Office of Inspector General
Audit Report

FEDERAL HIGHWAY ADMINISTRATION'S OVERSIGHT OF FEDERAL-AID AND RECOVERY ACT PROJECTS ADMINISTERED BY LOCAL PUBLIC AGENCIES NEEDS STRENGTHENING

Federal Highway Administration

Report Number: MH-2011-146

Date Issued: July 15, 2011

Memorandum

U.S. Department of Transportation
Office of the Secretary of Transportation
Office of Inspector General

Subject: ACTION: Federal Highway Administration's Oversight of Federal-aid and Recovery Act Projects Administered by Local Public Agencies Needs Strengthening
Report Number MH-2011-146

Date: July 15, 2011

From: Joseph W. Comé
Assistant Inspector General for Highway and Transit Audits

Reply to Attn. of: JA-40

To: Federal Highway Administrator

Each year states entrust the administration of approximately $8 billion in Federal-aid highway program funds to governments in cities and counties–referred to as local public agencies (LPA)–for construction of highway infrastructure. The American Recovery and Reinvestment Act (ARRA) of 2009 invested an additional estimated $8 billion in LPA-led infrastructure projects.[1] Along with this substantial infrastructure investment, ARRA legislation requires the Federal Highway Administration (FHWA) to perform oversight to ensure that ARRA-funded projects meet Federal requirements and legislative goals, and are adequately protected against fraud, waste, and abuse.

FHWA considers those states that do not employ comprehensive oversight of LPA-administered Federal-aid highway projects as being high risk to the effective implementation of ARRA. In 2010, FHWA determined that 9 states had not employed a comprehensive level of LPA oversight and had material weaknesses in their LPA oversight programs. These weaknesses included a lack of resources to perform state oversight of LPAs, LPAs' inadequate contract administration and quality assurance procedures, noncompliance with Federal labor requirements, and improper processing of contract changes.

[1] Pub. L. No. 111-5 (2009). The estimated $8 billion is based on the ARRA funding requirement that apportions 30 percent of ARRA funds for sub-allocation within each state.

As part of our ongoing ARRA oversight, we initiated this audit to determine whether FHWA has taken actions to reduce risks identified with locally administered highway projects. Specifically, we assessed (1) the extent of LPA compliance with Federal requirements and (2) the effectiveness of FHWA's actions in ensuring that states have adequate LPA oversight programs. To conduct this audit, we selected 4 states for site visits (California, Louisiana, Tennessee, and Texas) from 50 states and Washington, D.C., based on FHWA's internal assessment of the risks related to states' LPA oversight programs and the total ARRA funds authorized. In these four states, we visited 29 LPAs and reviewed 59 ARRA and Federal-aid highway projects.[2] These projects received a total of $2.5 billion in Federal, state, and local funds. We interviewed FHWA, state, and local officials and contract consultants, and reviewed relevant project documents. This performance audit was conducted from November 2009 through April 2011 in accordance with generally accepted government auditing standards and included such tests as we considered necessary to detect fraud, waste, and abuse. Exhibit A contains a detailed description of our scope and methodology.

RESULTS IN BRIEF

We found at least one instance of noncompliance with Federal requirements in 88 percent (52 of 59) of the LPA projects we reviewed in California, Louisiana, Tennessee, and Texas. Most prevalent were shortcomings related to construction management requirements. Although our review of transactions per project was limited, we still identified $5 million in unsupported costs. Due to similarities in the approach to LPA oversight in other states, the extent of noncompliance and unsupported costs we found suggest the potential for broader vulnerabilities with LPA-administered ARRA projects in other parts of the country. As a result, more than 2 years after the enactment of ARRA, FHWA still faces a significant challenge in ensuring LPAs are appropriately expending Federal funds.

Specifically:

- In California, each of the 15 LPAs we reviewed failed to comply with at least one key Federal or state requirement.[3] For example, field diary entries and other evidence, such as engineering calculations, were not recorded to substantiate the accuracy of periodic payments made to contractors.[4] Our results are consistent with FHWA's 2010 internal assessment, which

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[2] In the four states, we selected projects with recent significant activity from 829 LPAs and 5,934 Federal-aid and ARRA LPA highway projects identified by FHWA.

[3] We reviewed 37 active and recently completed construction projects administered by 15 LPAs valued at $2.1 billion in Federal, state, and local funds.

[4] Engineering calculations include field measurements made by the resident engineering team to verify that specific contract items have been delivered and are eligible for progress payments. Progress payments are periodic payments made to a contractor for work satisfactorily performed as a project progresses, on a monthly basis. Payments are usually made to a contractor for work satisfactorily performed up to that point.

concluded California did not have a comprehensive LPA oversight program.

- In Texas, our results contradict FHWA's 2010 internal assessment, which concluded that Texas had a comprehensive LPA oversight program. We found that 9 of 10 LPAs failed to comply with at least one key Federal requirement, such as not adequately documenting cost analyses that should serve as the basis for negotiating contract change orders.

- In Tennessee and Louisiana, we found instances of incomplete cost analyses to support negotiated change orders on the relatively small number of projects we reviewed. For example, in Tennessee, we found that one LPA approved multiple change orders totaling over $100,000 with incomplete or no evidence of cost analyses.

As a result of noncompliance with Federal requirements, amounts paid with Federal dollars in California, Louisiana, Tennessee, and Texas could be greater than necessary. We identified $5 million in unsupported costs as a result of errors in project change orders, progress payments, and other financial transactions. Based on our results, additional unsupported project costs could be uncovered if FHWA or states performed more thorough inspections and reviews of project documentation.

While FHWA has taken action to address weaknesses in state LPA oversight programs, its actions are having a limited impact. In 2007, FHWA enhanced its programs for monitoring states' oversight of LPA projects by evaluating the adequacy of states' LPA oversight programs and urging states to adopt better management practices. For example, FHWA encouraged states to implement comprehensive LPA program manuals that document project requirements, and to perform detailed inspections of LPA projects to ensure they adhere to Federal requirements. However, our work in California, Louisiana, Tennessee, and Texas showed weaknesses in FHWA's oversight actions. Specifically:

- FHWA Division Offices do not assess the adequacy of state LPA oversight programs fully and uniformly, limiting FHWA's ability to make meaningful comparisons between states regarding their level of compliance with Federal requirements.

