
Office of Inspector General

Audit Report

FHWA DOES NOT EFFECTIVELY ENSURE STATES ACCOUNT FOR PRELIMINARY ENGINEERING COSTS AND REIMBURSE FUNDS AS REQUIRED

Federal Highway Administration

Report Number: ST-2016-095

Date Issued: August 25, 2016





Memorandum

U.S. Department of
Transportation

Office of the Secretary
of Transportation
Office of Inspector General

Subject: **INFORMATION**: FHWA Does Not Effectively
Ensure States Account for Preliminary
Engineering Costs and Reimburse Funds as
Required
Federal Highway Administration
Report No. ST-2016-095

Date: August 25, 2016

From: Barry J. DeWeese
Assistant Inspector General for
Surface Transportation Audits

Reply to
Attn. of: JA-30

To: Federal Highway Administrator

The Federal Highway Administration (FHWA) authorizes billions of dollars in Federal-aid funding for preliminary engineering (PE) to assist States in the design and related ground work needed before a highway or bridge project advances to physical construction or acquires right-of-way.¹ To achieve program efficiency, Federal law requires States to repay the Highway Trust Fund the full amount of Federal-aid expended on PE when a project does not acquire right-of-way or start construction within 10 years after Federal funds expended on PE were first made available.² FHWA's Division Offices are responsible for authorizing PE funding, assessing States' PE systems and processes, and collecting PE repayment as required. However, FHWA allows States to extend the 10-year limit under certain conditions, such as when the delay is reasonable and beyond the State's control.

Given the billions of dollars in Federal funds spent on State highway and bridge PE projects, we assessed FHWA's policies and procedures for (1) accounting for Federal PE funds used for highway projects, and (2) ensuring States repay the Highway Trust Fund for Federal PE expenditures when required.

We conducted this audit in accordance with generally accepted Government auditing standards. Our audit assessed PE oversight and internal controls at

¹ Right-of-way is new real property that must be acquired in order to construct or complete a transportation project.

² 23 U.S.C. § 102(b).

FHWA Headquarters and four Division Offices in Alabama, California, New York, and Pennsylvania. To conduct our work, we reviewed recent Division Office actions for 718 projects to assess compliance with PE requirements. We also selected a statistical sample of 76 highway and bridge projects from a universe of 28,459 PE projects reported in FHWA's Fiscal Management Information System (FMIS) and authorized in fiscal years 2000 through 2004.³ The results of our statistical sample allowed us to project the amount of Federal PE funding that is at risk of not being reimbursed to the Highway Trust Fund or acted on as required by FHWA's policy after the 10th fiscal year the funds were made available. These results also allow us to project the total value of PE projects incorrectly recorded as PE. See exhibit A for a full description of our scope and methodology.

RESULTS IN BRIEF

FHWA does not effectively account for Federal highway and bridge funds used for PE. Specifically, the four FHWA Division Offices we reviewed do not effectively assess whether States' systems and processes accurately account for PE projects, as required by FHWA Order 5020.1. For example, a Division Office determined that a State lacked processes for monitoring whether PE requirements were followed at the 10-year limit; however, the Division Office did not follow up on these findings for 5 years, contributing to the State's PE expenditures that have yet to be repaid. This occurred because FHWA Headquarters does not enforce PE oversight requirements, and Division Office officials do not consider State compliance with PE repayment requirements to be a high risk. In addition, FHWA lacks effective controls and practices to promote transparent and accurate accounting for PE projects. We identified potentially improper PE authorizations, miscoding of PE projects, and use of multiple Federal project numbers for the same PE project—all of which impede transparent and accurate accounting. For example, some Division Offices used a funding authorization method for some PE projects that FHWA has not demonstrated to be allowable—resulting in about \$1.1 billion in potentially improperly authorized PE expenditures. Additionally, States incorrectly coded non-PE projects as PE in FMIS, FHWA's financial information database. Based on these results, we project that Division Offices approved approximately \$3.1 billion⁴ in Federal PE expenditures (8 percent of total PE expenditures) for non-PE highway and bridge projects nationwide. As a result, FHWA is at risk of inaccurately accounting for or not collecting PE repayments as required.

³ Our 76 sampled projects represented approximately \$1.3 billion of the over \$37.8 billion in Federal-aid highway funds expended on PE projects. We selected Alabama, California, New York, and Pennsylvania for a more detailed review since they had a large number of projects in our statistical sample.

⁴ Our review determined that 12 of the 76 sampled projects were non-PE projects and coded incorrectly as PE in FMIS. Our projection has a precision of +/- \$2.6 billion at the 90-percent confidence level.

