

**THE ROLE AND FUNCTIONS OF
THE VOLPE NATIONAL
TRANSPORTATION SYSTEMS
CENTER**

Research and Special Programs Administration

Report Number: SC-2004-077

Date Issued: August 4, 2004




Memorandum

**U.S. Department of
Transportation**

Office of the Secretary
of Transportation
Office of Inspector General

Subject: **ACTION:** Audit Report on the Role and Functions of the Volpe National Transportation Systems Center, Research and Special Programs Administration
SC-2004-077

Date: August 4, 2004

From: Alexis M. Stefani 
Principal Assistant Inspector General
for Auditing and Evaluation

Reply to
Attn. of: JA-60

To: Deputy Secretary
Chief of Staff
Deputy Administrator, Research and Special
Programs Administration

This report presents the results of our review of the Volpe National Transportation Systems Center's (Volpe) role and functions. This audit was requested by Representative Ernest J. Istook, Chairman of the House Appropriations Subcommittee on Transportation, Treasury and Independent Agencies. Chairman Istook requested that the Office of Inspector General (OIG) conduct an audit to determine: (1) how Volpe's role and functions have changed over the years and whether current Volpe activities meet the Department of Transportation's (DOT) needs, (2) if Volpe has the necessary financial controls in place to assure its service fees are appropriate, and (3) DOT's role in overseeing Volpe and whether that role is adequate to ensure that Volpe provides cost-effective services.

To address Congressman Istook's request, we plan on issuing three reports. This report addresses Volpe's role and functions in the Department and whether Volpe is meeting DOT's needs. The second and third reports will cover Volpe's financial controls and program management oversight, respectively. (See Exhibit A for a discussion of our audit objective, scope, and methodology.) During the course of our audit, three other studies of Volpe were conducted—two by the Research and Special Programs Administration (RSPA) and one at the direction of the Secretary. The Secretarial review, which is to be completed later this year, will incorporate the work done by RSPA and the OIG.

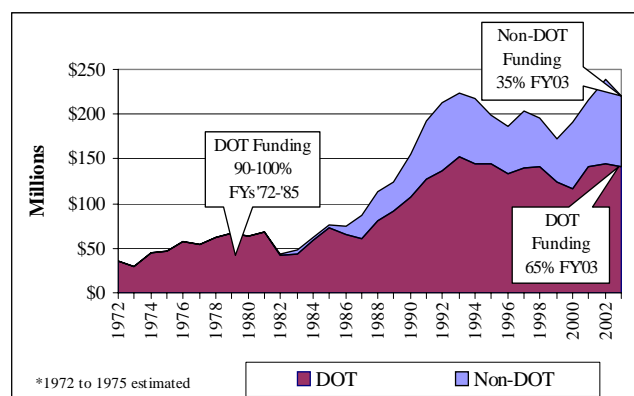
RESULTS IN BRIEF

With its transfer from the National Aeronautics and Space Administration (NASA) to DOT in 1970, Volpe was to be "...a central research and development facility of the Department of Transportation...." Yet, until recently, the lack of departmental oversight, coupled with a reliance on customer funding, have led Volpe into areas that raise questions as to whether such work represents the best use of the Center's resources and to what extent benefits will be derived for DOT. The following summarizes our three outcomes.

✓ ***Volpe's mission and role need to be better defined.*** Over the last 30 years, Volpe's mission and role have significantly changed. From an organization focused primarily on research and development (R&D) work for DOT,¹ most of Volpe's work now involves the demonstration and deployment of *existing* technologies and the hosting, maintenance, and updating of numerous management information systems (MIS). This MIS work, in particular, constituted over one-fourth of Volpe's funding in fiscal year (FY) 2003. Such work, however, represents a significant change from Volpe's initial R&D focus. Moreover, the Department's Chief Information Officer has questioned the Center's continued operation and maintenance of DOT information systems, citing the need to identify a more appropriate host center for such operational work. Although Congress gave DOT, and, in turn, Volpe substantial latitude in determining the types of services it would provide,² questions nevertheless remain as to where the Center should focus its sizable resources and expertise and what its role and function should be with respect to the Department.

✓ ***Volpe's changing customer base raises questions as to whether the Center is a DOT or a non-DOT asset.*** Volpe has come to service a far more diversified clientele, with non-DOT customers contributing an increasing share of the Center's funding and using a growing portion of its staff time. As illustrated by Figure 1, non-DOT

Figure 1. Volpe's Obligations by DOT and Non-DOT Customers, FYs 1972-2003*



¹ See Exhibit B for a summary of relevant memoranda and legislation on Volpe's mission and role within DOT.

² Title 49 USC 328(a) notes: "Amounts in the [working capital] fund [for Volpe] are available for financing the activities of the Center, including research, development, testing, evaluation, analysis, and related activities the Secretary of Transportation approves, for the Department, other agencies, State and local governments, other public authorities, private organizations, and foreign countries."

funding for Volpe grew from virtually nothing during the 1970s and early 1980s to over one-third of the Center's annual budget by FY 2003. Likewise, in FY 1994, 15 percent of Volpe's Federal staff was assigned to non-DOT projects. By FY 2003, this had increased to 27 percent. While such work is permitted and in some cases encouraged by the Department, this growth can have both short-term and long-term repercussions, influencing not only what projects the Center accepts and how staff resources are allocated but also what core capabilities are developed and maintained.

- ✓ ***Volpe has taken on non-DOT projects and maintained capabilities in areas that currently offer greater benefits to other agencies.*** As part of our audit, we identified eight non-DOT projects, totaling over \$153 million in obligations, that had little direct relationship to transportation or immediate benefit to DOT. The RSPA Management Assessment also challenged Volpe's involvement in the two largest of these projects (Environmental Protection Agency environmental remediation and Capitol Police physical security), noting that they were more appropriate for the private sector than for the Government.³ While non-DOT funding for such projects has allowed Volpe to maintain core capabilities and staff expertise in such areas as environmental remediation and physical security,⁴ there are no assurances that the Department will need these services from Volpe in the future or at what level and, if they are needed, whether Volpe (versus other public and private service providers) will be used.

Thus, short of converting Volpe to a Federally Funded Research and Development Center (FFRDC),⁵ the Department needs to take tighter control and provide closer oversight. Specifically, DOT senior leaders need to assume a more active role in determining the Center's mission, role, and activities within the Department and in overseeing its project acceptance and planning processes to ensure that all future work represents the most effective use of Volpe's resources and has direct value to the Department.

The Transportation Administrative Service Center (TASC) offers an example of why the Department needs to provide closer oversight of Volpe. As with Volpe, TASC was a non-appropriated activity and, as such, had incentive to operate

³ On July 18, 2003, RSPA completed a management assessment of Volpe's operations. Due to concerns raised by this study, the Acting RSPA Administrator rescinded Volpe's authority to accept non-DOT work in November 2003.

⁴ Non-DOT funding now represents a significant portion of Volpe's environmental and security work. For FY 2000 through FY 2003, for example, non-DOT customers sponsored 66 percent (\$84 million of \$127 million) and 88 percent (\$181 million of \$206 million) of the Center's human and natural environment work and security work, respectively.

⁵ As of 2004, there were 36 FFRDCs throughout the Federal Government. These FFRDCs are funded either through direct appropriations or customer payments and are generally exempt from Federal acquisition regulations.

independently and seek revenues from sources outside DOT. In December 2002, however, the Secretary concluded that based on the recommendations of a departmental review board, his own observations of TASC's operations, and OIG audit reports,⁶ fundamental structure and management changes were needed in TASC. As a result, the Secretary abolished TASC as a separate entity within the Department and transferred the majority of its employees to the Office of the Assistant Secretary for Administration. As with TASC, the Department clearly needs to provide closer oversight of Volpe.

Towards this end, we offer several recommendations relating to the establishment of an oversight board for Volpe. While these recommendations cite a number of important functions for the board, the final framework for the board is somewhat flexible and open to discussion by DOT's senior leadership. Nevertheless, two key principles are essential in ensuring the board's effectiveness. First, as long as Volpe remains a part of DOT, the Center can no longer be left to operate as independently as it has in the past. As this report notes, the lack of departmental oversight has resulted in a number of questions and concerns regarding Volpe's activities in support of DOT and non-DOT customers. And second, the board must not be seen as merely "rubber stamping" decisions already made by RSPA or Volpe. Instead, it needs to provide meaningful input to the RSPA Administrator on Volpe's operations, including the Center's mission, strategic and business plans, core capabilities, and workload.

