

STATEMENT OF
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BEFORE A JOINT HEARING OF THE
SUBCOMMITTEE ON SURFACE TRANSPORTATION AND MERCHANT MARINE
OF THE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION
AND THE
SUBCOMMITTEE ON TRANSPORTATION, INFRASTRUCTURE, AND NUCLEAR
SAFETY OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
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Chairman Breaux, Chairman Reid, Ranking Members Smith and Inhofe, and Members of the Committee:

Thank you for inviting me to testify today on the topic of "Freight and Intermodalism." I would like to commend your committees for their continued leadership on these important issues and in supporting our efforts to ensure the seamless transportation of goods throughout our country. I believe that ISTEA and TEA-21 have created a solid framework for addressing the transportation and logistics policy issues currently facing our nation, and the lessons we have learned will serve as important guideposts during the upcoming reauthorization debate.

Demands on our nation's transportation system are growing faster than supply. While statistics show that since 1970 our population has grown 40 percent and vehicle miles traveled have doubled, the Federal Highway Administration's Highway Statistics Manual indicates that our highway physical infrastructure has increased by only 6 percent during that timeframe. In fact, according to the Texas Transportation Institute, the costs associated with congestion in the 68 urban areas they studied totaled \$67.5 billion for 2000, including 3.6 billion hours of extra travel time and 5.7 billion gallons of fuel burned by vehicles sitting in traffic. Even after the significant investments in surface transportation infrastructure under ISTEA and TEA-21, our transportation system is still experiencing rising levels of congestion that adversely impacts the free movement of freight on our nation's roadways.

In 1998 (the latest year for which data are available), the U.S. transportation system carried nearly 4 trillion ton-miles of freight valued at over \$9 trillion. Of this, shipments totaling \$7.8 trillion were primarily domestic movements, with an additional \$1 trillion representing international merchandise. By the year 2020, forecasts predict that the U.S. transportation system will handle cargo valued at over \$28 trillion, of which \$24 trillion will be domestic movements and over \$4 trillion will pass through our nation's gateways.

Truck shipments accounted for 71 percent of total tonnage and 83 percent of the value of U.S. shipments based on the 1998 data. Trucks also make the vast majority of local deliveries, although the industry also carries large volumes of freight between regional and national markets. Water and rail also carry significant shares of total U.S. tonnage, but much smaller shares when measured on a value basis. Air cargo shipments, on the other hand, moved less than 1 percent of total tonnage but carried 12 percent of the value of freight shipments during 1998.

To put these figures into a broader context and provide a better sense of the challenges we must face, the *increase* in the volume of freight being shipped on our nation's highways will, by the year 2010, equal the total volume of freight currently carried on our entire rail system in the average year.

One of Congress' principal goals in establishing a unified, federal Department of Transportation (DOT) in 1967 was to facilitate coordinated transportation services across all modes while encouraging these services to be provided by private enterprise whenever possible. Another goal was to ensure that the connections between and among the transportation modes function smoothly while facilitating international trade and economic development. The Department provides a common framework that meets the various needs of our highway, marine, aviation and rail systems by ensuring greater coordination among programs affecting different modes of transportation while increasing the connectivity of these modes.

The landmark Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) increased funding flexibility and emphasized intermodal planning. The financial reforms of the Transportation Equity Act for the 21st Century (TEA-21) gave States and local governments vastly greater resources and the flexibility with which to implement the intermodal solutions fostered by ISTEA. Together, they have laid a sound framework for future federal surface transportation programs and the intermodal strategies needed to leverage and improve system management and utilization.

Although much has been done over the past decade, the promise of intermodalism – the efficient movement of freight and passengers through all modes of our transportation system – has not yet been fully realized. As bottlenecks grow and system congestion worsens, the Department increasingly will be asked to facilitate projects that enhance freight transportation efficiency. Also, in the aftermath of 9/11 participants in the transportation system have been called upon to integrate security measures into their operations, and the Department has initiated several programs to encourage that integration. For the freight industry, this will require strong private sector involvement with the Federal government empowered to foster cooperation across all modes through new public/private partnerships.

