July 17, 1997), and GAO/RCED-97-47.</li> <li><sup>37</sup>FHWA, <i>Federal Task Force on the Boston Central Artery Tunnel Project: Review of Project Oversight and Costs</i> (Mar. 31, 2000).</li> </ul>

did not contain documentation to support FHWA decisions that projects met program eligibility requirements.<sup>38</sup> Specifically, of the 83 projects reviewed, 81 projects (representing \$193 million in federal funds) had missing or incomplete documentation. As a result, we were unable to determine the basis of FHWA's eligibility decisions for many of the projects reviewed. We also found that FHWA divisions relied heavily upon the information provided by states to make FHWA eligibility decisions without verifying that information. For example, one FHWA division office reported that it reviewed preliminary cost estimates for about one-third of the projects included in our review before determining that projects were eligible.<sup>39</sup> As a result, we could not determine the basis of FHWA's eligibility decisions for those project cost estimates it did not review and as such, FHWA ran the risk of providing funds to ineligible projects.

In the Disadvantaged Business Enterprise (DBE) program, which aims to increase the participation of small businesses owned and controlled by socially and economically disadvantaged individuals, state DOTs are among those entities responsible for certifying firms to participate.<sup>40</sup> In an interview with one FHWA division office, the FHWA official said that he knows that the state DOT official is very experienced with the DBE certification process and, because of that, relies on the state to make certification decisions consistent with federal regulations. As a result, the official stated that FHWA is generally not involved in verifying the eligibility of DBE firms certified by the state. Although FHWA is not required to review every certification, in this instance FHWA's partnering relationship with the state influenced the level of oversight conducted in this area and exposed FHWA to the risk that ineligible firms might be certified as DBEs.

<sup>&</sup>lt;sup>38</sup>GAO, *Highway Emergency Relief: Strengthened Oversight of Eligibility Decisions Needed,* GAO-12-45 (Washington, D.C.: Nov. 8, 2011).

<sup>&</sup>lt;sup>39</sup>FHWA told us that this risk-based approach was appropriate since states have assumed oversight responsibility for design and construction of many federal-aid highway projects, including emergency relief projects. However, we found that this approach did not appear to be consistent with FHWA's procedures as outlined in its Emergency Relief Manual.

<sup>&</sup>lt;sup>40</sup>GAO, Disadvantaged Business Enterprise Program: Assessing Use of Proxy Data Would Enhance Ability to Know if States Are Meeting Their Goals, GAO-12-78 (Washington, D.C.: Oct. 13, 2011).

Officials from the FHWA division offices we spoke to said they tended • not to do unannounced inspections. Instead, FHWA alerts the relevant construction sites and offices of an inspection ahead of time. Officials from one FHWA division office explained that they rely primarily on announced visits because they do not want to create a "gotcha" environment, which might hurt their relationship with the state. Division officials from another office explained that announcing inspections gives state DOT staff time to do things like assemble the appropriate records or personnel for FHWA's inspection or allows FHWA to observe specific activities, such as materials testing, on the day that particular activity is occurring. While there are some advantages to announced inspections, the Institute of Internal Auditors includes unannounced visits as a common practice used by firms to mitigate risks associated with partnering.<sup>41</sup> By not conducting unannounced inspections, FHWA is essentially trusting the state and its contractors to put compliance with federal requirements over meeting competing demands like cost and schedule. In doing so, it may be missing the opportunity to more accurately verify compliance with federal requirements, observe normal operations, and create an environment conducive to compliance.

The partnering relationship between FHWA and state DOTs at times may have also resulted in FHWA being reluctant to require corrective action to bring a state back into compliance with program requirements. Specifically, FHWA staff acknowledged that, in their daily decision making, they have to think about how to preserve their relationship with their state counterpart and that they view taking corrective action as potentially damaging to that relationship. For example:

 We and the DOT Office of Inspector General have reported multiple times on the problem of funds committed to inactive federal-aid highway projects.<sup>42</sup> FHWA has made it a priority to decrease nationally the number of outstanding inactive projects to ensure that federal funds are being used in a timely and effective way. For example, FHWA had

<sup>&</sup>lt;sup>41</sup>Institute of Internal Auditors Research Foundation, *Managing Strategic Alliance Risk:* Survey Evidence of Control Practices in Collaborative Inter-organizational Settings (2006), 7.

<sup>&</sup>lt;sup>42</sup>Inactive projects are state and local construction projects to which federal funds have been obligated, but which have not had any expenditures over a 1-year period or for which funds are available but are unlikely to be obligated by FHWA within 1 year, as certified by the state.

reduced the percent of funds obligated to inactive projects to about 3.4 percent of all obligations by March of 2012-this percentage had stood at around 8 percent as recently as September 2010.43 In 2008, it established a Financial Integrity Review and Evaluation program requiring division offices to conduct a guarterly review of inactive projects and determine the validity of the amount obligated for each project. FHWA division offices have the authority to de-obligate funds from inactive projects. However, FHWA division officials with oversight responsibility for three states we visited expressed reluctance to use this authority because of concerns that it would negatively affect their working relationship with the state. Instead, these division offices negotiated with state officials to get them to explicitly agree to allow FHWA to de-obligate funds. FHWA officials acknowledged that this is a long, time-intensive process. For example, over the course of 6 months, one FHWA division office sent reminder letters with specific deadlines for the state to provide a rationale for allowing inactive funds to remain obligated. Yet at the end of this process there were still outstanding inactive projects that had not been resolved. In another state, FHWA finance personnel described having ongoing conversations with their state counterparts, asking them the status of inactive projects and negotiating to de-obligate those funds. The FHWA division office described the process as "walking the tightrope" with the states when making decisions to de-obligate. The amount of time officials we spoke with devoted to addressing inactive funds raises questions about whether, on the whole, division offices could have moved more quickly to make these funds available to other needed projects had officials not had to consider the impact of withdrawing funds on their partnership with the state.

 One state identified serious compliance issues with one of its major cities dating as far back as 2003, including federal construction specifications not being followed, insufficient field equipment, and lack of appropriate construction supervision. In 2009, FHWA withheld funding from the city for about 2 weeks while the state DOT drafted a corrective action plan. FHWA approved the plan and resumed funding. However, nearly 2 years later, as of August 2011, there were still points in the plan that had not been addressed. As a result,

<sup>&</sup>lt;sup>43</sup>FHWA tracks data on inactive projects and, although it does not publish these data, it provided them to us in commenting on this report.

federal funds continued to flow to projects that may not have fully met federal requirements.

