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Resources, Community, and Economic Development Division

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The Honorable Richard K. Armey Majority Leader House of Representatives

The Honorable John R. Kasich Chairman, Committee on the Budget House of Representatives

The Honorable Dan Burton Chairman, Committee on Government Reform and Oversight House of Representatives

The Honorable Bob Livingston Chairman, Committee on Appropriations House of Representatives

Subject: Results Act: Observations on the Department of Transportation's Draft Strategic Plan

On June 12, 1997, you asked us to review the draft strategic plans submitted by the Cabinet departments and selected major agencies for consultation with the Congress as required by the Government Performance and Results Act of 1993 (the Results Act). This report is our response to that request concerning the Department of Transportation (DOT).

# Objectives, Scope, and Methodology

Specifically, you asked us to review DOT's draft plan and assess (1) whether it fulfills the requirements of the Results Act and to provide our views on its overall quality; (2) whether it reflects DOT's key statutory authorities; (3) whether it reflects interagency coordination for crosscutting programs, activities, or functions that are similar or complementary to other agencies; (4) whether it addresses management problems we have previously identified; and (5) whether DOT's data and information systems are adequate for providing reliable information for measuring results.

We reviewed the draft strategic plan that dot provided to congressional committees on July 2, 1997. It is important to recognize that the final plan

is not due to the Congress and the Office of Management and Budget (OMB) until September 30, 1997. Thus, our findings reflect a "snapshot" of DOT's plan at this time. We recognize that developing a strategic plan is a dynamic process and that DOT is continuing to revise the draft. Furthermore, the Results Act anticipated that it may take several planning cycles to perfect the process and that the final plan would be refined in future planning cycles.

To address the five objectives, we interviewed DOT officials involved in preparing the plan, reviewed supporting documents that DOT used to prepare the plan, and relied on our knowledge of DOT's operations and programs from our numerous reviews of the Department. Additionally, we reviewed the Results Act to determine whether DOT's draft strategic plan complied with its requirements. To assess the overall quality of the plan and its components, we used OMB's guidance on developing strategic plans<sup>1</sup> and our May 1997 guidance for congressional review of the plans.<sup>2</sup> In determining whether DOT's draft strategic plan reflects the Department's major statutory responsibilities, we reviewed material in the explanatory notes in DOT's 1998 budget for an overview of the Department's functions and activities. In addition, we reviewed a compilation of statutory authorities prepared for the strategic planning process by DOT'S Office of the General Counsel. We also consulted with the Office of the General Counsel, and as you requested, we coordinated our review with the Congressional Research Service. To determine whether DOT had adequate systems in place to provide reliable information on performance, we relied on our prior reports and those from the Department's Office of Inspector General (OIG).

### Background

Created in 1966 from eight other major departments and agencies, DOT implements the nation's overall transportation policy and oversees federal transportation programs. With a budget of about \$39 billion in fiscal year 1997, DOT includes the Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), Federal Railroad Administration, Federal Transit Administration (FTA), Maritime Administration, National Highway Traffic Safety Administration (NHTSA), Research and Special Programs Administration, Bureau of Transportation Statistics, St. Lawrence Seaway Development Corporation, Surface Transportation Board, Transportation

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<sup>&</sup>lt;sup>1</sup>Preparation and Submission of Strategic Plans and Annual Performance Plans (OMB Circular A-11, Part 2, May 1997).

<sup>&</sup>lt;sup>2</sup>Agencies' Strategic Plans Under GPRA: Key Questions to Facilitate Congressional Review (GAO/GGD-10.1.16, May 1997, version 1).

Administrative Services Center, U. S. Coast Guard, and Office of the Secretary.

The Results Act is the legislative framework through which agencies are required to set strategic goals, measure performance, and report on the degree to which goals were met. The act requires federal agencies to develop strategic plans by September 30, 1997, that cover a period of at least 5 years. The Results Act requires that an agency's strategic plan contain six key components: (1) a comprehensive agency mission statement; (2) agencywide long-term goals and objectives for all major functions and operations; (3) approaches (or strategies) and the various resources needed to achieve the goals and objectives; (4) a description of the relationship between the long-term goals and objectives and the annual performance goals; (5) an identification of those key factors, external to the agency and beyond its control, that could significantly affect the achievement of its strategic goals; and (6) a description of how program evaluations were used to establish or revise strategic goals and a schedule for future program evaluations.

DOT provided the Congress with a Department-wide draft strategic plan for consultation on July 2, 1997. The plan's vision, mission statement, and five strategic goals are listed in table 1.

Table 1: Summary of Vision and Mission Statements and Strategic Goals in DOT's Draft Strategic Plan

Vision statement	A visionary and vigilant DOT leading the way to transportation excellence in the 21st century.
Mission statement	Serve the United States by ensuring a transportation system that meets our vital national interests and enhances the quality of life of the American people today and into the future.
Strategic, long-term goals	Safety: Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.
	Mobility: Shape America's future by ensuring a transportation system that is accessible, seamless, and efficient and offers flexibility of choices.
	Economic growth and trade: Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.
	Human and natural environment: Protect and enhance communities and the natural environment affected by transportation.
	National security: Advance the nation's vital security interests by ensuring that the transportation system is secure and available for defense mobility, ensuring that our borders are safe from illegal intrusion, and promoting worldwide economic growth and stability.

