

**STATEMENT OF
JANE F. GARVEY
ACTING ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION**

**GORDON J. LINTON
ADMINISTRATOR
FEDERAL TRANSIT ADMINISTRATION**

**RICARDO MARTINEZ. M.D.
ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

DEPARTMENT OF TRANSPORTATION

**BEFORE THE SENATE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON TRANSPORTATION**

APRIL 10, 1997

ISTEA REAUTHORIZATION

Mr. Chairman, Members of the Subcommittee. Thank you for the opportunity to testify in support of the Administration's proposal for reauthorization of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and for our respective agencies' budget requests.

Overview

A few weeks ago, Secretary Slater appeared before this subcommittee and provided an overview of the Department of Transportation's FY 1998 budget request. He told how our transportation network is the envy of the world, and how it has made us the most mobile society on earth. His message is that safety is our number one priority and that transportation is critical to economic growth and to providing our citizens with the mobility on which they have come to rely to sustain their quality of life. And it is about showing that safe and efficient transportation and a clean environment can go hand in hand. We Administrators of the DOT agencies most concerned with ISTEA are here to reinforce that message and to provide details about our reauthorization proposal.

We are now at a critical juncture as we examine ways to reauthorize the surface transportation program this year and to continue to improve our transportation systems. The Administration seeks to build upon the ISTEA foundation in the six-year, \$175 billion authorization proposal announced by the President, Vice President, and Secretary Slater last month--the National Economic Crossroads Transportation Efficiency Act of 1997 (NEXTEA). In the President's words, "we're taking the next big step to maintain and modernize our transportation system, and

to make sure it is the best in the world." He also emphasized that NEXTEA is "one of the most important pieces of environmental legislation that will be considered by the Congress in the next two years."

When the Administration's NEXTEA proposal was submitted to Congress last month, it demonstrated several of the Secretary's key national transportation priorities. These priorities include strategic investment in infrastructure to support economic growth and enhance U.S. global competitiveness; safety programs that will improve the public health and safety of the Nation by reducing highway crashes and resulting injuries and deaths; an Access to Jobs and Training program to help ensure that welfare reform works; help to communities to balance mobility needs with environmental protection and enhancement, and a commitment to common sense government and innovation. Included among the innovations in NEXTEA are proposals for (1) innovative financing to ensure that Federal resources stretch as far as possible, (2) innovation in technology to accelerate advances that close the gap between state-of-the-art and state-of-the-practice, and (3) innovation to implement common sense government in order to provide the people we serve with programs and organizations that work better and cost less.

Strategic Investment In Infrastructure and Safety

The Nation's surface transportation system, particularly the National Highway System and its intermodal connectors, is essential to economic development, to providing Americans with greater mobility, and to national defense. Clearly, sustained Federal support for infrastructure is critical to the health of the economy. The challenge we face today is to improve our existing transportation network and to provide for continuing economic growth within constrained resources and environmental priorities.

National and regional economic growth relies heavily upon a well-functioning surface transportation system. For example, the payoff relating to highway transportation spending levels goes well beyond the actual infrastructure itself and is reflected in the contribution of the public infrastructure to private sector employment and private sector productivity. At stake are jobs and the economic productivity of the Nation. Our highways and their interconnectors to other systems are the lifeline of the Nation.

The Administration's reauthorization proposal and FY 1998 budget strategically allocate our limited resources, with major increases for the National Highway System, Interstate Maintenance, Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement, and safety programs--clear national priorities. When combined with other provisions in our reauthorization proposal that improve States' ability to use their Federal transportation funds more flexibly, NEXTEA will enable States to better target their funds to the types of infrastructure investments that will work best for them--whether traditional highway investments, transit or rail projects, safety improvements, ITS

technologies, environmental needs, or new intermodal facilities to handle growing intermodal demands.

One example of the improvements our proposal would make is amendment of the definition of transit capital to include maintenance as an eligible expense. Such an approach would parallel the eligibility for Federal-aid highway projects. This would allow local transit operators to make better decisions on whether to invest Federal funds to prolong the life of existing assets, or to invest in new vehicles, facilities and equipment. In addition, transit providers in urbanized areas under 200,000 in population would also be given the flexibility to use all their transit funds for any eligible transit purpose--including operating expenses.

The Administration's reauthorization proposal and FY 1998 budget for the Department aim to build on the record level of Federal investment over the past four years. Indeed, NEXTEA increases surface transportation funding by \$17 billion, or 11 percent, over the \$157 billion authorized by ISTEA.

