

**Before the Subcommittee on Highways and Transit
House Committee on Transportation and Infrastructure**

United States House of Representatives

For Release on Delivery
Expected at
2:00pm EDT
Wednesday
May 1, 2002
CC-2002-155

**Management of
Large Highway
and Transit
Projects**

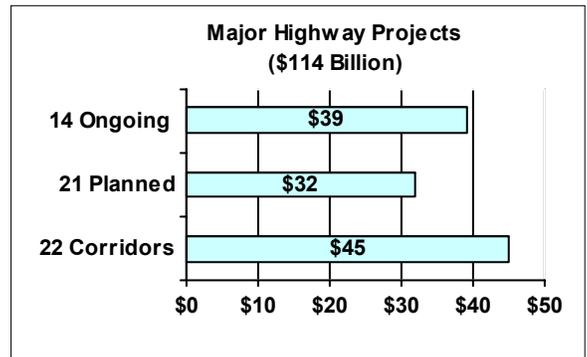
**Statement of
The Honorable Kenneth M. Mead
Inspector General
U.S. Department of Transportation**



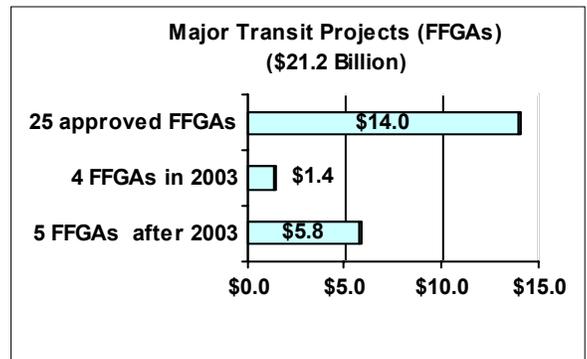
Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify today about the management and oversight of major highway and transit projects. Our testimony is based on audit reports we have issued on 18 major highway and transit projects, our ongoing work, as well as significant criminal investigations we have carried out with the Justice Department. Based on this work, we identified the management and oversight of major projects as one of the top 10 challenges facing the Department. We know that in the aftermath of the terrorist attacks on September 11, this Committee has rightly been focusing on security issues, so we commend you for your attention to this area.

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 \$22 billion in 1995 to \$23 billion in 1997 and nearly \$39 billion this year. The Federal Highway Administration's (FHWA) Major Projects listing identifies 14 active major projects estimated to cost over \$39 billion. FHWA also identified another 21 major projects on the drawing board that are expected to cost over \$32 billion, as well as 22 large corridor projects that will cost over \$45 billion.



The Federal Transit Administration (FTA) has 34 new starts projects for which funding is being requested in fiscal year (FY) 2003. Of the 34 projects for which FTA is requesting funding, 25 have full funding grant agreements (FFGAs) already in place; 4 are expected to have their FFGAs completed before the end of FY 2003, and the remaining 5 are not expected to have their FFGAs completed until after 2003.



Congress, the Federal Government, and state governments are all stakeholders in ensuring the investments in large projects result in a high-quality transportation system. These projects should be delivered to the taxpayers and the travelling public approximately on-budget, on schedule, and free from fraud and other irregularities. As Secretary Mineta 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.”

In the aftermath of the oversight lapses at the Central Artery in 2000, we have seen improvements, not just at the Central Artery, but on a broader front. We commend the Secretary, and Administrators Dorn and Peters, for the emphasis they are personally placing on oversight. Also, we want to make note of the important contributions of the American Association of State Highway and Transportation Officials (AASHTO), who the Committee will hear from this afternoon.

Today, I will cover three areas where we see opportunities for improved management, oversight, and increased vigilance. The first area is that, while we have seen that the Department is strengthening oversight, follow through will be needed to ensure the improvements are sustained. Second, I will discuss some tools that can help improve the management of large projects. Finally, I will discuss the status of efforts to prevent and detect fraud in transportation programs.

DOT is Strengthening Oversight and is Poised for Further Improvement — The Key will be Sustained Follow-Through

We have seen a number of large projects that stand as examples of good project management, including Utah's I-15, New Jersey's Hudson Bergen Light Rail project, and the Alameda Corridor in California. However, we also have identified a number of projects that have encountered significant problems, including cost increases, financing problems, schedule delays, and technical or construction difficulties. 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 are among them. Based on our audit work, we believe states, transit authorities, FTA, and FHWA have learned important lessons from these projects and are in the process of converting the lessons learned into constructive change.