FHWA lacks adequate processes to ensure States repay Federal funds spent on PE. For one-third of the projects in our statistical sample, FHWA did not take prompt action to ensure the State complied with Federal PE requirements when the project did not acquire right-of-way or start construction within the 10-year limit.⁵ Based on these results, we project that \$3.3 billion of Federal funds authorized in fiscal years 2000 through 2004 were at risk of not being repaid to the Highway Trust Fund or not used efficiently due to FHWA's inaction. In some instances, States continued using PE funding for years after their projects had exceeded the 10-year limit for acquiring right-of-way or starting construction. When PE actions were taken, the four Division Offices we reviewed did not consistently follow FHWA policy. Specifically, the Division Offices (1) extended the 10-year limit untimely and without required justification, (2) allowed States to avoid PE repayment without adequate justification, and (3) did not ensure States repaid PE costs timely. These issues occurred, in part, because FHWA has not implemented sufficient controls and guidance for enforcing compliance with PE requirements. For example, FHWA lacks clear guidance on how far PE projects should reasonably progress before PE repayment or other appropriate action is required, allowing for inconsistent interpretations across the Division Offices. In addition, FHWA has not defined the financial status of States' PE expenditures after the 10-year limit has passed, so the Agency does not take consistent financial accounting actions to manage the billions of dollars of funding spent on PE.

We are making several recommendations to help FHWA better account for Federal funds spent on PE and ensure States reimburse the Highway Trust Fund for federally funded PE expenditures when required.

BACKGROUND

FHWA Order 5020.1, "Repayment of Preliminary Engineering Costs," dated April 26, 2011, directs Division Offices to (1) ensure States' accounting systems can accurately identify PE costs by project and (2) work with States to establish procedures for regularly identifying PE projects nearing or exceeding the 10-year limit. FHWA authorizes the use of Federal aid for PE through project agreements with States. The date of the project's PE funding authorization starts the clock on the State's 10-year limit to acquire right-of-way or start construction. When a PE project exceeds the 10th fiscal year after the fiscal year in which Federal funds for PE were made available without acquiring right-of-way or starting construction, the Division Offices are required to take one of three actions: (1) approve the State's request for an extension of the 10-year limit, (2) require repayment of PE

⁵ To determine if prompt action occurred at the 10-year limit, we excluded the miscoded PE projects from our sample and universe. Based on the remaining 64 of 76 sampled projects (valued at \$1.2 billion in Federal-aid expenditures), we found that 21 did not receive prompt action. Our \$3.3 billion projection has a precision of +/- \$1.2 billion at the 90-percent confidence level.

expenditures, or (3) decide not to require PE repayment. FHWA has a longstanding practice of not requiring PE repayment when another Federal law, such as the National Environmental Policy Act of 1969 (NEPA), results in the project's termination.

FHWA DOES NOT EFFECTIVELY ACCOUNT FOR FEDERAL FUNDS SPENT ON PRELIMINARY ENGINEERING ON HIGHWAY AND BRIDGE PROJECTS

FHWA does not effectively account for Federal funds spent on PE highway and bridge projects. Specifically, the four FHWA Division Offices we reviewed do not effectively assess whether States' systems and processes accurately account for PE projects. In addition, FHWA lacks effective controls and practices to promote transparent and accurate accounting for PE projects in FMIS. Without adequate controls and proper authorizations, FHWA is at risk of not accurately accounting for or pursuing PE repayment as required.

Division Offices Do Not Effectively Assess Whether States' Systems and Processes Accurately Account for PE Projects

According to FHWA Order 5020.1, Division Offices are responsible for (1) ensuring States' accounting systems can accurately identify PE costs by project and (2) working with States to establish procedures for regularly identifying PE projects nearing or exceeding the 10-year limit to acquire right-of-way or begin construction.

However, none of the four Division Offices we reviewed could provide evidence that they effectively assessed whether States' systems accurately provide PE project data. Additionally, three of the four Division Offices took only limited actions to review States' procedures for identifying PE projects nearing or exceeding the 10-year limit, while the remaining Division Office did not take any such oversight actions. For example, in FHWA's assessment of State PE oversight, conducted in 2007, a Division Office determined that a State lacked processes for monitoring the 10-year PE requirement and requesting timely extensions for PE repayment. However, the Division Office did not effectively follow up on these findings until 5 years later. The Division Office's inaction contributed to State PE expenditures that have yet to be reimbursed to the Federal Government.

Further, although Local Public Agency (LPA) projects⁶ represent a significant amount of one State's Federal-aid highway spending, a Division Office relied entirely on the State to account for its LPA project actions, including PE actions.

⁶ LPA projects are FHWA Federal-aid projects managed by cities, counties, or other local entities.

For these projects, the Division Office did not independently verify whether the State complied with PE requirements to account for PE costs and identify the PE projects exceeding the 10-year limit.

The major factors that contribute to the Division Offices' ineffective oversight of State PE compliance include the following:

- FHWA Headquarters does not monitor Division Offices' PE oversight efforts. An FHWA Headquarters official stated that FHWA Order 5020.1 assigns responsibility for PE oversight exclusively to the Division Offices. However, the order lacks clarity on the specific actions that Division Offices should take to enforce State compliance with PE requirements in the policy. For example, the order does not specify how the Division Offices should verify States' PE systems and processes, discuss tracking tools, or describe enforcement actions to be taken if a State fails to comply with PE requirements.
- FHWA's oversight reviews do not require assessments of State compliance with PE requirements. For example, FHWA conducts Financial Integrity Review and Evaluation Program (FIRE) reviews to provide financial oversight of States' Federal-aid highway programs, but State compliance with PE requirements is not a required review element in FHWA's policy. According to division officials, FHWA's reviews of inactive obligations and project closeouts could also be used to identify PE projects subject to reimbursement; however, these reviews would not identify non-compliant PE projects that continue to actively expend funds and are not being closed out.
- The four Division Offices we interviewed did not consider compliance with PE requirements to be a high risk. In 2015, one Division Office declared PE a moderate risk area after it discovered that the State did not repay or take other appropriate actions for numerous projects that received millions of dollars in Federal funds for PE.