Freight Movement and International Trade

Understanding future freight activity, both foreign and domestic, is important for matching infrastructure supply to demand and for assessing investment and operational strategies. The U.S. economy depends upon a wide variety of products that move within state boundaries, through interstate commerce, and to and from various parts to the world. Using data from its Freight Analysis Framework (FAF), the Department has developed information on current and projected freight flows, including a forecast of activity through the year 2020.

FAF projects annual domestic freight volumes will nearly double between 1998 and 2020, increasing from 13.4 billion tons to over 22.5 billion, which raises the question of which modes will carry these new shipments. The FAF forecast assumes that growth in freight activity will be captured largely by increases in air and truck shipments. Domestic air cargo tonnages are projected to double, although its share of total tonnage would remain fairly small. Movements by truck are expected to almost double over the 1998 to 2020 period, capturing a larger share of total traffic. Finally, while both rail and domestic water shipments are projected to increase, their volumes are not expected to grow as dramatically over the forecast period, mainly because of slower demand growth in many of the key commodities carried by these modes.

Since the 1970's, international trade has emerged as a major component of the U.S. economy, as imports of consumer goods, petroleum, and manufactured products have increased along with exports of raw materials, agricultural products, and manufactured goods. This trend toward increased international trade is expected to continue, as suggested by DRI/WEFA's projection that over 30 percent of the U.S. economy will be tied to international trade in goods and services by the year 2020, up from 23 percent in 1998.

This projected growth in trade has led to concerns over congestion at U.S. ports, airports, and borders entry points. International trade, expressed in tons, is forecasted to grow at an annual rate of 2.8 percent and more than double by 2020. While increases are expected for all regions of the world, the largest growth will likely come in our trade with Mexico, Canada, Asia and South America. Cargo trade with our NAFTA partners moves primarily by truck and/or rail, and most international shipments of water and air cargo are transferred to or from trucks, rail cars or barges after arriving in the United States or before heading to export markets. Given the importance of trade to our nation's economy, identifying ways to more efficiently move freight across our borders will be critical in the years ahead.

NHS Intermodal Connectors

The condition of the existing transportation system and its connections directly affects the efficient movement of cargo. When Congress created the National Highway System (NHS), it recognized the need to provide adequate highway access to intermodal freight terminals. Intermodal passenger terminals are generally well served by NHS connectors but infrastructure connecting freight terminals to primary NHS routes is often in need of improvement.

NHS connectors are typically short, averaging less than two miles in length, and are usually local, county or city streets that have lower design standards than mainline NHS routes. They typically serve heavy truck volumes moving between intermodal freight terminals and mainline NHS routes, primarily in major metropolitan areas. Despite the fact that connectors are less than one percent of total NHS mileage, they are the "front door" to the freight community for a broad array of intermodal transport services and options.

TEA-21 directed the Secretary of Transportation to conduct a review of the NHS connectors that serve intermodal freight terminals and submit a report to Congress. The objectives of the review were to: (1) evaluate the condition of NHS connector highway infrastructure to major intermodal freight terminals; (2) review improvements and investments made or programmed for these connectors; and (3) identify impediments and options to making improvements to the intermodal freight connectors.

The findings of our report to Congress, dated July 2000, are especially relevant as we consider reauthorization of TEA-21:

- Intermodal connectors that primarily serve freight terminals have significant mileage with pavement deficiencies and generally exhibit inferior physical and operational performance than other similar NHS facilities;
- An analysis of investment practices shows a general lack of awareness and coordination for freight improvements within the State departments of transportation and metropolitan planning organizations (MPO) planning and programming process; and
- Given the pressing needs for passenger-related projects and the fact that many of the benefits from an increased freight investment are received outside of the investing jurisdiction, there is little incentive for local investment in freight projects.

The ability to recognize and effectively address connector needs within the context of our overall intermodal freight system are important elements in preserving and promoting the substantial productivity gains we have witnessed as a result of better supply chain management.

