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Status of ISTEA Programs

Mr. Chairman, I welcome this opportunity to testify before you today on the status of several key programs funded under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), to tell you how well these programs have worked in many ways, and also to identify areas where we should and can do more. In honoring President Clinton's pledge to rebuild America, we are committed to leading our National transportation program into the next century, advancing surface transportation programs that invest in the future, bring innovation to transportation, and enhance the Nation's competitiveness in the global economy.

Before I turn to the specifics of ISTEA, I want to begin by noting a significant milestone. This month marks the fortieth anniversary of another landmark transportation measure, the Federal-Aid Highway Act of 1956, which created the Highway Trust Fund and provided the first significant Federal funding for the construction of the Interstate System. This legislation was truly a bipartisan effort between a Republican President, Dwight Eisenhower, and a Democrat-led Congress. In his memoir, President Eisenhower explained why the construction of the Interstate System was one of the most important domestic programs of his presidency. "More than any single action by the government since the end of the war, this one would change the face of America. . . . Its impact on the American economy--the jobs it would produce in manufacturing and construction, the rural areas it would open up--was beyond calculation."

Traditionally, highway investment decisions were based on engineering requirements and on direct user benefits of reduced operating costs, shorter travel times, and lower accident rates. However, we have learned that our investment in the Interstate System has resulted in broader benefits, including real gains in national economic performance. Independent economic research conducted for the Federal Highway Administration (FHWA) has shown that industries have realized significant production cost savings from increased investments in our highway network, which suggests that highway investments more than pay for themselves when measured in terms of resulting improvements in economic productivity.¹ Another important finding of this research is that the contribution of highway networks to annual productivity growth rates from 1950 to 1989 averaged about 26 percent, although this contribution has been lower in recent years as the highway system has matured. This means that the highway network has contributed over one-quarter of the yearly productivity growth rate in the U.S., and it dramatically underscores the importance of infrastructure investment to the national economy as a whole.

The forty years that have followed since the start of significant Federal funding for Interstate construction have been filled with changes and challenges to our surface transportation systems that few could have predicted in 1956, such as the integration of the several modes of surface transportation into an intermodal system, increased State and local government responsibility for planning their own transportation systems, unprecedented flexibility in how these officials can use Federal resources, innovative financing methods to make our limited Federal transportation funds yield more, and intelligent transportation systems that cut travel times and reduce congestion. But President Eisenhower's view has proven to be true: the

¹ M. Ishaq Nadiri, *Contribution of Highway Capital to Industry and National Productivity Growth* (1996).

Interstate System has changed the face of America.

Later this month we will commemorate the monumental contributions of the Interstate System to our Nation and its people with an extensive outreach tour. Our journey will start in San Francisco, the final destination of the U.S. Army's 1919 transcontinental motor convoy in which, as a young soldier, Dwight Eisenhower volunteered to participate to assess the capabilities of U.S. routes to serve military needs. On the way east, we'll be meeting with citizens and State and local elected officials, to listen and learn from the people who use our transportation systems. We will complete the trip here in Washington with a special Interstate System anniversary celebration on the Ellipse, the starting point of the 1919 convoy.

Overview of ISTEA Programs

National Highway System

Since the start of the Interstate era, our population has grown and shifted, our economy has changed, and our needs as a Nation have evolved. To meet these needs and to extend the benefits of the nearly 43,000-mile Interstate System to areas not directly served by it, the National Highway System (NHS) was developed. Just as the Interstate System has united the varied parts of our Nation like never before, the National Highway System is the cornerstone of our surface transportation system for the next century. Rather than another construction project, the NHS is a strategic tool for targeting our scarce Federal resources to the Nation's most important routes (including the Interstate) and thereby improving the safety, efficiency, and reliability of our transportation system. Nowhere are the economic benefits of highway investment potentially higher than with the NHS. For example, because counties containing NHS routes also include 99 percent of all jobs in this country, NHS investment provides virtually every American worker with improved access to work and nearly every employer with more

reliable and affordable routes for transporting products to local, regional, national, and international markets.