FHWA Lacks Effective Controls and Practices To Promote Transparent and Accurate Accounting for PE Projects

Transparent and accurate accounting is important for FHWA to oversee States' compliance with PE requirements at the 10-year limit. However, our review determined that FHWA lacks effective PE accounting practices and controls. Specifically, (1) FHWA has not demonstrated that PE funding authorized under a method called Statewide Preliminary Engineering Systems (SPES) is allowable; (2) States' miscoding of PE projects results in inaccurate accounting; and (3) States' use of multiple Federal project numbers for the same PE project impedes FHWA tracking.

FHWA Has Not Demonstrated That PE Funding Authorized Under Statewide Preliminary Engineering Systems Is Allowable

According to FHWA guidance, proper project authorization is the first step in sound management of Federal funds. However, during our sample period, three Division Offices in our statistical sample review used an approach to authorize Federal PE funding that may be unallowable. Only one of the three Division Offices continues to use this approach today. Specifically, based on our review of a sample of six PE projects authorized between fiscal years 2000 and 2004, the Division Offices authorized \$1.1 billion in Federal funds expended on PE using SPES—a method that provides a form of incremental or phased funding for a number of State PE projects using a single Federal project number.

Previous FHWA reports have concluded that phased funding, such as what is found in SPES, is unallowable under the Federal-aid highway program. For example, a 2002 FHWA-sponsored report⁷ on innovative financing initiatives noted that phased funding was an unallowable funding method because it funds projects incrementally over several years instead of fully funding the projects when they are authorized. Incremental funding of this nature may be inconsistent with Title 23 Code of Federal Regulations (C.F.R.) Section 630.106(f)(1), which generally requires the total cost of a Federal-aid project or project phase, such as PE, be identified when the project agreement is executed.

In addition, a 2007 FHWA Division Office internal report⁸ concluded that SPES projects were unallowable for several reasons. First, SPES projects commit Federal funds for future unidentified project costs through phased funding. Second, SPES combines multiple projects under one project authorization, contrary to 23 C.F.R. Section 630.108, which requires a project agreement for each Federal-aid project. Third, States do not have to specify all PE projects on a SPES project agreement; therefore, when FHWA authorizes funding through the agreement, FHWA effectively delegates its responsibility to the State to approve Federal funding for each project included in SPES. Title 23 of the United States Code, Section 106, which details the Federal responsibilities a State can assume on a federally funded project, does not grant the State authority to approve Federal funding. For these reasons, SPES limits FHWA's ability to transparently and accurately account for PE project costs and oversee States' compliance with PE requirements.

Despite these reports, FHWA has not prohibited the use of SPES, nor demonstrated that SPES is an allowable method. In a recent legal determination,

⁷ Cambridge Systematics Inc. with Roskin Consulting and TransTech Managements Inc., *Final Report on Performance Review of U.S. DOT Innovative Finance Initiatives*, July 2002.

⁸ This 2007 Wisconsin Division Office report noted that although SPES had been a longstanding practice of the Division Office, the Division Office ultimately discontinued the use of SPES for the reasons noted in our report.

FHWA contended that SPES makes a lawful obligation for eligible and allocable activities and that the method requires the States to maintain effective internal controls. FHWA also contends that SPES is allowable because the Office of Management and Budget's (OMB) cost principles⁹ and recent provisions in the December 2015 Fixing America's Surface Transportation (FAST) Act¹⁰ allow the States to similarly combine multiple bridge projects in a single project agreement. However, while FHWA's legal determination has outlined a basis to allow the use of SPES, it has not provided sufficient detail to demonstrate that SPES complies with Federal-aid rules, identified when it is appropriate to use SPES to authorize PE, or specified the internal controls needed to effectively manage SPES.

States' Miscoding of PE Projects Results in Inaccurate Accounting

Division Offices do not effectively verify whether States accurately designate their projects as PE in FMIS and on project agreements, which FHWA uses to monitor and authorize Federal funds. In our sample of 76 projects coded as PE, States incorrectly designated 12 of these as PE. Consequently, the Division Offices approved about \$76 million in miscoded Federal PE expenditures for these 12 projects that did not meet FHWA's criteria for Federal funding of PE costs. Based on these results, we project that Division Offices approved a total of over \$3.1 billion of Federal PE expenditures for non-PE highway and bridge projects nationwide—or approximately 8 percent of the total PE expenditures.