FHWA can delegate to the state the responsibility of approving consultant contracts to ensure compliance with federal regulations. One state DOT lacked FHWA-approved written procedures for how it selects consultants, which are necessary to comply with federal regulations. The FHWA division office had given the state an extended opportunity—about 5 years—to address the compliance issue, allowing it to use interim procedures as long as the state DOT was developing final procedures and planning to have them approved by FHWA. After 5 years, due to the failure of the state to develop final procedures, the FHWA division office suspended all state DOT contract approvals and temporarily re-assumed the responsibility of approving consultant contracts to ensure compliance with federal procurement regulations. Once the state DOT developed written procedures and they were approved, FHWA restored consultant contract approval authority to the state DOT.

As discussed earlier, FHWA division administrators reported that they rarely use their most punitive corrective action tools such as cutting off funding for a program or organization. While FHWA, in cooperation with the Federal Transit Administration, is responsible for certifying that MPOs meet federal requirements, as we reported in September 2009, FTA and FHWA officials were unaware of any instance in which an MPO was not certified due to noncompliance in the previous 10 years.<sup>44</sup> In our survey of division administrators, for fiscal years 2009 through 2012, one FHWA division administrator reported that he withheld certification of an MPO due to issues in its congestion mitigation plan. However, FHWA still allowed project approvals to move forward. The FHWA division office put together a corrective action plan with the MPO, identifying action steps, deadlines, and people responsible. According to the FHWA division administrator, as long as the state is making progress toward resolving the issue, FHWA will not prevent the MPO from obtaining project approvals and moving construction forward. He noted that MPOs have a 4-year window to become recertified, and if an MPO reached the end of its window but still had not taken sufficient action for FHWA to certify it,

<sup>&</sup>lt;sup>44</sup>GAO, *Metropolitan Planning Organizations: Options Exist to Enhance Transportation Planning Capacity and Federal Oversight* GAO-09-868 (Washington, D.C.: Sept. 9, 2009).

FHWA would likely provide an extension and grant the MPO "conditional" certification, rather than decertify it.

	Similarly, none of the 52 FHWA division administrators stated they had not approved their state's bridge program any time in the past 3 fiscal years. In 2010, the DOT Office of Inspector General found some cases where FHWA bridge engineers reported that a state's bridge program substantially complied with federal regulations despite deficiencies that could have posed serious risks to public safety. <sup>45</sup> For example, one FHWA bridge engineer judged a state to be substantially compliant despite reporting that the state failed to close 96 bridges, as required. A bridge engineer in another state reported that 47 bridges were not closed as required, but concluded that the state was substantially compliant. In two other cases, FHWA bridge engineers reported states as substantially compliant even though 200 bridges in one case and over 500 bridges in the other case were not posted with maximum weight limit signs, as required.
FHWA Sometimes Showed a Lack of Independence in Decisions	FHWA's partnership relationship with the state may have made it vulnerable to a lack of independence in decisions to advance the program in some cases, resulting in it putting the states' interests above federal interests. For example:
	• The Recovery Act required that projects from economically distressed areas be given priority for project selection. The Public Works and Economic Development Act of 1965, as amended, defined these areas, and FHWA supplemented it with guidance to address determination questions. However, as we reported previously, three states developed their own guidelines to determine eligibility. <sup>46</sup> FHWA eventually determined that the states' efforts to determine eligibility did not meet the federal criteria, but it did so after obligating nearly all

<sup>&</sup>lt;sup>45</sup>DOT, Assessment of FHWA Oversight of the Highway Bridge Program and the National Bridge Inspection Program (Washington, D.C.: Jan. 14, 2010), 9-10.

<sup>&</sup>lt;sup>46</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).

the funds in those states, meaning FHWA's determination was too late to affect project selection.<sup>47</sup>

- Our November 2011 report on the Emergency Relief program found instances in which two division offices funded new emergency events with allocations that were no longer needed from previous emergencies.<sup>48</sup> FHWA's procedures specify that FHWA division offices are to identify, and then withdraw, unused program funding allocations so that FHWA can direct these funds to other emergencies. This provision exists because Emergency Relief program funding is often insufficient to fund emergency needs and a "backlog" list of projects exists. These two FHWA division offices gave priority to the state's interest in maintaining control of funds over the federal interest of ensuring that scarce unused Emergency Relief funds were made available to other states with potentially higherpriority emergencies. In response to our recommendation that it do so, FHWA instructed its division offices in January 2012 to no longer permit states to transfer unobligated allocations from one emergency event to a new event.
- We have previously expressed concerns about the Emergency Relief program prioritizing state's interests in other instances as well.<sup>49</sup> In 1996, we questioned the use of Emergency Relief funding in relocating and bettering the Cypress Viaduct, an elevated highway that collapsed in a catastrophic earthquake in Oakland, California. FHWA's regulations limit the use of emergency relief funds for improvements to or changes in the character of a destroyed facility. The regulations allow for funding "betterments"—such as relocation, replacement, upgrades, or added features that did not exist prior to the disaster—only when they are clearly economically justified to prevent recurring damage. In 1991, FHWA and the California Department of Transportation decided, as a result of environmental and community concerns, to replace the collapsed 1.5 mile connection with roughly 5 miles of new freeway segments. We

<sup>&</sup>lt;sup>47</sup>GAO-10-604 and GAO, *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).

<sup>&</sup>lt;sup>48</sup>GAO-12-45.

<sup>&</sup>lt;sup>49</sup>GAO, *Emergency Relief: Status of the Replacement of the Cypress Viaduct*, GAO/RCED-96-136 (Washington, D.C.: May 6, 1996).

questioned funding these improvements and additional costs through the Emergency Relief program, rather than through the annual formula funding states receive from the federal-aid highway program. This decision provided California with over \$1 billion in additional funding that it then did not have to utilize from regular federal-aid funds or state sources. In 2007 and 2011, we reported additional cases of FHWA using the Emergency Relief program to fund projects that had grown in scope and cost as a result of environmental and community concerns. In 2007, we recommended that FHWA revise its regulations to tighten eligibility criteria and place limits on the use of Emergency Relief program funds to fully finance projects with scope and costs that have grown as a result of environmental and community concerns. FHWA has not acted on this recommendation.