Based on our review, we therefore recommend that the Deputy Secretary of Transportation establish an oversight board for Volpe composed of senior departmental representatives from the Office of the Secretary of Transportation (OST) and DOT Operating Administrations that reports directly to the Deputy Secretary. We also recommend that the board:

- Provide input to the RSPA Administrator in defining Volpe's mission and role, as well as developing its strategic and business plans and core capabilities, to ensure they meet DOT's needs.
- Assist the RSPA Administrator in improving Center procedures for accepting projects to ensure that all future work agreements with both DOT and non-DOT customers represent the most effective use of Volpe's resources and will have direct value to the Department.

⁶ OIG Report Number MA-1998-073, "Transportation Administrative Service Center," February 5, 1998; OIG Report Number MA-1999-062, "Transportation Administrative Service Center Computer Center," March 3, 1999; OIG Report Number FI-2002-089, "Information Technology Omnibus Procurement Program," April 15, 2002; and OIG Report Number FI-2003-010, "Shutdown of the Transportation Computer Center, TASC," January 9, 2003.

- Provide feedback to the Deputy Secretary and the RSPA Administrator about the continuing merit of long-standing interagency agreements and memoranda of understanding between DOT and other agencies. The board should also review and provide input on any future interagency agreements that may involve significant amounts of work for Volpe.

On July 19, 2004, RSPA provided comments (see Appendix) to our draft report. RSPA concurred with our recommendation on establishing a DOT oversight board for Volpe, noting that "... the Volpe Center would benefit from having such a board." RSPA further pointed out that through an internal, DOT-wide oversight board, senior Departmental officials will have "... opportunity to furnish advice to the RSPA Administrator ... on work acceptance issues and procedures, core Volpe staff capabilities to be developed and maintained, and the other benefits identified in the Draft Report." RSPA also agreed that the board should report directly to the Deputy Secretary. Prior to its July 19, 2004 response, RSPA provided a number of other comments on the draft report. Where appropriate, we made changes to the final report in response to these comments.

While concurring with our first recommendation, RSPA did not specifically address three additional recommendations relating to the board's operation or provide target dates for completing the corrective actions. We have requested that RSPA respond to these recommendations within 30 days and include specific action taken or planned and the target dates for completion.

BACKGROUND

The John A. Volpe National Transportation Systems Center, located in Cambridge, Massachusetts, is an international center for R&D, engineering, and analysis of transportation-related issues. Although part of DOT's RSPA, Volpe receives no direct appropriations from Congress. Instead, Volpe is entirely funded through a fee-for-service structure in which all costs are covered by sponsored project work. For FY 2003, Volpe received \$232 million in funding (as measured in new obligation authority), with 64 percent (\$149 million) coming from DOT sources and 36 percent (\$83 million) from non-DOT sources. These funds support a workforce of about 550 Federal and 900 contractor employees. By itself, Volpe is larger than several of DOT's smaller Operating Administrations, making up over half of RSPA's Federal staffing and two-thirds of its budgetary resources.

During the course of our audit, three other studies of Volpe were conducted—two by RSPA and one at the direction of the Secretary. The first RSPA study's objective was to provide Volpe with feedback and direction to improve project management. The RSPA management assessment team identified a number of issues in a 53-page draft report in July 2003. The second RSPA study focused on

Volpe's organizational structure. Based on this study, the Volpe Director, in a memorandum dated April 13, 2004, proposed restructuring the Center and establishing an oversight office in Washington, DC. On June 30, 2003, the Secretary of Transportation established a departmental task force to review "all aspects of Volpe organization." This review, which is to be completed later this year, will incorporate the work done by RSPA and the OIG.

On December 16, 2003, the Secretary proposed a major restructuring of DOT's research activities, with an aim of creating "a more focused research organization within DOT that emphasizes and promotes innovative technology." Under this plan, RSPA would be renamed the Research and Innovative Technology Administration. The new operating administration would retain RSPA's R&D functions (which includes Volpe), as well as integrating the Intelligent Transportation Systems Joint Program Office and all the statistical and research activities of the Department's Bureau of Transportation Statistics. To further focus the new organization's research mission, several significant non-research functions would be transferred from RSPA to other DOT organizations, such as Emergency Transportation and Hazardous Materials Safety. If approved by Congress, this restructuring will significantly affect RSPA's role and responsibilities within DOT, as well as improve the coordination of departmental research activities.

RESULTS

Given Volpe's size and relative importance in the Department, DOT senior leaders need to have a greater say in determining the Center's mission, core capabilities, and workload. At present, Volpe has largely been left to determine the needs of the Department, with many of its services being based more on available funding and customer requests than high-level DOT input and strategic planning. Moreover, with non-DOT work constituting a larger share of Volpe funding, workload, and staffing, issues arise as to whether the Center is a DOT asset or one more oriented towards meeting the needs of the greater community. Volpe's customers give it high marks for its services, but DOT senior leaders need to take a more active role in determining the Center's mission, role, and activities within the Department and in overseeing its planning and project acceptance processes to ensure that all future work represents the most effective use of Volpe's resources and has direct value to the Department.

Greater DOT Oversight Needed Given Volpe's Changing Mission, Workload, and Customer Base

Over the last 30 years, Volpe has experienced significant changes in its mission, workload, and customer base. From an organization that was focused primarily on doing R&D work for DOT, Volpe has evolved into one providing multiple

services to both DOT and various other Federal and non-Federal customers. The growth in non-DOT workload creates concerns as to whether Volpe is a DOT asset or one more oriented towards meeting the needs of the larger community.⁷ Also, Volpe's long-term maintenance of DOT MIS programs raises questions as to whether such practices represent the most effective use of both Volpe and other departmental resources. Given these issues and the Center's evolving role within the Department, senior DOT leaders need to reassess Volpe, with a goal of clarifying its mission, role, and workload within DOT.

Volpe's Mission, Role, and Workload Have Become Less R&D Oriented

Volpe's mission, role, and workload have evolved from performing mostly transportation-related R&D to the demonstration and deployment of new technologies and information systems. In the 1970s, for instance, approximately 80 percent of Volpe's work involved the research and development of various innovative new transportation technologies, including prototypes of buses and light rail. By the 1990s and 2000s, Volpe's workload had changed to where approximately 80 to 85 percent involved the demonstration and deployment of existing technologies and systems, such as the air traffic management system for the Federal Aviation Administration (FAA), enhanced strategic mobility for the Department of Defense (DOD), environmental remediation for the Environmental Protection Agency (EPA), and physical security for the Capitol Police, as well as the hosting and maintenance of numerous MIS projects for DOT.

In particular, Volpe's MIS work has evolved from the development of new systems to the management and updating of existing ones. For example, in FY 2003 we found that only 7 percent (\$4.6 million of \$62.7 million) of DOT's funding in this area went to developing or providing expertise for new MIS projects. In comparison, 93 percent (\$58.1 million) was for Volpe's management and updating of existing information systems. Overall, Volpe was hosting, maintaining, and updating 21 DOT MIS projects⁸ at a cost of \$58.1 million in FY 2003, which was 26 percent of Volpe's entire obligations and nearly 17 percent of its direct Federal labor years.⁹ DOT customers have been reluctant to transfer these systems from Volpe because of cost, space, or staffing concerns. While the hosting, maintaining, and updating of MIS projects falls within the Center's statutory authority and is of value to DOT, such work does represent a

⁷ After Volpe's transfer from NASA in 1970, much of its early work came from DOT. Although Volpe could serve other clientele outside of DOT, it was not until the late 1980s that such work became a significant portion of the Center's workload and funding.

⁸ The largest MIS project that Volpe hosts, maintains, and updates is the Enhanced Traffic Management System. In FY 2003, Volpe obligated \$20.2 million in FAA funds for this project and used 24.4 Federal labor years.