### Results in Brief

To its credit, dot has undertaken a significant amount of work collecting and analyzing information while preparing its draft strategic plan. The plan, however, does not reflect enough of this information and, overall, is so general that clearly identifying the Department's priorities is difficult. Moreover, the plan does not fulfill all of the requirements of the Results Act. The draft plan meets the act's requirements for (1) a mission statement, (2) long-term goals, and (3) a description of program evaluations; however, each of these elements has weaknesses, some more significant than others. In addition, the plan does not meet the act's requirements to describe (1) strategies for achieving the goals, (2) a linkage between DOT's long-term goals and annual performance goals, and (3) those key external factors that could significantly affect DOT's achieving its goals. The overall quality of the plan could be improved by adhering more closely to OMB's guidance for preparing strategic plans and including more detailed information, such as descriptions of the processes, the skills, the technology, and the resources required to meet the goals and time frames for initiating or completing significant actions.

pot's draft strategic plan appears to reflect the Department's key statutory authorities, which are contained in an appendix to the plan. The plan is expansive enough to encompass almost all of the Department's statutory authorities. However, because the plan lacks precision, these statutory authorities are reflected at a very high level of generality. The plan would be enhanced by clearly linking the goals to the particular programs supported by the statutory authorities contained in its appendix.

The draft strategic plan does not show evidence that the Department coordinated with other agencies that have programs and activities that are crosscutting or similar to dot's. The plan recognizes that there are other stakeholders for dot's long-term goals and provides for building or establishing partnerships with these federal, state, and local governments and the transportation industry. However, except for the Department of Defense (dod), the plan does not identify specific stakeholders. In addition, the plan does not identify the crosscutting or overlapping programs, explain how the activities and programs of other stakeholders could affect dot's achieving the goals, and describe how dot plans to coordinate with other stakeholders.

DOT'S draft strategic plan does not adequately address major management challenges and high-risk areas that we have previously identified in our reports and testimonies. Addressing these issues is critical to ensuring that strategies are in place to meet the Department's goals. In the critical issue of transportation safety and security, the plan addresses some of our specific concerns about aviation security but does not mention other important transportation safety concerns. Furthermore, the plan does not mention challenges we identified to (1) improve the management of aviation, highway, and transit programs and (2) meet the long-term funding needs of FAA and Amtrak. Finally, the plan does not provide sufficient details on the improvements needed in its management and financial data or in its organizational structure.

DOT'S ability to produce reliable performance information is uncertain. The plan is unclear about what information DOT will need to measure its performance. Furthermore, our previous work has indicated that DOT has difficulty producing reliable data to document performance and support decision-making at the program level. Similarly, DOT'S pilot projects under the Results Act have acknowledged data limitations.

### DOT's Strategic Plan Does Not Fulfill All the Requirements of the Results Act

Overall, DOT's draft strategic plan does not fulfill all of the requirements of the Results Act. The plan meets the requirements for three critical components—a mission statement, long-term goals, and a description of program evaluations. The remaining three key components—strategies for achieving the goals, the relationship between long-term goals and annual performance goals, and the identification of key external factors that could significantly affect the achievement of the goals—do not meet the act's requirements. In addition, the plan is so general that it is difficult to clearly identify the Department's priorities. Furthermore, although the Results Act requires that the plans cover a minimum of 5 years, the plan does not specify the period of time covered. The overall quality of DOT's plan, including the sections that meet the act's requirements, could be improved by adhering more closely to OMB's guidance for preparing strategic plans and, in some cases, incorporating summaries of the information that DOT considered in developing the plan but did not include in the July 2 draft.

### Mission Statement Meets Requirement

DOT'S plan meets the Results Act's requirement that a strategic plan contain a comprehensive mission statement that covers the major functions and operations of the agency. The mission statement (see table 1) is broad enough to encompass all of the major functions and operations of the Department and, in addition, it is results-oriented. OMB's guidance states that the mission statement (1) should focus on the agency's core programs and activities and (2) may include a discussion of enabling or

authorizing legislation and an identification of issues that the Congress specifically charged the agency to address. For example, DOT's enabling legislation describes the Department's purpose as developing transportation policies and programs that, among other things, "contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost." The mission statement could be improved by including such language from the Department's enabling legislation, which would focus the mission statement more directly on the Department's core activities.

### Long-Term Goals Meet Requirement

The Results Act requires strategic plans to contain long-term goals and objectives for the major functions and operations of an agency. Dot's draft strategic plan meets this requirement—it contains five long-term goals (see table 1) that encompass the Department's major functions and operations and a set of outcome goals for each long-term goal. The long-term goals are within the Department's span of influence as called for in OMB's guidance. In addition, in discussing the human and natural environment goal, the plan acknowledges the Department's responsibility to mitigate and reduce the negative environmental effects of transportation facilities. To address this issue, the plan includes an outcome goal to "reduce the adverse effects of siting, construction and operation of transportation facilities on the natural environment and communities."

However, DOT's long-term goals could be improved by following OMB's guidance to state all goals in a manner that (1) allows a future assessment of whether they are achieved and (2) is sufficiently precise to direct and guide an agency's staff toward fulfilling its mission. In some cases, it is clear how success in achieving a goal will be determined. For example, the plan explains that success in achieving the safety goal will be measured by six quantitative outcome goals, such as "reduce the number of transportation-related fatalities." In other cases, however, how success will be measured is unclear. For example, success in achieving the mobility goal will be measured by such outcome goals as "improve the structural integrity and operational efficiency of the nation's transportation infrastructure," and success in achieving the human and natural environment goal will be measured by such outcome goals as "improve the livability of communities through investments in transportation facilities." The latter two outcome goals do not indicate how the long-term goals are to be measured and what results will demonstrate their achievement.