Multi-State and Cross-Border Transportation Planning

End-to-end movements of commercial freight must be viewed within the context of a transportation system that is not bounded by state or international borders. A regional perspective and decision-making capability is required to provide effective coordination for the infrastructure planning and investments that support these commercial activities. Recognizing that the health of their economies depends upon efficient movement of goods along regional transportation system segments that often lie beyond their immediate responsibility, several State and Provincial Departments of Transportation have joined together to promote regional transportation consortia. The following examples illustrate this coordinated and complementary approach to regional transportation planning and infrastructure development:

- I-95 Corridor Coalition (I-95CC): The geographic region represented by the I-95CC consists of 12 States (ME, VT, NH, MA, CT, RI, NY, NJ, PA, DE, MD, VA) and the District of Columbia. With a population of just over 67 million people, it is home to nearly a quarter of the nation's inhabitants and a quarter of the nation's jobs, but contains only 6% of the landmass of the nation. The population density of the region makes efficient goods movements both essential and extremely challenging in this largely urbanized environment. DOT representatives from the 12 states and the District of Columbia have developed an intermodal strategic plan for the I-95CC that is addressing freight transportation needs within the context of the region's social, economic, and environmental goals.

- Gulf/Rivers Intermodal Partnership (G/RIP): In a cooperative effort of seven southeastern and Gulf state departments of transportation, regional planning entities and four public port authorities, G/RIP works to improve waterside/landside infrastructure investments through education programs for public planners. The partnership uses the region's ports as classrooms in addition to periodic forums with senior regional public and private sector policy makers to discuss topical infrastructure issues.
- International Mobility and Trade Corridor (IMTC): The IMTC is a coalition of over 60 U.S. and Canadian business and government entities whose mission is to identify and pursue improvements to cross-border mobility in the "Cascade Gateway", which includes four land border crossings between British Columbia and Washington State. Two-way trade at the Blaine, WA, border crossing alone was valued at more than \$35 million per day in 2000. Congestion and processing delays at the Blaine border crossing result in over \$40 million in additional operating costs annually – losses that exceed one day's revenue generated by this commercial traffic. IMTC-sponsored projects are funded through bi-national financial partnerships at federal, regional, and local levels.

TEA-21's Record

Congressional support for the commercial movement of freight was woven into many parts of TEA-21, helping to strengthen the nation's transportation system through: enhanced stability and flexibility of funding; the borders and corridors programs; and increased application of new information technologies.

Stability and Flexibility of Funding

TEA-21 revolutionized transportation funding through its budgetary firewalls and innovative financing provisions as well as by providing record amounts for surface transportation programs. The budgetary firewalls that were introduced created confidence among grantees regarding program funding. As a result, states and localities have relied upon these assurances and increased their funding levels to match or even exceed federal commitments made in TEA-21. The Department sees its role as one of exercising leadership in convening public and private sector parties to undertake innovative financing of major transportation projects.

One of the most impressive intermodal success stories is the Alameda Corridor freight project. The Alameda Corridor is a multi-modal project that uses a mix of private funds and public programs, including a \$400 million loan from the Department of Transportation, to improve rail and highway access and to reduce traffic delays in the critically important area of the Ports of Los Angeles and Long Beach. The recently completed \$2.4 billion project, which opened for revenue service on April 15, 2002--on time and within budget--will have far-reaching economic benefits that extend well beyond Southern California.

The funding flexibility created under ISTEA and continued in TEA-21 allows States and communities to tailor their transportation choices to meet their unique needs. It enables state and local decision-makers to consider all transportation options and their impacts on traffic congestion, air pollution, urban sprawl, economic development, and quality of life.

TEA-21's innovative credit program has further augmented both the highway and transit programs. The Transportation Infrastructure Finance and Innovation Act (TIFIA) has provided

almost \$3.6 billion in federal credit assistance to eleven projects of national significance, representing \$15 billion in infrastructure improvements. These loans, loan guarantees, and lines of credit for highway, transit, rail, and intermodal projects have encouraged private investment to strengthen transportation infrastructure.