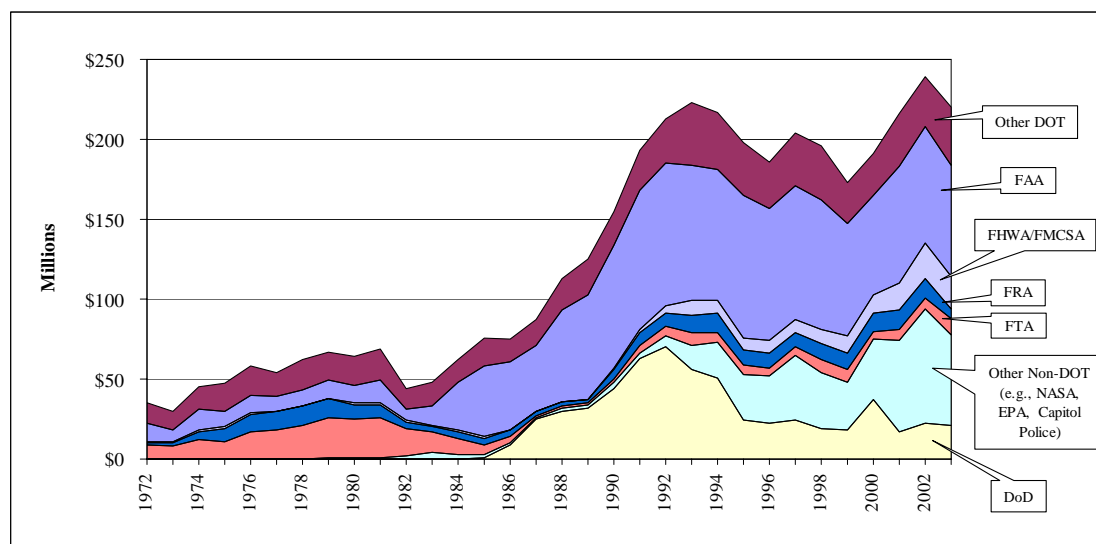
⁹ Direct labor involves time charged to a specific project. Indirect labor (e.g., administrative and clerical) is pooled and allocated across all projects.

significant change from Volpe's original mission of conducting R&D. Moreover, DOT's Chief Information Officer has questioned Volpe's continued operation and maintenance of MIS projects, noting that such services are inconsistent with the Center's charter and the Department needs to determine an appropriate host center for such operational work.

Non-DOT Customers Are Assuming a Greater Share of Volpe's Funding and Staff Resources

Beyond the Center's evolving mission and workload, Volpe's customer base has also changed. Overall, Volpe has come to service a far more diversified clientele, with non-DOT customers contributing an increasing share of the Center's funding and using a growing portion of its staff time. For instance, through most of the 1970s and early 1980s, virtually 100 percent of Volpe's work (as measured in obligations) was for DOT-related projects. This changed during the mid-1980s when DOD started using Volpe. Although DOD work has declined somewhat in recent years, other Federal and non-Federal agencies have increased their involvement with Volpe. By the early 2000s, Volpe was receiving over one-third of its funding from non-DOT sources, with EPA and the Capitol Police being two of its biggest customers. These two Agencies, in particular, have made up nearly 17 percent (\$191 million of \$1.1 billion) of Volpe's new funding over the last 5 years. Figure 2 illustrates the relative shifts in Volpe funding from selected DOT and non-DOT customers between FY 1972 and FY 2003.¹⁰

Figure 2. Volpe Federal Obligations by Customer, FYs 1972-2003*



* See Exhibit D for a listing of organizational acronyms.

¹⁰ See Exhibit C for a complete listing of Volpe DOT and non-DOT customers and associated obligations from FY 1994 to FY 2003.

Although Volpe's funding and Federal workforce levels have remained fairly constant over the last 10 years, this was achieved in large part through a significant infusion of non-DOT resources. For instance, between FY 1994 and FY 2003, new funding from DOT sources declined 15 percent—when adjusted for inflation—as compared to a 19-percent increase from non-DOT sources. Volpe's Federal workforce levels also remained essentially unchanged during this time, although the number of contract employees fell by nearly 28 percent. Volpe officials attributed this decline to rising Federal and contractor labor costs,¹¹ changing work mix, and relatively small growth in obligations. Increased funding from outside DOT (and the drop in contractor labor) also resulted in Volpe assigning a growing number of its Federal staff to non-DOT projects. For example, in FY 1994, 15 percent of Volpe's Federal staff (as measured in direct labor years) was assigned to non-DOT projects. By FY 2003, this had increased to 27 percent.

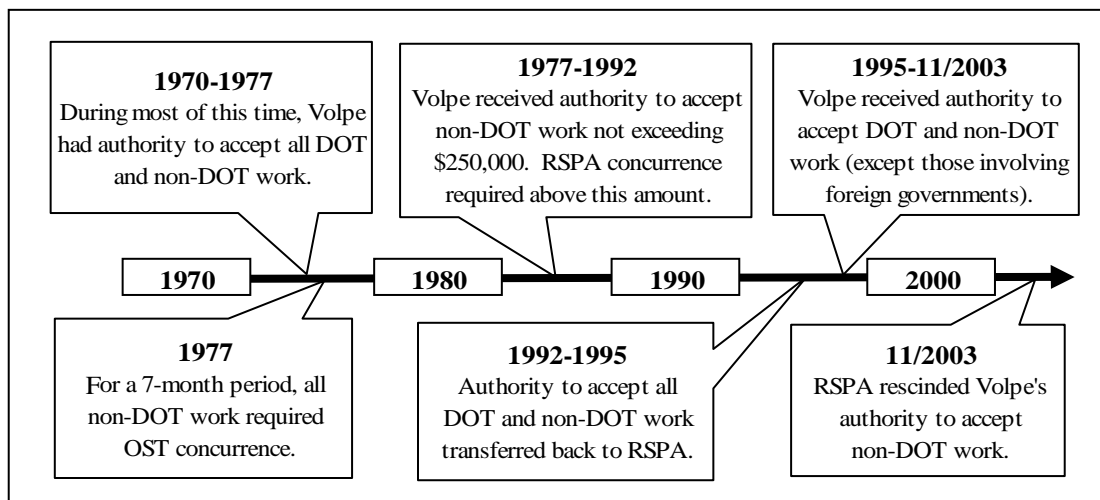
Growth in non-DOT funding was an important factor in helping Volpe compensate for reduced funding from DOT sources. Yet, this need to obtain new funding can also significantly influence what work is accepted, how staff resources are allocated, and which core capabilities are developed or maintained. Greater departmental involvement in these decisions would help ensure the needs of the Department are fully considered, as well as those of Volpe and its non-DOT customers.

Volpe Had Significant Authority in Deciding Its Workload

Volpe's changing role, workload, and customer base has, in part, been influenced by the lack of DOT oversight and the Center's significant authority in determining its workload. Except for a brief period in the 1990s, the Volpe Director has always had the authority to accept DOT projects and, to varying degrees, non-DOT projects as illustrated by Figure 3. The authority to accept non-DOT work, however, was of little importance during the 1970s and early 1980s since nearly all of Volpe's work involved DOT customers. This changed in 1985, when DOT signed a Memorandum of Understanding with DOD. This agreement ushered in a period of significant use of Volpe's services by DOD and, later, other non-DOT customers. (See Exhibit E for a chronological listing of major events in Volpe's history.)

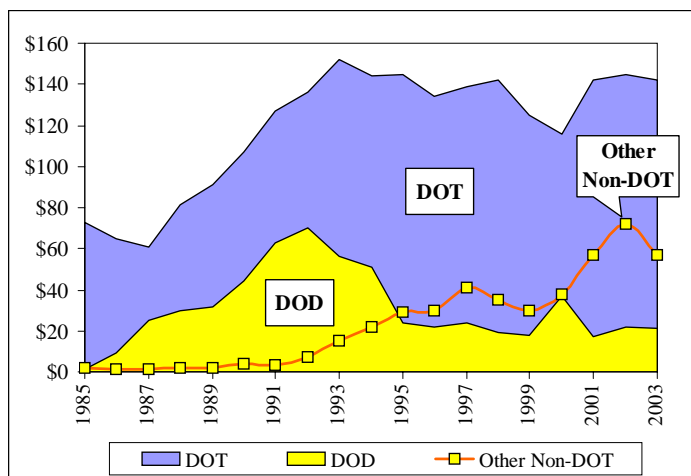
¹¹ Between FY 1994 and FY 2003, Volpe Federal and contractor labor costs rose 48 percent and 25 percent, respectively.

Figure 3. Volpe's Changing Approval Authority for DOT and Non-DOT Work



By late 1995, when Volpe regained the authority to approve most non-DOT work, DOD funding for Volpe had dropped by two-thirds from its high in FY 1992. In addition, funding from DOT sources, which had significantly increased during the late 1980s and early 1990s, would experience little change over the next decade (see Figure 4). To help compensate for the funding shortfall, Volpe accepted a number of projects involving other non-DOT customers, including the Capitol Police, EPA, and NASA. Overall, funding from other non-DOT sources increased by 90 percent between FY 1996 and FY 2003, with these customers providing one quarter of Volpe's funding by the early 2000s.