In addition, FHWA has on occasion taken extraordinary measures, expending considerable resources to advance the program, to the point of becoming actively and closely involved in developing and implementing solutions to state problems. When an overseer becomes part of the solution, the arms-length, independent perspective may be lost, as agencies that are responsible for implementing program improvements face an inherent conflict when they later approve those actions or review their effectiveness. For example:

FHWA spent a substantial amount of time and effort with state DOT personnel and others trying to determine if funds used on a private bridge were eligible for use to help the state meet its matching requirement for federal funding. According to division office officials, the state was struggling to meet the 20 percent funding match required of states in order to receive the 80 percent federal-aid highway funding, due to the economic recession and poor fiscal situation of the state. Division office officials further explained that had it not met the match, the state could have lost about \$200 million in federal funds in fiscal year 2012. States may receive "toll credits"funds that can be credited by FHWA toward the state's federal match-if it can demonstrate that toll revenues were spent on facility improvements and meet other requirements. In an effort to meet its match, officials explained that the state identified a private toll bridge that it repaired and improved using toll revenue, but had never claimed the revenues as federal toll credits. The FHWA division office committed staff, including their financial manager, to work with the state DOT, the private bridge company, and an outside auditing firm to determine the eligibility of the toll credits. Together they identified more than \$50 million in eligible toll expenditures, finding individual line item expenditures in areas such as preventative maintenance and

	capital improvements related to tolling equipment and real estate acquisition. The eligible toll credits helped the state meet its fiscal year 2012 federal match requirement. While FHWA officials characterized the Division's activities as appropriate technical assistance that was needed because the state did not have the skills to identify these credits, it placed the agency in a position of approving actions it was actively and closely involved in developing.
	• In one state, an FHWA division office detailed a staff person to work full-time on-site at the state DOT to help bring the state into compliance with the requirements of the Highway Beautification Act of 1965. <sup>50</sup> Division office officials had identified ongoing compliance issues with the state's outdoor advertising program, including multiple examples of signs that were not in compliance with the state's agreement with DOT. <sup>51</sup> As a result, FHWA could have withheld 10 percent of the state's federal-aid funds. However, the division did not withhold these funds. The division adopted an approach that entailed considerable time and effort on the part of FHWA by detailing a staff person to (1) research sign regulations on federally controlled routes to determine compliance with the federal-state agreement and the Highway Beautification Act, (2) review the state's outdoor advertising inventory to determine the status of signs, and (3) provide interpretations, clarifications, and authoritative determinations concerning FHWA policy, among other activities.
Despite Partnership Risks, FHWA Has Good Oversight Practices in Several Areas	Despite the risks partnership poses, in several areas of the federal-aid highway program, FHWA has good oversight practices. The Institute of Internal Auditors has identified segregation of duties in the type of partnership FHWA has with state DOTs as one of the most common practices used in managing partnership-related risks. <sup>52</sup> During the administration of the Recovery Act, FHWA developed the National Review Teams (NRT) composed of FHWA staff—separated from the rest
	<sup>50</sup> Highway Beautification Act of 1965, Pub. L. No. 89-285, Title I, 79 Stat. 1028 (1965) (codified as positive law in 23 U.S.C. § 131).
	<sup>51</sup> The 1965 act requires each state DOT to enter into a formal agreement with DOT to control signs adjacent to the Interstate System and other routes included on what is now the National Highway System.
	52

<sup>52</sup>Institute of Internal Auditors Research Foundation, *Managing Strategic Alliance Risk: Survey Evidence of Control Practices in Collaborative Inter-organizational Settings.*  of the FHWA—to act as a neutral third party to conduct oversight. The NRTs were able to maintain their neutrality and objectivity in part because they did not have to concern themselves with preserving a partnering relationship while conducting oversight and making recommendations for action. In addition, the findings and recommendations of the NRTs were reported both to the FHWA division office, which was responsible for developing action items in response, and the responsible FHWA Director of Field Services, who was responsible for ensuring the action items were completed within the established time frames. This practice of providing an independent review had several benefits. According to FHWA officials, it provided

- a consistent, comparative perspective on the oversight regularly conducted by division offices, and it gathered information at the national level on both best practices and recurring trouble spots across FHWA division offices;
- additional "boots on the ground" for project-level oversight and increased awareness of federal oversight activity among states, MPOs, and other transportation organizations receiving Recovery Act funds; and
- an independent outside voice to examine the Recovery Act projects and point out problems, keeping the partnering relationship between the division offices and the state DOTs intact.

The response to the NRT reviews from both division office and state officials with whom we spoke was positive. For example, division office officials said that the NRT reviews often echoed their own observations of weaknesses in the state DOT's program, but they said the state DOT seemed more inclined to act because the NRT was a fresh voice presenting the observations. Division office officials also told us that having the NRT point out deficiencies was helpful to them in maintaining their partnering relationship with the state. State DOT officials we spoke with in our discussion groups generally agreed that the NRT reviews, while they created an additional burden, provided an independent thirdparty perspective during the implementation of the Recovery Act.

In administering the federal-aid highway program, FHWA makes use of two practices that facilitate good oversight:

• A risk management approach to oversight. Conducting risk assessments, which are part of FHWA's approach, to identify both

internal and external risks to an agency is another best practice for agencies.<sup>53</sup> In particular, by targeting areas of risk at both the state and national level, FHWA can focus on specific program areas of concern and better utilize limited resources. Division offices conduct annual assessments of their states to identify the greatest risks and vulnerabilities, and FHWA headquarters uses this information to identify common risk areas across the nation. FHWA officials in several division offices we spoke with stated that they use the risk assessment to inform their oversight activities throughout the year and take specific steps, when applicable, to address the risks. In 2009, we reported that FHWA had improved its use of risk assessments by proactively identifying risks and their potential impact, as well as developing specific response strategies to inform its planned oversight activities. Our report concluded that FHWA's guidance and training reflected best practices in risk management in three of four key areas.54

Random sampling to review documentation of various financial transactions—a practice that is in keeping with its risk-based approach. This approach ensures that FHWA can assess compliance with financial requirements in a systematic way when it is impossible for FHWA to survey all occurring financial transactions. Furthermore, selecting transactions randomly protects the sample from selection bias, to which FHWA division offices could potentially be vulnerable because of their partnering relationship with the state. For example, in its Financial Integrity Review and Evaluation system, FHWA headquarters selects a random sample of transactions for each division office to check for compliance with the Improper Payments Information Act of 2002.<sup>55</sup> FHWA headquarters also randomly selects billing transactions each quarter to determine if there is sufficient documentation to support the billing item and amount.