We propose authorization levels higher than the proposed obligation levels so there will be flexibility to increase transportation funding within a balance budget if economic conditions improve in future years. With multi-year authorizing legislation, such as our ISTEA reauthorization, we believe it is important that the contract authority levels are set at appropriately high levels. This allows for growth in the program in the outyears, if the budget picture permits such growth. And in the apportionment formulas that we have proposed to distribute Federal highway funds among the States, we have sought to strike a fair balance among the many diverse transportation needs of this Nation. However, we understand that there will be considerable debate over this matter and we offer our proposal as a starting point.

Highway Investment

Included in the Department's overall FY1998 program levels is \$20.2 billion in obligations for the Nation's highways and bridges. This includes a Federal-aid highway obligation ceiling of \$18.17 billion, which is approximately the same level as enacted in FY1997. The total contract authority proposed for FY1998 is \$22.8 billion, up from \$22.5 billion in FY1997.

All States have benefited from ISTEA infrastructure programs such as Interstate Maintenance, the National Highway System, the Surface Transportation Program, the Congestion Mitigation and Air Quality Improvement Program (CMAQ) and the Bridge Program. These core Federal Highway Administration (FHWA) programs are not only retained in NEXTEA, but, in the aggregate, authorizations would increase by 33 percent over ISTEA levels. The proposed funding levels for the highway program are sufficient to fund system maintenance and preservation costs and some capacity improvements. Yet these levels also reflect the continuing commitment of both the President and the Congress to balance the

budget and reduce the Federal deficit.

Our NEXTEA legislation also includes more than \$2 billion from the Highway Trust Fund for the continued construction of the Appalachian Development Highway System (ADHS) in the 13 States that comprise the Appalachian region. The ADHS is now 76 percent complete. In the past, this system of highways has been funded from the General Fund through various appropriations and authorization acts. Our NEXTEA funding proposal would promote much-needed economic development in the Appalachian region and throughout the entire eastern United States, because more than 92 percent of the Appalachian Development Highway System is located on our Nation's most critical and well-traveled highways--the National Highway System.

Transit Investment

We propose budget authority in FY 1998 of \$5.1 billion, and a \$4.4 billion obligation level. Within the FY 1998 obligation level, our budget makes available \$4.2 billion for capital investment in mass transportation. Beginning in FY 1998, we are proposing to fund the entire \$31 billion, six-year transit program from the Mass Transit Account of the Highway Trust Fund. Additionally, in FY 1998, we are proposing that discretionary bus and bus-related funding and fixed guideway modernization funding, be rolled into Formula Programs.

NEXTEA proposes to combine some transit program categories to make the program simpler to understand and manage, at the Federal level as well as at the State and local levels. Our proposal would provide simpler, and more flexible program-wide definitions of eligible capital costs, matching ratios, and grant requirements. We would also expand the transferability of funds among the Urbanized, Non-Urbanized and Specialized formula programs.

NEXTEA proposes having a much larger proportion of the transit program go out by formula, rather than on a discretionary basis. This will help local agencies plan by reducing uncertainty over funding sources and earmarking, and will improve the equity by which the funds are distributed. It will also enhance the possibility of using innovative financing techniques to leverage the use of Federal funds.

New transit lines or significant upgrades to existing service can be more effective in some cases in addressing congestion than new or expanded highway capacity. Recent research by the firm Hickling-Lewis-Brod examined major transportation corridors and determined that high-quality transit significantly improves the overall door-to-door travel time for both transit riders and highway users. As motorists switch from automobile commuting to mass transit, congestion on highways lessens and highway travel time improves. Increased transit investment in these corridors is an effective use of transportation revenues that clearly benefits motorists.

Since January 1993, the Federal Transit Administration (FTA) has signed Full Funding Grant Agreements for 19 new or expanded fixed guideway projects totaling \$7 billion. When State and local funds are also considered, these projects will result in the investment of over \$12 billion in new mass transit infrastructure in metropolitan areas from coast to coast. These actions continue FTA's successful strategy of employing the mechanisms provided in ISTEA to execute long-term contracts and maintain the Administration's strong support for mass transit.

In addition, NEXTEA builds on the efforts in ISTEA to strike a balance between existing infrastructure and the need to build new systems. We recognize the need to balance new system construction with support to "older rail cities." Such support funds the replacement and rehabilitation of the existing rail fleet and the restoration of rail facilities such as stations, track, and yards and shops, as was guaranteed in ISTEA.