- FHWA Headquarters does not accurately report the status of states' LPA oversight programs because state assessments are not based on objective criteria and do not sufficiently focus on whether states administer federally funded projects in compliance with Federal requirements.

- FHWA Headquarters does not independently assess or enforce corrective action plans that are needed to improve states' oversight of LPAs.

We are making a series of recommendations to improve the effectiveness of FHWA's LPA oversight.

BACKGROUND

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU),[5] holds states responsible for overseeing LPAs' (sub-recipients of Federal funding) project delivery and accounting. Accordingly, states' oversight programs must ensure that LPAs are meeting all Federal requirements during the design and construction of Federal-aid highway and bridge projects. In 2006, FHWA completed an internal review of LPAs and reported significant deficiencies in LPAs' administration of Federal-aid projects, including compliance with construction and project management requirements in Titles 23 and 49 of the Code of Federal Regulations (C.F.R.).[6] Based on the results of its 2006 review, FHWA directed its Division Offices to assess whether the states' LPA oversight programs reliably resulted in LPA projects being administered in accordance with Federal requirements.

FHWA also directed the Division Offices located in each state, Puerto Rico, and the District of Columbia to work with their counterparts to develop a date-specific action plan to bring LPA programs into compliance with Federal requirements. After Division Offices informed FHWA Headquarters that this action was a significant burden, FHWA gave the Division Offices the flexibility to determine the appropriate level and method of review to assess whether a state had a comprehensive LPA oversight program. However, FHWA still instructed Division Offices to develop action plans to address deficiencies they identified.

To promote accountability in ARRA, FHWA established national review teams (NRTs) to conduct independent assessments of states' compliance with Federal requirements. Using standard guides to conduct their reviews, the NRTs assess state processes and compliance in six risk areas: LPAs; plans, specifications, and estimates; contract administration; quality assurance; disadvantaged business enterprises; and eligibility for payments. At the close of each review, NRTs provide the Division Office with a report that summarizes the results, rates each

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[5] Pub. L. No. 109-59 (2005).

[6] The C.F.R. contains requirements for states and LPAs related to the management and construction of highway and bridge projects funded by the Federal Government. For example, 23 C.F.R. states that LPAs must ensure changes made to projects are reviewed and documented, an effective quality assurance program is in place, and projects comply with Federal laws. Additionally, 49 C.F.R. requires states and LPAs to ensure the use of disadvantaged business enterprises and to close out projects effectively.

review area, and cites observations and recommendations. The summary report forms the basis of a corrective action plan.

LPAS HAD A HIGH LEVEL OF NONCOMPLIANCE WITH FEDERAL REQUIREMENTS

LPA projects we reviewed exhibited a high level of noncompliance with Federal requirements, which has continued since ARRA's implementation. We reviewed 145 of the most recent project payments and change orders for LPA project activities covering basic Federal-aid and state requirements at 29 LPAs administering 59 Federal highway projects in California, Louisiana, Tennessee, and Texas. These projects received $2.5 billion in Federal, state, and local funding, of which $394 million were ARRA funds. (See exhibit B for a list of the LPAs and projects we reviewed.)

For the 59 LPA projects selected, we conducted compliance reviews in 12 key project activities (detailed in exhibit C), and found a range of errors, with 7 activities having error rates at or above 39 percent. Most errors were related to highway and bridge construction management. For example, we found compliance errors in 33 of the 42 projects (79 percent) we reviewed for change orders and claims. Table 1 shows the number of projects we reviewed in each activity, and the number and percent of errors we found.

Table 1: Results of 12 LPA Project Activities Reviewed

Project Activities Reviewed	Number of Projects Reviewed*	Number of Projects Reviewed with Errors	Percent of Projects Reviewed with Errors
1. Change Orders and Claims	42	33	79%
2. Project Bidding—Plans, Specifications, and Estimates/Contractor Selection/Unbalanced Bid Analysis	30	22	73%
3. Utility Agreements/Reimbursements	3	2	67%
4. Consultant Selection and Billings	24	15	63%
5. Construction Pay Quantities and Progress Payments	45	22	49%
6. Project Reporting and Tracking	39	17	44%
7. Quality Assurance Procedures	44	17	39%
8. Value Engineering	13	3	23%
9. Construction Close-Out	17	3	18%
10. Right-of-Way Acquisitions	15	1	7%
11. Force Account Justification	1	0	0%
12. In-Kind Local Matching of Funds	1	0	0%

*All project activities were not reviewed in the 59 LPA projects selected.

Source: OIG analysis.

In California, we reviewed 37 Federal highway projects, managed by 15 LPAs, valued at $2.1 billion in Federal, state, and local funds.[7] Each LPA had at least one error in the project activities we reviewed. Our review results are consistent with FHWA's 2010 internal assessment, which concluded that California did not have a comprehensive LPA oversight program, indicating the potential for significant vulnerabilities remaining in California. We further identified $4 million in unsupported project costs in our selection of project transactions, resulting from these errors. Specifically, we found that of the 15 California LPAs we reviewed:

- 8 LPAs could not provide sufficient engineering calculations for 12 projects or the required daily construction diary entry that would demonstrate that the LPA engineers measured the quantities for which periodic progress payments were made to contractors.

- 11 LPAs did not adequately document their cost analysis of negotiated contract change orders or sufficiently validate the time and material paid to construction contractors on 19 projects. For example, in the City of Richmond, officials at the Transit Station project could not provide adequate field diaries to substantiate work hours, equipment, or materials relating to $190,000 in time and material contract change orders. Officials also could not provide evidence of a completed cost analysis required to support payments the City made to contractors for a $31,000 negotiated work order.