The incorrect coding occurred because until recently, FHWA had insufficient guidance on which activities should be designated as PE. During our audit, FHWA issued a March 2015 memorandum to improve the consistency of newly authorized PE projects in FMIS.¹¹ According to the memorandum, when PE activities are not properly authorized, FHWA's administration and compliance with PE requirements pose a significant challenge. FHWA's failure to ensure accurate coding of PE projects in FMIS and project agreements impedes transparent and accurate accounting of Federal funds provided for PE.

States' Use of Multiple Federal Project Numbers for the Same PE Project Impedes FHWA Tracking

For some of the projects we reviewed, FHWA could not track PE funding data when States used multiple Federal projects numbers to authorize PE for the same project. According to FHWA policy, States may use separate project numbers to fund each individual project phase such as PE, right-of-way, and construction.

⁹ 2 C.F.R. Part 200.

¹⁰ Public Law 114-94, Section 1111, allows for the bundling of two or more similar bridge projects that are eligible; are included as a bundled project in a transportation improvement program or a statewide transportation improvement program; and are awarded to a single contractor or consultant pursuant to a contract for engineering and design or construction between the contractor and an eligible entity.

¹¹ FHWA Memorandum, Guidance on Preliminary Engineering Authorization in FMIS, March 11, 2015.

Although FMIS has a “related project” function to facilitate tracking for projects with several Federal project numbers, our review determined that States sometimes do not use this function to annotate related project numbers because FHWA policy and guidance do not require States to do so.

States’ use of multiple, unlinked Federal project numbers in FMIS for one project impedes FHWA’s ability to monitor whether the State takes required actions at the 10-year limit. Specifically, using a separate project number for a project’s PE phase can give it a new PE authorization date, which may incorrectly extend the project’s 10-year limit. Moreover, the practice of using multiple project numbers for one project may involve incrementally obligating Federal aid for the project’s PE activity—potentially a type of phased funding that is not allowed under the Federal-aid highway program.

FHWA PROCESSES DO NOT ENSURE STATES TAKE ACTION TO REPAY PRELIMINARY ENGINEERING FUNDS WHEN REQUIRED

FHWA processes do not ensure States take action to repay Federal funds spent on PE when required. For one-third of PE projects in our nationwide statistical sample, FHWA did not ensure States took prompt action on projects that had not acquired right-of-way or started construction within the 10-year limit. When PE actions were taken, the four Division Offices did not consistently follow FHWA policy, according to our review of recent actions taken on 718 PE projects. These issues occurred, in part, because FHWA has not implemented sufficient controls and guidance for enforcing compliance with PE requirements.

For One-Third of Projects, FHWA Did Not Ensure States Took Required Actions When PE Projects Exceeded the 10-Year Limit

For 21 of 64 PE projects in our nationwide statistical sample, FHWA did not take prompt action to ensure the States complied with Federal PE requirements when the projects did not acquire right-of-way or start construction within 10 years. Specifically, FHWA allowed States to continue funding PE for these 21 projects without either reimbursing the Highway Trust Fund or extending the 10-year limit. In some instances, States continued funding PE expenditures for years past the 10-year limit. Based on the results from our sample, we project that \$3.3 billion¹² (or approximately 9 percent of Federal funds spent on PE nationwide) were at risk of not being repaid to the Highway Trust Fund or efficiently made available for other projects to use at the 10-year limit due to FHWA’s inaction.

¹² During a 5-year period ending fiscal year 2014.

Division Offices Did Not Consistently Follow FHWA Policy When Taking PE Actions

In our review of four Division Offices' actions on 718 recent projects to enforce PE requirements at the 10-year limit, we found that the Division Offices did not comply with FHWA's policy by (1) extending the 10-year limit untimely and without required justification, (2) allowing States to avoid PE repayment without adequate justification, and (3) not ensuring States repaid PE expenditures timely.

Division Offices Did Not Extend the 10-Year Limit Timely and With Required Justification

The four Division Offices we reviewed provided us with 142 recent PE projects with approved extensions to the 10-year limit.¹³ Our assessment determined that the majority of extensions for these 142 projects were not approved timely or were not justified in accordance with FHWA's PE extension requirements. Table 1 summarizes the PE extension issues we identified.

Table 1. Summary of Issues With Extensions for PE Projects Exceeding 10-Year Limit

TIMELINESS (Total projects reviewed: 142)		
Timeliness Issue	Number	Percent
Division Offices approved untimely extensions to the 10-year limit	75	53%
Division Offices did not follow up with States when extensions expired	19	13%
JUSTIFICATION (Total of projects reviewed: 116 of the 142 projects)		
Justification Issue	Number	Percent
Division Offices approved extensions lacking documented justifications	61	53%
Division Offices approved multiple extensions	16	14%
Division Offices approved extensions without sufficient justifications	7	6%
Division Offices automatically approved 3-year extensions to LPA projects	39	34%

Source: OIG analysis of Division Office records

We reviewed 142 PE projects with current and prior extensions to the 10-year limit to determine whether the extensions were approved timely.¹⁴ For 75 of these projects (53 percent), the Division Offices approved extensions untimely—from

¹³ Our analysis includes those PE projects we identified in FMIS or were provided by FHWA and State officials. Due to internal control weaknesses identified during this review, we could not verify whether FHWA and the States provided a comprehensive list of approved PE extensions, PE reimbursements, and PE reimbursements not required.