Our proposal provides an equal amount, \$634 million, for major capital investments and fixed guideway modernization. That level for major capital investments over six years is sufficient to sustain the Federal commitment to all existing and expected FFGAs. The amount for Fixed Guideway Modernization will be funded under the Formula Programs and distributed by the current statutory formula for fixed guideway modernization.

Safety Investment

Secretary Slater has set transportation safety as his highest priority. Federal safety programs have contributed to real progress in highway safety. Safety belt use has grown from 11 percent in 1982 to 68 percent in 1996. Alcohol involvement in fatal crashes has dropped from 57 percent to 41 percent over this same 15-year period. The highway fatality rate has declined steadily since 1966, now at the all-time low of 1.7 per hundred million miles traveled.

Despite this significant progress, a look at recent statistics reveals that there is no room for complacency. After years of steady decline, the total number of highway deaths increased from 1992 to 1995. Motor vehicle crashes are still the leading cause of premature death of our Nation's youth. Safety belt use has grown by only two percentage points since 1993. In 1995, the number of alcohol-related fatalities increased for the first time in 9 years. In 1996, 41,500 people died and over 3 million more were injured in police-reported crashes. Although our fatality rate remains at an all-time low, highway crashes still cost the Nation \$150 billion per year. Taxpayers share in these costs through Medicare, Medicaid, and income support programs. Twenty-four percent of all medical care costs associated with motor vehicle crashes are covered by public revenues (14% from federal revenues and 10% from State resources). In 1994, highway crashes cost taxpayers \$13.8 billion, the equivalent of \$144 in added taxes for each household in the U.S.

Improving air bag safety is a top priority. The National Highway Traffic Safety Administration (NHTSA) has initiated a comprehensive effort to realize more fully the life-saving attributes of current driver and passenger air bag systems, and to pave the way for the introduction of improved air bags in the near future. Our budget request contains an increase of about \$8 million for air bag initiatives, a top-priority increase for FY 1998.

Another major priority is to work with Governors and State legislatures to encourage the enactment of stronger safety belt and child safety seat laws. We will be implementing a Presidential safety belt plan to increase the use of these vital life-saving devices. We have a number of efforts underway to improve passenger safety of our children.

Speeding --exceeding the posted speed limits, or driving too fast for conditions--is a problem on all roads. The human and economic costs of speeding are staggering. In 1995, speeding was a factor in 31 percent of all fatal highway crashes, at a cost to society and the economy of more than \$29 billion. Currently, 34 States have increased their speed limits beyond what would have been allowed under the former national maximum speed limit law, and 23 of these 34 States have increased their speed limits to 70 miles per hour or greater. NHTSA and FHWA have jointly developed and continue to implement a Speed Management Plan combining research, enforcement, roadway engineering and public education.

Recent surveys indicate that aggressive driving, a behavior often marked by excessive speed, has become the driver behavior that most concerns the motoring public. NHTSA's activities to combat aggressive driving include public information and education, demonstration programs in major urban areas to identify effective enforcement techniques, and research to determine the relationship between specific unsafe driving acts and crash involvement.

NHTSA programs have been highly cost effective. The number and costs of fatalities and injuries would be significantly higher if not for the effectiveness of these programs. Since 1992, safety belts, child safety seats, motorcycle helmets, and the age-21 minimum drinking age laws under have saved over 40,000 lives. Air bags have saved more than 1,850 lives.

ISTEA recognized the importance of the Federal-State partnership in highway safety. We believe that the status quo is not sufficient to accomplish what must be done. The successor to ISTEA must continue to look at new ways to advance this essential partnership and secure the safety of those traveling on our Nation's roads. Our reauthorization proposal builds on the strong components of the existing law, but streamlines programs, creates new flexibilities, and provides linkages among other highway safety programs to move our safety programs forward in a coordinated manner to address national priorities.

Our NEXTEA proposal is designed to help the States deter drunk and drugged driving and to encourage increased use of safety belts and child safety seats. It includes authorizations for significantly increased safety funding with greater emphasis on incentive programs. The flexibility inherent in these incentive programs, which give States the ability to choose whether to implement suggested legal and program criteria, has proved very successful in motivating States to make greater efforts in highway safety.

