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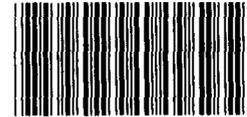
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Subcommittee on Transportation  
United States Senate

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MASS TRANSIT

FTA's Projections Could  
Better Reflect State and Local  
Needs

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Mr. Chairman and Members of the Subcommittee:

It is a pleasure to be here today to present our views on the nation's transit needs and the challenges the Federal Transit Administration (FTA) and the transit community face in addressing these needs. Our testimony today is based on our work at FTA over the past several years, including a report<sup>1</sup> released this week on transit needs projections, which was required by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

In order to make important decisions to support public transit's role in the future, the Congress needs the best information available about how states and localities intend to use transit to achieve their transportation-related goals. These goals include increased mobility, reduced traffic congestion, improved air quality, and economic development.

Our testimony today will focus on the different transit needs projections provided to the Congress, why these projections varied, what factors could affect the transit needs, and opportunities for improving FTA's transit needs projections. In summary, our work shows that:

- The Congress has been provided several projections of transit needs which vary widely, from \$7.5 billion to \$32 billion per year. These projections were prepared by FTA, the American Association of State Highway and Transportation Officials (AASHTO), and the American Public Transit Association (APTA). Such a wide variation in the need for funds complicates the Congress' decision-making process.
- The projections varied because each defined transit needs differently by including or excluding certain cost elements and by making different assumptions to determine cost. The largest difference occurred because FTA excluded operating needs, which AASHTO and APTA projected to be \$14 billion and \$16.3 billion a year, respectively. In addition to operating needs, the key components of transit's overall needs are capital expansion needs, and capital maintenance and replacement needs. All projections included some costs for these two needs, but FTA possibly understated needs in these categories by making several conservative assumptions.
- Several factors, including federal legislation such as the Clean Air Act Amendments of 1990 (CAA), the Americans With Disabilities Act (ADA), and the Energy Policy Act of 1992, could cause future transit needs to exceed all of the needs projections. FTA addressed some potential impacts of ADA and

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<sup>1</sup>Mass Transit: Needs Projections Could Better Reflect Future Costs (GAO/RCED-93-61, March 9, 1993).

CAA, but AASHTO and APTA did not include estimates because these laws and regulations were not yet in place when they prepared their projections. However, none of the projections included the increased transit needs that might occur if states and localities decide to increase transit services to help meet a broad range of transportation-related goals.

- There are short- and long-term improvements that FTA should make to improve its transit needs projections. In the short term, FTA should include operating costs in its projections to provide a complete picture of transit needs, particularly since operating costs have historically been more than three times capital costs. FTA should also modify certain assumptions and methodologies to better reflect future transit costs. In the longer term, since states and localities determine transit's role, FTA should utilize the state public transportation management systems (PTMSs) and the state and local transportation improvement plans required under ISTEA. The PTMSs will provide transit system condition and performance data not currently available nationwide. The state transportation plans will include those transit projects that states and localities have decided to fund. By basing needs on state-specific data, FTA will be able to provide the Congress better information about needs in individual states and localities.

Let me discuss these issues in more detail.

#### TRANSIT NEEDS PROJECTIONS VARY WIDELY

Our report compared FTA's most recent transit needs report, issued in June 1992,<sup>2</sup> AASHTO's September 1988 report, and APTA's October 1990 report, which projected annual transit needs in constant 1991 dollars to be \$7.5 billion, \$20.5 billion, and \$32 billion, respectively (see table 1). FTA is required by law to report to the Congress on the condition and performance of the nation's transit systems (49 U.S.C. 308), whereas AASHTO and APTA provided needs projections to contribute to the reauthorization debate that resulted in the passage of ISTEA.

The nation's transit needs include operating costs, such as employee wages, fuel, and insurance; capital maintenance costs, such as vehicle and facility replacement; and capital expansion

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<sup>2</sup>The most recent highway needs report, The Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance (January 1993), also presents transit needs. The transit needs in this report are the same as those in FTA's 1992 transit needs report, except that the costs to eliminate the backlog of deferred maintenance are distributed over 20, rather than 10, years. Our report also included FTA's 1991 transit needs report.

costs, such as bus and rail expansion, and previously deferred maintenance activities. Annual capital needs, for both maintenance and expansion, were projected to be \$7.5 billion by FTA, \$6.4 billion by AASHTO, and \$15.7 billion by APTA. FTA limited its report to only capital needs, unlike AASHTO and APTA, which projected operating needs to be \$14.0 billion and \$16.3 billion, respectively.