- 4 LPAs could not demonstrate that they used competitive consultant selection procedures on 7 construction projects. Additionally, 8 LPAs did not prepare an independent cost estimate on 10 construction projects required to establish fair and reasonable compensation prior to negotiating contracts with construction consultants.

- 6 LPAs did not meet important aspects of quality assurance on 11 construction projects we reviewed. A quality assurance program includes testing to ensure that all materials and workmanship meet contract specifications and requirements.

Texas had errors similar to those in California. In Texas, we reviewed 17 Federal highway projects, managed by 10 LPAs, totaling $364 million. Of the 10 LPAs, 9 had at least one compliance error relating to the project activities we reviewed. The errors are of particular concern because they contradict FHWA's assertion in

[7] LPAs and projects were selected from 578 LPAs and 5,230 projects in California, 35 LPAs and 74 projects in Louisiana, 204 LPAs and 569 projects in Tennessee, and 12 LPAs and 61 projects in Texas. For the projects we selected, we reviewed 83 payments and change orders in California, 4 in Louisiana, 8 in Tennessee, and 50 in Texas.

a 2010 internal assessment that Texas had a "comprehensive" LPA oversight program. Texas projects had errors relating to contract progress payments, contract change orders, and construction quality assurance requirements. We identified almost $1 million in unsupported costs on the Texas LPA projects we selected, which resulted from the errors. Specifically, of the 10 Texas LPAs we reviewed:

- 7 LPAs could not demonstrate they performed sufficient engineering calculations to support whether the resident engineers had appropriately measured the quantity paid in progress payments on 10 construction projects. For example, in the City of El Paso, Texas, we selected two payments each from the Central Business District III and the Magoffin Street Improvement projects totaling $244,251. The City's resident inspectors could not provide quality calculations, field diaries, or other documents to support progress payments made to contractors.

- 7 LPAs did not adequately document their cost analysis of negotiated contract change orders or sufficiently validate the time and material paid to construction contractors on 11 construction projects. For example, we found that the City of El Paso did not prepare or document a cost analysis on any of the four approved change orders we reviewed.

- 5 LPAs did not meet important aspects of quality assurance testing requirements on six construction projects. For example, City of El Paso officials could not provide documentation to show that they performed material quality testing on either the Central Business District III or the Magoffin projects.

Finally, our review of a small number of LPAs (4 LPAs) in Tennessee and Louisiana found instances of noncompliance with Federal requirements similar to those in California and Texas. In Tennessee, we found that the City of Murfreesboro approved seven change orders totaling over $100,000 with incomplete or no evidence of a cost analysis to support negotiated change order prices. Additionally, on Louisiana's Fleur de Lis Drive Improvement Project, the City of New Orleans incorrectly invoiced FHWA for $197,000 in change order work that was performed for another Federal agency. In this case, Louisiana allowed New Orleans to bill FHWA, instead of the Federal Emergency Management Agency, which was responsible for delaying the project. After our review, the FHWA Louisiana Division Office rescinded the Federal reimbursement.

The errors in project change orders, progress payments, and other financial transactions we selected resulted in $5 million in unsupported LPA project costs.

Based on our test results, additional unsupported project costs could be uncovered if FHWA or states performed more thorough inspections and reviewed documentation to support project costs billed to FHWA. We did not project our results to LPA projects in all states, because this was not a statistical sample.

FHWA'S ACTIONS ARE HAVING A LIMITED IMPACT ON IMPROVING THE EFFECTIVNESS OF STATE LPA OVERSIGHT PROGRAMS

While FHWA has taken actions to address weaknesses in state LPA oversight programs, its actions are having a limited impact. To date, FHWA has appointed a Headquarters LPA Coordinator, evaluated the adequacy of states' LPA oversight programs, and advised states to develop and disseminate LPA manuals that detail procedures for administering projects in compliance with Federal requirements. In addition, FHWA's NRTs conducted LPA compliance reviews for ARRA projects in some states. However, our work in California, Louisiana, Tennessee, and Texas showed weaknesses in FHWA's oversight efforts. Specifically, FHWA Division Offices do not assess the adequacy of state LPA oversight programs fully and uniformly; FHWA Headquarters does not accurately report the level of states' compliance with Federal LPA requirements; and FHWA Headquarters does not independently assess the severity or validity of LPA deficiencies identified by Division Offices or enforce corrective actions needed to improve states' oversight of LPAs.

FHWA Division Offices Do Not Assess the Adequacy of State LPA Oversight Programs Fully and Uniformly

Since 2007, FHWA has attempted to formally assess the effectiveness of state LPA oversight programs by directing Division Offices to determine whether state departments of transportation were ensuring that LPAs properly administer federally funded projects. Initially, FHWA Headquarters provided Division Offices specific criteria to conduct the LPA reviews, but shortly thereafter, gave Division Offices the flexibility to choose the appropriate level and method of review to make this determination. Because Division Offices have inconsistent assessment criteria, FHWA cannot make meaningful comparisons between states regarding their levels of compliance with Federal requirements. Comparisons would allow FHWA to focus attention on improving high-risk states and identify emerging risks across the Nation. Accordingly, FHWA has no assurance that Division Office reviews consistently assess all LPA project management activities that the states must oversee to ensure compliance with Federal requirements.

Our four-state review found that FHWA encourages states to perform field inspections of LPA projects, but what FHWA considers an acceptable inspection

varies by Division Office. In some instances, states perform field inspections using a simple inspection checklist that only identifies that an activity was inspected. This process does not provide details on the specific procedures the inspectors reviewed or the methodology used to perform the inspection. For example, our work on five federally funded highway projects in Tennessee showed that inspection checklists did not demonstrate that state engineers assessed whether project change orders and payments were based on a well-documented cost analysis. In contrast, for ARRA projects, California recently implemented a comprehensive field inspection process that involves documenting the specific procedures reviewed by inspectors. This will allow FHWA to assess LPA compliance with Federal requirements fully and uniformly, and ensure compliance.