<sup>&</sup>lt;sup>53</sup>GAO, *Standards of Internal Control in the Government*, GAO/AIMD-00-21.3.1 (Washington: D.C. November 1999), 10.

<sup>&</sup>lt;sup>54</sup>GAO, Federal-Aid Highways: FHWA Has Improved Its Risk Management Approach, but Needs to Improve Its Oversight of Project Costs, GAO-09-751 (Washington, D.C.: July 24, 2009).

<sup>&</sup>lt;sup>55</sup>Pub. L. No. 107-300, 116 Stat. 2350 (2002).

Partnering Could Help FHWA Implement a Performance-Based System, but Long- standing Challenges Would Remain	Legislation has been approved in the Senate that would move the federal- aid highway program toward a more performance-based approach. FHWA's partnership—its close working relationship with the states— could be useful in making the transition to such a system; however, FHWA would need to effectively address the risks posed by such a close partnership—lax oversight and lack of independence. In addition, it would have to address other existing weaknesses that we have identified in previous reports, including improving the transportation planning process and data collection and evaluation. Finally, long-standing challenges stemming from the growth in the number of responsibilities and complexity within the federal-aid highway program, as well as the lack of well-defined federal goals and roles, would remain. Reexamining and refocusing surface transportation programs, which we have previously recommended, presents an opportunity to narrow the scope of FHWA's responsibilities so that it is better equipped to transition to a performance- based system. This review identified areas where FHWA expends considerable time and resources but exercises little effective control— areas where devolving responsibilities to the states may be appropriate.
Legislation Approved by the Senate for a Performance-Based Highway Program	A performance-based system is critical to the reexamination and restructuring of surface transportation programs that we and others have recommended. <sup>56</sup> Currently, most highway grant funds are distributed through formulas that have only an indirect relationship to infrastructure needs and many have no relationship to outcomes or the performance of the grantees. Because funds are distributed without regard to performance, it is difficult to know whether federal spending is improving the performance of the nation's highway infrastructure. <sup>57</sup> Under Moving Ahead for Progress in the 21st Century (MAP-21)—FHWA would develop performance targets for minimum condition levels in two areas: (1) pavement on the Interstate and non-Interstate highways on the National Highway System and (2) bridges on the National Highway System. <sup>58</sup> If a state did not to meet the minimum condition levels for 2 consecutive years, it would be required to commit a specific percentage

<sup>56</sup>GAO-08-744T.

<sup>57</sup>GAO-08-400.

<sup>58</sup>S. 1813 §§ 1106, 1112.

	of its federal-aid highway funding to the deficient area. For other areas, MAP-21 directs states to develop performance targets related to national priorities identified in the legislation, <sup>59</sup> document these targets in their statewide transportation improvement programs, and link investment priorities to these targets. FHWA would have to (1) work with the states to develop performance goals that represent real improvements relative to the state's current conditions and will improve the performance of the nation's transportation system, and (2) monitor and measure states' progress and take corrective action should states not meet performance targets. Legislation approved by the House Transportation and Infrastructure Committee and the President's fiscal year 2013 budget proposal also refer to states developing performance measures and goals to improve safety, congestion, and other areas.
FHWA's Partnership Approach Could Facilitate a Transition to a Performance-Based Program	FHWA's partnership with states could offer several benefits in moving toward a performance-based program. In particular, through the partnership's collaborative approach, FHWA could provide technical assistance to help states develop performance goals and targets and establish data collection methodologies to evaluate and track their progress. States participating in our discussion groups found the technical assistance, knowledge transfer, and policy advice that FHWA provides a highly valuable benefit of the partnership relationship. Likewise, FHWA division office personnel recognized the benefit partnership offers in facilitating technical assistance.
	Developing effective performance goals and targets and the data collection methods to track targets poses challenges that technical expertise can address. As we have reported, the more specific, measurable, achievable, and outcome-based the goals are, the better the foundation for allocating resources and optimizing results. <sup>60</sup> Also, goals must be linked to project selection and funding decisions, and without specific and measurable outcomes for federal involvement, policymakers will have difficulty determining whether certain parts of the federal-aid highway program are achieving the desired results. In addition,
	<sup>59</sup> These priorities include (1) safety, (2) infrastructure condition, (3) system reliability, (4)

<sup>&</sup>lt;sup>59</sup>These priorities include (1) safety, (2) infrastructure condition, (3) system reliability, (4) freight movement and economic viability, and (5) environmental sustainability (S. 1813, § 1203).

<sup>&</sup>lt;sup>60</sup>GAO-08-400.

	developing data collection methods that consistently and reliably capture the metrics needed requires technology, planning, and training staff to ensure high-quality data. FHWA has recently developed performance metrics and revamped its data collection approach for the National Bridge Inventory System. Specifically, it adopted a new risk-based, data-driven approach that incorporates the review of 23 individual performance metrics, and, where appropriate, makes use of random sampling of the state's bridges to evaluate the metrics. <sup>61</sup> This recent experience, coupled with its technical expertise in other areas and division office officials' relationship with, and knowledge of, their state, would help to facilitate knowledge transfer and have the potential to create an effective performance-based program.
FHWA Would Need to Mitigate Risks of Partnership	Moving to a more performance-based approach means monitoring and measuring states' progress, holding states accountable for meeting performance targets, and taking corrective action objectively and consistently across states when needed. However, this can only be achieved if the risks posed by partnership discussed earlier—lax oversight, reluctance to take corrective action, and lack of independence in decision making—are overcome.
	In addressing the risks posed by its partnership, FHWA can draw on some of its existing organizational structures. For example, during the implementation of the Recovery Act, FHWA used its NRTs to augment the oversight provided by division offices by conducting additional programmatic reviews and project inspections. Officials stated that the NRTs were able to maintain their neutrality and objectivity while conducting oversight and making recommendations, and that NRT personnel provided a consistent, comparative perspective to the oversight regularly conducted by division offices. Officials also explained that the NRTs' observations often reinforced those of division staff while also allowing the partnering relationship between the division offices and state DOTs to remain strong.