FTA has institutionalized the use of project management oversight contractors (PMOCs) and financial management oversight contractors (FMOCs) to oversee transit projects and to report to its in-house staff on findings and needed corrective actions. This is essentially a sound approach that can provide early warnings of cost, schedule, and quality problems. Nonetheless, the quality of PMOC/FMOC oversight can be improved, particularly in the areas of spot-checking grantee cost and schedule estimates.

We saw both the strengths and the weaknesses of the PMO program in our work on the Tren Urbano project in 2000 and 2002. On the positive side, our work on our May 2000 review of Tren Urbano found that the PMOC had discovered and raised important schedule and construction quality issues. However, the grantee had not acted to address those concerns. Ultimately, FTA withheld \$165 million

until Tren Urbano implemented a corrective action plan addressing the issues. In the process of doing our March 2002 audit, we noted that Tren Urbano officials consistently reported that the estimated cost of the project was \$1.9 billion. We discovered that the estimated cost was over \$2.0 billion, and the PMOC had accepted Tren Urbano's prior representations without checking them. We shared our findings with the PMOC and FTA, and, as a result, Tren Urbano officials raised their cost estimate. Overall, the attention Administrator Dorn is placing on strengthening the PMOC/FMOC process is positive, and FTA, in our opinion, is further along than FHWA in implementing effective oversight processes.

Historically, FHWA has focused most heavily on oversight of engineering and contract issues, rather than on oversight of management and financial issues, such as controlling project-level costs, financing, transportation planning, and maintaining accountability over funds. However, FHWA was profoundly affected by the surprise Central Artery cost increases in 2000. Those events served as a catalyst for FHWA to begin reevaluating its oversight focus.

In the aftermath of the Central Artery cost increases, FHWA convened a Task Force on the Central Artery, and the former Secretary followed that with a Task Force to examine the oversight of large infrastructure projects across the Department. The FHWA Task Force issued its report in March 2000, and the Secretary's Task Force issued its report in the closing weeks of the Clinton Administration in December 2000. Both reports contained numerous recommendations for improving FHWA's and the Department's management of the Central Artery and other large projects. Responding to the recommendations in those reports, in June 2001 FHWA issued its Stewardship and Oversight Policy and, in October 2001, an action plan for implementing that policy.

In her confirmation hearing, Administrator Peters strongly emphasized the importance of improving FHWA's oversight and accountability over funds. The challenge now is for FHWA to follow through on its plans and commitments on a broad front — not just on projects that are experiencing high profile difficulties like the Central Artery, Woodrow Wilson Bridge, or Springfield Interchange. FHWA faces several challenges in its efforts:

