LESSONS LEARNED FROM ARRA:
IMPROVED FHWA OVERSIGHT
CAN ENHANCE STATES’ USE OF
FEDERAL-AID FUNDS

Federal Highway Administration

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The American Recovery and Reinvestment Act of 2009 (ARRA) added roughly $27 billion to the Federal Highway Administration’s (FHWA) budget—a 67-percent, one-time increase for State highway construction and improvement projects. FHWA’s ARRA projects were awarded using the same policies, procedures, and practices used to award its other Federal-aid projects. ARRA projects are also subject to additional requirements. For example, ARRA mandates that funds be obligated 19 months after enactment, requires enhanced oversight of ARRA-funded contracts, and emphasizes the use of competitive procedures. Effective competition is key to ensuring the Federal Government and States maximize the use of Federal-aid funds. It can save money, improve contractor performance, curb fraud, and promote accountability for results.

Although States have the right to select projects for Federal funding, FHWA is responsible for effective stewardship of all Federal highways programs.\(^1\) This includes overseeing State Departments of Transportation’s (State DOT) use of Federal-aid funds and providing assurance that these funds are expended in a manner effective in securing competition.\(^2\) However, over the past 2 years, we

\(^1\) 23 U.S.C. § 145(a).
have identified weaknesses in FHWA’s oversight of State contracting practices.\(^3\) ARRA’s significant funding infusion and abbreviated spending timeframes further challenged FHWA’s oversight of States’ use of Federal highway funds—substantially increasing the risk of fraud, waste, and abuse.

Given FHWA’s responsibility for effective stewardship of the $40 billion Federal-aid program, we initiated this audit to (1) examine the level of competition for State DOT awarded ARRA contracts, (2) evaluate FHWA policies and guidance for awarding Federal-aid contracts, and (3) assess FHWA’s oversight of State DOT contracting practices.

We conducted this audit between November 2009 and November 2011 in accordance with generally accepted Government auditing standards. To conduct our work, we reviewed FHWA and State DOT policies and procedures, and interviewed FHWA representatives in Washington, D.C., and FHWA Division Office and State DOT personnel in six States: Florida, Illinois, Kentucky, Massachusetts, New Mexico, and Texas. We also surveyed 52 FHWA Division Offices that received ARRA funds to obtain ARRA contract award data and identify State DOT contract award practices and FHWA Division Office oversight procedures. In addition, we selected a statistical sample of 1,671 contracts from nine States,\(^4\) which allowed us to project an estimated price difference between ARRA contracts with either 1 or 2 bids and those with exactly 3 bids. Exhibit A contains the full details of our scope and methodology.

**RESULTS IN BRIEF**

Our review of FHWA’s oversight of ARRA contracts points to opportunities that could foster competition and maximize use of Federal-aid funds. First, 19 percent of the 8,365 ARRA contracts that State DOTs awarded through March 31, 2010\(^5\) received minimal competition—receiving just 1 or 2 bids. Based on our sample of 9 States, prices for contracts with 1 or 2 bids were, on average, 11 percent higher than prices for contracts that received 3 bids. According to FHWA, neither the Agency nor the States could have done more to increase competition for ARRA contracts—especially since ARRA required FHWA to award contracts promptly to spur job creation. FHWA Headquarters officials also reported that a number of other factors played a role in competition, including project location and the type

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\(^4\) The statistically selected random sample included 9 States, and one was selected twice for a total of 10 States. This is typical for a sample designed using our chosen methodology, as described in Exhibit A.

\(^5\) From OIG survey of 52 FHWA Division Offices for States that received ARRA funds.
of work. However, FHWA was unable to provide sufficient data to show how these factors affected competition for each contract in our sample. Further, the information relied heavily on testimonial evidence. Even though ARRA’s expedited spending timeframes and other factors may have affected competition, our review highlighted the importance of doing more to increase competition. We acknowledge that it is not always possible for Federal-aid contracts to attract 3 or more bids, as none of the 9 States in our sample received 3 or more bids on 100 percent of its contracts. However, a third of our sampled States came close: 3 States received 3 or more bids on 95 percent of its contracts. Accordingly, it is important for FHWA to encourage and oversee States’ use of competition on Federal-aid contracts, as we found that contract price averages went down as more bids were received. When projected over all FHWA ARRA funds, the 11 percent difference in average contract prices is significant. We project with 90 percent confidence that the overall average price difference between contracts with 1 or 2 bids and those with 3 bids is at least $179 million dollars. This difference should not be construed as potential savings. Rather, it highlights the importance of increasing competition because our results show that even minimal increases in the number of bids could have a significant impact on contract prices.

Second, FHWA policies and guidance reflect best practices for promoting competition; however, the guidance is optional and, therefore, unenforceable. For example, FHWA guidance discourages but does not prohibit the public disclosure of potential bidders and engineer’s estimates. U.S. Department of Justice (DOJ) anti-trust prosecutors recommend keeping this information confidential to improve bidding and prevent collusion. However, 79 percent of the FHWA Division Offices surveyed said State DOTs made the names of bidders or potential bidders publicly available prior to bid opening, and 33 percent said the engineer’s estimates were made publicly available at some point during the bid process.

Third, FHWA lacks the oversight mechanisms needed to determine whether ARRA and other federally funded contracts have been sufficiently competed. Specifically, FHWA does not have sound performance measures and monitoring tools to evaluate State DOT contract competition and award activity. Such measures and monitoring tools could reveal problems and best practices that could be shared with other State DOTs, maximizing the use of Federal-aid funds. In addition, FHWA Division Offices do not consistently follow FHWA’s few requirements or guidance for overseeing State DOT bidding practices, and their efforts to monitor State DOT contract award policies and practices are not well-documented. For

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6 Our projection estimates the price difference between ARRA contracts with either 1 or 2 bids and ARRA contracts with exactly 3 bids. Our estimated range is based on a 90-percent confidence interval with a midpoint estimate of $525 million. The estimate’s margin of error is +/- $346 million. We chose to project exactly 3 bids to accommodate FHWA’s concern that it is difficult to achieve more than 3 bids for some contracts. The projected price difference could potentially increase if contracts received more than 3 bids. Exhibit A contains further details about our methodology.
example, according to FHWA guidance, contracting agencies can check a suspension and debarment database prior to award to ensure that they do not award federally assisted contracts to irresponsible contractors. However, the majority of FHWA Division Offices we surveyed either do not obtain written documentation confirming that State DOTs checked the database prior to contract award, or do not check the database themselves.

We are making a number of recommendations for strengthening FHWA’s policies and oversight of State DOT contract award practices that could result in increased competition and significant cost savings for the broader Federal-aid program.

BACKGROUND

The existing statutory and regulatory framework recognizes that efforts to oversee the Federal-aid contract bidding process can contribute to effective stewardship of Federal funds, especially when millions in taxpayer funds are at stake. Although States have the right to select projects for Federal funding, FHWA remains responsible for overseeing State DOTs’ use of Federal-aid funds and providing assurance that these funds are expended in a manner consistent with applicable Federal laws and regulations. For example, title 23, U.S. Code (U.S.C.), section 112(a) requires State DOTs, as recipients of Federal-aid program funds, to use bidding methods that are “effective in securing competition.” In 2005 the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) directed the Secretary to develop minimum standards for periodically evaluating States’ practices for estimating and reducing project costs and awarding contracts. Further, FHWA has developed guidance and regulations on bidding and contract procedures. FHWA regulations in title 23 of the Code of Federal Regulations (CFR) require States to use certain contract award practices, such as those related to advertising contracts and approving State DOT prequalification procedures.