New incentives within the framework of our Section 402 State and community highway safety program will give added momentum to the program, at the same time that State and local attention is focused on high priority safety needs. Thus, in addition to the Section 402 performance-based grant program, NEXTEA provides authorizations for four carefully crafted and targeted incentive grant programs:

- * an enhanced drunk driving prevention program to help States enact and enforce tough drunk driving laws;
- * a new occupant protection program to encourage States to increase safety belt use--the single best way to protect the occupants of a vehicle;
- * a new drugged driving program, a Presidential initiative to help States enact and enforce tough laws to prevent drug-impaired driving; and
- * a new State highway safety data improvement program to encourage States to improve the data they use to identify the priorities for their highway safety programs.

NEXTEA increases authorized funding for NHTSA by about 25%, to \$392 million in FY 1998. Within the Department's overall FY 1998 program levels is \$333 million in obligations for NHTSA, about 11 percent more than the amount provided in fiscal year 1997. This greater amount reflects the high priority both this Administration and the American public give to highway safety. This funding level will provide a balanced program in FY 1998--to address both vehicle and behavioral safety areas and to carry out essential safety research, including how to reduce crash injuries. We have a strong behavioral program that balances our regulatory mission in motor vehicle safety.

Under our reauthorization proposal, highway safety programs would become more flexible and streamlined in a number of areas. We have retained the railroad/highway grade crossing program, but would make funds under this program available to address noncompliance of grade crossing devices. We have combined the FHWA and NHTSA portions of Section 402 program so there is one allocation to the States; and we have proposed a reduction in the number of separate motor carrier program elements. We believe that our jointly administered safety delivery program is working well.

We have also created incentives for State safety agencies to work closer together in dealing with their safety problems. For example, if a State has an integrated

safety planning process in place that deals with three major safety areas: roadways, drivers, and commercial vehicles, then they will have the ability to spend funds from both the STP and hazard elimination program for any of those three safety areas, as well as be eligible to tap into a new Integrated Safety Fund; again for use within any of the three safety areas.

We believe that with the increased funding and flexibilities which are being proposed, the States will be in a much better position to identify and resolve their safety problems. Our reauthorized program also includes a major safety research focus within the Intelligent Transportation Systems program for the development and testing of intelligent vehicle systems, which will include collision avoidance and in-vehicle information systems, and which promise dramatic safety improvements.

Our motor carrier safety program also retains its important role in our NEXTEA bill and our FY 1998 budget request. For the last three years, the number of fatal crashes involving trucks has been higher than the number of such crashes in 1992. This follows the three-year decline in fatal involvements prior to 1992. The FHWA's budget request and NEXTEA proposal include \$100 million annually for motor carrier safety, a 27 percent increase over the FY1997 level. The increased funding will be used to make improvements to driver safety programs, information systems and data analysis, and evaluation of all aspects of driver performance and safety.

These funds will support a results-oriented commercial motor vehicle safety program. Over 80 percent of the funds will be used as grants to States for the implementation of comprehensive, nationwide performance based safety programs. States will be given the opportunity to strengthen enforcement activities by investing in areas with the potential for crash reduction based on their own circumstances. The funds will also support national information systems, and analysis and development of new systems to support critical safety initiatives such as the Commercial Vehicle Information System. Within NHTSA, research will be continued to improve heavy truck safety, primarily in the areas of braking, rollover stability, tires and cab integrity.

Innovation in Financing

As we administer transportation programs that will carry the nation into the 21st century within tight budgetary constraints, we must continue to ask ourselves how we can do it better. That is, how can we be more efficient, more innovative in the delivery of transportation services?

Government cannot meet all of the Nation's infrastructure investment needs alone. This Administration has strongly supported and encouraged creative financing solutions and more private sector involvement in infrastructure improvement and management of America's transportation system.

Our reauthorization proposal and our FY 1998 budget would continue funding for State Infrastructure Banks (SIBs) at the FY 1997 level of \$150 million but funding would come from the Highway Trust Fund. This program had previously been funded from the General Fund.

In addition, we would continue to focus on new methods of improving the way available resources are used and maximizing their benefits. We are promoting new financing techniques that have the added benefit of leveraging still further resources, including those of the private sector, and bringing them on line for much-needed infrastructure investment. Our reauthorization proposal proposes a new \$100 million a year Transportation Infrastructure Credit Enhancement Program to leverage Federal dollars and encourage private sector investment in transportation projects of national significance that may otherwise be delayed or not constructed at all because of their size and uncertainty over timing of revenues. With this new program, the Department will be able to make grants that, along with supplemental contributions by States and other entities, will comprise a Revenue Stabilization Fund for projects to secure external debt financing, or to be drawn upon if needed to pay debt service costs in the event project revenues are insufficient.