<sup>&</sup>lt;sup>3</sup>Section 101 of Title 49, United States Code.

Although the supporting documents that dot used to prepare its draft strategic plan indicate that the Department developed additional information on how to measure each outcome goal, this information is not included. For example, dot has identified more than 10 possible measures for the outcome goal to "improve the structural integrity and operational efficiency of the nation's transportation infrastructure." These possible measures include the percentage of the National Highway System in good or better condition, the percentage of deficient bridges, and the percentage of transit facilities in standard or better condition. Including examples of such information in Dot's strategic plan would clarify the meaning of the Department's goals and allow it and the Congress to assess whether those goals are being achieved.

omb's guidance also calls for goals to be sufficiently precise to direct and guide staff toward actions that fulfill dot's mission. In that connection, dot's plan would be strengthened if it specified which agencies or programs are expected to contribute to achieving each of dot's five strategic goals. For the most part, the plan discusses how the Department will achieve its goals in very general terms. For example, the plan states that dot will achieve its safety goal by having "all dot activities intended to reduce or eliminate transportation related incidents . . . (1) incorporate human factors considerations; (2) develop, deploy, and promote cost-effective technology; (3) build partnerships to fully integrate safety as a basic business principle; and (4) enhance delivery of services through improved communications with our customers." This statement does not contain enough detail to clarify the activities required to attain dot's long-term goals.

### Strategies for Achieving Goals Do Not Meet Requirements

While dot's plan lists six corporate management strategies for achieving its long-term goals, it does not fulfill the requirements of the Results Act to describe the operational processes, the skills, the technology, and the resources required to meet them. Dot's plan could be improved by including this information in the discussion of corporate management strategies. For example, although one corporate management strategy is to foster a diverse, highly skilled workforce, the plan does not describe any specific skills needed or gaps in the workforce that must be addressed for the plan to succeed. According to a senior Department official, during the process of preparing the plan, dot identified the need for staff with regulatory negotiations skills and bilingual capabilities. This information is not contained in the draft plan. Including such details would help dot to meet the act's requirements. Similarly, the corporate strategy for

information technology calls for DOT to be "a recognized leader in using state-of-the-art information technologies across the broad spectrum of transportation." The strategy does not explain what technologies are being referred to or the resources required to enable DOT to be a recognized leader in their use.

DOT'S plan could also be improved by following OMB'S guidance for strategies. First, the guidance calls for the strategies to provide additional detail when achieving a goal is predicated on a significant change in resource or technological levels or capacities. DOT'S plan does not provide such additional detail. In several cases, we believe that such a discussion is warranted. For example, the plan says that DOT will implement the recommendations of the President'S Commission on Critical Infrastructure Protection and the White House Commission on Aviation Safety and Security. We have reported that the successful implementation of these recommendations is contingent upon resolving a key issue—who will finance additional security improvements—and developing the needed technology. A brief discussion of this constraint, including DOT'S strategy for obtaining the required financing and technology, would help readers assess how realistic or likely the goal's achievement is.

As previously mentioned, the plan calls for "incorporating human factors considerations" in all of DOT's activities that are intended to reduce or eliminate transportation-related incidents. However, implementing this element of the plan may require a difficult shift from past priorities. In 1996, we found that human factors work within FAA lacked effective coordination.<sup>5</sup> Furthermore, FAA's fiscal year 1998 budget request for research on human factors represents a decrease from the fiscal year 1997 budget and less than half of what was appropriated for fiscal year 1995. A brief discussion of the resources for and priority of human factors activities would be helpful.

Second, omb's guidance states that the strategies for achieving goals should include a description of the process for communicating goals throughout an agency and for assigning accountability to managers and staff to achieve them. Dot's draft strategic plan does not address how its goals will be communicated to employees or how managers and staff will be assigned accountability. Assigning clear expectations and

<sup>&</sup>lt;sup>4</sup>Aviation Security: Technology's Role in Addressing Vulnerabilities (GAO/T-RCED-NSIAD-96-262, Sept. 19, 1996).

<sup>&</sup>lt;sup>5</sup>Human Factors: Status of Efforts to Integrate Research on Human Factors Into FAA's Activities (GAO/RCED-96-151, June 27, 1996).

accountability to employees so that they see how their jobs relate to the Department's mission and goals can be useful in implementing a strategic plan. According to a senior dot official, the Department already has a mechanism that partly addresses this issue—dot's modal Administrators have annual performance plans and target performance levels that are aligned with dot's mission. Dot's Deputy Secretary tracks the Department's progress through monthly meetings with the Administrators. A brief explanation of how this process will be refined in the light of the new strategic plan would help dot staff understand how dot plans to assign accountability for implementing its strategic plan.

Finally, OMB's guidance states that the strategies for achieving goals should contain time frames for initiating or completing significant actions and any assumptions or projections. The plan does not include such information. It would be helpful, for example, for the plan to include time frames for completing the air traffic control (ATC) modernization program and improvements along Amtrak's Northeast Corridor, both of which are long-term, multibillion-dollar infrastructure projects.