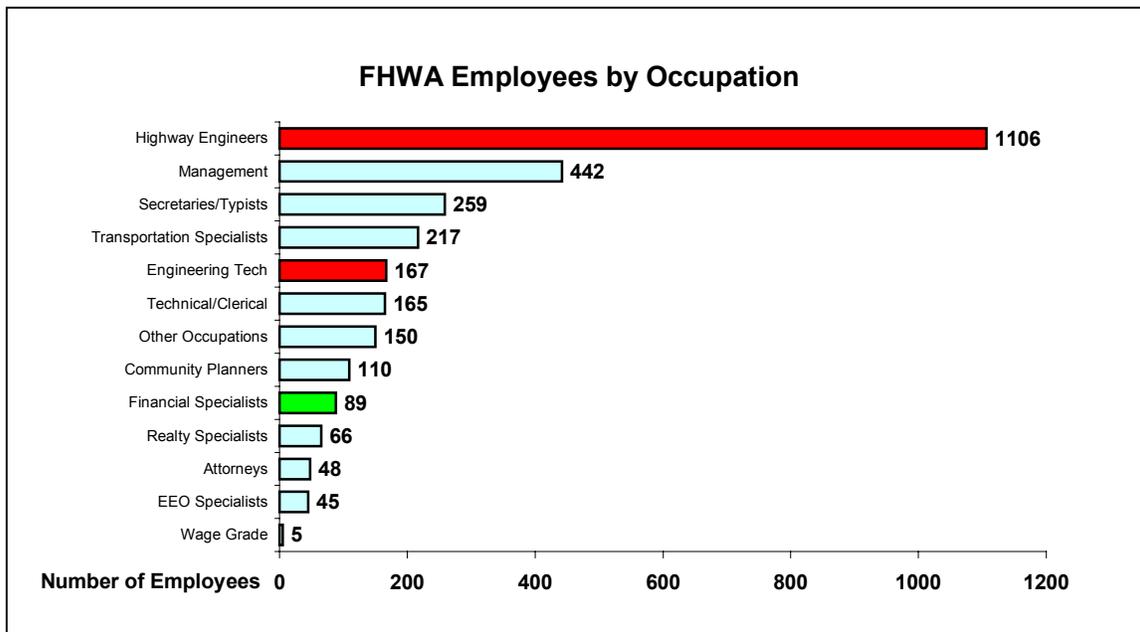
- Historically, the Highway program has been founded on a partnership between the states and FHWA. This partnership is important, but it is equally important that FHWA be willing to step back and make the hard calls when necessary. This was a problem we saw with FHWA's oversight of the Central Artery in 2000 and, initially, in our review of the Woodrow Wilson Bridge project in 2001. Since that time, FHWA's scrutiny of those projects has increased, and FHWA took action recently to require

additional cost information in response to increases on the Springfield Interchange project.

- Due to the heavy emphasis on engineering issues, other major project drivers such as financing, controlling cost and schedule performance at the project level, or program planning at the state-wide level, get less attention. As a result, FHWA officials sometimes miss larger management issues. For example:
 - At the time the Central Artery announced a \$1.4 billion cost increase in 2000, FHWA officials had reviewed and approved thousands of design changes. Nonetheless, they were caught unaware when the cost increase was announced, even though they had just approved the project's finance plan.
 - In Virginia, FHWA's review of the statewide Transportation Program did not detect that the program was critically underfunded because project costs were being systematically underestimated. We found FHWA has established no standards for preparing cost estimates on projects of less than \$1 billion.

To successfully refocus on the evaluation of each state's processes for managing and overseeing projects, FHWA will need to reexamine the mix of disciplines and skills of its staff. This is not to suggest that FHWA needs more staff. Current FHWA staffing, which is predominately engineers, reflects its historic engineering focus (see Chart). A strategy for achieving a more multidisciplinary approach to oversight activities could include a mix of actions such as:

- hiring staff with private sector project management skills, like financing 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; or
- adopting FTA's PMOC/FMOC approach in some cases.



- FHWA will need better data to successfully refocus its oversight efforts. Over the years we have found the reasons for cost increases beyond the initial cost estimates on large-dollar highway projects cannot be readily determined. This is because FHWA’s information system only tracks costs associated with individual project segments. Essentially, FHWA tracks contracts, not projects.

To develop broad project reports like its Major Projects listing, FHWA must request the data from states and combine it manually. FHWA’s current system also does not allow FHWA to analyze trends because each entry overwrites the previous data. Overall, these problems prevent FHWA from capturing the full cost of projects or using their information system for trend analysis. A new system is currently being planned.

Tools to Improve the Management of Large Projects

More consistent use of several tools and common business practices would benefit all transportation projects. For example:

Reliability of cost estimates. Early cost estimates are often very inaccurate, for a number of reasons. For example, the projects may undergo considerable change during design, which adds to the costs. In other instances, the estimates may not have included all reasonably anticipated costs. As a result, in some cases, project approvals may be secured on the strength of cost estimates prepared before the

design package is substantially complete, and which contain figures that are far too preliminary.

For example, in 1994 the cost estimate for the Springfield Interchange project in Virginia was \$241 million. However, it did not include such routine items as construction management, design, allowances for inflation, or contingency reserves. Today the estimate is around \$700 million. On the Seattle Central Link, the \$1.67 billion cost estimate in the request for approval of the full funding grant agreement was soon raised by \$1 billion. Great care must be taken to assure that these preliminary cost estimates are understood for what they are, and that they do not serve as the predicate for project approval unless they are thoroughly examined and found to be accurate and complete.