<sup>&</sup>lt;sup>61</sup>However, at the moment the National Bridge Inspection Standards' random sampling selection does not use a stratified approach that may be beneficial in this case. As a result, it is equally likely that a small, low-traffic, locally owned bridge would be selected for inspection as a large, high-volume, load-rated bridge on the Interstate.

## FHWA Would Need to Address Existing Oversight Weaknesses in Planning and Data Collection

Although FHWA would have to work with the states to develop performance goals and monitor and measure states' progress, we have reported weaknesses in federal oversight of both the statewide and metropolitan area planning processes that prevent effective measurement and tracking of performance outcomes. For example, we found that FHWA's oversight of statewide planning focuses on process, rather than specific transportation outcomes.<sup>62</sup> As such, FHWA cannot assess whether states' investment decisions are improving the condition and performance of the nation's transportation system. Similarly, pursuant to federal law, federal oversight of metropolitan planning is process-oriented rather than outcome-oriented, making it difficult to determine whether this oversight was improving transportation planning. Specifically, FHWA's oversight is geared toward determining whether MPOs are in compliance with federal laws and regulations, and this procedural focus, coupled with the fact that FHWA rarely withholds certification of MPOs, makes it difficult to use the certification process as a performance indicator for MPOs. In addition, we found that while FHWA identifies corrective actions to bring MPOs into compliance, it does not routinely assess the progress MPOs are making toward completing those corrective actions.

We recommended to Congress that FHWA more closely review states' transportation improvement programs to assess whether states' investments are achieving intended outcomes, rather than limiting its evaluation to whether the state complied with federal processes for developing the plan. We also recommended that Congress make the metropolitan planning processes more performance-based in order for FHWA to better assess the MPOs' progress in achieving results and better understand whether federal funds are being used to achieve national goals.<sup>63</sup> When we completed our review, Congress has not yet approved a multi-year surface transportation reauthorization measure, which could potentially address these recommendations.

In addition, FHWA would need to improve its ability to collect nationallevel data on highway performance to hold states accountable. Although

<sup>&</sup>lt;sup>62</sup>GAO, Statewide Transportation Planning: Opportunities Exist to Transition to Performance-Based Planning and Federal Oversight, GAO-11-77 (Washington, D.C.: Dec. 15, 2010).

<sup>&</sup>lt;sup>63</sup>GAO-09-868.

the Government Performance and Results Act of 1993<sup>64</sup> requires agencies to measure performance toward the achievement of program goals and objectives,<sup>65</sup> we have stated previously that the federal government is not equipped to implement a performance-based approach to transportation funding because it lacks comprehensive data.<sup>66</sup> For example, during the administration of the Recovery Act we recommended that DOT assess the long-term benefits of Recovery Act investments in transportation infrastructure. In its response, DOT said it expected to be able to report on Recovery Act outputs, such as the miles of road paved, but not on outcomes, such as reductions in travel times. We have found other areas in which the lack of comprehensive, national-level data would hinder any move toward a performance-based system. For example, in administering the on-the-job training program, FHWA does not collect consistent national-level data on the number and demographics of program participants, the trades involved, and status of trainees. As a result, FHWA is not able to assess program results and hold states accountable.<sup>67</sup> In another example, our review of statewide transportation planning found that while FHWA division offices were collecting data on progress made by states to advance projects on their statewide transportation improvement programs to their construction phase, the data were unreliable to the point of being unusable because they were collected inconsistently across states and could not be used to compare states' progress.<sup>68</sup> We have made numerous recommendations to DOT related to the need for national-level data-a number of which DOT has yet to implement.

<sup>&</sup>lt;sup>64</sup>Pub. L. No. 103-62, 107 Stat. 285 (1993) (codified at 31 U.S.C. §§ 1115-1116).

<sup>&</sup>lt;sup>65</sup>GAO, *Executive Guide: Effectively Implementing the Government Performance Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1996).

<sup>&</sup>lt;sup>66</sup>GAO-08-744T.

<sup>&</sup>lt;sup>67</sup>GAO-11-703.

<sup>&</sup>lt;sup>68</sup>GAO-11-77.

Long-standing Challenges and the Need to Reexamine and Reform the Federal-Aid Highway Program Remain FHWA's success in transitioning to a performance-based program is dependent not only on addressing risks posed by its partnering relationship, but also by factors it cannot control. A performance-based program represents new responsibilities at a time when the growth in the number and complexity of its responsibilities and the lack of well-defined federal goals and roles leave FHWA, to a large extent, with a broad mandate in an increasingly constrained budget environment. As we have reported previously, a performance-based system is one part of the broader need to reexamine and restructure the program. A clearer definition of the federal role and, in turn, FHWA's responsibilities is under Congress's purview, and therefore beyond FHWA's or its partners' ability to address.

In 2008, we recommended that Congress consider a fundamental reexamination and reform of surface transportation programs that would potentially result in a more clearly defined federal role in relation to other levels of government and thus a more targeted federal role focused around evident national interests. For issues in which there is a strong national interest, ongoing federal financial support and direct federal involvement could help meet federal goals. Where national interests are less evident, other stakeholders could assume more responsibility, and some programs and activities may better be devolved to other levels of government. In some cases, it may be appropriate to "turn back" activities and programs to state and local governments if they are best suited to perform them.<sup>69</sup>

Devolving parts of the federal-aid highway program may be appropriate in cases where not only national interests are less evident, but also where FHWA expends considerable time and resources yet exercises little effective control. During this review, we identified two such areas: (1) delegated projects and (2) locally administered projects. By law, the states assume oversight responsibility for delegated projects—that is, all projects that are not on the National Highway System, and are thus off the federal-aid system and not the focus of the national program.<sup>70</sup> In fiscal year 2011, about 48 percent of federal-aid funds were obligated for projects for which oversight could be assumed by the states. Even though the states are responsible for oversight of the design and construction of

<sup>&</sup>lt;sup>69</sup>GAO-08-400.