ARRA imposed new transparency and accountability requirements on Federal awarding agencies and their recipients by (1) emphasizing the use of fixed-price contracts and competitive procedures to the maximum extent possible, (2) mandating that funds be obligated 19 months after passage, and (3) requiring enhanced oversight for ARRA-funded contracts. Further, the Office of Management and Budget (OMB) set additional ARRA accountability objectives and issued implementation guidance, which noted that the benefits of competition are well established.

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8 The Secretary of Transportation is directed by 23 U.S.C. § 112(a) to require recipients of Federal-aid program funds to use bidding methods that are “effective in securing competition.”
10 23 CFR § 635.110; 23 CFR § 635.112; 23 CFR § 635.113; and 23 CFR § 635.114.
FHWA’s ARRA Risk Management Plan identified major risk areas, including contract bidding and procurement, and strategies to mitigate those risks, such as review guides to assist national review teams and checklists to assist monitoring and oversight. In addition, FHWA required its Division Offices to augment their usual oversight efforts by conducting “visible monitoring” of processes and documentation within their respective States, such as checks of financial transactions, consultant procurements, bid processes, and change order approvals.

To help State DOTs compete and award Federal-aid contracts, FHWA established its “Guidelines on Preparing Engineer’s Estimate, Bid Reviews, and Evaluation” (Guidelines), which includes non-binding procedures for assessing competition and for evaluating whether additional actions are warranted before making award decisions. The Guidelines note that “competition for projects by bidders is an integral part of a successful construction program” and that “an effort should be made by the contracting agency to maximize the competition by a number of methods.”

**ONE-FIFTH OF STATE DOT ARRA CONTRACTS WERE AWARDED WITH ONE OR TWO BIDS**

Nearly one-fifth of ARRA contracts awarded by State DOTs received just 1 or 2 bids, which could have significant cost implications. While FHWA Division Offices reported that 98 percent of the 8,365 ARRA contracts State DOTs awarded through March 31, 2010 used competitive bidding procedures, 1,572—19 percent—only had 1 or 2 bids (see table 1).

**Table 1. ARRA Contracts by Number of Bids**

<table>
<thead>
<tr>
<th>Number of Bids</th>
<th>Number of Contracts</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bid</td>
<td>472</td>
<td>6%</td>
</tr>
<tr>
<td>2 bids</td>
<td>1,100</td>
<td>13%</td>
</tr>
<tr>
<td>3 or more bids</td>
<td>6,793</td>
<td>81%</td>
</tr>
<tr>
<td><strong>Total competed contracts</strong></td>
<td><strong>8,365</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: OIG survey of 52 FHWA Division Offices for States that received ARRA funds

Based on a statistical sample of 1,671 State-awarded ARRA contracts, contracts with 1 or 2 bids were awarded at prices that more often exceeded the engineer’s estimate than contracts with 3 bids. Further, contract price averages went down as more bids were received (see figure 1). Specifically, contracts with 1 or 2 bids
averaged 93 percent of the engineer’s estimate, while those with 3 bids averaged 82 percent—11 percent lower than contracts with only 1 or 2 bids.

**Figure 1. Average Price Percentage of Engineer’s Estimate by Number of Bids**

![Average Price Percentage of Engineer’s Estimate by Number of Bids](image)

Source: Self-reported ARRA contract award data supplied by sampled States

According to FHWA, neither the Agency nor the States could have done more to increase competition for ARRA contracts—especially since ARRA required them to award contracts promptly to spur job creation. FHWA representatives also reported that a number of other factors played a role in competition, including project location and the type of work. In addition, FHWA stated that fewer firms bid on ARRA projects as time progressed because firms eventually reached their full capacity. While we recognize that ARRA’s expedited spending timeframes and other factors may have affected competition, FHWA was unable to provide sufficient data to show how these factors affected competition for each contract in our sample. Further, the information relied heavily on Division Administrators’ opinions, anecdotal views, and high-level perspectives.

We acknowledge that it is not always possible for Federal-aid contracts to attract 3 or more bids, as none of the 9 States in our sample received 3 or more bids on 100 percent of its contracts. However, a third of our sampled States came close: 3 States received 3 or more bids on 95 percent of its contracts (see table 2). These three States—New Mexico, Massachusetts, and Oregon—comprise diverse geographical locations.
Table 2. Percentage of Sampled State Contracts With One or Two Bids and Three or More Bids

<table>
<thead>
<tr>
<th>State</th>
<th>1 Bids</th>
<th>2 Bids</th>
<th>3 or More Bids</th>
<th>Total</th>
<th>1 or 2 Bids Percentage of Total</th>
<th>3 or More Bids Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM</td>
<td>0</td>
<td>1</td>
<td>21</td>
<td>22</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>MA</td>
<td>0</td>
<td>4</td>
<td>80</td>
<td>84</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>OR</td>
<td>0</td>
<td>2</td>
<td>36</td>
<td>38</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>TX</td>
<td>5</td>
<td>20</td>
<td>319</td>
<td>344</td>
<td>7%</td>
<td>93%</td>
</tr>
<tr>
<td>CA</td>
<td>0</td>
<td>8</td>
<td>95</td>
<td>103</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>FL</td>
<td>3</td>
<td>9</td>
<td>111</td>
<td>123</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>SC</td>
<td>8</td>
<td>21</td>
<td>131</td>
<td>160</td>
<td>18%</td>
<td>82%</td>
</tr>
<tr>
<td>IL</td>
<td>73</td>
<td>123</td>
<td>400</td>
<td>596</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>TN</td>
<td>50</td>
<td>50</td>
<td>101</td>
<td>201</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: Self-reported ARRA contract award data supplied by sampled States

It is important for FHWA to encourage States to increase competition on Federal-aid contracts because we found that contract price averages went down as more bids were received. Specifically, overall prices for contracts with 1 or 2 bids were, on average, 11 percent higher than prices for contracts that received 3 bids. When projected over all FHWA ARRA funds, the 11 percent difference in average contract prices is significant. We project with 90 percent confidence that the overall average price difference between contracts with 1 or 2 bids and those with 3 bids is at least $179 million dollars. This difference in contract pricing should not be construed as potential savings. Rather, it highlights the importance of increasing competition because our review shows that even minimal increases in the number of bids could have a significant impact on contract prices.

11 Our projection estimates the price difference between ARRA contracts with either 1 or 2 bids and ARRA contracts with exactly 3 bids. Our estimated range is based on a 90-percent confidence interval with a midpoint estimate of $525 million. The estimate’s margin of error is +/- $346 million. We chose to project exactly 3 bids to accommodate FHWA’s concern that it is difficult to achieve more than 3 bids for some contracts. The projected price difference could potentially increase if contracts received more than 3 bids. Exhibit A contains further details about our methodology.
FHWA DOES NOT REQUIRE STATES TO USE CONTRACT AWARD PRACTICES THAT PROMOTE INCREASED COMPETITION

FHWA policies and guidance reflect best practices for promoting competition; however, FHWA does not require State DOTs to follow its guidance. For instance, some State DOTs’ contract award practices heighten bidding risks, which could hinder effective competition. In addition, a number of State DOTs do not have written procedures for evaluating competition and have not fully implemented FHWA’s recommended practices for promoting competition.