In several cases, the draft plan provided more specific information on how dot will achieve its long-term goals. For example, dot intends to achieve the national security goal by implementing the recommendations of the President's Commission on Critical Infrastructure Protection and the White House Commission on Aviation Safety and Security. As another example, dot intends to achieve the mobility goal by promoting, developing, and implementing solutions using innovative technology to improve communications, infrastructure, and operational efficiencies, such as intelligent transportation systems, global-positioning satellites, the Internet, and new pavement and bridge designs. Including this type of information throughout the plan would help dot to direct or guide its staff to accomplish its goals.

Plan Does Not Link Long-Term Goals to Annual Performance Goals and Programs

The plan does not describe how performance goals in the annual performance plan will be related to the long-term goals in the strategic plan, as required by the Results Act. OMB's guidance further states that the strategic plan is to briefly outline the type, nature, and scope of the performance goals and the relationship between the annual performance goals and the long-term goals. The Results Act requires the performance goals to cover each program activity listed in the agency's budget, and by

<sup>&</sup>lt;sup>6</sup>The Results Act requires OMB to have agencies prepare annual performance plans beginning for fiscal year 1999. This plan is to contain annual performance goals and identify the performance measures that an agency will use to assess its progress.

doing so, the performance goals provide a direct link to an agency's day-to-day activities. Dot's plan does not describe performance goals or link them to the long-term goals. The plan states that dot has not developed its performance goals yet but intends to identify the goals in its fiscal year 1999 annual performance plan due in September 1997. The strategic plan would be improved by providing examples of possible performance goals and indicating their relationship to specific goals. By omitting this information, dot's strategic plan does not link the long-term strategic goals to the Department's programs.

### Identification of Key Factors External to the Department Does Not Meet Requirements

Recognizing that achieving a goal can be influenced by or predicated on external conditions prevailing over the time period covered by the plan, the Results Act requires strategic plans to identify those key external factors beyond an agency's control that could significantly affect the achievement of its long-term goals. The draft plan does not meet this requirement. The plan identifies four external factors—significant shifts in demographics, accelerated economic growth and globalization, increasing concerns for safety and security, and changing technological trends—but does not include other key factors. For example, we have identified several major issues facing the Department that are significantly affected by factors outside its control. As discussed later, critical problems in the long-term financing for FAA and Amtrak need to be addressed. Although successfully addressing these issues will require action by the Congress, the plan does not identify this critical factor.

This component of the plan could be improved by following omb's guidance, which calls for plans to contain a brief discussion of how each key factor links to a particular goal and how the achievement of that goal could be affected by the factor. Dot's draft plan discusses only one of the four key external factors it identifies—demographics. The plan describes some demographic trends, such as the aging population and population growth, that could affect Dot's ability to accomplish its safety and mobility goals. However, the plan does not discuss how these goals could be affected by the demographic trends identified.

As previously mentioned, the plan provides no discussion of the other three key factors it identifies. A discussion of each factor would help readers understand what assumptions DOT made in developing its goals and how their attainment might be affected. For example, a discussion of changing technological trends would be helpful. Satellite navigation, intelligent highway systems, and the increasing availability of

telecommunications alternatives to transportation could have enormous implications for the degree to which the Department is able to accomplish its strategic goals. The plan alludes to this in a discussion of strategies for accomplishing the goals when it states that DOT "will explore the cyber frontier, crossing old boundaries to discover new, virtual modes of transporting people and information that transcend time and space." The meaning of this statement, however, is not clear and requires more discussion.

The supporting documents that DOT used to prepare the plan indicate that the Department analyzed six external factors—political, economic, social, environmental, security, and technology trends—in terms of their impact on transportation and on the Department. Some demographic information from this analysis was included in the plan, but information on other factors was not. In its analysis of five technology areas—(1) information and communication; (2) advanced materials for constructing, maintaining, and repairing transportation infrastructure and vehicles; (3) energy and environment; (4) human factors; and (5) modeling, simulation, and industrial design—DOT identified the technology areas' possible effects on DOT, such as the need to place greater emphasis on specialized or customized transportation as the population of elderly persons increases and the need to revisit and tighten some safety and fuel economy standards as a result of new power systems and lighter-weight cars and trucks being developed to improve energy efficiency and environmental compatibility. The plan could be improved by including summaries of such information for each key factor.

### Program Evaluation Component Could Be Improved

DOT'S draft strategic plan discusses the program evaluations used in establishing the goals and a schedule for future evaluations, as required by the Results Act. This component of the plan, however, could be improved by following omb's guidance, which calls for including (1) the general scope of and methodology for planned evaluations, (2) the key issues to be addressed, and (3) a schedule for future evaluations. DOT'S plan lists only titles for the evaluations scheduled for 1997 and 1998 for NHTSA, FHWA, FTA, and FAA. For example, NHTSA'S evaluations include "motor vehicle content labeling" and an "evaluation of passenger air bag cutoff switches." Such information is insufficient to determine the scope and methodology or the key issues to be addressed. Furthermore, without this additional information, it is difficult to determine how or if some scheduled evaluations—such as motor vehicle content labeling, the odometer fraud

study, and the theft prevention report to the Congress—relate to  ${\tt DOT}\mbox{'s}$  goals.

## Observations on the Overall Quality of the Plan

We recognize that dot's strategic plan is a draft that the Department expects to revise before submitting it to omb and the Congress in September 1997. However, the draft we reviewed is so general that almost any activity the Department undertakes could be considered to fit in the strategic plan. As a result of this generality, the plan does not clearly set priorities for the activities or chart a clear course for accomplishing the Department's mission. Our work has shown that when dot was preparing elements of the plan, it collected and analyzed information in significantly greater detail than the plan reflects. While extensive details would detract from the plan by making it overly lengthy, summaries of what dot considered in preparing the plan and specific examples of what programs and actions dot intends to undertake would greatly enhance the plan's usefulness.