<sup>&</sup>lt;sup>70</sup>23 U.S.C. § 106(c)(2).

these projects, FHWA is still expected to evaluate state DOT capacity through a number of processes and reviews. Division office officials told us that these activities require a considerable amount of time and effort on the part of their staff.

Locally administered projects are projects in which a state DOT has given approval to a local public agency (e.g., a city or county) the responsibility to administer a project or phase of a project such as design, property acquisition, or construction. These projects can either receive full oversight from FHWA or that responsibility can be assumed by the state. During our review, FHWA did not have national-level information on the number of projects or amount of federal funds spent on locally administered projects. However, it began requiring division offices to collect this information for newly authorized projects on March 12, 2012, so such data will be available in the future. Nevertheless, locally administered projects are ranked by FHWA's risk assessments as among the highest-risk areas in FHWA's oversight portfolio at both the state and national levels. For example, at least 33 division offices included risks related to locally administered projects as their most pressing risk areas in 2010. These risks included a lack of understanding of federal-aid construction contract requirements and use of innovative or nontraditional construction techniques by inexperienced local agencies. Likewise, FHWA headquarters identified locally administered projects as high risk. According to FHWA division and state officials, local agencies struggle to meet federal regulations that accompany federal-aid funding because of high staff turnover at the local level and the infrequency with which local agencies receive federal funding.

These challenges were reiterated throughout the discussion groups we conducted, as well as at the site visits to FHWA division offices that we conducted across the country. FHWA officials from two states described a wide range of risks posed by locally administered projects, including use of outdated design standards, lack of quality control and assurance, lack of standard documentation and recordkeeping, and insufficient knowledge of the right-of-way acquisition requirements. One FHWA division office provided examples of locally administered projects in their state that did not conduct construction inspections or materials testing or bought supplies from foreign countries, actions that are out of compliance with federal regulations. According to officials in three of the FWHA division offices we visited, locally administered projects require considerable time, attention, and resources. For example, according to officials in three division offices, FHWA staff expend a good deal of time and effort

providing technical assistance and capacity-building to enhance the ability of local agencies to successfully administer federal-aid projects.

Further, our analysis of the 2010 state Single Audits<sup>71</sup> showed that insufficient monitoring of subrecipients,<sup>72</sup> such as on locally administered projects, was one of the most common findings and that 18 of 47 reporting states had findings related to monitoring of subrecipients. Our analysis also showed that state DOTs did not properly communicate federal requirements in their awards to or contracts with subrecipients and that their monitoring of subrecipients during the award was inadequate. Specifically, state DOTs' monitoring of subrecipients for compliance with federal and state requirements lacked procedures for or had poor compliance with existing procedures for regular site visits, risk assessments, and performance reporting.

As we have reported, devolving parts of the federal-aid highway program would have many implications and would require careful decisions to be made at the federal, state, and local levels. Since the federal-aid highway program has a dedicated source of funding (in that it is funded from fuel taxes and other fees deposited into the Highway Trust Fund), devolving parts of the highway program could entail reducing revenues into the Highway Trust Fund. The decision to reduce revenues at this time would be difficult because the Congressional Budget Office estimates, as of March 2012, that to maintain current spending levels plus inflation between 2013 and 2022, the Highway Trust Fund will require over \$125 billion more than it is expected to take in over that period.<sup>73</sup> At the federal level, it would need to be determined what functions would remain and how federal agencies would be structured and staffed to deliver those

<sup>&</sup>lt;sup>71</sup>A Single Audit is a required audit of states, local governments, and nonprofit entities that expend at least \$500,000 per year in federal awards. Single Audits include determinations on whether the audited entity met the compliance requirements listed in the Office of Management and Budget's Circular No. A-133 Compliance Supplement for each major program. There are 14 types of compliance requirements which include allowable costs/cost principles, activities allowed or unallowed, and subrecipient monitoring.

<sup>&</sup>lt;sup>72</sup>A subrecipient is an entity that receives a grant award from the prime recipient of an award and is accountable to the prime recipient for the use of the federal funds provided by the subaward. For the federal-aid highway program, this is generally a local public agency that administers a federal-aid project, but may also be a nonprofit, educational institution, and in some cases, another federal agency.

<sup>&</sup>lt;sup>73</sup>Congressional Budget Office-March Fiscal Year 2012 Baseline Projections for the Highway Trust Fund.

programs. At the state and local levels, it would need to be determined whether to replace federal revenues with state taxes and what types of programs to finance. Deciding whether to replace federal revenues with state taxes would be difficult because states also face fiscal challenges and replacing revenues would have different effects on different states.<sup>74</sup>

Conclusions

FHWA's partnership approach with the states allows it to proactively identify issues before they become problems, achieve cost savings, and gain states' commitment to improve their processes. In some areas, FHWA division offices have good oversight practices that complement its partnership, including using a risk-based approach to its oversight and using an independent, third- party review (the NRTs) to augment its oversight activities during the implementation of the Recovery Act.

However, FHWA's partnership also poses risks that it has not to date directly addressed, that can potentially result in improper or ineffective use of federal funds and the loss of independence necessary for effective oversight. Should Congress direct FHWA to move to a performancebased system, holding states accountable for achieving performance measures—and taking action when they do not—would be essential. Because of the nature of their partnership with the states, FHWA's division offices may not be in the best position to mitigate partnership risks. Given that partnership produces benefits, the solution does not lie with eliminating FHWA's partnership approach. Rather, a strategy built around leveraging the strengths of the partnership approach while managing its risks could provide a better way for FHWA to verify the states' use of federal funds.

While such a strategy could take many forms, greater separation of the responsibilities to advance, oversee, and make corrective action decisions in the program would be consistent with good internal control practices and may help FHWA transition to a performance-oriented program. Specifically, a nationally focused, independent oversight entity modeled on the NRTs could be an effective vehicle to mitigate risks associated with partnering between FHWA division offices and state DOTs by conducting periodic evaluations of selected activities and making recommendations for improvement. This could be particularly

<sup>&</sup>lt;sup>74</sup>GAO-08-400.

helpful in instances in which the division offices have been reluctant to take corrective action because of concerns about damaging the partnering relationship. In addition, if Congress directed FHWA to move to a performance-based system, an entity modeled on the NRTs could assess states' progress toward performance measures and hold states accountable for meeting them. Responsibilities such as technical assistance and knowledge transfer—areas where FHWA's partnering relationship can help states develop performance goals and targets could remain with the division offices.

