**Before the Senate Committee on Environment and Public Works**
**United States Senate**

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# Reauthorization of Highway and Transit Programs:

# Improving the Delivery of Transportation Projects

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**Statement of**

**The Honorable Kenneth M. Mead**

**Inspector General**

**U.S. Department of Transportation**


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Mr. Chairman and Members of the Committee:

We appreciate the opportunity to participate in the Committee's preparation for reauthorization. I commend the Committee for examining project delivery and environmental streamlining issues. Although meeting environmental requirements can take a significant amount of time, delays can occur throughout any project's planning, design, and construction phases for any number of reasons. We know of no panacea that will prevent all problems. However, our work has shown that effective management and oversight can help prevent avoidable problems, and mitigate the cost increases and schedule delays when problems do occur.

Today, I want to discuss a series of steps that can be taken in the reauthorization to improve management and oversight, and facilitate the delivery of projects to taxpayers approximately on budget, on schedule, and free from fraud. These steps are (1) refocusing Federal Highway Administration's (FHWA's) oversight to ensure state programs operate effectively and projects of national significance are well managed, (2) promoting the use of proven project management tools, and (3) strengthening efforts to prevent fraud, waste, and abuse. Of course, whether monies are lost to cost overruns, schedule slippage, or fraud, the result is the same – fewer resources remain for transportation projects.

The Transportation Equity Act for the 21st Century (TEA-21) provided record levels of transportation funding for highways and transit, with the investment almost doubling, from $23 billion in fiscal year (FY) 1997 to nearly $39 billion this fiscal year. The combined Federal, state and local investment in highways and transit during the 6-year period of TEA-21 will exceed $500 billion – an average expenditure of more than $225 million a day.

Although the recent economic downturn has reduced Federal and state transportation funding streams, the demand for investments in transportation infrastructure remains great. For example, the 14 active FHWA large projects are estimated to cost more than $39 billion. FHWA also has identified another 21 large projects on the drawing board that are expected to cost over $32 billion, and 22 large corridor projects that will cost over $44 billion. For FY 2003, the Federal Transit Administration (FTA) is requesting funding for 34 new starts projects valued at a total cost of $21.2 billion.

Managing the construction of large projects, especially in densely populated urban areas, has become much more difficult over the last several decades. Specifically, project managers are faced with such factors as having to maintain traffic flow and commerce during construction; meet environmental and historic preservation requirements; and incorporate intermodal capabilities. Financing large projects has also become a much more difficult proposition because it can often involve complex financial techniques, such as structured bonding, innovative financing mechanisms, and private equity investments.

These issues affect not only billion dollar projects, but often those in the hundreds of millions of dollars as well. Changing conditions have materially affected project delivery and have wide-ranging implications for the approaches and staffing of FHWA, FTA, the states, and grantees. However, improving project management and delivery can provide significant benefits. For example, increasing the efficiency with which $500 billion is spent by only 1 percent provides an additional $5 billion – an amount equal to 4 of the 14 active FHWA large projects.

The states have generally developed the capability to meet their responsibilities, and we have reviewed a number of large projects that stand as examples of good project management – projects such as Utah's I-15, New Jersey's Hudson Bergen Light Rail project, and the Alameda Corridor in California. In contrast, we have reviewed projects in which management and oversight were ineffective, leading to significant cost increases, financing problems, schedule delays, and technical or construction difficulties. These projects include the Central Artery, the Woodrow Wilson Bridge, the Springfield Interchange in Virginia, Puerto Rico's Tren Urbano, the Los Angeles Metro Red Line, and the Seattle Central Link. In each of those cases, project management has agreed to take action to correct the deficiencies we reported. We are in the process of conducting follow-up work on several of the projects.

Our testimony today is based on audit reports we have issued on 18 large highway and transit projects, our ongoing work, as well as significant criminal investigations we carried out with the Justice Department.

Overall, we see several opportunities to improve project delivery in the reauthorization by:

- **Refocusing FHWA's oversight to ensure state programs operate effectively and projects of national significance are well managed.**

  Recognizing that the interstate system was largely completed, and that states and localities know better what is needed for their citizens, Congress delegated responsibility for project selection and execution to the states during the 1980's and 1990's. The states have improved their capability to manage their transportation programs, including engineering expertise. However, FHWA has historically continued to focus most heavily on oversight of engineering and contract issues, rather than on oversight of management and financial issues. To a large extent, FHWA defers to the states for both the implementation and oversight of federally funded transportation programs. Although FHWA has taken several steps to improve its stewardship it has not completed the transition from its traditional role of reviewing and approving contract level actions, to a new higher-level role of conducting reviews to ensure the effectiveness of the states' processes in areas that are major project drivers, such as financing, controlling project-level costs, schedule performance, transportation planning, and maintaining accountability over funds.