In addition, FHWA has not ensured that all states have comprehensive and consistent processes in place to promptly resolve deficiencies on federally funded highway and bridge projects when LPA inspections identify them. For example, while California has implemented a comprehensive field inspection process for ARRA projects, it does not have an effective follow-up process for confirming that LPAs took appropriate actions to resolve project deficiencies identified.

FHWA Headquarters Does Not Accurately Report the Status of States' LPA Oversight Programs

FHWA's annual reports on the status of LPA oversight in individual states were not based on objective criteria and did not focus on whether states administered federally funded projects in compliance with Federal requirements. Rather, the reports presented Division Offices' subjective assessments on how well state programs were generally working in each respective state. These assessments did not routinely include a sample of LPA projects to validate compliance with Federal requirements. Such independent testing could determine whether states are consistently enforcing Federal requirements.

In preparing the annual reports, the Headquarters LPA Coordinator[8] asks Division Offices to respond to a survey questionnaire, which contains open-ended questions regarding the status of each state's LPA oversight program. The LPA Coordinator then judgmentally interprets the survey response narratives and produces a report on the national status of all state LPA oversight programs and any program weaknesses and corrective actions the Division Offices identified. We found the FHWA survey was based on a short series of open-ended questions rather than an assessment of LPA compliance with Federal requirements. Survey questions mainly based on Federal requirements would provide the LPA Coordinator with

[8] In 2007, FHWA established a Headquarters LPA Coordinator position to assist in setting FHWA's LPA oversight policy and coordinate each Division Office's assessment of state LPA oversight programs.

objective criteria to evaluate state programs. Accordingly, the reports do not contain meaningful information that would enable FHWA Headquarters to measure or understand existing oversight vulnerabilities, or clearly identify corrective actions that each state needs to accomplish.

FHWA's 2010 internal assessment of Texas' LPA program demonstrates the shortcomings of FHWA's current approach to characterizing state LPA oversight. This assessment showed that Texas had a "comprehensive" LPA oversight program, while California did not. However, we found similar high levels of noncompliance with basic Federal construction management requirements at LPAs in California and Texas. Based on our review, FHWA's California and Texas Division Offices used different approaches to reach their conclusions, but the FHWA Headquarters LPA Coordinator accepted the Division Offices' assessments without confirming their validity.

FHWA Headquarters Does Not Independently Assess or Enforce Corrective Action Plans Needed To Improve States' Oversight of LPAs

Since 2007, FHWA has required Division Offices to develop action plans to address LPA-related deficiencies identified in their state LPA program assessments, including specific tasks to resolve deficiencies and timelines for completion. However, FHWA Headquarters only conducts a cursory review of the action plans and does not evaluate whether planned actions were adequate and timely to address the deficiencies noted. Therefore, the resolutions of deficiencies are likely protracted. For example, in 2009, the California Division Office determined that it would take California 3 to 5 years to establish a "comprehensive" LPA oversight program. As a result, California's LPA program deficiencies could impact Federal funding well after most ARRA funds are expended.

Without Headquarters' independent assessment or enforcement activities, it is not clear whether critical actions have been completed. After deficiencies are identified in an action plan, the Division Office becomes primarily responsible for monitoring and resolving them. FHWA guidance suggests, but does not require, Divisions to provide Headquarters with quarterly updates of the status of their action plans. When quarterly updates are submitted, Headquarters provides little follow through. As a result, subsequent reports on actions may be incomplete, outdated, or lacking specificity. For example, California's quarterly update to its fiscal year 2009 plan indicated that actions were complete, while a description of the reported actions indicated only partial completion. A Texas quarterly update stated that actions were completed, but then did not describe how the actions were accomplished. We reported a similar concern in our January 2011 report on FHWA's NRT efforts to identify and address corrective actions on ARRA

highway projects.[9] We reported that FHWA Headquarters has not done enough to monitor Division Offices' efforts to correct the oversight deficiencies the NRTs identified during their state reviews.

Targeted assistance from FHWA Headquarters could improve the timeliness of Division efforts to improve LPA oversight. Further, Division Offices in states with acute LPA oversight deficiencies may not receive sufficient assistance and direction from FHWA Headquarters to ensure that the corrective actions are appropriate and will be completed in a timely manner to improve management of projects funded with Federal dollars.

CONCLUSION

ARRA greatly increased the number of federally funded highway and bridge projects that LPAs plan to construct across the country. To protect the billions in ARRA investments in these projects, FHWA must ensure that all states have effective LPA oversight programs. While FHWA has made some progress in improving state programs, it must take more action to ensure that states provide effective oversight and that LPA-administered ARRA projects meet all Federal requirements. Further, continued noncompliance with Federal requirements could result in improper payment of limited Federal dollars at a time when infrastructure needs are increasing faster than funding resources.

RECOMMENDATIONS

To strengthen oversight of LPA projects, we recommend that FHWA:

1. Implement a policy establishing uniform procedures and criteria for Division Offices to use when assessing the ability of states to ensure LPAs meet Federal requirements. The policy should also require FHWA Headquarters to validate the accuracy of Division Office assessments.

2. Develop a Headquarters process to assess the effectiveness of Division and state LPA corrective action plans to ensure deficiencies are promptly resolved. The process should specify the planned actions, milestones, level of government responsible for implementation, and ensure actions are completed as planned and on schedule.

3. Develop a Division Office-based plan that will increase state oversight in the seven project activities in which we identified a high level of noncompliance with Federal requirements (change orders and claims, project bidding, utility

[9] OIG Report Number MH-2011-027, "Actions Needed to Strengthen Federal Highway Administration's National Review Teams," January 6, 2011. OIG reports are available on our website: www.oig.dot.gov.

agreements and reimbursements, consultant selections and billings, construction pay quantities and progress payments, project reporting and tracking, and quality assurance procedures).

4. Assess the project transactions related to the $5 million in unsupported project costs we identified in California and Texas and review similar transactions within these projects for unsupported costs. The assessment would include developing an action plan to collect all unsupported costs or identify FHWA's rationale for acceptance of these costs.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FHWA a draft of this report for review and comment on April 8, 2011, and received its formal written comments on June 9, 2011. FHWA's complete response is included as an appendix to this report. FHWA fully concurred with our recommendations and provided implementation dates. We consider all of these recommendations resolved pending completion of the planned actions.