Figure 4. Volpe Obligations by DOT, DOD, and Other Non-DOT Customers, FYs 1985-2003



Volpe's involvement in a growing number of non-DOT projects raises several concerns regarding the Center's work acceptance process. The OIG first noted problems regarding this process in a 1994 audit report (see Exhibit F). More recently, RSPA's 2003 Management Assessment challenged Volpe's involvement in two large non-DOT projects—EPA environmental remediation and Capitol Police physical security—that were seen as being more appropriate for the private sector. We also question these two projects, as well as six other projects identified

during our audit. Totaling over \$153 million in obligations, these eight projects have little direct relationship to transportation or immediate benefit to DOT (see Table 1). The two largest projects, EPA Region 8 environmental remediation and Capitol Police physical security,¹² also represented a sizable share of Volpe's funding over the last several years (e.g., 26 percent of the Center's new funding in FY 2002 and 16 percent in FY 2003). Moreover, with the exception of Volpe's initial work for EPA Region 8, these non-DOT projects were approved by the Volpe Director or Deputy Director without needing the concurrence from senior DOT officials.¹³

Table 1. Volpe Projects with Little Direct Relationship to Transportation or Immediate Benefit to DOT

| Project Title | Customer Agency* | Total Obligations as of 2/2004 |
|---|------------------|--------------------------------|
| Region 8—Libby Montana Asbestos Site Assessment and Remediation | EPA | \$73,124,870 |
| Capitol Police Physical Security | USCP | \$71,979,042 |
| Technical and R&D Support for Combating Terrorism | DOD | \$7,451,533 |
| Region 9—Superfund Removal Program | EPA | \$330,662 |
| Security Review of Treasury Facilities** | Treasury | \$77,982 |
| Organizational Design and Implementation** | EPA | \$68,265 |
| Back Bay National Wildlife Refuge | DOI | \$11,094 |
| Performance Measures for Navy Chief Information Officer** | DOD | \$7,872 |
| | Total | \$153,051,320 |

* See Exhibit D for a listing of organizational acronyms.

** Project has been completed.

Based on issues raised by the RSPA Management Assessment, the Acting RSPA Administrator rescinded Volpe's authority to accept non-DOT work in November 2003. A new formal delegation of authority for non-DOT work was issued on May 7, 2004.¹⁴ Given the magnitude and importance of Volpe projects, the Department needs to strengthen Volpe procedures for accepting work to include a greater role for senior DOT leadership.

Volpe's Planning Process and Core Capabilities Require Greater Departmental Involvement

Volpe's planning process and decisions concerning its core capabilities lack sufficient input from senior DOT leadership regarding the Department's needs and where the Center should be focusing resources. Senior leadership involvement would help identify these needs and ensure they are addressed. For instance, although more than 90 percent of DOT customers who rated Volpe in our survey

¹² For comparative purposes, we considered Volpe's work in these areas as two large projects. The actual number of individual projects being worked by Volpe includes 2 environmental remediation projects for EPA Region 8 and 60 physical security projects for the Capitol Police.

¹³ Volpe officials noted that most of these projects were accepted based on prior memoranda of understanding signed by DOT senior officials. Moreover, with the Capitol Police project, the RSPA Administrator was given advanced notice of the Center's intent to accept the overall project.

¹⁴ Whereas this delegation of authority gives Volpe the right to negotiate new work with non-DOT customers, the authority to accept such work remains with the RSPA Administrator.

were pleased with the Center’s ability to meet their needs, some of these same respondents also cited various administrative, technical, and management areas associated with transportation activities where Volpe could improve its operations, including the ability to perform highway analysis, handle population-based safety issues, and forecast future ridership.¹⁵

Volpe’s Planning Process Lacks Departmental Input

DOT leadership provides little direction to or oversight of Volpe’s planning process with respect to drafting the Center’s strategic and business plans. These plans are important because they lay out the direction for developing Volpe’s core capabilities, the actions necessary to maintain such capabilities, and how the Center will address the Department’s needs and strategic goals. Beyond the RSPA Administrator’s final review, no other senior DOT stakeholder is involved in either helping develop Volpe’s strategic and business plans or providing final concurrence. Moreover, the need for greater customer input in Volpe’s planning process was cited by the RSPA Management Assessment. In particular, this study questioned the “soundness of the Volpe business plan,” noting that “... a more customer oriented, market-based, proactive approach would result in a business plan founded on sound business principles that would clearly define Volpe’s corporate expectations.”

Under the current process, Volpe develops a strategic plan every 3 to 5 years and a business plan every 1 to 2 years. Together, they frame the Center’s technical direction and human capital requirements. As part of its planning process, Volpe has hosted informal workshops and symposiums involving senior transportation officials, academics, and industry representatives. Once the strategic and business plans are completed, they are approved by the Volpe Director and forwarded to the RSPA Administrator for final concurrence. DOT leadership—beyond the RSPA Administrator—should be involved in Volpe’s planning process to help identify the Department’s future needs and to ensure the Center strengthens or develops the necessary capabilities to meet these needs.

Volpe Has Developed and Maintained Capabilities in Areas That Are Supported More by Non-DOT Customers

This lack of involvement in Volpe’s planning process and the Center’s considerable authority in accepting work has led to the development and maintenance of core capabilities and staff expertise in areas, such as environmental remediation and physical security, that are currently being supported more by non-DOT customers than those within the Department. Moreover, the potential for future DOT support in these two areas has lessened

¹⁵ Volpe officials point out that the Center has established capabilities in these areas, but that these capabilities can only be utilized when the customer makes the funding and the work available.

with the transfer of the Coast Guard and Transportation Security Administration to the Department of Homeland Security. As the Volpe Director noted, “With the transfer of TSA to the Department of Homeland Security, direct funding for this type of work [security] is not readily available within the US Department of Transportation.”

The relative lack of DOT funding for security and environmental work as compared to the three other departmental strategic goals is illustrated in Figure 5. For example, only 14 percent of Volpe’s obligations for security in FY 2003 involved DOT customers, as compared to 86 percent for non-DOT customers. Likewise, in the area of human and natural environment, 39 percent of Volpe’s obligations in support of this goal involved DOT projects, as compared to 61 percent for non-DOT customers. In contrast, for the other three DOT strategic goals, Volpe’s FY 2003 obligations for DOT projects ranged between 82 percent and 88 percent. Within DOT, Volpe’s funding in support of the five strategic goals in FY 2003 was \$72 million for safety, \$37 million for mobility, \$14 million for organizational efficiency, \$13 million for human and natural environment, and \$6 million for security.

Figure 5. Percent of Volpe’s Funding by Customer and DOT Strategic Goals, FY 2003

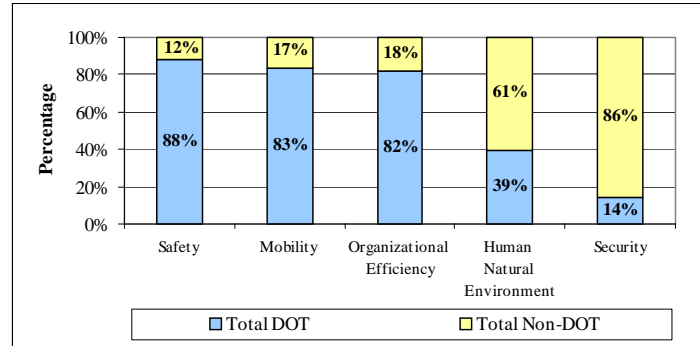
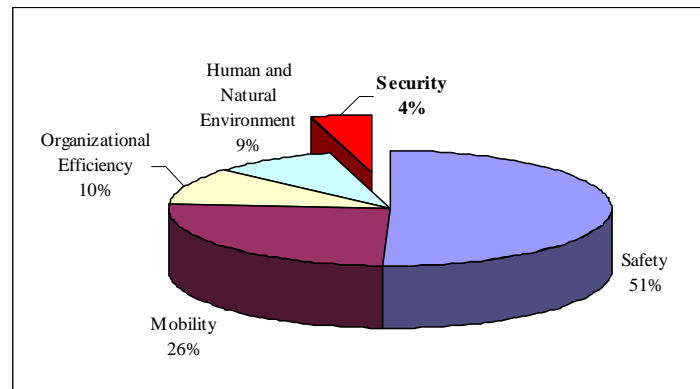


Figure 6. Percent DOT Funding for Volpe by Strategic Goals, FY 2003



Of the five strategic goals, security constituted about 4 percent of DOT’s total funding of Volpe (see Figure 6). It is unlikely that this percentage will significantly change in the short term, given that security is less than 1 percent of DOT’s FY 2005 budget request.