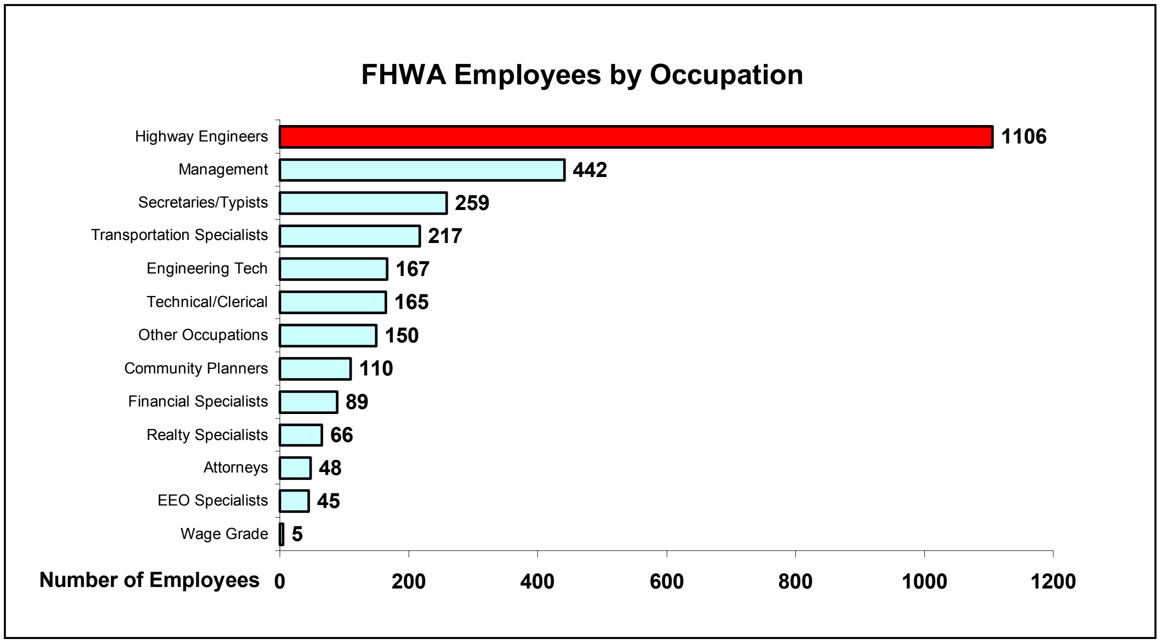
Because FHWA remains focused on detailed engineering activities, rather than developing a more multi-disciplinary staff and higher level approach to oversight, it has sometimes missed larger management issues. For example, FHWA approved thousands of design changes on the Central Artery, but was caught unaware when the project's cost increased by $1.4 billion.

Among the actions that would promote more timely and efficient project delivery are:

- Clarifying FHWA's role to ensure it is focused on the programs and processes in which states use Federal highway funding, rather than on detailed, contract level reviews and approvals. On projects costing more than $1 billion, FHWA must have clear direction to monitor and ensure these projects of national significance are kept on time and on budget.

- Delegating detailed contract and project actions to the states and refocusing FHWA on independently monitoring state management processes, rather than approving detailed contract level actions. For example, FHWA still performs many detailed contract administration actions, such as approving contract change orders and the location and wording of highway signs.

- Requiring FHWA to report on the skills and competencies it needs to implement a process and program oriented oversight program. Reflecting its historical focus on engineering issues, the current FHWA staff mix is dominated by engineers (see Chart). Engineering skills will remain important, but on today's projects a more multidisciplinary staff will be needed. This is not to suggest FHWA needs more staff. A strategy for achieving a more multidisciplinary approach to oversight activities within current staffing levels could include a mix of actions such as hiring staff with private sector project management skills, that is, financing, program analysis, and cost estimating; streamlining and delegating project-level approvals to the states so staff time can be refocused on overseeing higher-level management and financial issues.




- On a selected basis, allowing FHWA to emulate FTA's approach to overseeing large, significant, projects through project management oversight contractors (PMOCs) and financial management oversight contractors (FMOCs). This approach helped FTA become one of only a few agencies to get off the General Accounting Office's "High Risk List." The use of PMOCs and FMOCs needs further fine tuning, which we are working with FTA on, but overall it is a sound approach to project oversight.

- **Promoting the use of proven project management tools.** In reviewing large projects, we have identified a number of tools that can help managers keep projects approximately on time and on budget. These tools include reliable costs estimates, project finance plans, achievable state transportation program plans, and integrated master schedules. When managers look to attract investors to participate in financing large infrastructure projects, reliable information is essential to make appropriate disclosures. Finally, information is critical for policy makers as they decide which projects would be the best use of resources to address transportation problems and promote economic development.