ACTIONS REQUIRED

Subject to the follow-up provisions in Department of Transportation Order 8000.1C, we request that within 30 days of this report FHWA provide us with information to demonstrate its completion of the planned actions.

We appreciate the courtesies and cooperation of FHWA representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-5630 or David Pouliott, Program Director, at (202) 366-1844.

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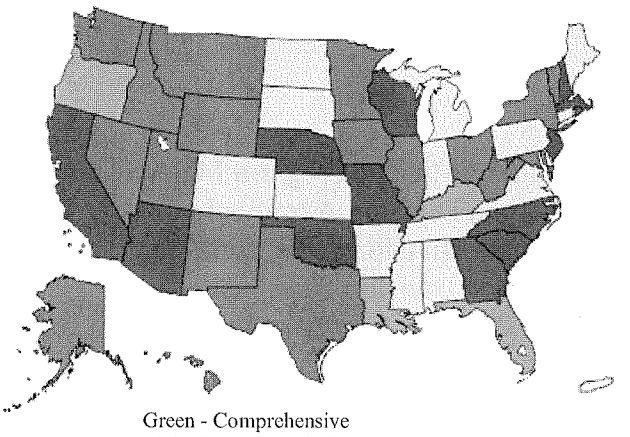
cc: FHWA Director, Office of Program Management
FHWA California Division Administrator
FHWA Louisiana Division Administrator
FHWA Tennessee Division Administrator
FHWA Texas Division Administrator

EXHIBIT A. OBJECTIVE, SCOPE, AND METHODOLOGY

We conducted this audit from November 2009 through April 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Our objective was to determine whether FHWA has taken actions to reduce risks identified with locally administered highway projects. Specifically, we assessed (1) the extent of LPA compliance with Federal requirements and (2) the effectiveness of FHWA's actions in ensuring that states have adequate LPA oversight programs.

To assess the extent of LPA compliance with Federal requirements, we visited 29 LPAs and reviewed 59 projects in California, Louisiana, Tennessee, and Texas and reviewed 54 recent progress billings, 88 recent change orders, and 3 other payment actions. These states were selected based on FHWA's ranking of each state's LPA oversight program comprehensiveness, Federal-aid apportioned in fiscal year 2009, and the total dollar amount of highway funds that ARRA provided to each state. We selected one state for review in each of FHWA's ranking categories: comprehensive, borderline comprehensive, borderline not comprehensive, and not comprehensive. Figure 1 shows FHWA's ranking of the comprehensiveness of state LPA oversight programs for each category.

Figure 1. FHWA Headquarters' FY 2008 Assessment of State LPA Oversight Programs



Green - Comprehensive
Light Green - Borderline Comprehensive
Pink- Borderline Not Comprehensive
Red - Not Comprehensive

Source: FHWA "Local Public Agency Federal-aid Project Oversight & Stewardship - FY 2008 Status Report," September 2009.

We selected projects based on the degree of recent project activity and location, from project lists provided by FHWA Division Offices in California, Louisiana, Tennessee, and Texas. These lists, totaling 5,934 projects and 829 LPA sponsors, included LPAs with ongoing ARRA work and LPAs slated to receive ARRA funding. In most instances, the data were based on state project records, because FHWA's databases do not differentiate between state and LPA-administered projects. At each LPA, we reviewed project construction activities to assess LPA compliance with Federal regulations. The 12 project activities we selected are representative of basic management oversight on a Federal-aid highway or bridge project and are required under 23 C.F.R. and 49 C.F.R. Additionally, we assessed state requirements that supplemented Federal requirements.

Because many LPA-administered ARRA projects were not in active construction, we reviewed one or more ongoing or recently completed federally funded highway projects to determine how the LPA sponsor was administering Federal highway projects. To determine whether LPA project activities complied with Federal requirements, we selected transactions from a project's most recent payments or change orders and reviewed the supporting documentation. For example, we reviewed the construction payment activity by reviewing up to five line items in a claim for reimbursement (progress billing) and determined whether field records consisting of the resident inspector's calculation sheets and daily construction diaries supported each line item. We reviewed these records further to determine whether calculations or diary postings were used to support the quantities claimed as delivered or installed and verified the accuracy and the completeness of the records with local officials.

To assess the effectiveness of FHWA actions, we interviewed FHWA's Division Office officials in California, Louisiana, Tennessee, and Texas; the FHWA Headquarters LPA Coordinator; FHWA Headquarters officials in the Office of Professional and Corporate Development and Office of Program Administration; and FHWA's NRT staff. We examined policies and memoranda detailing FHWA Division Offices' LPA oversight responsibilities.

Additionally, we examined FHWA's "Local Public Agency Federal-aid Project Oversight and Program Stewardship Status Reports" for fiscal years 2007, 2008, and 2009, compiled by the FHWA LPA Coordinator, which reported on each Division Office's yearly assessment of the state LPA oversight program. Our examination included identification of the process and procedures for compiling and completing the reports; interviewing Division Office staff who developed the state assessments and determining how the state assessments were made; reviewing Division Office corrective action plans; and interviewing state and local officials to assess the states' LPA oversight role and their involvement and understanding of FHWA's assessment of their state.