State DOTs Use Some Contract Award Practices That Heighten Bidding Risks

Our survey of 52 FHWA Division Offices found that many State DOTs do not keep bidder information and engineer’s estimates confidential (see table 3).

Table 3. Percentage of State DOTs Using Contracting Practices That Can Affect Competition

<table>
<thead>
<tr>
<th>Reported State Practices Affecting Competition</th>
<th>Percentage of State DOTs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Releasing Bidders’ and Potential Bidders’ Names</strong></td>
<td></td>
</tr>
<tr>
<td>Makes names of firms that request information to bid publicly available prior to bid opening</td>
<td>79%</td>
</tr>
<tr>
<td>Makes names of firms that submit bids publicly available prior to bid opening</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Publicly Releasing the Engineer’s Estimate</strong></td>
<td></td>
</tr>
<tr>
<td>Makes engineer’s estimates publicly available at some point during the contracting process</td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: OIG survey of 52 FHWA Division Offices for States that received ARRA funds

FHWA, American Association of State Highway and Transportation Officials (AASHTO), and DOJ guidance recommend keeping this information confidential to maximize competition and minimize fraud. For example, FHWA guidance discourages but does not prohibit the public disclosure of potential bidders and engineer’s estimates. DOJ anti-trust prosecutors recommend keeping this information confidential to improve bidding and prevent collusion. According to those prosecutors, companies can use information on potential bidders and prior State DOT engineer’s estimates to judge how high they can raise prices.

Releasing the names of potential competitors prior to bid opening allows bidders to gauge the level of competition and bid accordingly. According to FHWA’s
Guidelines, this practice offers no advantage to the State, yet provides bidders with information needed to collude. AASHTO similarly warns that the public disclosure of potential bidders allows contractors who would violate antitrust laws to find out whether they will have competition on a particular contract. Representatives of two State DOTs we visited said that releasing potential competitors’ names prior to bid opening helps subcontractors find work. However, FHWA’s Guidelines state that the prime contractor is responsible for finding subcontractors.¹²

Releasing engineer’s estimates also increases the risk of fraud because it gives bidders the information needed to rig bids. Joint DOJ-FHWA guidance—developed as a result of investigations into bid rigging—suggests that engineer’s estimates should be kept confidential prior to contract award.¹³ Yet, our survey of FHWA Division Offices identified 17 State DOTs that release engineer’s estimates at various stages of the contracting process (see table 4).

### Table 4. Number of State DOTs that Release Engineer’s Estimates Prior to, At, or After Bid Opening

<table>
<thead>
<tr>
<th>Stage of the Contracting Process When Engineer’s Estimates Are Released</th>
<th>Number of State DOTs that Release Engineer’s Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to bid opening</td>
<td>4</td>
</tr>
<tr>
<td>At bid opening</td>
<td>5</td>
</tr>
<tr>
<td>After bid opening</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Source: OIG survey of 52 FHWA Division Offices for States that received ARRA funds

Five of the six State DOTs we visited publicly release the exact engineer’s estimate—two prior to bid opening and three after bid opening. According to an AASHTO representative, the majority of cost engineers believe the estimate should never be published. For State DOTs that believe total confidentiality is not realistic, FHWA’s Guidelines recommend but do not require publishing a range rather than the exact estimate.

¹² To help prime contractors meet this responsibility, DOT requires States’ Disadvantaged Business Enterprise (DBE) programs to maintain a list of prospective subcontractors for DOT programs.

State DOTs Do Not Consistently Have Written Procedures for Evaluating Competition

A number of States do not have written procedures for assessing competition when projects receive low bidder interest or when low bids are priced significantly lower than engineer’s estimates. These situations can indicate potential problems with the competitive environment or issues with the contract’s bidding documents, location, or type—which could ultimately result in higher costs. Therefore, assessments of the competitive environment in these circumstances could help promote competition. However, because FHWA guidance recommends but does not require States to assess competition in these cases, a number of States do not have formal procedures for conducting these types of assessments.

Based on our survey of FHWA Division Offices, 58 percent of State DOTs lack written policies and procedures for evaluating competition when firms request bidding plans but do not bid. FHWA’s Guidelines suggest that, when a significant number of firms request bidding plans but only a small percentage—less than 30 percent—submit a bid, State DOTs should try to identify the reasons for the lack of interest and take appropriate actions to increase competition. According to AASHTO guidance, contacting non-bidding plan holders may reveal contractor concerns, such as market conditions and the quality of the bid documents—including problems with constructability, scheduling, or design omissions.

In addition, not all States have formal, written procedures for assessing the competitive environment when low bids are priced significantly below engineer’s estimates—that is, when the lowest bid for a contract is priced lower than what the Government expected to pay. FHWA stated that bids for ARRA-funded projects came in significantly below their engineer’s estimates due to the economic downturn. Of the contracts in our statistical sample, 38 percent had prices that were significantly lower than the engineer’s estimates—ranging from 20 percent to 81 percent. FHWA’s guidance calls for a thorough analysis to justify award of a contract when the low bid differs from the engineer’s estimate by an unreasonable amount.14 Three of the 6 States we visited had established thresholds for triggering a review of low bids, which ranged from 15 percent to 25 percent below engineer’s estimates, but the other 3 States lacked criteria for evaluating bids below the engineer’s estimate. However, significantly low bids can indicate potential problems with the competitive environment or issues with the contract’s bidding documents. Without evaluating the significantly low bids, it is difficult to determine if they are due to the recession or problems with the competitive environment.

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State DOTs Have Not Fully Implemented FHWA’s Recommended Practices for Evaluating and Improving Competition

Our survey of FHWA Division Offices determined that not all State DOTs have implemented FHWA’s suggested practices for evaluating competition (see table 5). For instance, 21 State DOTs—40 percent—do not use FHWA’s recommended tool for assessing competition when a low bid exceeds the engineer’s estimate.

**Table 5. Percentage of State DOTs That Have Not Implemented FHWA’s Recommended Practices for Evaluating Competition**

<table>
<thead>
<tr>
<th>Reported State Practices for Evaluating Competition</th>
<th>Percentage of State DOTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not use FHWA’s tool for assessing competition when the apparent low bid is above the engineer’s estimate</td>
<td>40%</td>
</tr>
<tr>
<td>Lacks written policies and procedures for accepting an apparent low bid that is above the engineer’s estimate</td>
<td>23%</td>
</tr>
<tr>
<td>Lacks written policies and procedures for initiating a further review prior to decision to award or re-advertise a project</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: OIG survey of 52 FHWA Division Offices for States that received ARRA funds

FHWA Guidelines call for States to determine whether competition was adequate and whether additional competition or better prices could be obtained. FHWA’s tool suggests thresholds for determining whether competition is adequate (see table 6). For example, the tool indicates that if a contract receives 3 bids, then competition is adequate if the low bid does not exceed the engineer’s estimate by 10 percent.

**Table 6. FHWA’s Suggested Tool for Assessing Competition Using Number of Bids and Percentage of Engineer’s Estimate**

<table>
<thead>
<tr>
<th>Minimum Number of Bids</th>
<th>Competition May Be Considered Adequate when Low Bid Does Not Exceed Engineer’s Estimate by</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>1</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: FHWA’s Guidelines on Preparing Engineer’s Estimate, Bid Reviews, and Evaluation
While FHWA recommends that States use this tool, some State DOTs use other—and, in some cases, undocumented—criteria to determine whether further evaluations of competition are needed to ensure effective competition. For example, some State DOTs use fixed percentage thresholds that do not consider the number of bids received. We also found that 181 ARRA contracts in our sample—11 percent—exceeded the recommended competition thresholds outlined in FHWA’s tool, which indicates that those contracts may have required further review to ensure adequate competition (see table 7).