Any successful transition to a performance-based system in the highway program requires accurate, reliable national-level data. The partnership that division offices have with state DOTs could help to ensure that states develop data collection methods that would help determine whether the highway system overall was improving. Furthermore, FHWA has the expertise to develop and implement a rigorous national-level data collection effort as it recently did with the National Bridge Inventory System. We are not making a new recommendation to DOT on this matter because many of our recommendations on collecting national-level data remain open.

In 2008, we recommended that Congress consider reexamining and refocusing surface transportation programs, establishing well-defined goals with direct links to identified federal interests and roles, and consider devolving to the states and other levels of government responsibility for programs where national interests are less evident. The information we gathered during the course of this review and the pending transition to a more performance based federal-aid highway program reinforces the need to act. First, FHWA's responsibilities have expanded over the years while its resources have not, and the addition of a performance-based system to its already broad mandate would further expand FHWA's responsibilities. Reexamining and refocusing surface transportation programs presents an opportunity to narrow the scope of FHWA's responsibilities so that it is better equipped to transition to a performance-based system. Second, this review has identified specific areas where devolving or turning back to the states the responsibilities for managing and funding some parts of the highway program may be appropriate. Turnback would have many implications and would require careful decisions. Yet nearly half of federal-aid highway funds are spent on roads off the National Highway System-projects for which oversight has been assumed by the states-raising questions about whether evident federal interests are at stake. In addition, the considerable federal resources FHWA expends overseeing locally administered projects-

	including capacity-building activities for city and county governments— raises questions about whether such time and effort is better spent in support of more nationally focused programs and objectives.
Matter for Congressional Consideration	As we have previously recommended, Congress should consider reexamining and refocusing surface transportation programs, including establishing well-defined goals with direct links to identified federal interests and roles. Based on this review, there may be areas where national interests are less evident and where Congress may wish to consider narrowing FHWA's responsibilities.
Recommendations for Executive Action	We recommend that the Secretary of Transportation direct the FHWA Administrator to develop a strategy based on the NRT model to mitigate the risks associated with its partnering approach with state DOTs, while maintaining the strengths that the partnership approach brings to the program. This strategy should address existing risks and, if Congress directs FHWA to move to a performance-based system, partnering risks that could affect the successful implementation of such a system.
Agency Comments	We obtained oral comments from DOT officials, including the Director of FHWA's Office of Program Administration. These officials stated that DOT generally agreed with the findings and recommendations in the report. Specifically, they recognized that the agency's partnership approach with the states poses oversight risks. They stated that they are implementing efforts based on the NRT model to provide independent reviews and accountability services to improve the efficiency and effectiveness of FHWA programs. We will monitor these efforts to assess if the department is responsive to our recommendation that DOT mitigate the

risks of its partnership with the states.<sup>75</sup> DOT officials also provided technical comments which we incorporated as appropriate.

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

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or herrp@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 that made significant contributions to this report are listed in appendix III.

Sincerely yours,

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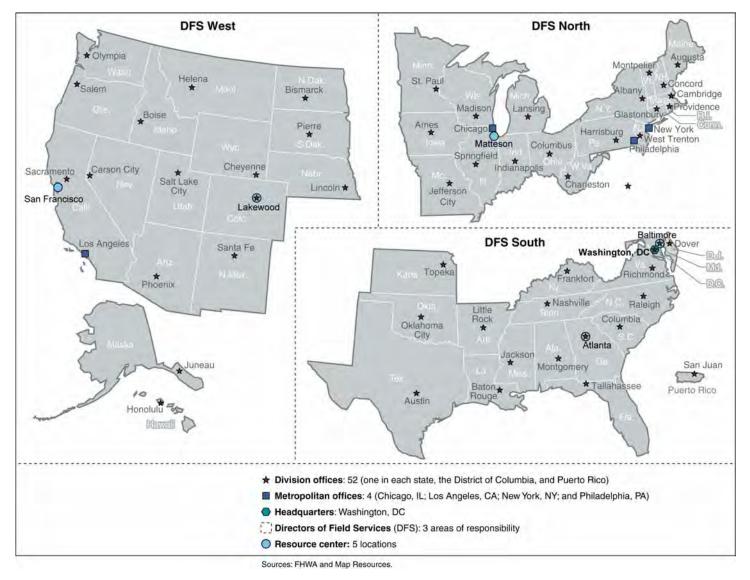
Phillip R. Herr Managing Director Physical Infrastructure Issues

<sup>&</sup>lt;sup>75</sup>Section 236 of the Legislative Reorganization Act of 1970 requires the head of the agency to submit a written statement on action taken on recommendations and submit the statement to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Government Reform of the House of Representative within 60 days of the release of this report, and the Committees on Appropriations of both Houses of Congress in the first request for appropriations submitted more than 60 days after the date of the report. Pub. L. No. 91-510, § 236, 84 Stat. 1140, 1171 (codified as amended at 31 U.S.C. § 720(b)).

## Appendix I: FHWA Organization

The Federal Highway Administration (FHWA) has 52 division offices one in each state, the District of Columbia, and Puerto Rico-to carry out the day-to-day activities of the federal-aid highway program. These offices are generally located in the same city as the state departments of transportation (state DOTs), which is usually the state capital. In addition, jointly with the Federal Transit Administration, the FHWA operates four metropolitan offices in Philadelphia, Pennsylvania; New York, New York; Chicago, Illinois; and Los Angeles, California, which are extensions of their respective division offices. FHWA division offices are organized geographically under three directors of field service who provide administrative supervision and leadership on strategic initiatives to their constituent division offices. FHWA headquarters provides leadership and policy direction for the agency, and FHWA's Resource Center, with five locations, provides technical expertise, guidance, and training to the states in areas such as air quality, civil rights, construction, environment, safety and bridges.