¹⁴ Since FHWA's decisions not to pursue PE reimbursements are not readily identifiable in FMIS or tracked by the Division Offices, we requested that the Division Offices self-report this data for the purposes of our review. However, we could not verify whether the data were comprehensive. Two Division Offices only provided partial lists, and one could not provide data related to LPA projects.

1 month to 11.5 years after the 10-year limit. Untimely extensions reduce the effectiveness of Federal PE laws intended to achieve program efficiency if enforced. Moreover, for 19 projects, existing extensions had expired, but there was no evidence that Division Offices promptly took actions to ensure States either repaid PE costs or received another justified extension.

We also reviewed 116 of the 142 projects to verify whether States' justifications to extend the 10-year limit complied with FHWA requirements. Specifically, FHWA Order 5020.1 requires States requesting an extension to provide justification that addresses all five elements listed in table 2. However, FHWA approved extensions for 61 of the 116 PE projects (53 percent)—incurring \$98 million in Federal expenditures—which were not fully justified or documented to show that the requested delays for right-of-way acquisition or construction were reasonable and beyond the State's control.

Table 2. FHWA Requirements for State Requests To Extend the 10-Year Limit

Requests to extend the 10-year limit must address the following elements:
1. Support that the delay is reasonable and beyond the State's control
2. A definite schedule
3. The State's commitment to follow the schedule
4. An evaluation of time needed to advance the project to the next phase
5. Documentation of recent steps taken to advance the project

Source: FHWA Order 5020.1

Division Offices also approved multiple extensions for 16 of the 116 PE projects (14 percent), which significantly extended the time the projects could take to acquire right-of-way or start construction. Specifically, these projects receiving multiple extensions authorized between 12 and 21 years to acquire right-of-way or start construction (compared to the 10-year limit)—during which the States continued to spend Federal funding on PE. FHWA Order 5020.1 lacks criteria regarding the use of multiple extensions for PE. However, given the considerable time added to these PE projects, it is less likely that States submitted accurate definite schedules or evaluations of the time needed to complete the project as required by FHWA's policy.

In addition, 7 of 116 PE projects in our sample (or 6 percent) did not have sufficient justifications for extending the 10-year PE requirement per FHWA policy. According to FHWA Order 5020.1, a sufficient justification for an extension includes: (1) litigation delaying project development; (2) complex project consultations involving Federal, State, local agencies, and sovereign nations; and (3) public involvement that alters the State's plan, project, purpose,

and need. However, for these seven projects, the justifications for approved time extensions were based on typical delays found in the environmental review process, even though 10 or more years had passed since funds for the PE project were made available. For instance, one State requested an additional 6 years to acquire right-of-way or start construction for a 13-year old project due to environmental delays typically found on highway projects.

Finally, a Division Office has a policy to automatically provide a 3-year extension to the 10-year PE requirement for LPA projects in one State—even if the State requests a much shorter extension. The Division Office automatically approved 3-year extensions for a total of 39 of the 116 PE projects we reviewed (34 percent).

Division Offices Allowed States To Avoid PE Repayment Without Adequate Justification

FHWA Order 5020.1 states that FHWA cannot grant an outright waiver for PE repayment. However, the Agency does not require a State to repay federally funded PE when the project is terminated due to compliance with another Federal law, such as NEPA. We reviewed more than half (28) of the 52 projects identified by the Division Offices for which PE repayment was not pursued even though these projects did not acquire right-of-way or start construction in 10 years as required. For 5 of these projects (18 percent), Division Offices had adequate justification, based on FHWA criteria, to allow States not to reimburse PE costs.

However, for 23 projects (82 percent), Division Offices allowed the States to avoid repaying a total of \$45 million in PE costs without adequate justification. For these projects, FHWA allowed States to avoid PE repayment for reasons that were inadequately documented or not directly related to compliance with NEPA or another Federal law. For example, Division Offices allowed States to avoid paying \$24.7 million in PE expenditures for six PE projects, despite insufficient documentation. For two PE projects, Division Offices allowed States to avoid repaying \$10.1 million in PE expenditures because of Federal or State budget issues—not a justifiable reason per FHWA policy. For other projects, the State stopped the project due to issues unrelated to the NEPA process, or there were no documented NEPA evaluations or findings.

Additionally, one Division Office official stated that the State may “spin off” a project from a terminated PE project—after which the State does not have to repay PE costs for the terminated project. Allowing States to avoid PE repayments for this reason may be acceptable when there is a direct link to the terminated project’s NEPA review findings; however, FHWA does not have guidance specifying when it is acceptable to do so and how this should be documented. Additionally, the States may have spent considerable Federal funds on PE for the

terminated projects, calling into question whether allowing States to avoid PE repayment in these cases represents good stewardship of Federal dollars.