Despite these successes, there are still areas where we can improve. For example, while freight transportation projects are often regional or multi-state in scope, funding is typically distributed through states and localities. Also, conventional financing programs have provided funding for a wide variety of projects focused on individual modes of transportation, but when dealing with major intermodal projects these programs have often proven insufficient. Finally, because TEA-21's programs are oriented towards the public sector, it can be difficult to truly incorporate the needs of private sector transportation carriers and shippers in the planning process.

The Borders & Corridors Program

TEA-21 established the National Corridor Planning and Development and Coordinated Border Infrastructure Program (also known as the "Borders and Corridors" program). Both programs are financed by one funding source, which is authorized at \$140 million annually from FY 1999-2003. Due to the obligation limitation provisions of TEA-21, awards the first three years averaged about \$123 million, but based on the law's RABA provisions and Congressional direction awards for the fourth year (FY 2002) will be nearly \$480 million.

Congressional designation (or "earmarking") of projects in the Borders and Corridors program increased from 0% in FY 1999 to about 50% in FY 2000 and 65% in FY 2001. Given this trend and the cost of preparing full applications, in May 2001 the FHWA solicited 'Intent to Apply' for FY 2002 in place of full applications with a provision that full applications would only be requested if warranted based on that year's DOT Appropriations Act. When Congress designated 100% of the funding for FY 2002, FHWA did not solicit full applications and instead requested abbreviated applications for projects designated by Congress. As a result, congressional earmarking has prevented the Department from taking a strategic approach and using the program to facilitate trade through targeted transportation investments that maximize system efficiency.

Awards under the Borders and Corridors program have been as follows:

FY 1999	\$123.1 million
FY 2000	\$121.8 million
FY 2001	\$123.6 million
FY 2002	\$478.0 million

For some projects construction is nearly complete or underway. One project that has essentially been completed is near the World Trade Bridge between Laredo, Texas and Nuevo Laredo, Mexico. Before this bridge was opened, traffic queues up to 4 miles long were common on an existing bridge and traffic was grid locked for several miles along I-35. Subsequent to its opening, trucks were diverted to the new bridge leaving the existing bridge to serve autos, buses and pedestrians. The gridlock has now disappeared and travel time has been reduced dramatically for trucks, autos and pedestrians while improving safety and creating jobs.

Some construction projects currently underway that are likely to be completed in the next two or three years include the FAST (Freight Action Strategies) corridor in Washington State and the Bridge of the Americas and the Paso del Norte Bridge between El Paso, Texas and Ciudad Juarez, Mexico. In the FAST project, replacing a number of highway/rail grade crossings with grade separations will improve safety, relieve congestion and improve operation of the water ports and the rail lines. In El Paso, a modest expenditure (about \$3 million for each bridge) will improve physical inspection capacity on each bridge by as much as 40%.

Other projects are at least three or more years from completion including such important bottleneck relief projects as: the Ambassador Bridge Gateway in Detroit, Michigan; the SR 905 connector to the border crossing south of San Diego, California; and the Hoover Dam Bypass between Arizona and Nevada. Finally, the future I-69 between Michigan and the Texas lower Rio Grande Valley, which is more of a new access and economic development project, is probably more than a decade from completion.

Application of New Information Technologies

Any seamless transportation system – present or future – relies heavily on information technology. The same information revolution that has swept through the private sector and increased our nation's productivity must also be applied to our transportation systems. "Smarter" systems have the potential to dramatically reduce the barriers and costs that currently limit the ability of passengers and freight carriers to operate across modes. They also will help us to ensure safer and more secure freight transportation networks.

TEA-21 authorized a total of \$603 million for Intelligent Transportation Systems (ITS) research for fiscal years 1998 through 2003, which has funded important research projects that support freight movements by focusing on system optimization and more effective use of existing infrastructure. These efforts also facilitate the integration of the operational aspects of all of our transportation systems, while system construction projects address their physical connectivity. Intermodal freight is a major emphasis of DOT's ITS efforts, and the Department is currently conducting several ITS operational tests designed to improve the efficiency and security of the inter-modal movement of freight.