Due to the limited DOT funding for security, Volpe’s involvement—especially in physical security—currently involves only two small DOT projects.¹⁶ These are

¹⁶ In FY 2003, Volpe received approximately \$21.3 million for physical security work. Of this amount, DOT and non-DOT sponsors provided \$1.1 million (5 percent) and \$20.2 million (95 percent), respectively.

the development of security handbooks and a series of security forums for the Federal Transit Administration and an assessment of intercity bus service security for the Federal Motor Carrier Safety Administration. Nevertheless, the Volpe Director sees the Center's continued involvement in this area as being extremely important to DOT as well as the larger transportation community, with the potential for multiple spin-off benefits. In support of this position, Volpe officials point to the Center's current work on a number of non-DOT projects, such as developing and deploying vessel and vehicle identification systems for DOD and designing an integrated security system for Boston's new Silver Line bus tunnel.

Volpe officials note that the Center over the last 30 years has developed expertise in environmental remediation and physical security for such DOT customers as the Coast Guard, FAA, and Federal Railroad Administration. As DOT funding dwindled, Volpe sought to leverage funds from non-DOT customers to help maintain these capabilities, which may be needed in the future by the Department. As the Volpe Director points out, without the support of non-DOT customers, Volpe would not have been able to maintain security and environmental remediation as core capabilities. While such work is important, senior DOT leadership needs to assess Volpe's continued work in this area and whether the resulting expertise is something the Department wants to continue to foster and, if so, at what level.

DOT Needs To Establish a Board To Oversee Volpe

The Department should establish a board to oversee Volpe's operations. The creation of an oversight board for Volpe has been proposed in three different reports: two DOT studies¹⁷ and, more recently, the RSPA Management Assessment. In particular, RSPA's assessment provided the following reasons for establishing a board:

The input of guidance external to Volpe is needed to stay in the forefront of changing technologies in the transportation system. The RSPA Administrator should consider establishing a three to five member "Board of Directors," independent of Volpe, to represent Volpe's stakeholders....The Board could be made up of senior DOT officials from RSPA, the Operating Administrations, and OST to provide direction, oversight, and feedback to Volpe.

We also support establishing a board to oversee Volpe operations for many of the same reasons. First, a board would provide more direct feedback to the RSPA Administrator on the particular needs (current and future) of each major DOT

¹⁷ Both DOT studies were issued in 1995, with one addressing a reorganization of R&D within the Department and the other examining the option of privatizing Volpe.

customer. Second, board members could gain a greater appreciation of what Volpe has to offer, as well as what services it is currently providing to other DOT and non-DOT customers. Third, a board would assist the RSPA Administrator in determining the types of non-DOT projects Volpe should accept. And fourth, since many of the larger DOT customers maintain their own research centers, the board could help coordinate the resources and talents among these centers with Volpe—a key goal of the Secretary’s proposed reorganization of DOT’s research functions. Table 2 provides a comparison of Volpe with some of the other DOT research centers with respect to sponsor, percent non-DOT work performed, Federal staffing levels, and FY 2003 funding. Because these centers are in different parts of DOT and, except for Volpe, are more narrowly focused, the danger is that without guidance DOT research efforts may become increasingly less integrated and less efficient. Therefore, the existence of these other centers and the similarity of some of their work to Volpe’s support the need for greater coordination to avoid unnecessary duplication or competition, as well as to maximize staff expertise and resources.¹⁸

Table 2. Selected DOT Research Facilities

| Center | DOT Sponsor* | Non-DOT Workload | Federal Staffing | Contractor Staffing | FY 2003 Funding (Millions) |
|---|---------------|------------------|------------------------|---------------------|----------------------------|
| Volpe | RSPA | 35% to 40%+ | 550 FTEs** | 900 | \$261.0 |
| Technical Center | FAA | <5% | 1,299 FTEs** | 1,425 | \$424.0 |
| Turner-Fairbank Highway Research Center | FHWA | Minimal | 109 FTEs** | 400-500 | \$82.0 |
| Vehicle Research and Test Center | NHTSA | Minimal | 28 FTEs** | 75 | \$17.0 |
| National Crash Analysis Center | FHWA NHTSA | *** | 1 FTE** (part-time) | 10 (part-time) | \$1.5 |

* See Exhibit D for a listing of organizational acronyms.

** Full-time Equivalent

*** Cooperative agreement with George Washington University and private industry

¹⁸ A Volpe oversight board could also help RSPA coordinate research activities within DOT, a shortfall identified in a recent Government Accountability Office audit report (dated May 2003). Specifically, the report stated that RSPA had not met all congressional and DOT requirements for coordinating ongoing departmental research efforts to avoid duplication.

RECOMMENDATIONS

We recommend that the Deputy Secretary of Transportation:

1. Establish an oversight board for Volpe composed of senior departmental representatives from OST and DOT Operating Administrations that reports directly to the Deputy Secretary.

The board will:

2. Provide input to the RSPA Administrator in defining Volpe's mission, role, strategic plan, business plan, and core capabilities to ensure they meet DOT's current and future needs.
3. Provide input to the RSPA Administrator in improving procedures relating to how Volpe accepts projects to ensure all future work agreements with DOT and non-DOT customers represent the most effective use of Volpe's resources and will have direct value to the Department.¹⁹
4. Provide input to the Deputy Secretary and the RSPA Administrator on the continuing merits of long-standing interagency agreements and memoranda of understanding between DOT and non-DOT agencies (such as DOD and EPA). The board should also review and provide advice on all proposed interagency agreements that may produce significant amounts of work for Volpe.

MANAGEMENT COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

On July 19, 2004, RSPA provided comments (see Appendix) to our draft report. RSPA concurred with our recommendation on establishing a DOT oversight board for Volpe, noting that "... the Volpe Center would benefit from having such a board." RSPA further pointed out that through an internal, DOT-wide oversight board, senior Departmental officials will have "... opportunity to furnish advice to the RSPA Administrator...on work acceptance issues and procedures, core Volpe staff capabilities to be developed and maintained, and the other benefits identified in the Draft Report." RSPA also agreed that the board should report directly to the Deputy Secretary. Prior to its July 19, 2004 response, RSPA provided a number of additional comments to the draft report. Where appropriate, we made changes to the final report in response to these comments.

¹⁹ As part of these improved procedures, the board should be responsible for reviewing "proposed" project agreements involving large non-DOT projects and providing advice to the RSPA Administrator as to whether they should be accepted or not. For DOT and small non-DOT projects (as well as small funding increases), RSPA would only be responsible for keeping the board apprised of which projects are being accepted or declined.

ACTION REQUIRED

While concurring with our first recommendation, RSPA did not specifically address three additional recommendations relating to the board's operation. In accordance with DOT Order 8000.1C, therefore, we would appreciate receiving your written comments to our final report within 30 calendar days. For each of the four recommendations, please indicate the specific action taken or planned and the target date for completion. If you do not concur, please provide your rationale. You may provide alternative courses of action that you believe would resolve the issues presented in this report.

We appreciate the courtesies and cooperation of Volpe, RSPA, and other DOT representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-1992 or Robin K. Hunt, Deputy Assistant Inspector General for Hazardous Materials, Security and Special Programs, at (415) 744-3090.

#

cc: David Lev, Acting Deputy Director of Volpe, DTS-2
Linda Combs, Assistant Secretary for Budget and
Programs/Chief Financial Officer, B-1
Martin Gertel, Audit Liaison, M-1

EXHIBIT A. OBJECTIVE, SCOPE, AND METHODOLOGY

The audit objective was to determine how Volpe's role and functions have changed over the years and whether current Volpe activities meet DOT needs. In addressing this objective, we reviewed pertinent legislation, memoranda, policy directives, executive decisions, DOT and Volpe policy guidance, and plans related to Volpe activities. We determined how Volpe's role and functions have changed over the years, including an analysis of workload, revenue sources, annual funding levels, and mix of Volpe's DOT and non-DOT customers for the past 30 years and of Federal and contractor staffing levels for the past 10 years.

We assessed whether Volpe activities met departmental needs (past, present, and future) through a satisfaction survey of DOT customers.²⁰ The survey addressed the level of satisfaction with Volpe performance on past and present projects and the likelihood the customers would select Volpe for future projects. To determine why Volpe accepted some non-DOT work that appears to have little or no relationship to transportation or value to the Department, we judgmentally selected 45 of 247 projects, reviewed associated memoranda of understanding, and discussed the rationale for performing this work with Volpe management. In addition, we reviewed policy regarding project acceptance and determined whether the policy was followed. We also determined how Volpe identified present and future DOT needs and how it plans to meet these needs.