To maximize the impact of every dollar spent on transit, the FTA is working to introduce various innovative financing methods to the transit community. Since 1994, FTA has reviewed and approved 22 innovative financing transactions involving over \$2.2 billion in Federally-supported assets. These included cross-border leases, sale/leasebacks, bond issues for construction, and leveraging of soft match. Altogether, these transactions netted over \$143 million in additional private investment for the transit systems.

Innovative financing is but one of many efforts to expand funding availability for transit. Other initiatives include facilitating joint developments to attract private partners for transit infrastructure projects, and developing ways to better coordinate funding between Federal programs. For example, some Community Development Block Grant funds may be expended in support of transit projects in redevelopment communities. Also, FTA is Co-Chair of the DOT/DHHS Coordinating Council on Human Services Transportation, which seeks to link transportation delivery through multiple programs (Medicaid, elderly transportation, public transit) at the local level. Our Access to Jobs and Training initiative will also be an important tool in this regard.

Focusing on People and Communities

ISTEA focused on transportation's bottom line: making America a better place to live. It emphasized consideration of how transportation investment and policy choices affect safety, community quality of life, and the environment.

One of the most pressing problems today in light of the new welfare legislation is

making the reforms work. Nationally, only six percent of those on welfare own an automobile. A person can't get a job if a person can't get to a job. In response to this problem, FTA has proposed a new initiative called "Access to Jobs and Training." Transit is the "to" in "Welfare to Work." The President alluded to this initiative in his State of the Union Address. Under this new program, governors, units of local government and nonprofit agencies will be able to compete for resources. The funds will be used to plan and implement the best methods of solving local transportation problems related to getting people off the welfare rolls and into jobs or training needed to enter the workforce. Although it is our intent that funding will primarily support operating and capital costs for service start-up, other eligible costs include collaborative planning to assess employment transportation needs and develop service strategies, integrating transportation and welfare planning, the coordination of existing service providers, the development of long-term financing strategies, promotion of employer-provided financing, administrative costs associated with the program, and evaluation activities.

In addition, the proposed programmatic changes and expanding the definition of capital projects for mass transportation will give operators added flexibility within the transit programs to provide needed support for transit service to meet the requirements of the Americans with Disabilities Act.

Environment

Under NEXTEA, the basic program structure of our environmental programs remains unchanged from ISTEA. Our proposal also continues ISTEA's commitment to inclusive transportation planning which will enhance State and local decisionmakers' ability to consider the environmental impacts of their transportation investment decisions. Although our communities have made significant progress in improving air quality in recent years, we still face environmental challenges, not just to improve our air but to enhance our communities.

The CMAQ program has proven to be ISTEA's most flexible program, representing more than half of all flexible funds used for transit purposes (\$1.7 billion of \$3.0 billion). Other non-highway projects that assist areas in improving air quality are receiving an increasing share of CMAQ funds as well. Through 1996, over \$500 million in CMAQ funds were used to establish or expand rideshare services, promote demand management, and support bicycle and pedestrian travel. CMAQ flexibility has allowed States to fund new innovative efforts such as vehicle emission inspection and maintenance programs, alternative fuel conversions and refueling facilities and the purchase of clean fueled buses and electric vehicles.

The congestion relief benefits of the CMAQ program have also been substantial. Houston's TransStar traffic management and control system uses cutting edge technology to manage over 300 miles of freeway and over 100 miles of high

occupancy vehicle lanes. CMAQ has also funded many other congestion mitigation projects, including HOV lanes in Los Angeles, shared-ride services in Virginia and New Hampshire, and bicycle and pedestrian facilities in Montana. The benefits of promoting alternative travel options as envisioned by the Congress in ISTEA have clearly been realized through the CMAQ program.

Under NEXTEA, we will build on this success. The Department proposes an increase in the average CMAQ program funding authorization under ISTEA from \$1.0 billion annually to \$1.3 billion under NEXTEA, an increase of 30 percent. Funding eligibility would be expanded in several ways. These include providing funds on the basis of a State's maintenance, as well as nonattainment area, populations; clarifying that nonattainment areas for particulate matter (PM) are explicitly eligible and adjusting the funding formula accordingly; and including programs to reduce extreme cold starts (where the majority of vehicle emissions are generated) and to "buy back" or scrap higher-polluting pre-1980 vehicles. Also, with EPA's proposal to revise the national ambient air quality standards, the Department recognizes the need to extend funding to any areas newly designated under the new standards. We therefore propose that CMAQ funds be available to these areas after a State has submitted its implementation plan addressing the new standards to EPA.