Division Offices Did Not Ensure States Repaid Federally Funded PE Expenditures Timely

We reviewed the 4 States' PE repayments for 548 PE projects between fiscal years 2010 and 2014. Our review determined that States did not repay the Government timely for 253 (46 percent) of these projects. According to FHWA Order 5020.1, States who are required to repay PE expenditures must reimburse the Government for the project in the next Federal-aid billing cycle. To repay these federally funded PE expenditures, States reduce the amounts reimbursed on their other highway and bridge projects rather than actually reimburse the Highway Trust Fund.

For the 253 PE projects, the States made untimely repayments to the Government—between 1 and 23 years after the 10th fiscal year following the date of the PE project's authorization. The delayed reimbursements for one Division Office during this period totaled about \$149 million. The delays occurred because FHWA does not provide guidance to Division Offices on how to enforce the requirement that States repay federally funded PE expenditures timely.

FHWA Has Not Implemented Sufficient Controls for Enforcing Compliance With PE Requirements

Officials from one Division Office stated that they cannot effectively enforce PE requirements in FHWA Order 5020.1 because the State, for the most part, refuses to repay PE costs when required. For example, the Division Office requested nearly \$22 million in PE cost repayments for eight projects, but the State has yet to repay the Government. Similarly, for five additional projects, for which the Division Office had denied time extensions, the State disagreed with the Division Office's decision that PE costs be repaid.

One reason for ineffective enforcement of PE requirements is that FHWA Order 5020.1 broadly defines how far PE projects should reasonably progress before repayment or other action is required by the Division Office. This broad guidance allows for inconsistent interpretations across the Division Offices of when PE repayments should be pursued.

FHWA also does not have appropriate internal controls commensurate to the financial status of PE expenditures after a project does not acquire right-of-way or start construction within the 10-year limit. FHWA has not developed management tools and financial controls to ensure that PE expenditures can be accounted for and repaid timely. Specifically, FHWA has not defined the financial status of States' PE expenditures after the 10-year PE limit has passed to ensure that

appropriate actions occur. For example, if FHWA classified PE expenditures as a receivable or credit owed by the State after the 10-year limit has passed, then the Agency would be required to have a strategy in place to take appropriate financial accounting actions at the 10-year limit to ensure these amounts are consistently recorded, monitored, collected, and reported. However, because FHWA has not classified PE expenditures as such, FHWA has not taken consistent financial accounting actions.

Finally, FHWA's Chief Financial Officer (CFO) has a responsibility to ensure Federal funds expended on PE comply with Federal requirements. However, the CFO does not provide ongoing oversight of FHWA's required PE reimbursement actions. Further, although FHWA provides billions of dollars in funding for PE to States, the Agency has not established performance measures for achieving full compliance with the 10-year limit as part of its Annual Performance Report and Annual Performance Plan. Reporting on compliance with the 10-year limit would keep stakeholders updated on FHWA's progress in achieving this goal and help inform their decisions regarding program performance.

CONCLUSION

To achieve program efficiency, Federal law requires highway and bridge projects that receive Federal funding for PE to progress to right-of-way or construction within 10 years or the Federal funds expended must be repaid. FHWA's Division Offices have taken some actions to pursue PE repayment or other appropriate oversight actions as required. However, FHWA did not effectively account for federally funded PE expenditures, or ensure that States repaid funds or requested extensions when required. Until FHWA enforces PE requirements, clarifies PE guidance, and strengthens its financial controls for funding PE, the Agency may not be able to effectively safeguard the billions of dollars of Federal funds provided to States for PE.

RECOMMENDATIONS

We recommend that the Federal Highway Administrator:

1. Conduct an assessment of the risks and existing controls associated with the Division Offices' oversight of State's processes to track PE projects, and identify improvements to Division Office oversight.
2. Conduct an assessment of the accuracy and completeness of PE project authorizations. Correct any errors in FMIS projects that should be coded as PE as a result of this assessment.
3. Update FHWA Order 5020.1 or develop Agency guidance to state FHWA's policy concerning compliance with Title 23 U.S.C. Section 102(b), including the following:
 - a) Define when a project progresses to right-of-way or construction.
 - b) Describe accurate coding parameters for PE projects in FMIS.
 - c) Define the means of tracking the 10-year limit for PE projects, including those involving multiple Federal project numbers.
 - d) Define recordkeeping and documentation expectations for tracking reimbursements, extending the 10-year limit, and decisions not to pursue reimbursements.
 - e) Define roles and responsibilities for Division Offices and FHWA Headquarters for consistent oversight and enforcement of PE requirements before and after the 10-year limit.
 - f) Define FHWA Headquarters' policy on resolving differences arising between Division Offices and States regarding required PE actions.
4. Obtain a legal determination from the Office of the Secretary to permit SPES projects and similar funding agreements and establish internal controls to ensure compliance with Federal requirements. Implementing this recommendation could put the \$1.1 billion in PE funds to better use.
5. Develop and implement financial controls and processes to monitor PE projects exceeding the 10-year limit, approved extensions, and reimbursements not pursued when PE projects do not progress within the 10-year limit. Implementing this recommendation could put \$3.3 billion in PE funds to better use.
6. Develop performance measures that track compliance with the 10-year limit and report progress.