Furthermore, dot's draft plan does not identify the time frames for accomplishing the long-term goals. The Results Act requires a strategic plan to cover a minimum of 5 years. OMB's guidance calls for descriptions of how the plan will be achieved, including schedules for initiating or completing significant actions. The plan lacks this information, as we mentioned previously. Without knowing the time frame or the schedule for completing activities, it is difficult to assess whether the plan is reasonable or realistic. Furthermore, without an ending date, the Congress and the public do not know when they can expect to hold the Department accountable for accomplishing the long-term goals in its plan.

### Plan Reflects Key Statutory Authorities

DOT'S strategic plan, with limited exceptions, appears to reflect the statutory authorities contained in the compilation attached as an appendix to the plan. The plan is expansive enough to encompass almost all of DOT'S statutory authorities. However, because of the plan's lack of precision, these statutory authorities are reflected at a very high level of generality. Furthermore, the plan does not appear to reflect the Department'S authorities in connection with commercial space transportation and fuel efficiency standards.

The draft plan could be improved by linking its stated strategic or outcome goals to the particular programs supported by the statutory authorities contained in the appendix. For example, one of the outcome goals under

DOT'S safety goal is to reduce the number of transportation-related fatalities. However, the plan contains no explicit references to the programs administered by NHTSA or the statutory provisions authorizing such programs, despite the fact that the vast majority of transportation-related fatalities occur on the nation's highways. Similarly, one of the outcome goals under the Department's mobility goal is to "improve the structural integrity and operational efficiency of the nation's transportation infrastructure." However, the plan contains no explicit references to such major infrastructure initiatives as the National Highway System or ATC modernization or the statutory provisions related to these initiatives. The Results Act does not require such linkages, but we believe that including such linkages in the plan may help explain the Department's mission and goals.<sup>7</sup>

The appendix on statutory authorities does not include any reference to the Surface Transportation Board or the Commercial Space Program. An official from DOT's Office of the General Counsel stated that the statutes related to the Surface Transportation Board were omitted from that appendix because the Board operates as an entity independent of DOT. However, the body of the strategic plan lists the Surface Transportation Board as one of the organizations that operates collaboratively under a departmental mission. Therefore, it is not clear whether DOT's strategic plan encompasses the Surface Transportation Board. That official also acknowledged that the Commercial Space Program is a major program and that relevant statutes should have been included in the compilation of statutory authorities.

### Plan Does Not Address Crosscutting Activities

The draft strategic plan does not show evidence that DOT coordinated with other agencies that have programs and activities that are crosscutting or similar to DOT's. According to a senior DOT official, coordination is an ongoing activity and no specific coordination was done in preparing the draft plan. The plan recognizes that there are other stakeholders for DOT's long-term goals and provides for building or establishing partnerships with federal, state, and local governments and the transportation industry. However, except for DOD, the plan does not identify specific stakeholders. In addition, the plan does not identify (1) which programs are crosscutting or overlapping, (2) how the programs and activities of the stakeholders could affect the goals' achievement, and (3) how DOT expects to coordinate with its stakeholders. For example, the plan does not mention such other

<sup>&</sup>lt;sup>7</sup>OMB Circular A-11 states that an agency's mission statement may include a brief discussion of the agency's enabling or authorizing legislation; this suggestion, however, does not extend to the statement of goals.

important stakeholders as the Environmental Protection Agency (EPA), which has responsibilities that affect DOT's human and natural environment goal. A page is reserved in the draft plan for stakeholders' comments, which may contain this kind of information.

The plan includes the following three outcome goals for its national security goal that specifically support DOD's needs:

- Ensure the readiness and capability of commercial transportation to meet national defense needs.
- Ensure that transportation infrastructure and technology are adequate to facilitate military logistics during mobility, training exercises, and mobilization.
- Maintain the readiness of resources owned, managed, or coordinated by DOT that are necessary to support the President's National Security Strategy and other defense-related plans.

However, the plan does not explain what DOD's needs are and the implications for DOT's programs. In supporting documents, DOT observed that DOD may increase its reliance on commercial transport of personnel and equipment and identified a number of implications for DOT's programs. The plan does not mention this issue. A brief discussion of DOD's programs and their requirements and how they affect DOT's strategic plan would help explain the linkage between the two Departments' programs and activities and how changes in the way DOD operates will affect DOT.

The supporting documents that DOT used to prepare the plan indicate that the Department considered several other crosscutting issues. For example, these documents mentioned EPA's revisions to the ozone and particulate matter standards proposed in December 1996 and identified the potential effect on transportation and the implications for DOT's programs. This issue was not mentioned in DOT's plan. DOT's plan would benefit from a brief discussion of how its programs and goals relate to other agencies and how it ensured that the goals in the plan complement, rather than conflict with, other federal agencies' programs and activities.

### Plan Does Not Adequately Address Major Management Challenges

DOT'S draft strategic plan does not adequately address the major management challenges and high-risk areas that we and others have identified. Addressing these issues is critical to ensuring that strategies are in place to meet DOT'S goals. Earlier this year, we testified on four critical management issues facing the Department: (1) enhancing transportation

safety and security; (2) improving the management of aviation, highway, and transit programs; (3) meeting the long-term funding needs of FAA and Amtrak; and (4) having an appropriate organizational structure and adequate financial and other management information. We also identified critical information technology management issues facing DOT and other agencies. While we recognize that adequately addressing many of these problems will take concerted action by the Department, the Congress, and other affected parties, the Department's strategic plan can do more to make clear its priorities and its commitment to meeting these challenges.