  We have found several troubled highway and transit projects and programs in which these tools were not used, or were not used effectively. For example, several large projects were not using the full capability of their schedule tools, and thus, did not have the information needed to deal with the inevitable schedule conflicts that arise in complex projects employing multiple contractors.

Actions that could promote more timely and efficient project delivery include:

- Expanding the use of project finance plans to include other projects that can strain a state's capability. Finance plans provide senior program and oversight officials with the comprehensive information needed to make appropriate financial decisions regarding the projects. Our work has shown that requiring finance plans for projects costing more than $1 billion in TEA-21 was a very wise decision on the part of Congress.

  On the other hand, projects costing less than $1 billion can also burden a state's management resources. The threshold for requiring plans could be reduced to $500 million. In states that have smaller highway programs, projects costing less than $500 million may be difficult to undertake. An alternate threshold could be to require finance plans for projects costing more than half a state's apportionment. We also suggest, however, that there be some limits on finance plan requirements, such as exempting projects with minimal Federal participation or any project less than $100 million regardless of the percentage of state apportionment. FHWA should continue to approve the plans for each project costing more than $1 billion, and should review states' processes for preparing finance plans on other projects.

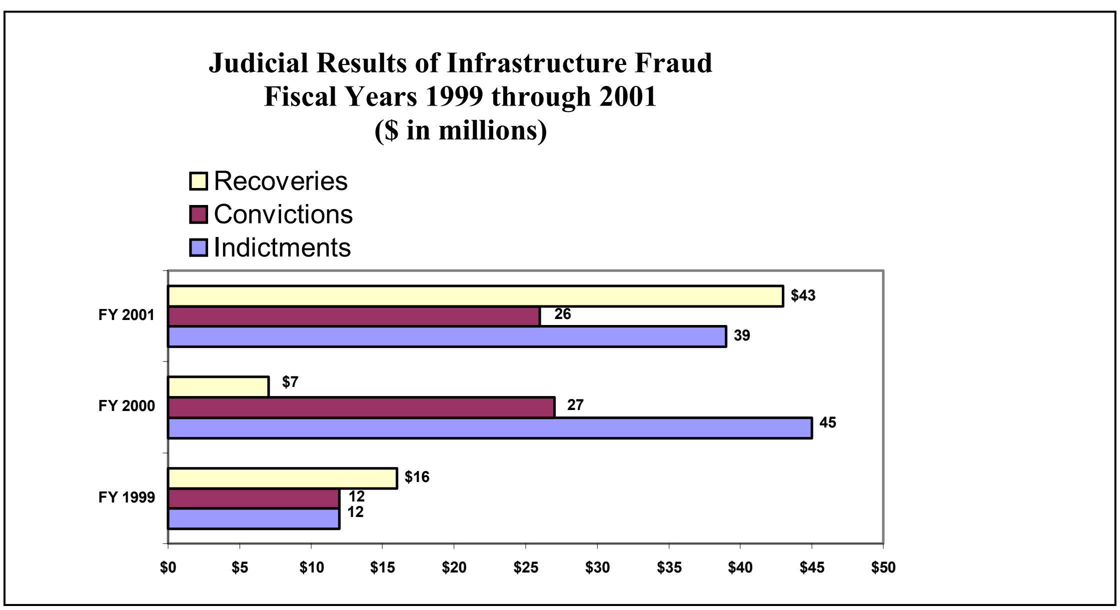
- Requiring FHWA to establish baseline cost estimating standards for all projects exceeding $100 million or 50 percent of a state's annual apportionment, and to ensure that cost growth on large projects is monitored and controlled. Presently, FHWA has established no detailed standards for preparing cost estimates on projects under $1 billion.

- Requiring large projects to use integrated resource loaded schedule tools and earned value project measurement techniques. Given the complexity typical of large projects, problems with one contractor can have a domino effect that delays the overall project delivery. Integrated, resource loaded schedules can help to identify schedule conflicts and prevent or mitigate delays, thereby reducing cost increases.

- Requiring FHWA to develop and implement systems to provide timely information on the performance of state programs and large projects. FHWA's information system tracks only costs by individual project segment and each entry overwrites previous data. Consequently, to develop nationwide reports, such as identifying the status of large projects, FHWA must request data from each state and combine the data manually. Having timely, consistent information would enable FHWA to better analyze trends, such as might be found by comparing program-wide statistics on state planning, project delays, or cost increases beyond initial estimates on large-dollar highway projects.