Across the country, the Interstates have had tremendous impacts on local and regional economies by providing unprecedented mobility. They provide routes for just-in-time delivery of materials, manufactured parts, and finished goods from every corner of the Nation to every part of the world. The transformation of the Southeast along I-85, the area's primary transportation artery, into an international economic success has been highlighted in recent years. Heavy spending in basic infrastructure, including highways and the Atlanta airport, along with a well-trained labor force, an aggressive industrial policy, and low taxes, have lured many manufacturing firms to locate along I-85. In fact, one stretch of I-85 in western South Carolina has been nicknamed the "U.S. Autobahn" because of the large number of German companies that have located there. For the businesses and workers of the Southeast, I-85 is an economic lifeline.

In some cases, we don't recognize how much we depend on our Interstate System until it is no longer available, due to repair or reconstruction, or in the case of California, due to the destructive forces of the massive Northridge earthquake. Interstate routes 5 and 10, critical commercial and commuter routes, were among the many routes that sustained major damage from the quake. While many drivers responded to our calls to use public transportation, to carpool, and to telecommute, the loss of these major Interstate routes meant long delays and congested detours. Add to these expenses the costs to businesses and industries dependent on these major routes, and the costs of these closures escalated to \$1 million per day. Using innovative contracting procedures to dramatically shorten construction times, the contract for reconstructing I-10, the Santa Monica Freeway, was let only 18 days after the earthquake. Quick

action and close cooperation with Caltrans and the contracting industry meant that we were able to reopen the Santa Monica Freeway only 85 days after the quake. The earthquake, although obviously impacting the Los Angeles area most severely, dramatically underscored the strategic importance of the National Highway System to the economy of the entire Nation. The impact of damage to these few critical Interstate routes, now a part of the NHS, was felt nationwide.

Prior to the designation of the NHS last November, all principal arterials (totaling approximately 204,000 miles) were eligible for NHS funds; designation of the 161,000-mile system has therefore reduced the number of eligible miles by approximately 43,000. These 43,000 miles are, however, still eligible for Surface Transportation Program (STP) funds.

ISTEA authorized \$17.4 billion for fiscal years 1992-1996 for improving the NHS. To date, States have obligated \$15.2 billion in NHS funds for projects to resurface, rehabilitate, reconstruct, and make operational and safety improvements to NHS routes, and \$4 billion Interstate Construction funds for similar work on the Interstate System, a key component of the NHS. While ISTEA established categorical programs, it also made them flexible for the States. States may on their own decide to transfer up to 50 percent of their NHS funds to their STP apportionments. States may also transfer up to 100 percent of their NHS apportionments to their STP accounts if the Department finds that such a transfer is in the public interest. To date, 11 States have transferred \$416.7 million under these provisions to meet temporary funding shortfalls or to fulfill longer-term transportation needs.

Fostering intermodal connectivity is one of the core functions of the NHS, because only an integrated and intermodal transportation system can support economic growth, increase our competitiveness in the vastly expanding international marketplace, and enhance the personal mobility of every American. Therefore I am pleased that the Department's recent submission of

proposed intermodal connector routes, if approved by Congress, would add over 1,200 more connecting routes--totaling 1,925 miles--to link key highways with major ports, airports, rail/truck terminals, Amtrak and bus stations, pipeline terminals, public transit facilities, ferries, multi-modal passenger terminals, and international border crossings. Criteria for selecting connectors were developed through a collaborative process among the different modal administrations of the Department, State transportation agencies, metropolitan planning organizations, public interest groups, and others. Under a provision of the National Highway System Designation Act (NHS Act), these proposed connections are now eligible for improvements with NHS funds.