Finance plans impose discipline. In 1998, in TEA-21, Congress directed that finance plans be prepared for projects over \$1 billion. Our work has shown this was a very wise decision on the part of Congress. The Department also requires finance plans for projects they identify as “at risk” or “troubled.” Before finance plans were required, I recall having a hard time getting FHWA to provide cost estimates on any highway projects. In the last several years, we have reviewed finance plans on a number of large projects, including the Central Artery, the Los Angeles Metro Red Line, and Woodrow Wilson Bridge, among others. Although we have noted problems in several of the plans, overall, we have found that they are an extraordinarily good tool even when imperfect.

Finance plans provide current information about project cost, financing, schedule and technical issues to enable the Department, states, Congress, project managers, and the public to evaluate the health of a project. We do have a concern, however, that finance plans not be seen as stigmatizing projects as troubled. Finance plans are a good discipline, a sound business practice, and the right thing to do as a matter of routine, even for projects with a sticker price well under \$1 billion. We note FTA requires finance plans for Full Funding Grant Agreements for transit projects with a price tag of under \$1 billion.

Master project schedule and project tracking. To avoid costly delays, the work schedules of the various contractors must be coordinated, and progress measured to judge whether the contractors will be able to complete the project on schedule and within budget. The tool for doing this is the master project schedule. However, in several instances, we found large projects that were not making good use of this tool. For example, neither the Tren Urbano nor the Springfield Interchange projects had a current master schedule that would enable them to detect emerging cost and schedule problems and make mid-course corrections. Given the complexity typical of large projects, delays by one contractor can have a domino effect, and use of an integrated schedule is a prudent business practice.

Achievable state-wide plans. TEA-21 requires states to prepare financially constrained transportation plans at least every 2 years. These plans are representations to the taxpayers of how the states intend to use the taxpayers' money to meet their transportation needs. These plans identify which projects will be funded, their costs, schedules, and funding sources. This is particularly important in states that have large projects ongoing, because cost increases on the large project can put pressure on the state's ability to fund its other transportation needs. FHWA must ensure these plans are financially constrained.

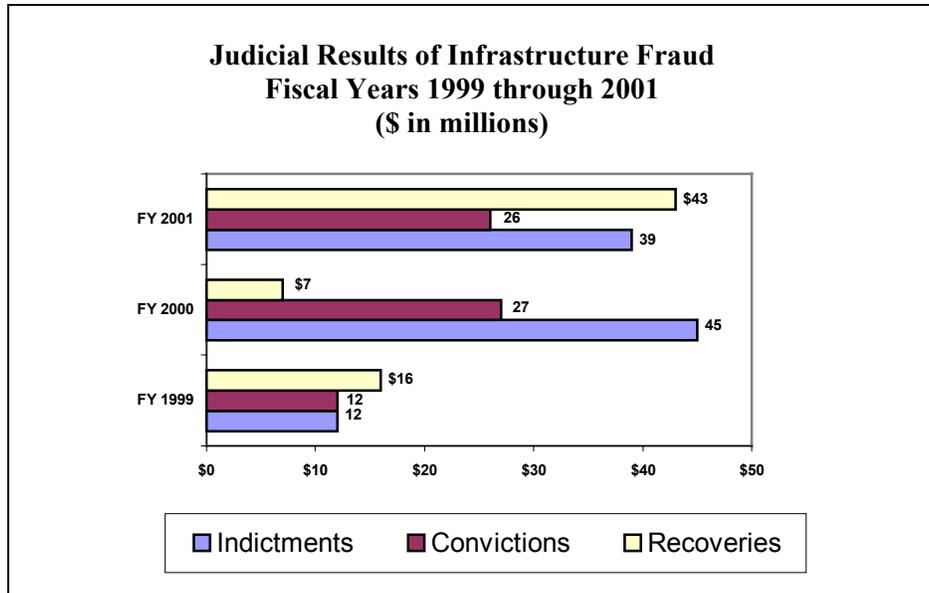
We reviewed one state's plans covering the years 1994 to 2000, and found that in large part, the plans were unrealistic. For example, of 152 interstate, primary, and urban construction projects included in the plans, 30 percent were started on time, 57 percent were delayed, and 13 percent were eliminated. One of the reasons this occurred was the cost estimates included in the plan understated the actual cost of the projects, so the funding identified for the overall highway construction program was insufficient. Nonetheless, FHWA approved the plans.