First, a critical issue facing the Department is ensuring the safety and security of travelers on the nation's airways, highways, and waterways. DOT's strategic plan reflects this issue in two goals—safety and national security. While the plan addresses some of our specific concerns about aviation security, it does not mention our specific concerns about overall transportation safety. Over the years, we have identified areas in which DOT can do more to improve the efficiency and effectiveness of its transportation security and safety programs:

- We have made recommendations about security vulnerabilities in the aviation system—checked and carry-on baggage, mail, and cargo—and steps that could be undertaken to improve security. The White House Commission on Aviation Safety and Security (the Gore Commission), formed after the crash of TWA Flight 800, made more than 30 security recommendations in February 1997. We believe that the Gore Commission's recommendations are a good start toward an evolutionary process of reaching agreement on the goals and objectives for improving our aviation security system. Effective implementation of these recommendations requires the various federal agencies, local authorities, and the aviation industry—most importantly, airlines and airports—to work together. Dot's draft plan discusses several activities to achieve its national security goal that reflect our concerns. These activities include
  - (1) developing and implementing security enhancements;
  - (2) implementing the Gore Commission's recommendations;
  - (3) completing vulnerability assessments and implementing recommendations; and (4) developing and maintaining partnerships with other federal agencies, state/local governments, the transportation industry, and foreign governments.

<sup>&</sup>lt;sup>8</sup>Federal Management: Addressing Management Issues at the Department of Transportation (GAO/T-RCED/AIMD-97-172, May 21, 1997).

<sup>&</sup>lt;sup>9</sup>See, for example, Aviation Security: Additional Actions Needed to Meet Domestic and International Challenges (GAO/RCED-94-38, Jan. 27, 1994) and Aviation Security: Technology's Role in Addressing Vulnerabilities (GAO/T-RCED-NSIAD-96-262, Sept. 19, 1996).

To enhance transportation safety, we have consistently identified the need to improve federal oversight of air travel by (1) targeting FAA's inspections to the areas of highest risk, (2) enhancing the reliability of safety data, and (3) improving the training of inspectors. Over the years, we have suggested that FAA focus its resources on such areas of concern as new entrant and commuter airlines and aging aircraft. In addition, improving safety on the nation's highways, where over 40,000 people are killed annually, requires strong, effective partnerships among federal, state, and local governments. We have pointed out that increasing the use of safety belts is the most effective way to lower the nation's death toll from highway accidents. 10 We have suggested that the Congress consider encouraging the states to enact primary enforcement laws that allow police officers to stop and ticket a vehicle's operator solely because the occupants are not using their safety belts. We also believe that such laws should cover all of the occupants of all the vehicles having safety belts. We also recommended that the Secretary of Transportation provide special emphasis and targeted programs for increasing the use of safety belts by the occupants of light trucks. DOT's strategic plan is vague on how the Department will achieve its safety goal and does not mention these related issues.

Second, DOT can do more to improve its management of aviation, highway, and transit programs to ensure that limited funds are effectively and efficiently used. DOT's plan includes infrastructure in its mobility goal but provides too few details to fully address our concerns. For example, FAA's multibillion-dollar program to modernize the ATC system has been plagued with cost overruns, schedule delays, and shortfalls in performance. Because of the size, complexity, cost, and problem-plagued past of the ATC modernization, we designated it as a high-risk information technology initiative in 1995 and again in 1997. 11 DOT's strategic plan does not mention the ATC modernization. As another example, major surface transportation projects, each costing hundreds of millions to billions of dollars, are continuing to incur cost increases, experience delays, and have difficulties acquiring needed funding commitments. We believe that FHWA can do more to address the problem of cost growth by working with the states to improve the cost management of large-dollar highway construction projects. Some of our concerns are reflected in the plan's discussion of the mobility goal, which lists such activities to achieve this goal as (1) developing and promoting innovative financing techniques and

<sup>&</sup>lt;sup>10</sup>Motor Vehicle Safety: Comprehensive State Programs Offer Best Opportunity for Increasing Use of Safety Belts (GAO/RCED-96-24, Jan. 3, 1996).

 $<sup>^{11}</sup>$ High-Risk Series: An Overview (GAO/HR-95-1, Feb. 1995) and <u>High-Risk Series: Information Management and Technology (GAO/HR-97-9, Feb. 1997).</u>

increasing flexible funding and (2) "maximizing the benefits of the planning process to improve project selection by techniques such as cost-benefit analysis." However, the list of activities provides no details on how they will be accomplished or what programs and modes of transportation will be affected.

Third, critical transportation financing issues—meeting the long-term funding needs of FAA and Amtrak—face DOT and the Congress. Each issue presents formidable challenges that will stretch limited resources and will require long-term strategies to successfully address. DOT's strategic plan does not raise these issues. FAA estimates that its needs will exceed projected funding levels by about \$13 billion over the next 5 years. We believe that determining how best to finance FAA is a complex problem that requires careful study and good cost data. To assist in finding solutions to FAA's long-term financing needs, the Congress formed the National Civil Aviation Review Commission, which is scheduled to make its recommendations by August 1997. Deciding among various financing alternatives for FAA will involve trade-offs among such factors as the efficient use of the airport and airway system, fairness to system users, and the effect on competition. To effectively design any new financing system, FAA needs better cost data to appropriately allocate costs among users. 12 With respect to Amtrak, we recently reported that its financial condition is very precarious and that as currently constituted and funded, Amtrak will continue to require substantial federal financial support well into the next century. <sup>13</sup> Amtrak is not mentioned in DOT's plan.