We reviewed several studies and reports on Volpe, including two OIG audit reports (see Exhibit F), DOT reports on Volpe reorganization and privatization (March and June 1995), and a draft RSPA Management Assessment report (July 18, 2003). We also met with the RSPA Management Assessment team to discuss its observations and reviewed related briefings and consultant reports on follow-up actions being taken. Throughout the process, we met with the Volpe Director and division officials to gain an understanding of the changes and to obtain documents as needed.

We conducted work at Volpe in Cambridge, MA; at RSPA; and at other selected DOT and non-DOT offices in Washington, DC (see Exhibit G). We conducted the audit from July 2003 through May 2004. The audit was done in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States and included tests of internal controls as were considered necessary.

²⁰ Our sample was based on 60 randomly selected DOT projects. Since some DOT officials oversaw more than one project, the actual number of customers surveyed was 55.

In the conduct of this audit, we used computer-generated data from Volpe. We did not assess the general and application controls for each of the automated systems. For some of these data, such as yearly funding totals, we relied on recent audit work done by another office within our organization. In other instances, we were able to compare several data sources to ensure consistency in the information received from Volpe. When discrepancies were found, we followed up with Volpe officials to determine the basis for these differences and to obtain new data runs when justified.

EXHIBIT B. MEMORANDA AND LEGISLATION ON VOLPE'S MISSION AND ROLE WITHIN DOT

| | |
|--|--|
| March 13, 1970 | Memorandum for the President from Bureau of the Budget supports DOT's proposal to take over NASA's ERC (Electronics Research Center). This memorandum states: "To an increasing degree the success of the Department of Transportation's programs will depend upon the effectiveness of its research and development." The memorandum further notes: "We also share the view that ERC could become a useful facility within the Department's research and development program... We believe that transfer of ERC would give the Administration and DOT good opportunity to strengthen DOT's R&D planning and management." |
| March 19, 1970 | Presidential memorandum approves proposal to acquire NASA's ERC for use by DOT. In the memorandum, the President concurs with "...the need to view transportation in the Nation as a total system and to improve the Department's mechanism for planning and conducting research and development." |
| March 30, 1970 | Memorandum from the Under Secretary of DOT announces the transfer of NASA's ERC to DOT, effective July 1, 1970. The memorandum notes: "In conjunction with this action, the Department has been directed to accelerate its R&D planning..." |
| May 12, 1970 | Memorandum to the General Services Administration from Office of the Secretary of Transportation requests transfer of NASA's ERC to DOT. This request states: "The ERC will be utilized and developed as a central research and development facility of the Department of Transportation in furtherance of DOT's objective of achieving an integrated national goods and passenger carrying transportation system." The Center "...will also provide initial additional capability for current programs and a reasonable basis for expansion for future R&D programs. It will promote R&D in support of such transportation problems as: Urban transit and traffic congestion Air traffic control and airport/airways expansion Air, highway, and marine and rail safety Transportation impact on the environment (including pollution control and noise abatement) Coordination and integration of intermodal transportation systems." |
| May 30, 1980 and January 12, 1983 | Section 9(r)(1) of the Department of Transportation Act, 49 USC 1657(r)(1) authorizes the Secretary to establish a working capital fund (fund) for financing the activities of the Transportation Systems Center (Center). 49 USC 328(a) codifies this legislation and states that "...amounts in the fund are available for financing the activities of the Center, including research, development, testing, evaluation, analysis, and related activities the Secretary of Transportation approves, for the Department, other agencies, State and local governments, other public authorities, private organizations, and foreign countries." |

EXHIBIT C. VOLPE OBLIGATIONS BY CUSTOMER, FYs 1994-2003 (\$ in Millions)²¹

| DOT ²² | FY 1994 | FY 1995 | FY 1996 | FY 1997 | FY 1998 | FY 1999 | FY 2000 | FY 2001 | FY 2002 | FY 2003 |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| FAA | \$82 | \$89 | \$83 | \$84 | \$81 | \$70 | \$62 | \$73 | \$73 | \$70 |
| FHWA | 8 | 8 | 8 | 8 | 9 | 11 | 12 | 12 | 8 | 8 |
| FMCSA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 14 | 17 |
| FRA | 12 | 9 | 9 | 9 | 10 | 10 | 11 | 13 | 12 | 13 |
| FTA | 6 | 6 | 5 | 5 | 8 | 8 | 5 | 7 | 7 | 10 |
| NHTSA | 4 | 5 | 8 | 8 | 8 | 7 | 8 | 11 | 16 | 13 |
| OST | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 |
| RSPA | 4 | 4 | 4 | 6 | 7 | 5 | 6 | 6 | 7 | 6 |
| USCG ²³ | 15 | 10 | 6 | 7 | 6 | 6 | 5 | 7 | 0 | 0 |
| Other DOT | 12 | 12 | 10 | 11 | 10 | 7 | 6 | 7 | 7 | 4 |
| Total DOT | \$144 | \$145 | \$134 | \$139 | \$142 | \$125 | \$116 | \$142 | \$145 | \$142 |
| Capitol Police | 0 | 0 | 0 | 0 | 0 | 4 | 14 | 15 | 27 | 13 |
| DOE | 7 | 6 | 7 | 8 | 9 | 8 | 6 | 4 | 2 | 2 |
| DOD | 51 | 24 | 22 | 24 | 19 | 18 | 37 | 17 | 22 | 21 |
| DOJ | 0 | 1 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| DOS | 3 | 3 | 0 | 0 | 1 | 0 | 0 | 3 | 6 | 4 |
| EPA | 2 | 3 | 1 | 1 | 1 | 7 | 9 | 22 | 20 | 17 |
| NASA | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 8 | 6 | 14 |
| Treasury | 2 | 2 | 8 | 8 | 5 | 1 | 0 | 0 | 0 | 0 |
| USCG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 |
| USPS | 1 | 8 | 10 | 14 | 9 | 5 | 1 | 2 | 2 | 1 |
| Other Federal | 7 | 6 | 0 | 2 | 1 | 1 | 3 | 1 | 2 | 1 |
| Non-Federal | 0 | 0 | 0 | 4 | 5 | 2 | 2 | 2 | 2 | 2 |
| Total Non-DOT | \$73 | \$53 | \$52 | \$65 | \$54 | \$48 | \$75 | \$74 | \$94 | \$78 |
| Total Obligations | \$217 | \$198 | \$186 | \$204 | \$196 | \$173 | \$191 | \$216 | \$239 | \$220 |

²¹ Numbers are rounded.

²² See Exhibit D for a listing of organizational acronyms.

²³ With the transfer of USCG to the Department of Homeland Security, Volpe reclassified it as non-DOT starting in FY 2002.

EXHIBIT D. ORGANIZATIONAL ACRONYMS

| | |
|-------|--|
| DOD | Department of Defense |
| DOE | Department of Energy |
| DOI | Department of the Interior |
| DOJ | Department of Justice |
| DOS | Department of State |
| DOT | Department of Transportation |
| EPA | Environmental Protection Agency |
| FAA | Federal Aviation Administration |
| FHWA | Federal Highway Administration |
| FMCSA | Federal Motor Carrier Safety Administration |
| FRA | Federal Railroad Administration |
| FTA | Federal Transit Administration |
| NASA | National Aeronautics and Space Administration |
| NHTSA | National Highway Traffic Safety Administration |
| OIG | Office of Inspector General |
| OST | Office of the Secretary of Transportation |
| RSPA | Research and Special Programs Administration |
| TSA | Transportation Security Administration |
| USCG | United States Coast Guard |
| USCP | United States Capitol Police |
| USPS | United States Postal Service |