EXHIBIT B. LPAS AND PROJECTS REVIEWED BY THE OIG

Local Public Agency Reviewed	Project Reviewed	FHWA Funding Source[a]	Unsupported Costs Found[b]
City of Los Angeles, CA	Valley Boulevard	Federal-aid	Yes
	1st St. Viaduct	Federal-aid	No
	Citywide Resurfacing	Federal-aid	No
City of Oxnard, CA	5th Street parking lot	Federal-aid	Yes
	US 101 Rice Avenue	ARRA	No
County of Los Angeles, CA	I-5/Hasley Canyon Road	Federal-aid	No
Port of Long Beach, CA	Ocean Boulevard	Federal-aid	No
	Gerald Desmond Bridge	Federal-aid	No
County of Shasta, CA	Airport Road Bridge	Federal-aid	Yes
	Blue Jay Lane	Federal-aid	No
	Lone Tree Road	Federal-aid	Yes
City of Richmond, CA	Transit Station	Federal-aid	Yes
	Filbert Street	Federal-aid	Yes
	Greenway Path	Federal-aid	Yes
City of San Bruno, CA	SR82	Federal-aid	Yes
	San Bruno City Park Way	ARRA	No
City of Redding, CA	Cypress Street Bridge	Federal-aid	Yes
	Bonnyview Road	Federal-aid	No
County of Riverside, CA	River Road	Federal-aid	Yes
	Cantu-Galliano Road	Federal-aid	Yes
San Bernardino Associated Governments, CA	I-215	ARRA	Yes
	I-10 Ford Street	Federal-aid	Yes
City of Modesto, CA	9th St. Bridge	Federal-aid	No
	9th St. at two locations	Federal-aid	Yes
	Sylvan Avenue	Federal-aid	Yes
City of San Jose, CA	Stevens Creek Intelligent Transportation System	Federal-aid	No
	Street Resurfacing/Round 2 Overlay	Federal-aid	Yes
	Street Resurfacing/Round 3 Overlay	Federal-aid	Yes
	Various Roads/Foxworthy	ARRA	Yes
City of Glendale, CA	SR134 Bridge	Federal-aid	Yes
	Glenoaks Boulevard	Federal-aid	Yes
	Pacific and Allen Avenues	ARRA	No

Exhibit B. LPAs and Projects Reviewed by the OIG

Local Public Agency Reviewed	Project Reviewed	FHWA Funding Source[a]	Unsupported Costs Found[b]
	Controller Conversion	ARRA	No
City of Murrieta, CA	Ivy St. Bridge	Federal-aid	No
	Clinton-Keith Bridge	ARRA	No
City of Long Beach, CA	Carson Street	Federal-aid	No
	Spring Street	ARRA	No
City of Austin, TX	Cesar Chavez Street	Federal-aid	Yes
	E. 7th Street	Federal-aid	No
Central Texas Regional Mobility Authority, TX	183A Turnpike	Federal-aid	No
City of Hutto, Texas	Cottonwood Trail Phase II	ARRA	Yes
City of Galveston, TX	Traffic Signal Repairs	Federal-aid	No
City of Houston, TX	Brittmoore Road	Federal-aid	Yes
	Whiteheather Storm Sewer	Federal-aid	Yes
Corpus Christi Port Authority, TX	Joe Fulton International Trade Corridor Phase I	Federal-aid	No
	Joe Fulton International Trade Corridor Phase II	ARRA	No
City of El Paso, TX	Central Business District III	Federal-aid	Yes
	Magoffin Avenue	Federal-aid	Yes
City of El Paso - Sun Metro, TX	West Side Transit Terminal	Federal-aid	Yes
Alamo Regional Mobility Authority, TX	US 281 Super Street	ARRA	Yes
City of San Antonio, TX	Jones Maltsberger Road	ARRA	Yes
	Callaghan Road	Federal-aid	Yes
	Woodlawn Avenue	Federal-aid	Yes
	Clark Avenue	Federal-aid	Yes
City of Pineville, LA	Susek Drive	ARRA	No
City of New Orleans, LA	Fleur de Lis Drive	Federal-aid	Yes
	Robert E Lee Boulevard	Federal-aid	No
City of Murfreesboro, TN	Gateway Trail	Federal-aid	Yes
Tennessee Department of Environment and Conservation, TN	Fiery Gizzard Trail	Federal-aid	No

[a] "Federal-aid" denotes that the LPA project reviewed was using Federal-aid highway and bridge program funds and "ARRA" denotes that the LPA project reviewed was using ARRA funds.

[b] Unsupported costs were found in our sample of change orders, progress payments, or other financial transactions in 33 projects.

Exhibit B. LPAs and Projects Reviewed by the OIG

EXHIBIT C. DESCRIPTION OF PROJECT ACTIVITIES REVIEWED BY THE OIG

Project Activity	Code of Federal Regulation	Description of Project Activity Reviewed
1. Change Orders and Claims	23 C.F.R. § 635.109, .120, and .124; § 140.501-.505	23 C.F.R. § 635 provides guidance on changed conditions and claims. State procedures require the use of change orders to document changed conditions made to a project's original plan and specifications.[a] 23 C.F.R. § 635.120 requires the agency's[b] resident engineer to conduct and document a cost analysis of any proposed negotiated change order prior to award. In cases where change in price cannot be reasonably negotiated, the work is conducted on a force account basis, where field diaries are used to support the contractor billings. A claim arises when changes are not approved by the agency. 23 C.F.R. § 635.124 requires the claim to be resolved through a formal administrative or legal process and administrative settlement costs are defined in 23 C.F.R. § 140.501, .503 and .505.
2. Project Bidding	23 C.F.R. § 635.104, .112-.114; § 630.205	23 C.F.R. § 635.104 and .112 provide that contracts for project construction are generally advertised formally and then competitively awarded. However, before advertising, 23 C.F.R. § 630.205, requires the agency's engineer to prepare project's plans, specifications, and estimates. Consistent with C.F.R. § 635.113, bids are publically opened and the agency shall prepare a tabulation of bids. Consistent with 23 C.F.R. § 635.114, before awarding a contract, the agency systematically reviews the contractor's proposal to determine, on an item-by-item basis, if the items bid are mathematically or materially balanced as a whole and are reasonable based on the agency's cost estimate.
3. Utility/Railroad Agreements and Reimbursements	23 C.F.R. § 645.113; § 646.216	23 C.F.R. § 645.113 and § 646.216 states that when a project must relocate a utility or railroad during construction, a formal agreement with the utility or railroad should be prepared to identify the work scope and methods needed for the relocation. Per 23 C.F.R. § 645.113 and