**Table 7. Number and Percentage of Awarded ARRA Contracts that Exceed FHWA’s Recommended Thresholds for Assessing Competition**

<table>
<thead>
<tr>
<th>State</th>
<th>Total Awarded ARRA Contracts</th>
<th>Number of Contracts Exceeding Thresholds</th>
<th>Percent of Total Awarded Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee</td>
<td>201</td>
<td>51</td>
<td>25%</td>
</tr>
<tr>
<td>Illinois</td>
<td>596</td>
<td>83</td>
<td>14%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>160</td>
<td>17</td>
<td>11%</td>
</tr>
<tr>
<td>Florida</td>
<td>123</td>
<td>11</td>
<td>9%</td>
</tr>
<tr>
<td>Oregon</td>
<td>38</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td>California</td>
<td>103</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>22</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>84</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Texas</td>
<td>344</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,671</strong></td>
<td><strong>181</strong></td>
<td><strong>11%</strong></td>
</tr>
</tbody>
</table>

Source: OIG analysis of FHWA self-reported bidding and contract data supplied by sampled States

We also found that not all State DOTs have implemented FHWA’s suggested practices for evaluating competition when low bids exceed their engineer’s estimates—that is, when the lowest bid for a contract is priced higher than the Government expected to pay. These practices are important because several contracts in our sample had award prices that were significantly higher than the engineer’s estimates. In one extreme case, a contract was priced 175 percent higher. However, 12 State DOTs—23 percent—do not have written policies and procedures for accepting a low bid that is above the engineer’s estimate.

In addition, 11 State DOTs—21 percent—do not have formal procedures for initiating reviews to consider whether to re-advertise projects. Re-advertising
involves rejecting submitted bids and re-competing the project to attract further competition. FHWA guidance states that, when bids for projects come in higher than expected, it is generally in the public interest to defer them for re-advertisement. Similarly, AASHTO guidance states that “decisions to make awards above market value should require substantial justification, including demonstration for essential need for the work where re-bidding would not be in the public interest.”

According to AASHTO’s 2006 survey, 41 State DOTs reported that the top recommendation for fostering competition was rejecting noncompetitive bids and re-advertising. One State DOT reported annual savings of $5 million per year in a program that averaged just over $700 million per year (for 2005 and 2006) by rejecting noncompetitive bids and re-advertising. More recently, the project to build the new Wilson Bridge between Maryland and Virginia initially received a single bid of $860 million, which significantly exceeded the estimate of $487 million. When the project was re-advertised as three separate contracts, the project saved more than $350 million.

When States do re-advertise projects, FHWA’s Guidelines encourage but do not require State DOTs to track re-advertised projects and calculate cost savings or increases. As a result, 38 State DOTs—73 percent—do not have formal procedures for tracking these costs. Additionally, if re-advertised projects result in higher costs, the Guidelines recommend a thorough review of current engineer’s estimates to identify potential bid rigging or collusion.

Finally, a January 2009 survey—conducted jointly by FHWA, several State DOTs, and AASHTO—disclosed that States are not fully implementing a number of other recommended competition practices. For example, to overcome barriers to competition, FHWA Guidelines recommend extending contract advertisement periods or dividing a large project into smaller contracts, but some States do not fully implement these practices.

**FHWA DOES NOT HAVE EFFECTIVE CONTROLS FOR MONITORING STATE AWARD POLICIES AND PRACTICES**

FHWA oversight is inadequate for monitoring State DOT contract award activity. Specifically, FHWA lacks effective control mechanisms to assess whether ARRA and other federally funded contracts have been effectively competed. This information could indicate when competition is lacking or identify ways competition can be enhanced, further maximizing the use of Federal-aid funds. FHWA Division Offices also do not consistently follow FHWA’s few oversight requirements or guidance.
FHWA’s Ability to Assess State DOT Contract Award Practices Is Undermined By Limitations in Its Performance and Monitoring Tools

FHWA’s ability to assess State DOT contract award practices and identify national trends is undermined by limitations in several of its performance and monitoring tools.

- First, data quality problems and system limitations in FHWA’s Recovery Act Database System (RADS) weakened FHWA’s efforts to develop cost deviation metrics. For example, FHWA developed a RADS measurement to answer the question “how do contract awards compare to the project estimates?” However, according to FHWA, the comparison of the award amount to the cost estimate could only be made at the project-level, and the term “cost deviation” may not have been consistent with individual States’ definitions. Another issue facing RADS was that States’ were not consistently reporting engineer’s estimate data within the system. Without such metrics, FHWA cannot readily identify and address problems with competition or determine how widespread these problems are.

- Second, due to difficulties standardizing data, FHWA discontinued use of a performance measure for determining whether bid amounts averaged within 10 percent of the engineer’s estimate.

- Third, FHWA’s National Review Teams’ independent assessments of State DOTs’ management of ARRA funds only determine whether a competitive process was used—not the effectiveness of competition. As a result, contracts that were not sole-sourced—including those that received only 1 or 2 bids—were considered competitive.

- Last, FHWA’s evaluations of contract award practices are limited. In 2005 SAFETEA-LU directed the Secretary to develop minimum standards for periodically evaluating States’ practices for estimating and reducing project costs and awarding contracts. A FHWA representative said that the Agency routinely evaluates State plans, specifications, and estimates for cost control and risk management measures. While these evaluations can inform FHWA of some types of potential problems with contract awards, they do not address other contract award considerations, such as evaluating the effectiveness of competition.

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FHWA Lacks Firm Requirements for Division Offices’ Oversight, and Existing Requirements and Guidance Are Not Consistently Followed

FHWA Division Offices do not consistently follow FHWA’s few requirements or guidance for overseeing State DOT bidding practices, and their efforts to monitor State DOT contract award policies and practices are not well-documented. For example, our survey findings indicate that not all FHWA Division Offices are approving State prequalification procedures as required (see table 8).

Table 8. FHWA Division Offices’ Use of Contract Award Oversight Practices

<table>
<thead>
<tr>
<th>Contract Award Oversight Practices</th>
<th>“Yes” Response</th>
<th>“No” Response</th>
<th>“Don’t Know” or “N/A” Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHWA Division Office concurs with prequalification policies and procedures*</td>
<td>32 62%</td>
<td>5 10%</td>
<td>15</td>
</tr>
<tr>
<td>FHWA Division Office maintains written record of concurrence with prequalification policies and procedures</td>
<td>26 50%</td>
<td>8 15%</td>
<td>18</td>
</tr>
<tr>
<td>FHWA Division Office concurs with State’s construction procurement policies and procedures</td>
<td>39 75%</td>
<td>11 21%</td>
<td>2</td>
</tr>
<tr>
<td>FHWA Division Office maintains record of concurrence with States’ construction procurement policies and procedures</td>
<td>28 54%</td>
<td>21 40%</td>
<td>3</td>
</tr>
</tbody>
</table>

* Note: FHWA reported that 41 States (79 percent) have bidder prequalification policies and procedures, while 11 States (21 percent) do not.