STP and CMAQ Programs

Two other ISTEA programs have been very successful in bringing new partners into the surface transportation arena. The first, ISTEA's Surface Transportation Program, provides Federal assistance for transportation enhancements and any roads that are not functionally classified as local or rural minor collectors. STP funds may also be used on bridges on any public road and transit capital projects, at the discretion of State and local decisionmakers. To date, States have obligated \$20.7 billion in STP funds. The second flexible ISTEA program, the Congestion Mitigation and Air Quality Improvement Program (CMAQ), was developed to fund surface transportation projects that will improve air quality, regardless of transportation mode. The \$3.4 billion obligated by the States under the CMAQ program to date have funded transit projects, traffic flow improvement projects, and demand management, ridesharing, pedestrian, bicycle, and traffic control measures. A notable example of one of the many successes of the CMAQ program is in San Francisco, where a local partnership manages a program to cut the time people wait in traffic due to disabled vehicles, both reducing travel time and improving air

quality. Along with CMAQ funding, this program is supported by a \$1 supplemental vehicle registration fee on area motorists.

As a result of these programs, transportation planners and State and local decisionmakers now use a multimodal approach to prioritize their transportation needs and identify the most appropriate solutions. These flexible funds, together with transit urbanized area formula funds, give local decisionmakers enhanced flexibility to fund important transportation initiatives that best meet locally determined goals and objectives for mobility, economic opportunity, and environmental quality. The flexible funding programs have been a tremendous success. The total amount of all locally flexed funds (STP, CMAQ, Interstate Substitute, and transit urbanized area formula funds) to date is \$2.5 billion, with annual transfers increasing from \$304 million in fiscal year 1992 to \$802 million in fiscal year 1995.

Highway Bridge Program

A fundamental and essential link in our surface transportation system is our Nation's highway bridges. To help ensure the integrity of our current highway bridge infrastructure, the Federal Highway Administration established National Bridge Inspection Standards for the regular and thorough inspection of highway bridges. We also provide dedicated Federal funding through the Highway Bridge Replacement and Rehabilitation Program (HBRRP) to replace or rehabilitate deficient highway bridges.

The National Bridge Inspection Standards cover all highway bridges located on public roads and include specific requirements for inspection procedures, the frequency of inspections, inspection personnel qualifications, and bridge inventorying. The aim of these standards is to locate, evaluate, and address existing bridge deficiencies. The bridge inventory contains information on over 576,000 of our Nation's highway bridges and is used to identify deficient

bridges in each State, which are eligible for HBRRP funding.

The HBRRP is therefore a needs-based program under which funds are allocated to States annually based on the square footage of deficient bridges in each State, in accordance with a statutory allocation formula. Not more than 50 percent of a State's apportionment of HBRRP funds may be transferred to either the railway-highway grade crossing program or the hazard elimination program unless such transfer is found to be in the public interest. To date \$187.7 million have been transferred from the bridge program and \$14.2 million have been transferred into it from these two programs. The bridge program is an extremely successful and effective one; over 43,385 deficient highway bridges have been replaced or rehabilitated with HBRRP funds. We are fighting an uphill battle, however, as the overall bridge system continues to age and deteriorate.

To help address these needs, the FHWA continues to advocate the use of comprehensive bridge management systems to simplify the process of selecting the most effective methods for addressing ever-increasing bridge needs within existing budgetary constraints. Although the NHS Act has now made the implementation of bridge management systems optional, we are pleased that most States have indicated that they value this decisionmaking tool and will continue to use their bridge management systems.

We're also developing vigorous bridge management strategies for older bridges that carry the work of the National Bridge Inspection Standards to an even higher level. It is a high technology approach with a back-to-basics name: the find it and fix it program. This non-destructive and objective evaluation of in-service bridges will use such technologies as fiber optics, imaging radar and laser scanning to identify the problems that do not manifest visible symptoms until the damage to the bridge structure is severe, such as hidden steel corrosion or

fatigue cracks under layers of paint. The materials we're developing to repair these problems are equally advanced and include high-performance steel and concrete and fiber-reinforced plastic. Unlike steel, these materials are non-corrosive and they have twice the strength of traditional concrete. These "find-it" technologies can greatly improve the speed, accuracy, and quality of bridge inspection. The "fix-it" technologies will improve the strength and length of service of bridges and will reduce the time necessary for their repair, making this work safer for bridge inspectors and repair crews and less disruptive to the traveling public.