Project Activity	Code of Federal Regulation	Description of Project Activity Reviewed
		§ 646.216, the lump-sum amount needed for the relocation is contained in the project's contract or force account agreement.[c] Additionally, consistent with Federal and state requirements, the agency must review the proposed lump-sum price before any agreement is made. When using force account agreements the agency must review invoices and project field records to ensure that amounts billed are actual and eligible costs to the project.
4. Consultant Selection and Billings	23 C.F.R. § 172.5 and 172.7	23 C.F.R. § 172.5 provides that when selecting engineering and design consulting services, LPAs must use a competitive selection process that evaluates the technical qualifications of all candidates. Before negotiating the contract price, some states require the LPA to independently estimate the cost of planned scope of work. After award, consultant billings generally identify labor categories, hourly rates and job categories, other direct costs and indirect costs used to complete the consultant service deliverables; which should be reviewed by the LPA before approving the payments. In most cases, audits are performed of indirect cost rates charged by the consultant, as defined in 23 C.F.R. § 172.7.
5. Construction Pay Quantities and Progress Payments	23 C.F.R. § 635.122-.123; 49 C.F.R. § 18	23 C.F.R. § 635.122 provides for participation in a contractor's claim for reimbursement of delivered materials during project construction. 23 C.F.R. § 635.123 requires that agencies have procedures in effect that provide adequate assurances of the quantities of completed work are determined accurately. State construction procedures require the contractor to identify specific contract line items that have been delivered to date. The agency is required to inspect and verify delivery. The main evidence to support the line item's delivery in construction is the resident engineer's daily field diaries and other evidence, such as engineering calculations. 49 C.F.R. § 18 specifies that the determination of pay quantity records and documents must be retained.

Exhibit C. Description of Project Activities Reviewed by the OIG

Project Activity	Code of Federal Regulation	Description of Project Activity Reviewed
6. Project Reporting and Tracking	23 U.S.C. § 113; 49 C.F.R. § 26.37 and .55	State guidance requires the agency to conduct routine field inspections and perform project management during construction. This includes maintaining field diaries, organizing and retaining project records, and monitoring construction schedules. The agency must validate certified payroll for labor compliance as stated in 23 U.S.C. § 113 and state guidance. The agency must also conduct disadvantaged business enterprises compliance reviews to validate that minority firms performed a commercially useful function per 49 C.F.R. § 26.37 and 26.55.
7. Quality Assurance Procedures	23 C.F.R. § 637.205 and .207	23 C.F.R. § 637.205 requires the agency to have a process in place to evaluate the quality of construction workmanship and materials. According to 23 C.F.R. § 637.207 and state requirements, the evaluation includes pre-inspecting the manufacturer, performing acceptance testing, conducting independent assurance sampling and testing, and ensuring installed materials conform to specifications. Deficiencies can be identified through exception reports and must be resolved in a timely manner.[d]
8. Value Engineering	23 C.F.R. § 627	Value engineering requirements are codified in 23 C.F.R. § 627. An agency must conduct a systematic review that analyzes a project's design, and develops recommendations to improve design and/or reduce costs. The agency should assess each recommendation and make appropriate engineering changes to design or processes.[e]
9. Construction Close-Out	49 C.F.R. § 18.50	When the project is completed, 49 C.F.R. § 18.50 requires the agency to complete a contract close-out of the award. According to state guidance, this includes an assessment of liquidated damages, a final inspection, formal acceptance of the contract, and a final invoice.
10. Right-of-Way Acquisitions (ROW)	23 C.F.R. § 1.23; § 710	23 C.F.R. § 1.23 defines ROW to include all project property (land) acquired and managed by the agency, which is acquired solely for placing the roadway and supporting facilities. The agency must comply with

Project Activity	Code of Federal Regulation	Description of Project Activity Reviewed
		Federal requirements in 23 C.F.R. § 710, and state ROW acquisition requirements--including using property appraisals, payments of just compensation to landowners, and relocation assistance.
11. Force Account Justification	23 C.F.R. § 635.204	When construction work is completed by a public agency, instead of a private contractor, 23 C.F.R. § 635.204 requires the agency to demonstrate that the planned force account is cost-effective. State guidance requires the use of force account to be justified through a "public interest finding" because the work was not open to competition.
12. In-kind Local Matching of Funds	49 C.F.R. § 18.24	49 C.F.R. § 18.24 defines instances when an agency can use non-monetary matching contributions of in-kind services or donated property. These matches replace the more traditional cash match that states and local agencies are required to provide for most Federal-aid projects.

[a] State procedures described in this exhibit represent the procedures and processes established by the states to implement the CFR requirements. This exhibit provides the procedure used in a sampled state that most clearly describes and best exemplifies state implementation of the CFR requirement.

[b] The "agency" refers to a state or local agency responsible for administering a Federal-aid highway or bridge construction project.

[c] Force account includes the labor, equipment, materials, and supplies directly incurred by a state transportation department, county, railroad, or public utility on a federally funded highway project.

[d] Some of the quality assurance regulatory requirements referenced pertain only to National Highway System projects.

[e] Some of the value engineering regulatory requirements referenced pertain only to National Highway System or Federal-aid System projects.

EXHIBIT D. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
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APPENDIX. AGENCY COMMENTS

U.S. Department of Transportation
Federal Highway Administration

Memorandum

Subject: **INFORMATION:** Federal Highway Administration Response to Office of Inspector General (OIG) Draft Report on FHWA's Oversight of Federal-aid and Recovery Act Projects Administered by Local Public Agencies (10U3001M000)

Date: June 8, 2011

From: Victor M. Mendez
Administrator

Reply to Attn. of: HIF/HAIM-10

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) funded more than 13,300 projects, improved more than 41,500 miles of road and more than 2,700 bridges to date, and it helped put tens of thousands of Americans back to work. Recognizing that the unprecedented scale, speed, and scope of the Recovery Act would magnify the risks inherent in providing effective stewardship for these funds, FHWA built upon its existing comprehensive risk management framework. Through mechanisms such as the FHWA National Review Team (NRT), multidisciplinary experts charged with conducting independent reviews of Recovery Act funded projects, the Agency provided consistent, national oversight of its administration of Recovery Act programs to help ensure Federal funds are used in accordance with statutory and regulatory requirements. Based on its previous work, FHWA recognized from the outset that Recovery Act projects administered by local public agencies (LPAs) presented a uniquely challenging set of risks.