Source: OIG survey of 52 FHWA Division Offices for States that received ARRA funds

Contractor prequalification is used to determine the type and amount of work contractors can perform and to verify that contractors are responsible firms before allowing them to bid. According to FHWA Guidelines, State DOTs should develop effective contractor prequalification programs and other procedures to ensure fairness and to promote a competitive contracting environment. While prequalification is optional, State DOTs that elect to prequalify contractors must have their prequalification policies and procedures approved by the appropriate FHWA Division Office. Our survey findings indicate that not all FHWA Division Offices are approving State prequalification procedures as required.

In addition, FHWA guidance recommends, but does not require, that State DOT-FHWA stewardship agreements assign FHWA Division Offices the responsibility to review and approve relevant State DOT policies, such as contract administration
manuals. However, because FHWA’s guidance does not require that Division Offices take on this responsibility, we found that FHWA Division Offices’ implementation of this guidance varied. For example:

- FHWA’s Florida Division Office did not review the State DOT’s procurement policies and procedures, stating that the FHWA-State stewardship agreement did not call for formal concurrence.

- Although FHWA’s New Mexico Division stewardship agreement requires a review of bidding procedures, Division representatives indicated that they did not formally approve these procedures. They felt their approval was implied because they ensured that the procedures were followed for Federal-aid projects.

- FHWA Kentucky Division representatives stated they approved its State DOT’s procurement procedures, but the records of approval were lost, leaving them unable to demonstrate which procedures had been approved.

Further, some FHWA Division Offices do not follow FHWA’s recommended suspension and debarment (S&D) practices. Suspensions and debarments are actions taken to protect contracting agencies by preventing companies involved in illegal or irresponsible activities from receiving additional contracts or subcontracts. In January 2010, we reported that weak S&D practices provided opportunities for unscrupulous contractors to receive Government contracts and grants.\(^{16}\) To prevent suspended and debarred contractors from receiving contracts, FHWA’s Guidelines\(^{17}\) encourage contracting agencies to use the General Services Administration’s Excluded Parties Listing System (EPLS) to confirm contractor eligibility prior to contract award. However, FHWA does not require these eligibility confirmations. Consequently, a majority of the Division Offices we surveyed do not require written confirmation that State DOTs use EPLS to confirm that contractors are eligible prior to award. The majority of Division Offices also do not check themselves whether contractors are in EPLS (see table 9).


\(^{17}\) FHWA’s Guidance refers to Federal S&D policies found in 2 CFR § 180.
Table 9. Number and Percentage of FHWA Division Offices that Do Not Use Contract Award Oversight Practices Related to Suspensions and Debarments

<table>
<thead>
<tr>
<th>Contract Award Oversight Practices Related to Suspensions and Debarments</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHWA Division Offices that do not require that the State DOT provide written documentation that contractors are not on the suspension and debarment list prior to contract award</td>
<td>42</td>
<td>81%</td>
</tr>
<tr>
<td>FHWA Division Offices that do not determine if contractors are on the suspension and debarment list prior to contract award</td>
<td>37</td>
<td>71%</td>
</tr>
</tbody>
</table>

Source: OIG survey of 52 FHWA Division Offices for States that received ARRA funds

State representatives from two States said they depend on their FHWA Division Office to notify them of issues with potential bidders prior to award. In another State, both FHWA Division and State DOT officials were not aware that EPLS existed and thus were not checking it for contractors’ names. These findings indicate that, in some States, neither the States DOTs nor FHWA Division Offices are ensuring that irresponsible contractors do not receive federally assisted contracts.

CONCLUSION

The influx of Federal-aid project funds from ARRA means that an unprecedented amount of taxpayer dollars are at stake when States award contracts. Although FHWA’s ARRA funds have already been awarded, the Agency can use lessons learned from its oversight of ARRA contracts to foster better competition and maximize States’ use of Federal-aid funds for the entire Federal-aid program. Adequate oversight of State contract award practices is critical for obtaining better competition and awarding contracts at reasonable prices to responsible contractors. It also serves to identify concerns that can be remediated and shared to promote efficient use of Federal-aid funds. While we recognize the very real constraints that can affect competition, FHWA’s lack of mandated competitive bidding and award practices, combined with its inconsistent State contract award oversight, are hindering its ability to ensure effective competition for federally funded contracts. Because Federal dollars are scarce in the current constrained budget environment, FHWA should take efforts to maximize use of Federal-aid funds by encouraging States to increase competition wherever possible. Ultimately, strengthening FHWA’s competitive bidding requirements, oversight measures, and practices for all Federal-aid contracts can improve competition, better protect taxpayer funds, and reduce prices paid for future infrastructure investments.
RECOMMENDATIONS

We recommend that the Administrator, Federal Highway Administration, work with FHWA Division Offices and State DOTs to strengthen and better implement FHWA oversight of State DOT contract award practices by taking the following actions:

1. Complete a nationwide assessment to determine current levels of competition for Federal-aid contracts; evaluate factors affecting competition; identify State DOT contract award practices that may need improvement; and address perceived barriers to State DOT implementation of FHWA, AASHTO, and other best practices for improving competition;

2. Mandate the confidentiality of potential and actual bidders’ names and engineer’s estimates, as currently recommended in FHWA’s competitive bidding and contract award guidance;

3. Implement policies and procedures for ensuring that each State DOT establishes and uses a written, FHWA-approved plan for evaluating competition. These plans should address: assessing bidder interest levels, evaluating and documenting decisions on bids that vary significantly from the engineer’s estimate, conducting and documenting bid analysis, identifying and mitigating perceived barriers to increasing competition, and adequately documenting final award decisions;

4. Develop and implement effective performance measures and metrics to assess and trend State DOT contract award practices, document concerns, and share best practices with other State DOTs;

5. Establish standard FHWA Division Office requirements for performing and documenting oversight of State contracting activity, including stewardship agreement requirements for (a) FHWA approval of procurement policies and procedures and (b) FHWA verification that State DOTs have determined a potential winning bidder’s status on the EPLS list prior to contract award.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FHWA with our draft report on December 1, 2011, and received its response on March 7, 2012. FHWA’s response is included in its entirety as an appendix to this report. In its response, FHWA concurred with four of our five recommendations and partially concurred with one.
While FHWA concurred with our recommendations intended to improve competition, it pointed out that our report did not discuss $161 million of what it characterized as actual savings from awarding ARRA highway contracts with one or two bids. Our report acknowledged that the overall prices for contracts receiving 1 or 2 bids averaged 93 percent of the engineer’s estimate, which—as FHWA stated—is 7 percent below the engineer’s estimate. However, as discussed in our report, the difference between contract award prices and engineer’s estimates should not be construed as potential savings. Our findings highlight the importance of increasing competition. Contracts with 3 bids were, on average, 18 percent lower than the engineer’s estimate, while those contracts receiving 1 or 2 bids were 11 percent lower—indicating that contracts with more bids can have a greater impact on contract prices.

In its response, FHWA also suggested that, by using number of bids as “the sole criteria for assessing competition,” our analysis did not account for all factors that affect competition. However, neither our analysis nor recommendations for improving competition suggest that FHWA should focus exclusively on increasing the number of bids. As recognized by FHWA in other parts of its response, we acknowledge throughout our report that there are other factors to consider when evaluating competition, such as project location and type of work. However, FHWA was unable to provide written, quantitative, contract-level data that showed how any of these factors impacted each contract in our sample.