Interstate Maintenance and Interstate Reimbursement

Recognizing the need to maintain the massive Federal investment in the Interstate System, Congress first authorized funding for Interstate resurfacing, restoration and rehabilitation--a predecessor to today's Interstate Maintenance program--in the Federal-aid Highway Act of 1976. Projects eligible for funding under the Interstate Maintenance program include the resurfacing, restoration, and rehabilitation of Interstate routes, the reconstruction of existing interchanges and grade separations, and the construction of high occupancy vehicle lanes and auxiliary lanes. Additional single occupancy vehicle lanes and other capacity improvements are not eligible for Interstate Maintenance funding, but may be financed with NHS funds.

A State can transfer up to 20 percent of its Interstate Maintenance apportionments to its NHS or STP accounts. For transfers in excess of 20 percent, the Department must approve a State's certification that the sums proposed to be transferred are in excess of the State's Interstate System needs and that the State is adequately maintaining its Interstate routes. A few States have sought and gained the Department's approval for such transfers.

The NHS Act has now made preventive maintenance activities that are a cost-effective

means of extending the life of a Federal-aid highway eligible for all categories of Federal-aid highway funding. We are committed to preserving our investment, and we have already launched a new set of strategies and technologies for extending pavement life that will go a long way in assisting States in making the best investments in repaving, resurfacing and building their highways. In one of these strategies, Superpave, we've developed a new way to design asphalt pavement which reduces cracking and rutting and typically doubles the life of asphalt pavements. With more than 500 million tons of asphalt laid each year on all our roadways, the potential benefits of Superpave are enormous.

Whether to reimburse States for the expenses they incurred in building major, limited-access highways prior to increased Federal funding for the Interstate System was a contentious issue four decades ago as the Federal-aid Highway Act of 1956 was under debate. To resolve this controversy, the Bureau of Public Roads was directed to study the issue and report back to Congress. This study, completed in January 1958, identified \$4.967 billion as the total equitable reimbursement amount. The first funding authorized to reimburse the States came this fiscal year, with funds distributed to all States in accordance with allocations set forth in statute. ISTEA provides \$4 billion over two years for this program. The 1991 estimated value of the 1958 reimbursement amounts totals more than \$29 billion. Reimbursement funds provided in ISTEA are allocated to and generally administered as Surface Transportation Program apportionments.

ISTEA Reauthorization: Build On Our Successes

As we look to the next reauthorization period, we seek to learn from our experiences and build on our past successes. The ISTEA programs I've outlined above have worked well. America is the most mobile Nation in the world. Our surface transportation system has become

safer, cleaner, and more energy efficient. Today, far less air pollution is emitted from vehicles using our highways than 25 years ago. This improvement has helped make air quality better in most metropolitan areas. The percent of deficient bridges has decreased since 1990. ISTEA's flexible funding and transportation planning provisions have empowered States and metropolitan areas to identify for themselves the transportation improvements that best serve their own communities, with flexible Federal resources now providing a greater range of choices than ever before. The ISTEA also improved the Federal Lands Highway Program through increased funding, greater program flexibility, and improved transportation planning coordination with State and local agencies over decisions governing the 93,000 miles of Federal roads included in the program. We have made great gains in safety, with the Interstate System continuing to be the safest system by far. However, after many years of steady decline, the Nation's highway fatality rate has been level in recent years, and total motor vehicle fatalities have been increasing. To continue to see gains in highway safety, we need to renew our commitment to ISTEA's safety programs, which is a discussion I will leave for another hearing.

We recognize that despite record levels of transportation investment under ISTEA, significant investment is still needed to meet current demand. The resulting shortage of capacity has led to increased congestion and threatens to erode the safety and mobility gains we have made in recent years. All of us at the Department of Transportation understand the need for more overall investment in transportation, including Federal funding. In fact, average annual Federal transportation infrastructure investment over the past three years has been more than 10 percent higher than it was in fiscal year 1993, and the President's fiscal year 1997 budget proposes \$19.5 billion in new highway investment: \$1.5 billion more than fiscal year 1993 funding. But we also recognize that the bipartisan effort to eliminate the Federal deficit requires

that infrastructure investment spending must compete with other important national priorities for limited funding.