NEXTEA also continues investment in bicycle paths, scenic byways, and recreational trails that cost relatively little but which greatly improve the quality of our lives. While bicycle and pedestrian projects can be funded under all of the major ISTEA funding programs, transportation enhancement (TE) funds have accounted for 75 percent of funding for these projects.

Transportation enhancements are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of our transportation system. Such projects have become an important part of our commitment to the redevelopment and sustainment of communities through a variety of transportation related activities, from the renovation of historic rail depots, such as the Lafayette Depot in Lafayette, Indiana to the rehabilitation of the historic Stone Arch Bridge in Minneapolis and funding for the Schuylkill River Park and Trail in Philadelphia. Because of the success of this program, in NEXTEA, we propose to retain the current TE provisions of ISTEA with continued funding from a 10% set-aside from STP funds, resulting in a funding increase of over 30%. We also included a provision that codifies the requirement that TE activities have a direct link to transportation.

Innovation in Technology

As we began strategically planning for a post-ISTEA era, one of our goals was to create a fundamental cultural change both within the Department and the transportation community as a whole that would provide a foundation for the next century. One of the cornerstones for the future is a strong shift of resources and

energy to technological innovation--innovation that would provide for a greater return on our investment. This change would also move us from a traditional oversight role to one of proactive leadership, and make technology, in the broadest sense, a leading element in the transportation system for the 21st century.

To make this happen, we are proposing significant increases in programs which support the advancement of technological innovation. Our reauthorization proposal and FY 1998 budget request recognize that a strong Federal transportation research and technology program is not a trade-off with infrastructure funding, but is instead a powerful tool to ensure that innovation is incorporated into the multi-billion dollar infrastructure program.

Within the FHWA FY 1998 budget request, our proposed research and technology programs would be funded through a combination of direct contract authority and the administrative takedown from the Federal-aid highway program. Technology deployment and technology transfer programs--those elements of the research and technology program most closely aligned with program delivery and professional capacity building--would be supported through their own contract authority and not be a part of the administrative takedown. This would include activities such as ITS deployment, a proposed National Technology Deployment Initiatives program, the Local Technical Assistance Program, the National Highway Institute, and University Transportation Centers.

Funds to support pure applied research including basic ITS research and technology, and highway research and development, would be funded from General Operating Expenses as part of an administrative takedown as has been the case in the past.

Infrastructure and Traffic Safety

FHWA is answering our Nation's challenge to make roads better. One of our active research and development programs is defining "better" to mean highways that are safer and operate more efficiently. The annual cost of traffic crashes is \$150 billion and growing, and congestion costs U.S. businesses up to \$40 billion per year. The need to explore innovative solutions to our highway safety problems has led to productive partnerships with NHTSA and the private sector.

New approaches to modeling and computer simulation of vehicle and roadside hardware are being funded jointly with NHTSA and have participation from the automotive industry. The use of these powerful simulation tools will enable us to design future roadside hardware that will perform at higher levels and reduce the severity of crashes. Helping drivers to see pavement markings at night and in times of bad weather is another promising area of technology.

Research in the Automated Highway System (AHS) will reach a significant

milestone this August when its technical feasibility will be demonstrated in San Diego. The Department is also planning to link more closely the near term benefits of NHTSA's work in Crash Avoidance Systems with the research that has been carried out for the AHS. A major program review of the AHS will help us focus our resources so that we will be able to deliver sooner the benefits of integrating several collision avoidance systems into smart vehicles so we can reduce crashes while improving the efficiency of our existing highway system. The resulting Intelligent Vehicle program will capitalize on the synergisms that have been created through the public-private partnerships of the National Automated Highway System Consortium and the more than 100 public and private organizations who are participating as associate members. NHTSA's continuing basic development and integration work will help ensure that intelligent systems are fully integrated within the vehicle, are useful to the driver, and work in concert with the highway system to produce significant safety improvements.