7. For the \$143 million in PE projects questioned in this report without adequate justification for time extensions or avoided repayments, obtain from the States appropriate support or repayment of PE expenditures as required.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FHWA with our draft report on June 24, 2016, and received its response on August 9, 2016, which is included as an appendix to this report. FHWA concurred with recommendations 1, 2, 3, 5, 6 and 7 and agreed to complete necessary actions to implement each of these recommendations by December 31, 2017. Accordingly, we consider these recommendations resolved but open pending completion of planned actions. FHWA partially concurred with recommendation 4 but agreed to address our recommendation by assessing the use of SPES and implementing adequate controls as needed by June 30, 2017. Therefore, we consider this recommendation resolved but open pending completion of planned actions.

Despite either concurring or partially concurring with all of our recommendations, FHWA, in its response, expressed concern about the projections in our report, which estimated a total of \$4.4 billion of Federal PE funds that could be put to better use and \$3.1 billion in miscoded PE projects. Specifically, FHWA stated that our projections are overstated, misleading, and confusing—and imply that Federal funds were wasted or misspent or improperly paid. We disagree. As FHWA acknowledges in its response, Federal requirements for PE repayment are intended to promote program efficiency—which is achieving maximum program productivity with minimum waste or expense. Accordingly, our identification of funds put to better use provides an estimate, not of improper payments, but of the amount of Federal PE funds that could be used more efficiently if FHWA takes our recommended corrective actions. We worked closely with OIG’s statistician to design a statistically rigorous methodology, which enabled us to make projections at a 90-percent confidence level. See exhibit A for our full scope and methodology.

We appreciate the courtesies and cooperation of Federal Highway Administration 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.

#

cc: DOT Audit Liaison (M-1)
FHWA Audit Liaison (HAIM-13)

EXHIBIT A. SCOPE AND METHODOLOGY

We conducted this performance audit from September 2014 through June 2016 in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The objectives of this audit were to assess whether FHWA (1) accounts for Federal funds used for preliminary engineering on highway projects, and (2) ensures States reimburse the Highway Trust Fund for Federal expenditures on preliminary engineering when required.

To conduct our review, we assessed PE oversight actions by FHWA Headquarters and four Division Offices in Alabama, California, New York, and Pennsylvania. These States were selected because they had a large number of projects in the sample. We conducted a statistical sample of 76 highway and bridge projects from a universe of 28,459 non-SPES PE projects reported in FMIS and authorized in fiscal years 2000 through 2004 nationwide. OIG's statistician selected this sample using a stratified probability proportional to size with replacement methodology. Specifically, we stratified the universe of PE projects into 2 strata and selected 55 out of 13,522 projects from stratum 1 with projects that had no dates for right-of-way and construction. Then, we selected 21 out of 14,937 projects from stratum 2, which had dates for right-of-way, construction, or both. The 76 projects in our sample represented approximately \$1.3 billion of the more than \$37.8 billion in total Federal-aid highway funds expended on PE projects nationwide.

To assess whether FHWA accounts for Federal funds expended on PE highway and bridge projects, we reviewed the sample of 76 projects and identified 12 non-PE projects were coded incorrectly as PE in FMIS. The results of our review allowed us to estimate the total amount of Federal PE funding spent on non-PE projects in our universe, with 90-percent confidence and a precision of +/- \$2.6 billion. We also assessed whether FHWA complied with requirements in FHWA Order 5020.1 to (1) ensure States' accounting systems can accurately identify PE costs by project and (2) work with States to establish procedures for regularly identifying PE projects nearing or exceeding the 10-year limit. Finally, we evaluated whether FHWA's PE accounting practices and controls allowed for transparent and accurate accounting for PE projects, looking specifically at funding authorization methods, coding in FMIS, and tracking of multiple Federal project numbers.

To assess whether FHWA ensures States reimburse the Highway Trust Fund for Federal PE expenditures when required, we reviewed a smaller sample of PE

projects to determine whether FHWA took actions as required. We removed the 12 non-PE projects from our original 76-project sample, which reduced our sample size to 64 with an expenditure amount of \$1.2 billion.¹⁵ This reduced sample allowed us to project the total amount of Federal PE funding that is at risk of not being reimbursed to the Highway Trust Fund as required, with 90-percent confidence and a precision of +/- \$1.2 billion. With the assistance of our engineering expert, we analyzed project documentation to determine whether FHWA and the States completed PE actions as required and whether projects progressed to right-of-way or construction as reported.

We also assessed 718 PE projects, which the Division Offices reported that they had monitored or taken actions on over a 5-year period, by reviewing documentation or other information provided by the State. Specifically, we reviewed all 142 projects that had approved time extensions to the 10-year limit and for 116 of these projects available for a more detailed review we verified whether States' justifications to extend the 10-year limit complied with FHWA requirements. We also reviewed all 548 reimbursement actions and 28 of 52 instances in which repayment was not required. We reviewed all instances provided by three Division Offices and reviewed nearly one-third of those provided by the remaining office that were specifically applicable to the PE requirement. In certain instances, FHWA did not provide the PE project data we requested. In these cases, we accounted for the transaction as unsupported.