For recommendations 2, 3 and 5, corrective actions taken or planned by FHWA address the intent of our recommendations. We consider these recommendations resolved, but open pending completion of the planned actions.

For recommendations 1 and 4, while FHWA’s planned actions meet the intent of our recommendations, we need additional information prior to considering them resolved. For recommendation 1, our intent was for FHWA to complete a nationwide assessment of competition for Federal-aid contracts addressing, among other areas, perceived barriers to State DOT implementation of FHWA, AASHTO, and other best practices for improving competition. While FHWA agreed to conduct the assessment, it did not provide details on how it will address the perceived barriers to increasing competition. Therefore, we request that FHWA provide us with additional details clarifying how it plans to address this portion of our recommendation. For recommendation 4, FHWA committed to perform an assessment to determine current levels of competition in the States and compare those results to a prior survey; however, FHWA did not address its plans for developing measures and metrics to assess and trend future performance. Therefore, we request that FHWA provide us with details on the measures and metrics it will use as a baseline for assessing future performance.
ACTIONS REQUIRED

In accordance with Department of Transportation Order 8000.1C, we request that you provide us, within 30 calendar days, the additional information we requested for recommendations 1 and 4. Specifically, we request that you provide: clarification of how you will address barriers to increasing competition for recommendation 1 and planned completion dates; and a plan to develop and implement effective performance measures for recommendation 4 and planned completion dates.

We appreciate the courtesies and cooperation of Department of Transportation representatives during this audit. If you have any questions concerning this report, please call Mary Kay Langan-Feirson at (202) 366-5225, or Ken Prather, Program Director, at (202) 205-6084.

#

cc: Martin Gertel, M-1
    Arthur Jacobs, HAIM-13
EXHIBIT A. SCOPE AND METHODOLOGY

We conducted this audit 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.

We conducted this audit between November 2009 and November 2011. To identify criteria and practices that are applicable to the award of Federal-aid (including ARRA) contracts, we reviewed the CFR; FHWA’s Guidelines on Preparing Engineer Estimates, Bid Reviews, and Evaluation; Federal Acquisition Regulations (FAR); and other applicable Federal, State DOT, and industry policies or guidance.

In addressing our objectives, we performed the following steps for the ARRA contracts that we reviewed:

- We conducted and analyzed the results of a survey of State DOT procurement and FHWA Division oversight practices. The survey covered the 52 FHWA Division Offices that received ARRA funds.
- We conducted interviews with FHWA and State DOT officials at Headquarters and in the field.
- We made site visits to interview officials and review contract files at 6 Division and State DOT offices: Kentucky—selected based on data showing that 6 of the first 19 ARRA contracts awarded had only 1 bid—and the following randomly selected 5 States: Florida, Illinois, Massachusetts, New Mexico, and Texas. During those site visits, we reviewed the contract files for 59 ARRA projects. The projects were selected using random sampling and represented nearly $1.3 billion, or just over 27 percent, of the total ARRA funds awarded by all 6 States we visited. As part of those file reviews, we:
  - Conducted file reviews for contract award documents, including but not limited to bid proposals, signed contract documents, and required CFR and ARRA certifications; and
  - Performed a thorough review of pre-bid considerations (e.g., advertising timeframes), bid analysis documentation, and bid tabulations for each contract.
In addition, based on a statistical sample of ARRA contract bidding and award data, we developed a projection to estimate the price difference between ARRA contracts with either 1 or 2 bids and ARRA contracts with exactly 3 bids. Although the projected price difference could potentially increase for contracts with more than 3 bids, we limited the projection to 3 bids to accommodate FHWA’s concern that it is difficult to achieve more competition for some contracts.

To develop our projection, our statistician selected a random sample of 10 out of 51 States with probability proportional to size with replacement, where size was the amount of total distribution a State had received from the Federal Government. This methodology gave States with a larger distribution a higher chance of getting selected while giving every dollar distributed an equal chance. One State was selected twice, which is typical for a sample designed “with replacement,” which means a State that was selected was placed back into the universe and was then eligible to be selected again. Therefore, the number of unique States selected was 9 and includes 1,671 unique contracts, for a total of 10 States and 1,774 contracts.

We requested and received all information on contract IDs, engineer’s estimates, number of bids, and award amounts for all ARRA contracts awarded through March 31, 2010 from all nine States in our sample. The differences between the engineer’s estimates and the bid and award amounts varied greatly from -$10 million to $95 million. To estimate the potential impact, our statistician took the following steps:

1. Separated the data for each sampled State into 2 groups where Group 1 had 377 contracts with 1 or 2 bids, and Group 2 had 299 contracts with 3 bids.
2. Computed the sum of the engineer’s estimates and the sum of the award amounts for each sampled State and group.
3. Computed the difference between the engineer’s estimate and the award amount for each sampled State and group.
4. Computed the percent difference between the engineer’s estimate and the award amount for each sampled State and group.
5. Computed the difference in percentage between groups for each State.
6. Computed for each sampled State the estimated impact for Group 1 (contracts with 1 or 2 bids) for all 51 States by multiplying the difference in percent impact between groups by the engineer’s estimate for Group 1 and by the State’s sample selection weight.

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18 There are a total of 52 FHWA Divisions, which consists of the 50 States, the District of Columbia, and Puerto Rico. Puerto Rico was excluded because we did not include recipients of ARRA set-aside funds. Of the remaining 51 States, we randomly selected a sample of 10 States: Florida, Illinois, Massachusetts, New Mexico, Texas, California (selected twice), Tennessee, South Carolina, and Oregon.

**Exhibit A. Scope and Methodology**
(7) Computed the projected impact for Group 1 (contracts with 1 or 2 bids) for all 51 States by averaging the estimated impact for Group 1 over all sampled States.

(8) Computed the 90-percent confidence limits and the precision of the estimates.
## Exhibit B. Major Contributors to This Report

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ken Prather</td>
<td>Program Director</td>
</tr>
<tr>
<td>Aisha Evans</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Amanda Watson</td>
<td>Senior Auditor</td>
</tr>
<tr>
<td>Paul Stark</td>
<td>Senior Analyst</td>
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<tr>
<td>Richard Harold</td>
<td>Senior Analyst</td>
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<tr>
<td>Marjorie Tsaousis</td>
<td>Analyst</td>
</tr>
<tr>
<td>Tashaun Ross</td>
<td>Analyst</td>
</tr>
<tr>
<td>Meghann Noon</td>
<td>Auditor</td>
</tr>
<tr>
<td>Petra Swartzlander</td>
<td>Statistician</td>
</tr>
<tr>
<td>Fritz Swartzbaugh</td>
<td>Associate Counsel</td>
</tr>
<tr>
<td>Karen Sloan</td>
<td>Communications Officer</td>
</tr>
<tr>
<td>Christina Lee</td>
<td>Writer-Editor</td>
</tr>
</tbody>
</table>
APPENDIX. AGENCY COMMENTS

Memorandum


Date: March 7, 2012

From: Victor M. Mendez Administrator

To: Calvin L. Scovel III Inspector General (J-1)

The Federal Highway Administration’s (FHWA) successful implementation of the American Recovery and Reinvestment Act of 2009 (Recovery Act) demonstrates the effectiveness of the Agency’s careful planning, program delivery, and oversight efforts to ensure Recovery Act funds are spent wisely on prudent projects. We recognized at the outset that the challenges inherent in the unprecedented scale, speed, and scope of the Recovery Act would magnify the Agency’s risks in providing effective stewardship and oversight. Therefore, we built upon the Agency’s existing risk management framework and the proven internal controls used for our regular Federal-aid highway program (FAHP) to mitigate those risks. We also carried out our Recovery Act stewardship and oversight responsibilities with a focus on compliance with all requirements, including new statutory requirements unique to the Recovery Act. As a result of the Agency’s work and the work of our State and local partners, more than 9,100 road, highway and bridge Recovery Act projects have been completed, many at a lower cost than initially estimated. Another 3,900 projects are under construction across the country. These projects provide a significant investment in our Nation’s transportation infrastructure and put many thousands of Americans to work.