Fourth, dot's ability to effectively address many of these aforementioned issues depends on having a supportive organizational structure, implementing information management technology reforms, and improving its management and financial data. The plan does not provide sufficient details for addressing our concerns in these areas. Dot can do more to develop an appropriate organizational structure to achieve the most cost-effective delivery of services and ensure the proper use of federal funds. We have reported that opportunities exist to achieve these objectives by (1) examining the appropriateness of reorganizing the surface transportation administrations and their field office structures, (2) making changes to FAA's management structure and organizational

<sup>&</sup>lt;sup>12</sup>Air Traffic Control: Improved Cost Information Needed to Make Billion-Dollar Modernization Investment Decisions (GAO/AIMD-97-20, Jan. 22, 1997).

<sup>&</sup>lt;sup>13</sup>See, for example, Transportation Financing: Challenges in Meeting Long-Term Funding Needs for FAA, Amtrak, and the Nation's Highways (GAO/T-RCED-97-151, May 7, 1997) and Intercity Passenger Rail: The Financial Viability of Amtrak Continues to Be Threatened (GAO/T-RCED-97-94, Mar. 13, 1997).

culture, and (3) identifying additional opportunities to streamline the Coast Guard's operations. The plan mentions the need for the appropriate organizational infrastructure and processes to achieve DOT's strategic goals but does not explain what constitutes an appropriate infrastructure and processes or how they will be established.

Moreover, while dot's plan highlights information technology as a critical component of its corporate management strategy, the plan does not clearly discuss how the Department intends to implement the information management technology reforms called for in the Paperwork Reduction Act of 1995 and the Clinger-Cohen Act of 1996. These acts direct agencies to implement a framework of modern technology management based on practices followed by leading private and public organizations that have successfully used technology to improve performance and help meet strategic goals. Furthermore, dot, like many other agencies, will face emerging management challenges in implementing modern technology and resolving the need for computer systems to be changed to accommodate dates beyond the year 1999, the "year 2000 problem." Yet dot's plan does not discuss how it intends to address the "year 2000 problem" as well as any significant information security weaknesses—two issues that we have identified as high-risk across the government.<sup>14</sup>

In addition, DOT lacks the fully reliable financial management information necessary to ensure that federal funds are properly managed and reliable financial reports are prepared. The lack of such information could affect the implementation of the Department's strategic plan. For fiscal year 1996, DOT prepared its first Department-wide financial statement. DOT's OIG undertook an audit of the Department-wide balance sheet but was unable to provide an opinion about its reliability because of inadequate records and other deficiencies. Specifically, the OIG was unable to validate the value of property, equipment, operating materials, and supplies reported to be worth \$25.8 billion because of inadequacies in the supporting documentation and unreconciled discrepancies between the summary accounts and their supporting details. In evaluating DOT's internal controls, the OIG identified 11 significant internal control weaknesses and 13 additional conditions deemed important for reporting. Overall, the OIG made 72 recommendations to strengthen DOT's internal controls and improve the accuracy of its financial reporting. DOT's plan does not address these issues.

<sup>&</sup>lt;sup>14</sup>GAO High-Risk Series (GAO/HR-97-20SET, Feb. 1997).

DOT faces several important challenges in addressing its financial management problems, including (1) correcting the known weaknesses so that it can produce reliable, auditable financial statements; (2) fully implementing new federal accounting standards to meet federal financial management goals; (3) implementing and maintaining financial management systems that comply substantially with the federal requirements for financial management systems, applicable federal accounting standards, and the U.S. Government Standard General Ledger at the transaction level; and (4) submitting fully audited financial statements that cover all accounts and associated activities. DOT's plan does not address these financial management issues.

### DOT's Ability to Produce Reliable Performance Information Is Uncertain

Dot's ability to produce reliable data to measure its progress in achieving the plan's long-term goals is uncertain. The plan is unclear about what information will be needed to measure performance. However, we have reported serious problems with DOT's information resources and database management and identified these problems as one of several top management issues facing the Department. These problems adversely affect the Department's ability to monitor and evaluate the performance of U.S. transportation systems as well as identify and set priorities for the investment needs for the infrastructure.

Producing reliable data to document performance and support decision-making at the program level will be a challenge for DOT. For example, over the years we have reported on the limitations of aviation safety databases. In 1991, FAA began developing the Safety Performance Analysis System (SPAS), which draws on information from several safety-related databases to establish better priorities for FAA's inspections. However, SPAS is not expected to be fully operational until 1999. Furthermore, some databases that may provide source data for SPAS contain incomplete, inconsistent, and inaccurate data. FAA has recently developed and is implementing a strategy to improve the quality of data to ensure that these source databases provide more reliable information. The success of this strategy is critical to SPAS' becoming an effective tool for focusing on outcomes by targeting resources to high-risk activities.