Table 1: Summary of Transit Needs Projections

Dollars in billions per year

Needs	FTA 1992	AASHTO 1988	APTA 1990
Maintenance/replacement	\$ 3.9	\$ 4.4	\$ 6.5
Expansion	3.6	2.0	9.2
Subtotal, Capital	\$ 7.5	\$ 6.4	\$ 15.7
Operating	NA	14.0	16.3
Total	\$ 7.5	\$ 20.5	\$ 32.0

Note: All figures are expressed in constant 1991 dollars. "NA" indicates that this element was not addressed.

Source: GAO analysis of FTA, AASHTO, and APTA data.

DIFFERENT DEFINITIONS OF TRANSIT NEEDS  
CAUSED FTA'S, AASHTO'S, AND APTA'S NEEDS  
PROJECTIONS TO VARY

The three organizations defined needs differently by including or excluding certain cost elements and by making different assumptions. Moreover, they relied to varying degrees on the two basic data sources currently available--historical capital and operating data and local plans for future transit services--to project operating, capital expansion, and capital maintenance needs.

## Operating Needs

The largest difference between the three projections was for operating needs, primarily because FTA did not include any operating needs. Transit operating expenses are substantial, costing more than three times the amount spent on capital items. Transit services require large expenditures for bus drivers, train operators, fuel, tires, and so on. AASHTO and APTA projected operating needs to be \$14 billion and \$16.3 billion, respectively. AASHTO's and APTA's operating needs projections differed because they used actual operating expense data from different years.

Although required to include operating needs in its transit needs reports, FTA has not done so. FTA did not include operating needs because including them would make its report inconsistent with the highway needs report, which includes only capital needs. FTA officials told us that consistent needs definitions are important because FTA and the Federal Highway Administration (FHWA) are working toward a consolidated report. FTA also cited the complexity and sensitivity of operating needs projections as reasons for not including these needs.

We support the move to a consolidated report and agree that improved consistency in needs definition is an important component of this effort. We believe, however, that operating needs should be included in future FTA reports, because (1) transit's operating expenses are a significant portion of transit costs (far exceeding capital expenses); (2) FTA's statutory requirement specifically calls for capital, operating, and maintenance projections; and (3) acceptable methodologies for projecting operating needs are available.

## Capital Expansion Needs

The second largest difference among the projections was for transit capital expansion needs to improve or increase transit services. Annual capital expansion needs were projected at \$2 billion by AASHTO, \$3.6 billion by FTA, and \$9.2 billion by APTA. FTA's expansion needs are based on (1) bringing buses, rail vehicles, and rail facilities up to good condition by performing historically deferred maintenance and (2) serving additional riders whose highway needs will not be met. FTA potentially understates capital expansion needs by calculating the cost of these services on the basis of the cost of bus services. However, FTA acknowledges that some expansion would be met by rail service, which is more costly than bus service.

AASHTO's and APTA's reports also included capital expansion, but they based their capital expansion projections on cost estimates for specific transit projects, either approved or proposed, rather than on historic average costs (as FTA did). However, AASHTO and APTA each made different assumptions about what

expansion projects to include. AASHTO limited expanded transit services to those included in FTA's "pipeline of projects"--those transit projects that FTA has approved for planning, engineering, and/or construction--and in a 1983 APTA list of proposed high-occupancy vehicle (HOV)/busway projects. APTA limited its capital expansion needs to those identified by its operating members in a 1990 survey that asked for estimates of all funds needed to meet their communities' transit goals, whether or not these projects were approved by FTA.