Infrastructure Materials and Technologies

Building and upgrading the physical transportation infrastructure, principally the pavements and bridges across America, requires a major use of federal-aid transportation program dollars. The challenge we face is to make these roads better. This challenge is being addressed by applying technologies developed by the FHWA which can now make better pavements, such as ones called Superpave that will last longer; better bridge decks that last two to three times longer using epoxy coated reinforcement bars and fly ash concrete; and better bridge coatings that will last three to five times longer than previous systems. For example, FHWA-led research in High Performance Concrete (HPC) is helping to construct bridge structures that will accommodate loads twice as large as before. In 1996, this was demonstrated on a bridge in Houston, Texas. In 1997 we are working with more than 12 states to build more HPC bridges. Longer spans, fewer girders or beams, and longer life cycles, will result in substantial first cost savings at well over 1 million dollars for every 10-15 bridges built.

The FHWA will use requested resources to continue to develop, transfer, and implement technology through alliances with our partners and the international community. We will use research and technology dollars to improve the quality of infrastructure projects and reduce life-cycle costs in these times of limited funds.

Mass Transportation Research

In the area of mass transportation research, a major accomplishment was the roll-out, in October 1996, of the first prototype of the Advanced Technology Transit Bus (ATTB). The ATTB incorporates aerospace construction, accessible design and hybrid-electric propulsion into a single vehicle design.

FTA has been increasingly entering into joint sponsorships with other government agencies at the Federal, State and local levels, and partnerships with consortia formed by transit industry suppliers, transit agencies, national laboratories and

universities. These partnerships can increase competition and leverage funding. Examples of programs involving such partnerships include the Advanced Public Transportation Systems program (APTS) and the Fuel Cell Transit Bus.

Federal transit research has played a key role in maintaining the Nation's global competitiveness in developments such as electronic farecards and transit vehicles powered by low-polluting fuels, hybrid electric buses, fuel cells and battery powered propulsion systems. The United States must continue devoting resources to this area to ensure that emerging technologies are developed for markets both domestic and international.

Innovation for Today and Tomorrow--ITS

In 1991, under ISTEA, the Department initiated the Intelligent Transportation Systems program to research, operationally test and promote the application of computer and communications technology to our surface transportation system, in part, to address the growing gridlock in our Nation. Over the past five years, we have learned through our research efforts, that an intelligent transportation infrastructure applied to our surface transportation can improve efficiency, productivity, and safety. We are now ready to support deployment of integrated, interoperable ITS infrastructure, while continuing to conduct research in critical program areas. Consistent with the conclusions of a recent GAO review of the ITS program, we will also continue to provide deployment assistance directly to State and local agencies through technical assistance, guidance, training, and development of standards.

ITS research is already providing benefits related to improved efficiency of the surface transportation system by helping system operators monitor system performance, quickly identify and effectively respond to problems that develop, and provide timely, accurate information to travelers. Freeway management systems have increased throughput by up to 22%, while also increasing travel speeds and reducing accidents. Several locations utilizing ITS infrastructure freeway management systems in such states as Washington, Illinois, New York, Virginia, Minnesota, and California show reductions in total crashes from 15 percent to 50 percent. In San Antonio, Texas, reports show a 30 percent reduction in secondary crashes and a 35 percent reduction in total crashes. Based on DOT research, electronic toll collection systems can move 200-300% more vehicles per lane than conventional systems.

Our FY 1998 budget requests a funding level of \$150 million for ITS research. This research will focus on a number of areas with high potential benefits such as advanced traffic control strategies, effective transit management techniques, and collision avoidance technologies.

It is estimated that widespread deployment of three basic crash avoidance technologies --rear-end crash warning systems, roadway departure warning

systems, and lane change/merge crash avoidance systems --beginning in the next five years, could ultimately reduce crashes by 17% and save \$26 billion per year. The results of ITS research can also be applied to allow more efficient and accurate automated safety inspections of commercial vehicles, further enhancing safety.

States are beginning to experience reductions in the cost of regulating motor carrier safety through the use of automated registration, fuel tax reporting, and weight screening processes. Such deployments can also significantly improve productivity for commercial carriers by reducing time and effort needed to prepare necessary paperwork, and can reduce the time now wasted while manual weight screening is done and manual safety inspections are performed.

ITS infrastructure consists of a series of elements, such as smart traffic signals, advanced traffic management systems, and more. This infrastructure allows the public to travel more efficiently and safely. Over the last five years we have learned that this system works best when the components are interoperable, or "can talk to one another."