FHWA Used Comprehensive, Risk-Based Approach to Focus Recovery Act Oversight

The FHWA quickly recognized the risks inherent in implementing an accelerated funding program, such as the Recovery Act, and employed special management oversight measures to address those risks. Specifically, based on our prior agencywide corporate risk assessments and internal Recovery Act-specific surveys, FHWA identified plans, specifications, and estimates (PS&E) and contracting administration as top national Recovery Act risk areas. The FHWA recognized the inherent potential for errors and omissions with PS&Es that could lead to change orders, cost overruns, delays, permit
violations, and substandard products. Similarly, in the contract administration risk area, FHWA anticipated risks in the procurement, bidding, and management of contract terms and changes. We strategically targeted our efforts to respond to areas identified as top national risks. As a result, FHWA conducted more than 28,000 detailed Recovery Act project reviews, including 6,000 evaluations in the PS&E risk area and more than 8,500 evaluations in the contract administration risk area.

While this field-level oversight proved extremely effective at ensuring that Recovery Act projects started and stayed on target, FHWA also recognized the need to provide additional independent oversight through a comprehensive agencywide approach. The FHWA established a National Review Team (NRT), a multidisciplinary team of experts focused on helping the Agency achieve accountability and consistency nationwide for Recovery Act funded projects. The NRT conducted reviews of fund recipients’ compliance with Federal and State requirements, including evaluations of approved State processes and procedures for implementing Federal-aid highway projects. The NRT documented observations regarding compliance and made recommendations for corrective actions that are monitored by leadership. We were pleased the Office of Inspector General (OIG) found that the NRT conducted thorough reviews in a consistent manner—yielding useful data. To date, the NRT has conducted 232 site visits and reviewed 306 risk areas independently touching 1,425 projects. Of the nearly 2,000 recommendations issued by the NRT, FHWA has completed action on 87 percent of them.

FHWA Analyzed Oversight Results to Identify Best Practices

The FHWA evaluation of Recovery Act data identified best practices with applicability to our regular programs, such as the FAHP. A key conclusion drawn from FHWA’s Recovery Act oversight work highlighted the need for FHWA to continue to ensure its monitoring is particularly strong with regard to PS&E and contract administration. In May 2011, FHWA issued a report on Recovery Act Lessons Learned that included 22 internal recommendations to refine program operations. The report incorporated results from the NRT’s and Division Offices’ project reviews and a 2-day FHWA Lessons Learned Summit convened with Headquarters and field management.

Recovery Act Highway Projects Completed At Considerable Savings

Overall, Recovery Act highway and bridge projects were completed at substantially less than the initial engineering estimates. While OIG points out that contracts with one or two bids averaged 93 percent of the engineer’s estimate, but were on average 11 percent higher than prices for contracts that received three bids, it is important to note only 6 percent of projects received one bid. More importantly, the population of contracts containing one or two bids, by averaging 93 percent of the engineer’s estimate—in other words, coming in 7 percent below engineer’s estimates on the whole—reveals actual

savings of $161 million that was not discussed in the draft report. Taken altogether, the contracts used in OIG’s sample resulted in $371 million in real savings for Recovery Act funded contracts. Even with this success, FHWA will continue to look for ways to further ensure that States optimize competition on highway projects. Strong and effective competition practices are a sound business practice that should be inherent in any program that receives public funds, and we agree with the OIG that the Agency should continue to look for ways to relate applicable lessons learned from the Recovery Act to our regular FAHP.

**Fostering Competitive Contracting Is Complex and Multifaceted**

The FHWA has established guidelines and practices to help ensure that States use sound, competitive practices for highway projects to gain maximum value per dollar of investment. Many different factors must be considered when evaluating the extent to which highway contracting was conducted by a State in a competitive manner. Although OIG used number of bids as the sole criteria for assessing adequacy of competition in its audit and defines minimal competition as receiving one or two bids, FHWA’s experience has shown otherwise. Specifically, FHWA’s “Guidelines on Preparing Engineer’s Estimate, Bid Reviews, and Evaluation” state that the number of bids submitted is only one of 12 bid review factors that should be considered. The FHWA guidelines also state that “Although the number of bids received is a measure of bidder interest, by itself, the number does not indicate the degree of competition.” The other factors that must be considered include comparison of the bids against the engineer’s estimate; identity and geographic location of the bidders; potential for savings if the project is readvertised; urgency of the project; and current market conditions. These factors are consistent with findings from extensive studies conducted by FHWA and the American Association of State Highway and Transportation Officials (AASHTO) in 2006 and 2007.

These factors were further validated by the results of an internal FHWA assessment completed in October 2010 to obtain data concerning reasons why a small population of State-administered Recovery Act projects was awarded considerably above the engineer’s estimate and reasons why certain Recovery Act projects received only one or two bids. Consistent with information provided to the OIG and due to statutory obligation and project completion deadlines, we found Recovery Act projects that received one or two bids typically consisted of resurfacing projects, which accounted for more than 73 percent of total Recovery Act funds. For example, in the case of Tennessee, 86 percent of Recovery Act projects with two bids or less were resurfacing projects. Resurfacing projects, including those located in rural areas, on average historically receive fewer bids due to the asphalt plant locations and haul distance. We found the same to be true in the Recovery Act environment. The combination of small contract amounts, specialized work and production resources (e.g., batch plants, aggregate quarries), and other relevant factors generally contribute to the number of bids and the competitive environment. We appreciate the OIG’s recognition in its draft report that these are important factors to the bidding environment.
The FHWA has sound and effective controls in place, such as approving States’ PS&E packages before contracts are issued and conducting independent oversight on certain projects, including major projects more than $500 million, that enable FHWA to monitor State’s contract bidding and awarding practices. We agree with the OIG report that there are opportunities to work with States to further enhance their contracting practices to optimize competition. We have already started work with AASHTO’s Technical Committee on Cost Estimating to update AASHTO’s “Practical Guide to Estimating.” The guide will identify best practices on States’ contract letting strategies and ways to improve bid responsiveness.

OIG Recommendations and FHWA Actions

**Recommendation 1:** Complete a nationwide assessment to determine current levels of competition for Federal-aid contracts; evaluate factors affecting competition; identify State DOT contract award practices that may need improvement; and address perceived barriers to State DOT implementation of FHWA, AASHTO, and other best practices for improving competition.

**FHWA Response:** Concur. As stewards of public funds, FHWA continues to look for opportunities to work with State and local partners to optimize competition and control costs on all Federal-aid contracts to the fullest extent possible in order to maximize savings to taxpayers. Changes in the transportation industry, such as industry consolidation, workload fluctuation, and variation in the availability of qualified contractors are just some of the factors that can affect costs and the level of competition. These factors and others have led some States to employ new and innovative methods to control costs and foster competition for both Recovery Act projects and within their regular FAHP work.