We also reported on the limitations in the National Transportation Safety Board's (NTSB) information on airline accidents, upon which faa relies. In examining the safety performance of new airlines, we found that NTSB, the

<sup>&</sup>lt;sup>15</sup>Federal Management: Addressing Management Issues at the Department of Transportation (GAO/T-RCED/AIMD-97-172, May 21, 1997).

official source of information on airline accidents, defines accidents as events in which individuals are killed or suffer serious injury or in which the aircraft is substantially damaged. By NTSB's definition, accidents can range from fatal crashes in which the aircraft is destroyed and all crew and passengers aboard are killed, to events in which only one person suffers a broken bone and the aircraft is not damaged, to still others in which the aircraft is substantially damaged, but no fatalities or serious injuries occur.<sup>16</sup>

Dot's pilot projects under the Results Act have acknowledged limitations with their data. For example, NHTSA uses the General Estimates System for statistics on motor vehicle accidents. This database contains information from a nationally representative sample of police-reported accidents. Various sources, however, suggest that about half of the motor vehicle crashes in the country are not reported to police and that the majority of these unreported crashes involve minor property damage and no significant personal injury. A NHTSA study of injuries from motor vehicle accidents estimated the total count of nonfatal injuries at over 5 million compared with the General Estimates System's estimate of 3.2 million for the same year. NHTSA intends to study the unreported injury problem.

Another DOT pilot project under the Results Act—the U.S. Coast Guard's Marine Safety, Security, and Environmental Protection program—also reported similar limitations with its data. For its goal related to deaths and injuries, the Coast Guard found problems with the reliability of reporting injuries. The Coast Guard reported that less serious injuries, in particular, were substantially underreported and that the agency lacked data to determine the severity of injuries. <sup>17</sup>

Once DOT develops its final performance measures, it may need to consider appropriate modifications to its database systems to ensure that they include the needed data. In addition, as required by the Chief Financial Officers Act of 1990, program, accounting, and budget systems should be integrated to facilitate the systematic measurement and reporting of performance data.

<sup>&</sup>lt;sup>16</sup>Aviation Safety: New Airlines Illustrate Long-Standing Problems in FAA's Inspection Program (GAO/RCED-97-2, Oct. 17, 1996).

<sup>&</sup>lt;sup>17</sup>R. Kowalewski, "Using Outcome Information to Redirect Programs: A Case Study of the Coast Guard's Pilot Project Under the Government Performance and Results Act" (U.S. Coast Guard, Office of Marine Safety, Security and Environmental Protection, Apr. 1996).

### **Agency Comments**

We provided copies of a draft of this report to dot for review and comment. (DOT's comments are in the enclosure.) dot agreed with our observations and pointed out that it will consider our comments along with those from stakeholders when revising its draft strategic plan. Specifically, dot agreed with our observations that the strategic plan could be strengthened by (1) identifying the scope and methodology of future program evaluations, (2) specifying the time period covered by the plan, and (3) including information on coordination with other federal agencies. Dot stated that it intends to include such information in the next draft of the plan. While not disagreeing with our observations concerning major management issues and the Department's data, dot pointed out that these issues might be more appropriately addressed outside of the strategic plan. Dot provided several technical comments that we included as appropriate.

We are sending copies of this report to the Minority Leader of the House of Representatives; the Ranking Minority Members of your committees; the Chairman and Ranking Minority Members of the House Committee on Transportation and Infrastructure; the Secretary of Transportation; and the Director, OMB. Copies will be made available to others on request.

Please call me at (202) 512-2834 if you or your staff have any questions about this report. Major contributors to this report are Phyllis Scheinberg, Janet Barbee, Helen Desaulniers, Sharon Dyer, David Hooper, Teresa Spisak, and John Thomson.

John H. Anderson, Jr.

Director, Transportation Issues

John H. anderson Jr.

**Enclosure** 

# Comments From the Department of Transportation



U.S. Department of Transportation Assistant Secretary for Administration

400 Seventh St., S.W. Washington, D.C. 20590

July 28, 1997

Mr. John Anderson Director of Transportation Issues U.S. General Accounting Office 441 G Street, N.W. Washington, D.C. 20548

Dear Mr. Anderson:

Thank you for the opportunity to review the draft GAO report that provides observations on the Department of Transportation's (DOT) Government Performance and Results Act (GPRA) draft strategic plan as well as management issues GAO has previously identified and the adequacy of the Department's data and information systems.

With respect to the draft Strategic Plan, we appreciate the GAO draft report's observations and will include them in our review of comments from all of our customers and stakeholders at an upcoming executive retreat scheduled by the Secretary. As we discussed with GAO staff, we are now in the consultation phase of our planning effort and we are receiving insights that will help us strengthen the plan. For example, we agree with the draft report's comment that the schedule of program evaluations should include information on scope and methodology. We also agree that the plan should specify that it covers the annum plus 5 years. With respect to coordination with other Federal agencies, we are now in the process of conducting this coordination. We will include this information in the next draft of the plan.

With respect to the GAO draft report's observations concerning previously identified management issues and the Department's data and information systems, both outside the scope of GPRA strategic plans, we understand that GAO's client requested this information. Nevertheless, we believe that many of these issues might be more appropriately addressed using a tactical rather than a strategic approach. Finally, we understand that DOT staff has discussed with GAO several issues, which we anticipate will be addressed in the final GAO report, regarding the GAO draft report's discussion of financial information integrity. A copy of the information already provided to your staff is included for your reference.

Enclosure I Comments From the Department of Transportation

If you have any questions concerning our reply, please contact Martin Gertel on
366-5145.
Sincerely,
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