- **Improving efforts to prevent fraud, waste, and abuse.** Congress, the Federal Government, and state governments are all concerned with preventing fraud and abuse in transportation projects. Secretary Mineta has also recognized that DOT needs to develop better mechanisms to prevent and detect fraud, waste, and abuse. As he has said on numerous occasions "My credo on waste, fraud and abuse is simple: If the project calls for concrete and it's a 10 sack job, we at [the Department of Transportation] DOT are going to be sure we don't end up with a 7 sack job."

  Our work does not suggest abuse on a scale such as was experienced in the 1950s and 1960s. Nonetheless, in the last 3 years, since the increases in funding in TEA-21, we have seen significant increases in our fraud case work and judicial actions involving highways and transit. Overall, from 1999 to 2001, indictments based on our highway and transit fraud investigations increased from 12 to 39; convictions increased from 12 to 26; and monetary recoveries increased from \$15.8 million to \$43.2 million (see chart). Those include some of the biggest cases in the history of the highway program. At present, we have 106 pending investigations of contract and grant fraud involving highway and transit projects in 37 states.



The types of fraud we are commonly seeing today include activities such as bid rigging, bribery and kickbacks, false claims, product substitution, and disadvantaged business enterprises (DBEs). For example:

- This month (September), two construction companies pleaded guilty to separate charges of making false statements to the Government in their bids on separate Federal highway construction projects in North Carolina. The companies had shared their bid prices with an unnamed competitor after certifying that they would not disclose bid prices to any other bidder or competitor before the sealed bid opening. The two contractors subsequently were awarded contracts for about $1.6 million and $3 million. Sentencing is pending, but each company faces a maximum corporate fine of $500,000 that may be increased to <u>twice the gain</u> derived from the crime or <u>twice the loss</u> suffered by the victims of the crime, if either amount is greater than the statutory minimum.

- One of the most significant highway fraud cases occurred in Illinois. The scheme, which ran from the mid-1980s until 1996, involved both fraud and bribery. The owners of two companies and several of their employees altered equipment in their production plant to overstate the amount of materials (like asphalt) delivered to various highway projects. To conceal their activities, they bribed the state engineer by building the engineer's summer home. As a result, FHWA permanently debarred six companies and individuals from participating in federally funded road construction projects. In addition, the participants had to pay about $15 million in fines and restitution and faced sentences ranging from 3 years probation to 21 months in jail.

- Two minority business enterprises (MBEs) admitted they acted as fronts for contractors on public projects. This was one of the largest MBE frauds in U.S. history, involving approximately 60 fraudulent MBE subcontracts with a total value of over $40 million. Approximately 46 subcontracts totaling $26 million were on contracts let by Department of Transportation grantees, including projects to repave area highways and rehabilitate transit stations.

The states are the first line of defense in preventing such fraud, and we have been working closely with a number of state Inspectors General and state auditors on our fraud investigations. The Office of Inspector General, FHWA, and FTA have implemented many initiatives to protect major investments in infrastructure programs. For example, we co-sponsored two National Fraud Conferences on Highway Construction and Related Programs with the American Association of State Highway & Transportation

Officials (AASHTO), American Public Transportation Association (APTA) Internal Audit Committee, FHWA and FTA, and the Missouri and Georgia Departments of Transportation. Secretary Mineta personally addressed the conference we held this past May to emphasize the importance of fraud prevention. We have also increased the number of special agents working full-time on fraud investigations involving highway and transit infrastructure programs. Finally, we provided fraud awareness briefings to over 10,500 Federal, state, and local officials, law enforcement agencies, and industry organizations.

Preventing losses to fraud will make additional resources available for improving project delivery. Some states and even large transit authorities have established Offices of Inspector General or Offices of Audit to detect and prevent fraud and abuse. In our work, we have heard from several state officials that the pressure to fund "concrete and steel" projects sometimes makes it difficult to provide resources for oversight and fraud prevention. During the reauthorization, Congress should consider ways to help states fortify their oversight and fraud prevention efforts with dedicated funding, separate from funds used for constructing transportation projects.

A possible source of funding may be to allow states to retain monetary recoveries resulting from Federal transportation infrastructure enforcement actions. Normally, fines and recoveries from such judgments are returned to the Federal Treasury. Since the states programs are damaged by the fraud that leads to the enforcement action, sharing in the recoveries would help them restore their programs and provide support for further fraud deterrence efforts.

An example of this occurred in a civil settlement with Contech Construction Products, Inc., and Ispat-Inland, Inc., which was a case involving product substitution in the State of Louisiana. The companies substituted sub-standard polymer-coated steel culvert pipe used in highway and road construction projects from 1992 through 1997. Under the settlement agreement, the United States and the State of Louisiana shared in a $30 million recovery.

That concludes my prepared remarks. I would be glad to answer any questions you may have.