Figure 2: Locations of FHWA's Offices



## Appendix II: Scope and Methodology

To address our objectives, we reviewed and analyzed relevant laws, regulations, and FHWA documentation. Specifically, we reviewed previous and current authorizations of the federal-aid highway program, as well as proposed reauthorization language. We also reviewed relevant sections of U.S. Code that pertain to FHWA and its relationship with the states. Additionally, we reviewed and summarized past GAO work regarding FHWA's programmatic oversight responsibilities and its relationship with the states.

To obtain information on current FHWA structure and oversight activities, we conducted site visits to nine FHWA division offices, including Colorado; Delaware/Maryland, which has a joint office; Maine; Michigan; North Carolina; Oklahoma; Virginia; and Washington, D.C. We selected these states to include a range of selection criteria, including the extent to which oversight responsibilities have been assumed by the state, the size of the state's transportation program and proportion of federal funding relative to state funds, the type of transportation system in the state (e.g., primarily rural highways and interstate or primarily infrastructure in densely populated urban areas); and geographic distribution. We interviewed FHWA and state DOT officials in multiple settings to learn how they characterize their relationship and what role partnership plays in oversight.

We also reviewed selected academic literature on formal partnering practices and tools. To perform this analysis, GAO conducted a variety of literature and Internet searches, reviewed previous GAO reports, and analyzed literature recommended by engagement stakeholders. We read, analyzed, and synthesized these documents to construct a common definition of partnering, namely that "partnering is an approach that, through collaborative processes and activities, enables parties to achieve individual and mutually beneficial goals and results." We also identified nine features of partnership from our review of the literature. Of those, we selected four features based on the applicability of these features to FHWA's partnering relationship with state DOTs based on our observations of FHWA, interviews with FHWA and state DOTs, and from our review of documentation of formal partnering arrangements between states and FHWA division offices. In doing so, we developed the following definition of features of partnership: "Partnering processes and behaviors span a continuum of collaborative activities including information sharing, participative and consultative processes, collaborative problem solving, and formal team-building such as charter signing and relationship assessment." Further, we reviewed literature to identify partnership risks, and after identifying a list of six risks, we identified two risks which were

most evident in our audit work and that were most relevant to FHWA's partnering relationship with state DOTs: lax oversight and a lack of independence emerged as two primary themes of partnering risk.

To obtain an independent view of issues in FHWA's oversight, we examined the results of the 2010 Single Audits—statewide audits of financial statements and compliance with federal program requirements for certain programs among recipients of federal funds. Forty-seven states reported their results in the Federal Audit Clearinghouse as of October 28, 2011.<sup>1</sup> To determine relevant findings to our work, we identified audit records for FHWA funding categories, which provided us with funding amounts that were subject to audit findings as well as the types of audit findings.<sup>2</sup> We analyzed these findings to determine the types of findings occurring most frequently. For subrecipient monitoring, one of the most frequent audit finding types, we examined full-text Single Audit reports, comparing them against each other to identify common themes.

In addition to these efforts, we conducted a survey of all FHWA division administrators, who lead the FHWA division offices located in each state, as well as Washington, D.C., and Puerto Rico. With all 50 states and Washington, D.C., and Puerto Rico, our universe was 52 division offices.<sup>3</sup> We developed a web-based survey instrument of seven closed-ended questions and one open-ended question, regarding (1) FHWA's partnering relationship with state DOTs, and (2) FHWA's use of available corrective actions. We pre-tested the instrument with two division administrators in November 2011. The survey was released in December 2011. We received 52 completed surveys, for a 100 percent response rate.

<sup>&</sup>lt;sup>1</sup>Four of the remaining states do not submit annual Single Audit reports, and the fifth state did not submit any statewide Single Audit results for 2010 as of October 28, 2011.

<sup>&</sup>lt;sup>2</sup>Single Audit finding types include activities allowed or unallowed; allowable costs/cost principles; cash management; Davis-Bacon Act; eligibility; equipment and real property management; matching; level of effort; earmarking; period of availability of federal funds; procurement and suspension and debarment; program income real property acquisition and relocation assistance; reporting; subrecipient monitoring; special tests and provisions; and other.

<sup>&</sup>lt;sup>3</sup>One division administrator oversees both the Puerto Rico and Florida division offices. The survey instrument was sent out for each individual division office, and the administrator was given instructions on how to determine which instrument was assigned to which division office, and to respond fully to both, which he has done.

To obtain input from states on their relationship with FHWA division offices and their oversight of the federal-aid highway program, we conducted four discussion groups of state DOT representatives. We worked in conjunction with the American Association of State Highway and Transportation Officials to speak with personnel from a variety of geographic locations and various programs, including personnel from the areas of construction, locally administered projects, engineering, bridges, and leadership.

To determine the extent to which FHWA's incorporation of partnering practices into its oversight approach supports effective oversight, we used academic literature and GAO reports to identify criteria and effective practices for productive partnering and robust oversight. Using these criteria and effective practices, we assessed FHWA's current oversight practices by reviewing information from interviews with FHWA headquarters and division offices and state DOTs; site visit observations; and relevant findings from recent and ongoing GAO engagements examining various FHWA program areas.

To determine the extent to which FHWA's partnering approach serves as a foundation for moving toward a performance-based transportation program, we identified principles for a performance-based transportation system in previous GAO reports that can be applied to FHWA, including (1) national transportation goals, (2) performance measures, (3) appropriate performance targets, and (4) employing the best tools to emphasize return on investment. We also reviewed the proposed reauthorization bill, Moving Ahead for Progress in the 21st Century (MAP-21),<sup>4</sup> to incorporate Congress' expectations for moving toward a performance-based system.

We conducted this performance audit from April 2011 to April 2012 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.

<sup>&</sup>lt;sup>4</sup>S. 1813 §§ 1106, 1112, 112<sup>th</sup> Cong. (as adopted by the Senate March 14, 2012).

## Appendix III: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments	In addition to the individual named above, other key contributors to this report were Steve Cohen (Assistant Director), Joah lannotta (Analyst-in- Charge), Irina Carnevale, Kathryn Crosby, Peter Del Toro, Holly Dye, Bert Japikse, Thomas James, Stuart Kaufmann, SaraAnn Moessbauer, Amy Rosewarne, and Jeffrey Sanders.

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