In the past, FHWA has worked with AASHTO, which offers the capability and access to a unique nationwide perspective on practices used in States to assess factors affecting construction costs and competition. By June 30, 2012, FHWA plans to initiate a comprehensive, nationwide survey jointly with AASHTO to assess current levels of competition in the States for various road and highway construction trades. The survey results will allow FHWA to identify State contract award practices that may need improvement in implementing FHWA’s guidelines, to leverage and share best practices for improving competition, and to evaluate factors that may impact competition. The survey will include items such as occurrence of single bids, reasons of increased or decreased competition, construction bid items that have experienced the most rapid cost increases, and other factors relevant to competition. This effort will also evaluate States’ use of risk allocation methods and practices to control costs and increase competition, such as project scoping, price adjustment clauses, balancing work type in each letting, and rejecting noncompetitive bids and readvertising. Work with AASHTO in developing the survey is already underway, and FHWA has established a tentative completion date of December 31, 2012.
Recommendation 2: Mandate the confidentiality of potential and actual bidders’ names and engineer’s estimates, as currently recommended in FHWA’s competitive bidding and contract award guidance.

FHWA Response: Concur in part. Consistent with guidance jointly issued by FHWA and the Department of Justice (DOJ), FHWA agrees that engineer’s estimates should be kept confidential prior to contract award. By April 1, 2012, we will initiate discussions with the four States identified in the OIG’s survey who currently release the engineer’s estimate prior to bid opening to encourage those States to discontinue their use of such practice. Additionally, we will need to conduct followup discussions with DOJ’s Antitrust Division and AASHTO to gain input and to further assess the cost-benefits of any rulemaking activities to universally mandate the confidentiality of the engineer’s estimate, including prohibiting the release of the estimate after bid opening. The FHWA’s decision regarding the appropriateness of such rulemaking will be dependent on the outcome of those discussions.

As for mandating the confidentiality of potential bidders’ names, FHWA will partner with DOJ and AASHTO to reassess the practicality and practicability of such a mandate. We note that there are some real-world benefits to this practice, such as helping subcontractors find work, including disadvantaged business enterprises. We will also partner with DOJ and AASHTO to evaluate any potential requirements to keep actual bidders’ names confidential. We may initiate a rulemaking regarding contract procedures, if deemed appropriate, depending upon the outcome of those discussions. To address the immediate need to reinforce our current “Guidelines on Preparing Engineer’s Estimates, Bid Reviews, and Evaluation,” FHWA will develop and issue a policy by December 31, 2012. This new policy will focus on the need to maximize competition on Federal-aid contracts and to ensure States have written procedures, including procedures to perform market analysis for evidence of collusion and antitrust issues.

Recommendation 3: Implement policies and procedures for ensuring that each State DOT establishes and uses a written, FHWA-approved plan for evaluating competition. These plans should address: assessing bidder interest levels, evaluating and documenting decisions on bids that vary significantly from the engineer’s estimate, conducting and documenting bid analysis, identifying and mitigating perceived barriers to increasing competition, and adequately documenting final award decisions.

FHWA Response: Concur. As referenced above, FHWA will develop and issue a policy by December 31, 2012. The policy will direct Division Offices to review their State department of transportation (DOT) bidding and contract awarding procedures for evaluating competition. The FHWA’s review of State practices and procedures will address the elements identified in the recommendation, including the need for States to have procedures to adequately document final award decisions. It is important for States to have procedures to document final award decisions, especially when bids accepted compared with the engineer’s estimate fall outside the States’ established threshold, such as in cases where projects are necessary to be built for public safety or the project is a critical need.
**Recommendation 4:** Develop and implement effective performance measures and metrics to assess and trend State DOT contract award practices, document concerns, and share best practices with other State DOTs.

**FHWA Response:** Concur. A number of variables contribute to States’ competitive environment, such as project location within the State (rural versus urban), type of job (asphalt versus concrete, bridge work versus roadway work, etc.), and size of projects. As described in our response to recommendation 1, by June 30, 2012, FHWA plans to initiate a comprehensive, nationwide assessment jointly with AASHTO to implement measures that will help us determine current levels of competition in the States, such as occurrence of single bids. We will compare results to the 2006 and 2007 FHWA-AASHTO survey to identify trends in State DOT contract award practices, which will be used to inform our plans to assess trends moving forward. It will also allow FHWA to share best practices as a result of this effort.

**Recommendation 5:** Establish standard FHWA Division Office requirements for performing and documenting oversight of State contracting activity, including stewardship agreement requirements for (a) FHWA approval of procurement policies and procedures and (b) FHWA verification that State DOTs have determined a potential winning bidder’s status on the Excluded Parties Listing System list prior to contract award.

**FHWA Response:** Concur. The FHWA issued new guidance on stewardship and oversight agreements in August 2011 to provide a consistent, agencywide approach for developing future agreements with the States, where FHWA and the State DOT agree on how the FAHP will be administered in a State, with specific actions to be taken by one or both parties. Section 106 of Title 23, United States Code, requires that FHWA and the State enter into an agreement documenting the extent to which the State assumes the responsibilities of FHWA under Title 23. The stewardship and oversight agreement formalizes these assumed responsibilities and agreements to address how the FAHP will be administered in the State. In response to OIG’s audit work, FHWA added “number of bids per project (by region, type of work, contract size, level of competition, etc.)” and “bids and award dispersion by contractor” as effective stewardship and oversight indicators to improve the effectiveness of the contract administration area. We will further reemphasize these indicators in the policy referenced in our response to recommendations 2 and 3.

As for the recommendation for FHWA to verify that State DOTs have determined a potential winning bidder’s status on the Excluded Parties Listing System (ELPS) list prior to contract award, we note that the common rule and the Department’s adopted version of the common rule for suspension and debarment limit a Federal Agency’s ability to require a recipient to check the EPLS prior to awarding a contract. Specifically, 2 CFR 180.300 provides three methods for participation to verify the eligibility of other participants and 2 CFR 180.505(b) prohibits Federal Agencies from requiring participants to check the EPLS. We will work in accordance with existing laws and regulations and
will develop and issue a policy by December 31, 2012, that directs division offices to
review their State DOT bidding and contract awarding procedures for evaluating and
documenting competition decisions, including procedures to exclude prohibited parties
from obtaining Federal contracts and grants.

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The Recovery Act funds invested in highway and bridge projects not only generated a
significant number of good paying jobs, but also provided a lasting transportation legacy
for the traveling public. The FHWA will continue to work closely with our State and
local partners to ensure that competition is optimized on all Federal-aid contracts as we
are deeply committed to ensuring the public continues to get the best value for its
investment.

The FHWA appreciates the OIG’s efforts throughout this audit. We recognize the
complexity of the subject and the time invested to ensure the draft report serves as a
useful tool for management. We especially appreciate the open and constructive dialogue
afforded to us throughout the course of the audit and look forward to furthering the strong
working relationship with the OIG. The FHWA’s efforts and the efforts of the OIG will
strengthen the oversight of remaining Recovery Act projects and projects under the
regular FAHP. If you have any questions or comments regarding this response, please
contact David Nicol, Director of Program Administration, Office of Infrastructure, at
202-366-5530.