This situation reinforces the need for strategic Federal investment to target our resources to the most cost-effective investments and those that are national in benefit. The National Highway System is a superb model for such investment: NHS routes are our Nation's most important roads, linking workers to expanded job opportunities, manufacturers to new markets, and consumers to more products and services. The NHS is also a prime forum for deploying Intelligent Transportation Systems (ITS) and other technologies, and many ITS technologies are already at work on our Nation's highways. For example, advanced freeway management technology has increased the flow of traffic on Seattle's Interstate highways by almost 20 percent. In Minneapolis, the Guidestar system has helped reduce accident response rates by 20 minutes and has increased roadway capacity by 22 percent. ITS will increase the volume of traffic we can handle and reduce congestion. Even more impressive, we estimate that a fully deployed Intelligent Transportation Infrastructure in 75 of our largest metropolitan areas will create two-thirds of the additional capacity needed over the next decade in our most congested corridors--at 20 to 25 percent of the cost of traditional construction. ITS technologies also promise a 10 to 20 percent reduction in accidents.

Another way to make our available resources generate optimal returns is through the use of innovative financing techniques and State infrastructure banks. By attracting greater private sector and non-Federal public sector investment to transportation projects, innovative financing techniques have already made a real difference in projects across the country. Without requiring any additional Federal funds, these strategies have reduced project costs, advanced projects more quickly, and made more total money available faster to the States. Through our innovative

finance test initiative, "Test and Evaluation 045," the FHWA has approved more than 70 projects in 35 States worth over \$4 billion. This initiative has generated about \$1.5 billion in additional public and private investment, above and beyond conventional financing. And because of increased flexibility that States now have, many projects will advance to construction an average of 2 years ahead of schedule. For example, in Texas we formed a partnership with the Texas DOT and the Texas Turnpike Authority to build the State Highway 190 turnpike near Dallas. The project was initially proposed in 1964, but was stalled due to lack of funding until 1995. Innovative financing made the project possible by allowing the Texas DOT to use Federal transportation funds to make a \$135 million low-interest loan to the Turnpike Authority. Under the flexible terms of the loan, the Turnpike Authority will not have to begin repayments on the loan until after the toll road has opened and begun generating revenue.

Under the authority provided in the NHS Act, we have now approved applications from 8 States to participate in the State infrastructure bank pilot program, and two more will be designated shortly by the Secretary. These States will use a portion of their Federal highway and transit apportionments, along with their own funds, to loan money to transportation projects, or use the funds as a loan guarantee, as a credit enhancement, or to subsidize the interest rates for a project. Once these funds are paid back, States can use these same funds to advance a new round of projects, further increasing transportation investment.

By employing such innovative yet common sense approaches to financing, we have attracted new and additional funds to transportation projects, increasing investment in our Nation's transportation infrastructure by more than \$4 billion, thus promoting economic development, creating high-wage jobs, and honoring the President's promise to rebuild America.

Conclusion

In crafting our next reauthorization bill, we must be true to our rich legacy. The Federal Aid Road Act of 1916 laid the groundwork for the immensely successful Federal-State partnership that has evolved and grown over the decades to include important new partners yet still remains the foundation of our program. The many benefits of the Interstate legislation of 1956 are still felt today. President Clinton recently spoke of the monumental impact of this legislation, stating that the act “literally brought Americans closer together. We were connected city to city, town to town, family to family, as we had never been before. That law did more to bring Americans together than any other law this century” ISTEA has also been a landmark surface transportation bill, in no small part because it built on the best of what preceded it. We should do the same, building on the fundamental ISTEA principles of strategic investment, comprehensive transportation planning, intermodalism, flexible funding, and strong commitments to safety and research.

This concludes my prepared remarks. I would be pleased to answer any questions.