The FHWA's Corporate Risk Assessment had previously identified subrecipients as one of the Agency's top risk areas. This information was a critical component used to formulate the Agency's Recovery Act Risk Plan, which further focused oversight on areas posing the highest risk, particularly LPAs. Using a multifaceted approach to risk management, including information from single audits, along with results from FHWA's programmatic reviews and its Financial Integrity Review and Evaluation Program, FHWA continues to address inherent challenges with LPA oversight for all projects. These include variable quality and oversight by State departments of transportation (DOTs) due to resource constraints, weak internal controls, and a general lack of experience by LPAs in handling Federal requirements and Federal-aid highway projects in particular.

The NRT's findings confirmed FHWA's expectations of the risks posed by States' oversight of LPA-administered highway projects. To date, the NRT has conducted 189 site visits touching 1,279 Recovery Act projects, resulting in more than 1,588 total NRT recommendations for division offices' appropriate action. Through priority action taken and vigilant monitoring, 72 percent of the NRT's Recovery Act recommendations issued have already been fully addressed and closed. For its most significant findings, the NRT issues Recovery Act Advisories, highlighting the need for immediate management attention. The LPA oversight is addressed in these advisories, including one issued in September 2010, which identified recurring LPA issues and emphasized the need for FHWA division offices to ensure the State DOT's preventive measures are effective. Specifically, the NRT highlighted a lack of assurance that State DOT's oversight activities complied with the single audit requirements and that audit findings were tracked and resolved timely. The NRT advisory also underscored the need to ensure required single audits are completed and findings are addressed expeditiously. The FHWA recognized the need for priority action to address all single audit findings and have already closed 60 percent of OIG Recovery Act related single audit recommendations issued as of April.

Issues associated with subrecipient reporting and oversight have been identified governmentwide and have been well documented through the single audit process. With oversight responsibilities of the Federal-aid highway program assumed by the States according to 23 United States Code (USC) §106, FHWA is utilizing the full scope of its authority to ensure that States' oversight of LPA-administered projects focus on required accounting and audit controls at the local government level. The FHWA is fully committed to providing reasonable assurance that Federal funds are used effectively with adequate safeguards against waste, fraud and abuse.

OIG Recommendations and FHWA Actions

Recommendation 1: Implement a policy establishing uniform procedures and criteria for Division Offices to use when assessing the ability of States to ensure LPAs meet Code of Federal Regulations (CFR) requirements. The policy should also require FHWA Headquarters to validate the accuracy of Division Office assessments.

Response: Concur. The FHWA will issue a new policy to establish uniform procedures and criteria for division offices to use when assessing the ability of the State DOTs to assure that Federal-aid requirements are met on LPA-administered projects. The new policy will include a sampling process for FHWA Headquarters to review assessments conducted at the division office level. Issuance of the new policy is targeted for completion by September 30, 2011, for use in the annual LPA assessment conducted in 2012.

Recommendation 2: Develop a Headquarters process to assess the effectiveness of division offices and State LPA corrective action plans to ensure deficiencies are promptly resolved. The process should specify the planned actions, milestones, level of government responsible for implementation, and ensure actions are completed as planned and on schedule.

Response: Concur. As noted in the report, FHWA Headquarters annually monitors and reports on the progress of the division office and LPA action plans. The policy described in the response to Recommendation 1 will help formalize FHWA Headquarters' procedures to assess and monitor the effectiveness of LPA corrective action plans to ensure expedited resolution of deficiencies identified. Issuance of the new policy is targeted for completion by September 30, 2011 for use in the annual LPA assessment conducted in 2012.

Recommendation 3: Develop a division office-based plan that will increase State oversight in the seven project activities in which we identified a high level of noncompliance with Federal requirements.

Response: Concur. The FHWA implemented the recommended division office-level plans throughout the Agency. The FHWA Headquarters will issue a memorandum to the division offices emphasizing the importance of working with States to ensure that the areas noted as having high rates of noncompliance are given particular attention in the oversight of LPA-administered projects. We expect to issue the memorandum by August 30, 2011. This will allow us to incorporate information obtained during implementation of Recommendation 4.

Recommendation 4: Assess the project transactions related to the $5 million in unsupported project costs we identified in California and Texas and review similar transactions within these projects for unsupported costs. The assessment would include developing an action plan to collect all unsupported costs or identify FHWA's rationale for acceptance of these costs.

Response: Concur. The FHWA will review the unsupported costs identified in the OIG audit and any confirmed unsupported costs will be recovered accordingly. We are currently reviewing OIG's assessment of the project transactions. We will provide a report by August 15, 2011, that identifies unsupported costs that will be recovered and those costs that are deemed to be adequately supported.

Recovery of costs will depend upon the standard that applies to the particular project. Not all Federal-aid projects are subject to the construction and contract administration provisions of Title 23 of the CFR. In particular, Title 23 of the USC provides that those projects not located on the National Highway System must be designed, constructed, operated, and maintained in accordance with State laws, regulations, directives, safety standards, design standards, and constructions standards. In conducting this review, we will assess compliance with the standards applicable to each project.

Overall, FHWA invested Recovery Act funds in highway and bridge projects that not only generated tens of thousands of jobs, but also provided a sound investment in America's transportation infrastructure. The FHWA anticipated the oversight risks involved with these investments, particularly with regard to LPAs, and implemented extraordinary controls in an effort to ensure these investments fully achieved their intended goals. The FHWA appreciates the efforts of the OIG to further strengthen its oversight of Recovery Act and Federal-aid projects administered by LPAs. 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.