EXHIBIT E. SIGNIFICANT VOLPE EVENTS²⁴

| | |
|---------------------------|---|
| March 25, 1970 | President announced the transfer of the NASA Electronics Research Center (ERC) to DOT. |
| July 1, 1970 | Effective date for transfer of the NASA ERC to DOT's Office of the Assistant Secretary for Systems Development and Technology. ERC was renamed the Transportation Systems Center (TSC). |
| September 23, 1977 | TSC was consolidated with DOT's Materials Transportation Bureau to form the Research and Special Programs Directorate (RSPD). |
| December 1977 | Functions relating to the administration of transportation safety and research programs were transferred from OST to RSPD and assigned to the newly established Transportation Programs Bureau (TPB). |
| April 27, 1978 | RSPD was renamed the Research and Special Programs Administration (RSPA). |
| May 30, 1980 | Section 9(r)(1) of the Department of Transportation Act, 49 U.S.C. 1657(r)(1), authorized the Secretary to establish a working capital fund for financing the activities of the TSC. |
| February 23, 1981 | DOT Order 2300.7 "Financing Activities at TSC" established policies to govern the financing of work performed by TSC. |
| January 12, 1983 | Title 49 USC Section 328 codified previous legislation concerning TSC's working capital fund. |
| April 12, 1985 | Memorandum of understanding signed between the DOD and the Assistant Secretary of Transportation (Policy and International Affairs). Under this agreement, TSC was available to provide support in the following fields: systems research and analysis; operations and logistics; management information systems; supporting technology in command, control, communications, and intelligence; and supporting technology in transportation vehicles and structures. |
| September 18, 1990 | TSC was renamed the John A. Volpe National Transportation Systems Center in Secretary Volpe's honor. |
| October 24, 1992 | RSPA was formally established by statute (49 U.S.C. Section 112), with the Administrator responsible for carrying out the duties and powers vested in the Secretary with respect to activities of the Volpe National Transportation Systems Center. |
| September 22, 1994 | First RSPA Administrator appointed by the President and confirmed by the Senate was sworn into office. |
| September 28, 1995 | RSPA Administrator delegated authority to the Volpe Director to accept work and enter into agreements with: (1) OST and operating elements of the Department, and (2) other Federal agencies (i.e., non-DOT) where general working agreements are not applicable. |

²⁴ See Exhibit D for a listing of organizational acronyms.

| | |
|-------------------------|--|
| July 12, 1996 | <p>Memorandum of understanding signed between EPA and RSPA allowing Volpe's support in the following areas:</p> <ul style="list-style-type: none"> • Transportation related to environmental issues, • Federal facilities compliance issues, • Total systems engineering approach, • Strategic planning and business reengineering skills, • Technical expertise in state-of-the-art information systems development, • Technology transfer from other environmental initiatives, and • Expertise in the movement of hazardous and radioactive materials. |
| May 19, 1999 | <p>Interagency Agreement signed between the United States Capitol Police and Volpe.</p> |
| January 14, 2002 | <p>Volpe Order 5000.4B (cancelled 5000.4A, dated February 13, 1996) provided policy on work acceptance at Volpe and defined procedures for preparing and processing general work agreements, reimburseable agreements, memoranda of understanding, and memoranda of agreement.</p> |
| November 2003 | <p>RSPA Acting Administrator rescinded the Volpe Director's 1995 delegated authority to accept work from non-DOT Federal and state/local agencies where a general working agreement is not applicable.</p> |
| May 7, 2004 | <p>RSPA Deputy Administrator issued a new delegation of authority to the Volpe Director for accepting work. Under the new delegation, the RSPA Administrator retained the authority to accept new work from non-DOT organizations.</p> |

EXHIBIT F. PRIOR AUDIT COVERAGE

OIG Report Number R2-RS-4-021, “Project Acceptance Review Volpe National Transportation System Center,” June 8, 1994

We found that while Volpe contributed significantly to DOT’s research programs, the Center accepted projects with little or no research value and projects outside its basic mission of transportation research, development, testing, and evaluation. The report also noted that Volpe did not de-obligate and return excess funds from projects amounting to about \$66 million at the end of FY 1992. In response to the OIG’s report findings and recommendations, Volpe developed formal criteria limiting the acceptance of projects and evaluated proposed work against these criteria. A project-by-project review was also performed to determine which projects were completed or otherwise inactive so that remaining obligational authority could be returned to the sponsoring agency.

OIG Report Number MH-2002-071, “Office of Defects Investigation, National Highway Traffic Safety Administration,” January 3, 2002

We identified a number of deficiencies in Volpe’s work with the Office of Defects Investigation in developing a new information system for tracking safety defects (later referred to as the Advanced Retrieval “Tire, Equipment, Motor Vehicle” Information System or ARTEMIS).²⁵ The OIG recommended the NHTSA Administrator obtain the services of an independent entity to validate and verify the contractor’s progress, reduce development risk, and advise NHTSA of its findings. The report further recommended that NHTSA review and edit the data in the defect database for accuracy and completeness before transferring the data to the new information system.

²⁵ The OIG is conducting a follow-up audit of ARTEMIS project, with a report due later this year.

EXHIBIT G. ACTIVITIES VISITED OR CONTACTED

- Volpe National Transportation Systems Center, Cambridge, MA
- Research and Special Programs Administration, Washington, DC
- Office of the Secretary of Transportation, Washington, DC
- House Transportation and Treasury Subcommittee, Washington, DC
- Federal Aviation Administration, Washington, DC
- Federal Highway Administration, Washington, DC
- Federal Transit Administration, Washington, DC
- National Highway Traffic Safety Administration, Washington, DC
- Surface Transportation Board, Washington, DC
- William J. Hughes Technical Center, Atlantic City, NJ
- Turner-Fairbank Highway Research Center, McLean, VA
- Vehicle Research and Testing Center, Columbus, OH
- National Crash Analysis Center, George Washington University, Washington, DC


APPENDIX. MANAGEMENT COMMENTS



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

Memorandum

Subject: **INFORMATION:** Draft Report on the Volpe National Transportation Systems Center - Project No. 03B3010B000 Date: July 19, 2004

From: Samuel G. Bonasso, Deputy Administrator
Research and Special Programs Administration  Reply to
Attn. of:

To: Kenneth M. Mead
Inspector General

This memorandum responds to your Office's Draft Report on the RSPA/Volpe National Transportation Systems Center, Project No. 03B3010B000, which we received for comment on July 9, 2004. Per your transmittal memorandum, this report is the first of three audit reports on the Volpe Center your Office is preparing in response to a request from Congressman Istook, Chair of the House Transportation Appropriations Subcommittee. This Draft Report responds to the following question posed by Congressman Istook: "how Volpe's role and functions have changed over the years and whether current Volpe activities meet the Department of Transportation's (DOT) needs." I note that this Draft Report is being issued ten years after your last review of the Volpe Center. That report resulted in improved processes for work acceptance and funds management at the Center, and I am confident that this Draft Report, when finalized, will also produce beneficial changes.

The Draft Report recommends establishment of a Departmental oversight board for the Volpe Center that would provide a wide range of advisory business planning guidance to the RSPA Administrator and the Center. I agree with your conclusion that the Volpe Center would benefit from having such a board. As the Draft Report recognizes, Congress gave the Secretary very broad discretion in determining Volpe activities and its customers. Through the mechanism of an internal, DOT-wide oversight board, senior Departmental officials will have opportunity to furnish advice to the RSPA Administrator as to the exercise of this discretion, for example, to provide guidance on work acceptance issues and procedures, core Volpe staff capabilities to be developed and maintained, and the other benefits identified in the Draft Report. As the Draft Report observes,

Appendix. Management Comments

participation on this oversight board would also enable Departmental leadership serving as oversight board members to become familiar with Volpe's capabilities and the range of services currently being provided to its DOT and non-DOT customers. I also agree with you that having this board report directly to the Deputy Secretary will serve to emphasize the Volpe Center's importance to the entire Department. This reporting relationship should also help ensure the board's success by assuring the active participation of senior Departmental leadership. The Draft Report's recommendation has now been carefully structured to recognize and preserve the RSPA Administrator's statutory responsibilities with respect to activities of the Volpe Center.

I look forward to your support as RSPA moves forward to implement this recommendation. We will provide an implementation plan to you shortly.

cc:

K. Van Tine, S-2

J. Flaherty, S-1

The following pages contain textual versions of the graphs and charts found in this document. These pages were not part of the original document but have been added here to accommodate assistive technology.