#### Capital Maintenance Needs

The smallest differences among the three projections (FTA's estimate was \$3.9 billion, AASHTO's \$4.4 billion, and ATPA's \$6.5 billion) were for maintenance needs--the costs to maintain existing transit vehicles, facilities, and equipment. FTA's and AASHTO's first premise is that the nation needs to maintain the existing vehicle fleet, and they both used average vehicle cost and age data to estimate these needs. For facilities and equipment maintenance needs, FTA calculated these as a percentage of vehicle costs, whereas AASHTO relied on 1983 surveys of rail and bus facility needs. APTA, on the other hand, projected greater needs than the others because its methodology allowed for facilities expansion and used projected future costs rather than average historic costs.

Some of FTA's assumptions in determining capital maintenance needs resulted in understating these needs. For example, FTA's cost calculations for replacing aging vehicles operated by private nonprofit agencies--for programs such as Head Start--included only vehicles that FTA had funded, which is about half of the total fleet. The other vehicles were mostly funded by the Department of Health and Human Services, and FTA did not consider them to be a "transit need."

#### TRANSIT NEEDS MAY INCREASE BEYOND THE PROJECTIONS

All three projections excluded several factors that are likely to significantly increase future transit needs. Specifically, none of them fully takes into account the following factors: (1) costs for transit vehicles to convert to alternative fuels, due to clean air or energy conservation requirements; (2) ADA requirements to make existing transit stations and vehicles accessible to persons with disabilities and to provide expanded special services for the disabled; and (3) expanded transit services to meet specific transportation-related goals, such as reduced traffic congestion or improved air quality. Furthermore, future transit operating needs may exceed those forecasted by either APTA or AASHTO, since these projections did not account for the operating needs associated with their projected capital expansion needs.

Several recently enacted federal laws, such as CAA and ADA, could increase transit needs in two ways: by imposing requirements that increase the costs of providing existing transit services and by possibly leading to new transit services. For example, costs for transit services could increase because ADA requires transit operators to make all services fully accessible, which adds to transit's capital and operating costs. Additionally to the extent that new transit services are implemented to improve air quality and mobility for persons with disabilities, the nation's transit needs would increase.

FTA included projected capital costs to conform to ADA requirements and presented some possible impacts of the CAA on the basis of potential regulatory requirements, but AASHTO and APTA did not address these laws since they had not been enacted at the time their projections were prepared. However, none of the projections included the full range of transit needs that might occur.

#### FTA NEEDS TO MAKE SHORT- AND LONG-TERM IMPROVEMENTS TO ITS NEEDS PROJECTIONS

FTA could strengthen its needs projections by improving its methodologies and by making use of improved data that will be available under new ISTEA requirements. Our report recommends several specific ways, both in the short and long terms, that FTA can improve its projections. In the short term, FTA could improve its methodologies by including operating needs in its future transit needs reports. FTA should also modify certain assumptions and methodologies to reflect future costs. For example, FTA should calculate expansion costs on the basis of a mix of rail and bus services rather than estimating these needs using only bus service costs, which are lower than those for rail.

In the longer term, rather than projecting needs based on nationwide averages, FTA should use new data sources that better reflect state and local transit situations. ISTEA requirements will make available state and local investment plans, as well as data on transit systems' physical condition and service effectiveness, which better predict future transit investment needs than do existing data sources. These requirements include a state transportation plan and improvement program documenting local transit decisions and a state public transportation management system containing transit performance and condition data. In developing regulations for these ISTEA requirements, the Department of Transportation can help ensure that transit data are collected that will be useful in projecting needs. For example, FTA now relies on a 1983 physical survey of rail conditions, and the PTMS could provide FTA access to current information on actual vehicle and facility conditions without having to periodically conduct survey updates.

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In summary, future transit needs will depend upon a complex set of decisions made by each state and locality as they determine how their transportation systems will address transportation, environmental, economic, social and other goals. Until better information about local decisions is available nationwide, our recommendations should improve the transit needs projections that are based on historical data. Using the ISTEA-required state transportation plans and the PTMS data on the condition and efficiency of transit systems, when these become available, should result in needs reports that better reflect local transit investment decisions.

Mr. Chairman, this Subcommittee is facing competing demands for funding in high speed rail, highways, bridges, mass transit, aviation, Amtrak, and other areas. Many of these choices are policy decisions that only the Congress can make. It is of the utmost importance that when making these decisions in this time of scarce resources, the Congress have the best information available.

This concludes my prepared statement. I will be pleased to respond to any questions you or other members of the Subcommittee may have.

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