¹⁵ We also reduced the size of the universe using our estimate of the expenditures of non-PE projects.

EXHIBIT B. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
David Pouliott	Program Director
Stephen Gruner	Project Manager
Stuart Weibel	Senior Auditor
Cynthia Auburn	Senior Analyst
John Hannon	Senior Analyst
Danietta Williams	Senior Analyst
Anne-Marie Joseph	Senior Engineer
Seth Kaufman	Senior Counsel
Petra Swartzlander	Senior Statistician
Christina Lee	Writer-Editor
Tom Denomme	Project Consultant

APPENDIX. AGENCY COMMENTS



U.S. Department
of Transportation
Federal Highway
Administration

Memorandum

Subject: **INFORMATION:** Federal Highway
Administration (FHWA) Response to Office
of Inspector General (OIG) Draft Report on
FHWA Oversight of Preliminary
Engineering

Date: August 9, 2016

From: Gregory G. Nadeau
Administrator

In Reply Refer To:
HIF-1/HCFB-30

To: Barry J. DeWeese
Assistant Inspector General for
Surface Transportation Audits

We have reviewed the OIG draft report on FHWA's oversight of preliminary engineering (PE) and note that the OIG did not find any fraud, waste, or abuse of Federal funds during their audit. However, we are concerned that the OIG's projections in the report are overstated, misleading, and confusing to readers unfamiliar with the Federal-aid highway program (FAHP). The OIG's audit of FHWA's PE oversight covers projects that were authorized from 2000 to 2004; therefore, FHWA believes that the OIG's projections of Federal funds considered "at risk" are overstated as they do not accurately reflect FHWA's program improvements implemented over the past few years. The projections in the draft report are confusing and misleading to readers not familiar with the FAHP as they imply that Federal funds were somehow wasted or misspent. For the projects OIG identified as being miscoded, it is important to understand that the types of work identified in the project authorizations were still eligible uses of Federal funds. Therefore, figures cited in the OIG's report should not be misconstrued as improper payments. Additionally, the OIG did not provide proper context about the nature of how the FAHP works. Specifically, eligible PE costs that are required to be repaid by a state due to the passage of time without proceeding to acquisition of right-of-way or construction are simply redirected to other eligible activities within that same state; thus, any repayments do not permanently increase the size of the Highway Trust Fund.

The FHWA safeguards over \$40 billion annually in Federal funds for the construction and preservation of the Nation's highway and bridges and is responsible for oversight of funds expended on PE and the program efficiency requirements under 23 U.S.C. 102(b). The program efficiency provision is designed to give states and localities an incentive to focus resources on projects that have a higher likelihood of proceeding to completion. Implementing the PE repayment requirements does not result in a net saving to the Highway Trust Fund nor does it increase, over time, a state's available Federal-aid funding.

Repayments of previously authorized PE expenditures incurred by states and localities are in essence recycled within the state. In this process, the state uses its funds to reimburse the Highway Trust Fund and then deobligates the excess contract authority associated with the repayment, increasing the state's unobligated Federal-aid balance. These recovered Federal funds are then subsequently used by the state to program other projects, enabling the state to maximize the use of its Federal resources.

The PE provision promotes program efficiency, and FHWA must balance the risks related to PE repayment and the efficiency it encourages against all other components and requirements of the FAHP. Using a risk-based stewardship and oversight approach, FHWA applies its limited resources to address the greatest risk threats and opportunities. Additionally, the Moving Ahead for Progress in the 21st Century Act of 2012 (MAP-21) provided an important tool to assist the states to more effectively target Federal-aid resources and efforts on projects that have a greater likelihood of proceeding to completion as Congress intended under 23 U.S.C. 102(b). Specifically, MAP-21 added performance requirements for the National Highway System (NHS) and dedicated a greater share of Federal-aid highway funds to the NHS. The states are required to establish performance targets for the NHS and will be held accountable for meeting or making significant progress toward them. So to maximize performance outcomes, it may be in the best interest of the state to not advance projects that do not contribute to the system performance expectations set by the state.

Over the years, FHWA has improved its oversight of PE requirements. For example, in 2011, FHWA issued Order 5020.1 detailing the Agency's policy for repayment of Federal-aid funds and clarifying the requirements for granting time extensions. We also conducted an internal review of PE projects authorized in 2014 and found that the majority were accurately coded as PE projects. Additionally, in March 2015, FHWA issued guidance to improve the consistency of PE authorizations.

The OIG's recommendations support FHWA's ongoing efforts to strengthen PE oversight. Based upon our review of the draft report, we concur with Recommendations 1, 2, 3, 5, 6 and 7 and plan to complete the necessary actions to implement each recommendation by December 31, 2017. We partially concur with recommendation 4. We agree to work with the Office of General Counsel and will assess the use of Statewide Preliminary Engineering Systems and implement adequate controls as needed. The target action date to complete these actions is June 30, 2017.

We appreciate the opportunity to comment on the draft report. Please contact Thomas D. Everett, Associate Administrator for Infrastructure, at (202) 366-0371 with any questions.