Figure 1. Volpe’s Obligations by DOT and Non-DOT Customers, FYs 1972 to 2003. Amounts are in millions.

| Fiscal Year | DOT | Non-DOT | Total |
|--------------------|------------|----------------|--------------|
| 1972 | \$35 | \$0 | \$35 |
| 1973 | \$30 | \$0 | \$30 |
| 1974 | \$45 | \$0 | \$45 |
| 1975 | \$47 | \$0 | \$47 |
| 1976 | \$58 | \$0 | \$58 |
| 1977 | \$54 | \$0 | \$54 |
| 1978 | \$62 | \$0 | \$62 |
| 1979 | \$66 | \$1 | \$67 |
| 1980 | \$63 | \$1 | \$64 |
| 1981 | \$68 | \$1 | \$69 |
| 1982 | \$42 | \$2 | \$44 |
| 1983 | \$44 | \$4 | \$48 |
| 1984 | \$59 | \$3 | \$62 |
| 1985 | \$73 | \$3 | \$76 |
| 1986 | \$65 | \$10 | \$75 |
| 1987 | \$61 | \$26 | \$87 |
| 1988 | \$81 | \$32 | \$113 |
| 1989 | \$91 | \$34 | \$125 |
| 1990 | \$107 | \$48 | \$155 |
| 1991 | \$127 | \$66 | \$193 |
| 1992 | \$136 | \$77 | \$213 |
| 1993 | \$152 | \$71 | \$223 |
| 1994 | \$144 | \$73 | \$217 |
| 1995 | \$145 | \$53 | \$198 |
| 1996 | \$134 | \$52 | \$186 |
| 1997 | \$139 | \$65 | \$204 |
| 1998 | \$142 | \$54 | \$196 |
| 1999 | \$125 | \$48 | \$173 |
| 2000 | \$116 | \$75 | \$191 |
| 2001 | \$142 | \$74 | \$216 |
| 2002 | \$145 | \$94 | \$239 |
| 2003 | \$142 | \$78 | \$220 |

Note: DOT funding 90 to 100 percent for FYs 1972 to 1985.

Note: DOT funding 65 percent in FY 2003.

Note: Non-DOT funding 35 percent in FY 2003.

Note: Figures for FYs 1972 to 1975 are estimated.

Figure 2. Volpe Federal Obligations by Customer, FYs 1972 to 2003.
Amounts are in millions.

| Fiscal Year | DOD | Other Non-DOT | FTA | FRA | FHWA/FMCSA | FAA | Other DOT | Total |
|--------------------|------------|----------------------|------------|------------|-------------------|------------|------------------|--------------|
| 1972 | \$0 | \$0 | \$9 | \$1 | \$1 | \$11 | \$13 | \$35 |
| 1973 | \$0 | \$0 | \$8 | \$2 | \$1 | \$7 | \$12 | \$30 |
| 1974 | \$0 | \$0 | \$12 | \$5 | \$1 | \$13 | \$14 | \$45 |
| 1975 | \$0 | \$0 | \$11 | \$8 | \$1 | \$10 | \$17 | \$47 |
| 1976 | \$0 | \$0 | \$17 | \$11 | \$1 | \$11 | \$18 | \$58 |
| 1977 | \$0 | \$0 | \$18 | \$12 | \$0 | \$9 | \$15 | \$54 |
| 1978 | \$0 | \$0 | \$21 | \$12 | \$0 | \$10 | \$19 | \$62 |
| 1979 | \$0 | \$1 | \$25 | \$12 | \$0 | \$11 | \$18 | \$67 |
| 1980 | \$0 | \$1 | \$24 | \$9 | \$1 | \$11 | \$18 | \$64 |
| 1981 | \$0 | \$1 | \$25 | \$8 | \$1 | \$14 | \$20 | \$69 |
| 1982 | \$0 | \$2 | \$17 | \$4 | \$1 | \$7 | \$13 | \$44 |
| 1983 | \$0 | \$4 | \$13 | \$3 | \$1 | \$12 | \$15 | \$48 |
| 1984 | \$0 | \$3 | \$10 | \$4 | \$1 | \$30 | \$14 | \$62 |
| 1985 | \$1 | \$2 | \$6 | \$4 | \$1 | \$44 | \$18 | \$76 |
| 1986 | \$9 | \$1 | \$4 | \$4 | \$0 | \$43 | \$14 | \$75 |
| 1987 | \$25 | \$1 | \$1 | \$3 | \$0 | \$41 | \$16 | \$87 |
| 1988 | \$30 | \$2 | \$1 | \$3 | \$0 | \$57 | \$20 | \$113 |
| 1989 | \$32 | \$2 | \$1 | \$2 | \$0 | \$66 | \$22 | \$125 |
| 1990 | \$44 | \$4 | \$2 | \$6 | \$1 | \$77 | \$21 | \$155 |
| 1991 | \$63 | \$3 | \$5 | \$8 | \$2 | \$87 | \$25 | \$193 |
| 1992 | \$70 | \$7 | \$6 | \$8 | \$5 | \$89 | \$28 | \$213 |
| 1993 | \$56 | \$15 | \$8 | \$11 | \$9 | \$85 | \$39 | \$223 |
| 1994 | \$51 | \$22 | \$6 | \$12 | \$8 | \$82 | \$36 | \$217 |
| 1995 | \$24 | \$29 | \$6 | \$9 | \$8 | \$89 | \$33 | \$198 |
| 1996 | \$22 | \$30 | \$5 | \$9 | \$8 | \$83 | \$29 | \$186 |
| 1997 | \$24 | \$41 | \$5 | \$9 | \$8 | \$84 | \$33 | \$204 |

| | | | | | | | | |
|-------------|------|------|------|------|------|------|------|-------|
| 1998 | \$19 | \$35 | \$8 | \$10 | \$9 | \$81 | \$34 | \$196 |
| 1999 | \$18 | \$30 | \$8 | \$10 | \$11 | \$70 | \$26 | \$173 |
| 2000 | \$37 | \$38 | \$5 | \$11 | \$12 | \$62 | \$26 | \$191 |
| 2001 | \$17 | \$57 | \$7 | \$12 | \$17 | \$73 | \$33 | \$216 |
| 2002 | \$22 | \$72 | \$7 | \$12 | \$22 | \$73 | \$31 | \$239 |
| 2003 | \$21 | \$57 | \$10 | \$13 | \$25 | \$70 | \$24 | \$220 |

Note: Other Non-DOT includes NASA, EPA, and Capitol Police.

Figure 3. Volpe's Changing Approval Authority for DOT and Non-DOT Work

| Dates | Comments |
|---------------------|---|
| 1970-1977 | During most of this time, Volpe had authority to accept all DOT and non-DOT work. |
| 1977 | For a 7-month period, all non-DOT work required OST concurrence. |
| 1977-1992 | Volpe received authority to accept non-DOT work not exceeding \$250,000. RSPA concurrence required above this amount. |
| 1992-1995 | Authority to accept all DOT and non-DOT work transferred back to RSPA. |
| 1995-11/2003 | Volpe received authority to accept DOT and non-DOT work (except those involving foreign governments). |
| 11/2003 | RSPA rescinded Volpe's authority to accept non-DOT work. |

Figure 4. Volpe Obligations by DOT, DOD, and Other Non-DOT Customers, FYs 1985 to 2003. Amounts are in millions.

| Fiscal Year | DOT | DOD | Other Non-DOT |
|--------------------|------------|------------|----------------------|
| 1985 | \$73 | \$1 | \$2 |
| 1986 | \$65 | \$9 | \$1 |
| 1987 | \$61 | \$25 | \$1 |
| 1988 | \$81 | \$30 | \$2 |
| 1989 | \$91 | \$32 | \$2 |
| 1990 | \$107 | \$44 | \$4 |
| 1991 | \$127 | \$63 | \$3 |
| 1992 | \$136 | \$70 | \$7 |
| 1993 | \$152 | \$56 | \$15 |

| | | | |
|-------------|-------|------|------|
| 1994 | \$144 | \$51 | \$22 |
| 1995 | \$145 | \$24 | \$29 |
| 1996 | \$134 | \$22 | \$30 |
| 1997 | \$139 | \$24 | \$41 |
| 1998 | \$142 | \$19 | \$35 |
| 1999 | \$125 | \$18 | \$30 |
| 2000 | \$116 | \$37 | \$38 |
| 2001 | \$142 | \$17 | \$57 |
| 2002 | \$145 | \$22 | \$72 |
| 2003 | \$142 | \$21 | \$57 |

Figure 5. Percent of Volpe’s Funding by Customer and DOT Strategic Goals, FY 2003.

| Sponsor | Safety | Mobility | Organizational Efficiency | Human Natural Environment | Security |
|----------------------|---------------|-----------------|----------------------------------|----------------------------------|-----------------|
| Total DOT | 88% | 83% | 82% | 39% | 14% |
| Total Non-DOT | 12% | 17% | 18% | 61% | 86% |

Figure 6. Percent DOT Funding for Volpe by Strategic Goals, FY 2003.

| Strategic Goal | Percent |
|--------------------------------------|----------------|
| Safety | 51% |
| Mobility | 26% |
| Organizational Efficiency | 10% |
| Human and Natural Environment | 9% |
| Security | 4% |