Prevention and Detection of Fraud in Transportation Programs

The prevention and detection of fraud is an objective we share throughout all levels of government. In 1960, the predecessor of this subcommittee, led by Congressman Blatnik, investigated the Federal-aid Program and found it was fraught with waste, fraud, and corruption. They concluded that essential controls were lacking at both the state and Federal levels.

Controls to prevent the types of problems that were occurring then were put in place; our work does not suggest abuse on a scale such as was experienced in the 1950s and 1960s. However, in the past 3 years, we have seen increases in our fraud case work and judicial actions involving highways and transit, including several of the biggest cases in the history of the highway program.

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. At present, we have 113 pending investigations of contract and grant fraud involving highway and transit projects in 37 states. The following table shows the trends in judicial recoveries in fraud cases involving highway and transit infrastructure construction programs from FY 1999 through FY 2001:



The types of fraud we are commonly seeing today include activities like bid rigging, bribery and kickbacks, false claims, and product substitution.

- One of the most significant highway fraud cases occurred recently 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.
- In Louisiana, two companies were caught supplying unapproved coated steel pipe for highway projects. They hid what they were doing by providing fake certifications and stenciling false information on the outside of the pipe. The bad pipe was used for drainage culverts in various road projects throughout the state for over 5 years. That pipe was of substantially poorer quality and corroded faster than approved pipe. As a result, the companies agreed to pay \$30 million to settle the charges, and four of their employees pled guilty to Federal criminal charges.
- In the District of Columbia, we found a contractor involved in a scheme with officials of the District of Columbia Department of Public Works to overstate

the amount of concrete and asphalt delivered to federally funded road projects. Five inspectors pled guilty to taking bribes for approving false weigh tickets.

Several of the recent large cases involved the Disadvantaged Business Enterprise (DBE) program. For example:

- The co-owners of several major construction companies performing work for DOT grantees in the New York City area issued nearly \$1 million in corporate checks to their subcontractors to pay fraudulent invoices. The checks were cashed and the funds returned to them for use in paying organized crime to influence unions. They were ordered to forfeit \$5 million for their role in the kickback scam.
- 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.
- In West Virginia, a highway construction firm and a subcontractor were caught conspiring to create a “front” firm – designated as a DBE – to defraud the DBE program and obtain contract work on multiple West Virginia highway projects. The work purportedly done by the DBE subcontractor was actually done by the larger firm. The conspiracy involved false certifications, secret funding mechanisms, and cover-ups. After a jury trial, both the owner of the construction firm and the DBE received lengthy jail sentences. They were also convicted of obstruction of justice for threatening physical harm to an Office of Inspector General agent.
- In Florida, a small trucking company agreed to unlawfully act as a DBE "front" subcontractor for a larger company to obtain work on an Interstate construction project from 1996 through 1998. The companies were fined, and the owners of the companies were both fined and sentenced to jail for up to 28 months. FHWA is pursuing debarment of the participants in this scheme.

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. We have increased the number of special agents working full-time on fraud investigations involving highway and transit infrastructure programs. The Office of Inspector General, FHWA, and FTA have also implemented many initiatives to protect major investments in infrastructure programs. For example, we provided fraud awareness briefings to over 9,000

Federal, state, and local officials, law enforcement agencies, and industry organizations. AASHTO, in conjunction with several states, has developed an information system called TRNS*PORT that can be used to analyze bids and contractor information to detect bid rigging, among other things. This type of analytical capability is an important tool for preventing fraud.

Finally, along with the State of Missouri and AASHTO, we are co-sponsoring a National Fraud Conference on Highway Construction and Related Programs in St. Louis this month. The 2000 conference in Atlanta, which was the inaugural conference, attracted over 325 people from 43 states and the Federal Government. This time, we are expecting attendees from nearly all states, and the Secretary, Administrators Dorn and Peters, and the Inspectors General from the Departments of Transportation and Labor will address the attendees.

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