In order to jump start State and local government involvement in deploying ITS in an integrated manner, consistent with standards and within the bounds of the national ITS architecture, we are proposing an incentive program. Our reauthorization proposal would authorize this ITS Deployment Incentives Initiative and provide \$100 million per year to fund this effort over the life of NEXTEA. This deployment incentive program will focus on integrating existing intelligent transportation infrastructure elements in metropolitan areas, including those elements installed with other Federal-aid funds. It will also focus on installing, as well as integrating, the various elements of an intelligent transportation infrastructure for commercial vehicle projects, and projects outside metropolitan areas.

We believe that the timing of deployment is critical. At the moment, elements of the intelligent transportation infrastructure are being deployed piece by piece, with no guarantee of interoperability. State and local governments will then have to live with a stove-piped infrastructure, one in which components do not form a system and are not necessarily efficient. We believe this program gives state and local governments an incentive to cooperate with agencies, jurisdictions, and the private sector, to achieve fully integrated ITS deployment in accordance with the national ITS architecture and established ITS standards and protocols.

Innovation--Implementing Common Sense Government

Secretary Slater has emphasized common sense government and innovation as being among his top three priorities and it is reflected in our reauthorization proposal. Let me provide some specific examples:

- * In our planning provisions in NEXTEA, we propose to simplify the planning

factors, in order to focus States and MPOs on 7 broad goals rather than the 16 to 23 that are included in the statewide and metropolitan planning provisions of ISTEA.

- * In the STP, we propose eliminating the quarterly, project-by-project certification of each state's STP projects and instead establishing an annual, program-wide approval for each state's STP program.
- * Also for all projects off the NHS, we would reduce DOT oversight, replacing it with State oversight (except for environmental, labor standards, and similar laws which must remain a Federal responsibility).
- * For transportation enhancements, we retain the simplification provisions in the National Highway System Designation Act of 1995-- and we commit emphatically to doing everything we can administratively to carry out the letter and spirit of these provisions. In response to the NHS Act, we have already put in place provisions to allow for the use of donated funds, materials, and services as a State's match; allowed for advance payment options for cash-pressed localities; streamlined environmental documentation through the use of categorical exclusions; made changes in response to Uniform Relocation Act concerns; and are completing procedures to trim review time where historic preservation issues are involved.
- * Across our entire program, we propose removing a variety of restrictions on reimbursement of State and local government costs, and eliminating requirements that State and local governments "turn in" to the Federal government revenues that they gain from Federal-aid highway projects, permitting States and localities to retain those revenues as long as they use them for title 23 purposes.
- * For the Section 402 highway safety grant program, we will be expanding to all states the performance based management process begun as a pilot in Fiscal Years 1996 and 1997. Grant management will be simplified and states will have increased flexibility.

We are also working diligently with our partner agencies to ensure that we efficiently deliver "seamless" transportation service to our customers. In February 1996, the FHWA, FTA, NHTSA and Federal Railroad Administrators submitted a joint field restructuring proposal to former Secretary Peña. While each agency retained its existing identity and reporting relationships, renewed emphasis was placed on the spirit of intermodalism embodied in ISTEA. Headquarters and field officials of the four surface transportation modes and the Research and Special Programs Administration have been actively engaged in creating a new model -- one which focuses on the complementary relationships of the surface

transportation modes, as opposed to viewing them as separate and unrelated entities. The new model seeks to ensure seamless, intermodal, customer-friendly delivery processes through shared technical and administrative resources, while realizing reduced operating costs.

For example, in the planning area, one of the Department's more significant accomplishments includes the establishment of Intermodal Planning/Transportation Groups in each region which include representation from each of the surface transportation modes, RSPA, and other DOT modal administrations. Many of the regional groups also include representation from outside the Department, including the Army Corps of Engineers and the Environmental Protection Agency. These planning groups serve as vehicles for developing and overseeing agendas and carrying out specific initiatives related to transportation planning activities.

Conclusion

In implementing ISTEA, our efforts have focused on redefining and strengthening old partnerships and building relationships with new partners. From a program standpoint, we have emphasized the sustained economic growth that results from sound and substantial investment in transportation infrastructure, particularly the National Highway System, from programs that reduce costs to business and average citizens by enhancing highway safety, and from investment in research and technology innovation that will make our investments more efficient and effective. We look forward to working with the Congress to further the advances launched in ISTEA as our surface transportation programs are reauthorized to move us into the next century.

Thank you for the opportunity to testify today. We would be pleased to answer any questions you may have.