For example, the Chicago O'Hare cargo project uses a "smart card" and biometric identifiers to identify the shipment, vehicle and driver during transportation from the shipper to and through the air cargo terminal. Another project, Cargo-Mate, has particular applicability to port and container security, in addition to enhancing the efficiency of freight movement. This system is designed to perform real-time processing of asset and cargo transactions, provide for the surveillance of cargo movement to and from ports, and provide an integrated incident and emergency response capability.

In a cooperative venture between Washington State and British Columbia, under the auspices of the International Mobility and Trade Corridor (IMTC), electronic cargo seals are being deployed to demonstrate the use of low cost disposable technology to track cargo movements and monitor the security of containerized freight. This test will examine the use of a Congestion Notification System to improve truck access to the Port of Tacoma. When these and related projects are completed and the technologies deployed, the IMTC will have the first fully operational bi-

national electronic commercial vehicle operations (CVO) border crossing system in North America.

The Department also is participating in the International Trade Data System (ITDS), which will create a single federal database for all international trade and transportation transactions. Expected to become operational in FY2004 at the nation's busiest land borders, and at all land, sea and air ports of entry by 2006, ITDS will extend the benefits of customs modernization across the entire federal government. The ITDS and Customs' Automated Commercial Environment (ACE) are being jointly developed so that taxpayers and federal agencies will have a single system for processing international trade and transportation information that will also serve as an important tool in facilitating the transport of cargo.

Continued federal, state and local investment in the development of new transportation technology has the potential to yield enormous operational benefits and give transportation professionals much greater capacity to manage increasingly complex systems.

Security Issues

The events of 9/11 have made us all realize that transportation planning must also make the security of freight shipments a top priority, in addition to the system's safety and efficiency. As freight moves from one mode to another, from ship to rail to truck for example, we must ensure that these modes and the public are protected from terrorist attacks. The Transportation Security Administration (TSA) now oversees transportation security across all modes, with the most prominent of course being the new requirements for aviation. However, TSA is also concentrating on sea, rail and land shipments and the links between these modes when assessing possible security threats. Intermodal connectivity is critical for national security, and TSA is coordinating with the other modes in DOT, other federal agencies, and industry to achieve the highest possible security levels for the transport of goods.

Operation Safe Commerce (OSC) is an innovative public-private partnership dedicated to enhancing security throughout international and domestic supply chains while facilitating the efficient movement of legitimate commerce. The overall objective is to provide valid recommendations and workable solutions to legislators, regulatory agencies, the International Maritime Organization and the World Customs Organization on how best to address the critical issue of international cargo security. I serve as co-chairman of the Executive Steering Committee that directs the OSC initiative along with the Deputy Commissioner of the U.S. Customs Service, and have been very pleased with the substantial progress we have made so far.

A recently completed initial pilot test applied available technology to analyze the supply chain security of a shipment from Eastern Europe to New Hampshire by equipping a cargo container with onboard tracking, sensor and container door seals. This shipment was monitored as it was transported through numerous countries, and the jurisdictions of several Customs administrations, using various transportation modes.

OSC proposes to develop and test security practices to govern the packing, loading and movement of cargo throughout several international supply chains. This effort will seek to prototype various solution sets in order to test combinations of physical, technological and logistical security practices that will best secure domestic and international supply chains.

Operation Safe Commerce will attempt to do this by addressing three key components to secure supply chain management. First, it will demonstrate what is needed to ensure that a shipper exerts reasonable care and due diligence in properly packing, securing and manifesting the contents of a shipment of goods. Second, it will demonstrate various methods to ensure that the electronic documentation accompanying a cargo shipment is complete, accurate and secure from unauthorized access. Third, it will test supply chain security procedures and practices, and implement enhanced manifest data elements and container sealing procedures, to determine which applications of information and technology are most effective in securing international and domestic shipments.

Operation Safe Commerce will serve as a technology and business practice “laboratory” to vet innovate solution sets that support the objectives of other Federal initiatives such as the Department of Transportation Container Working Group, the U.S. Customs Container Security Initiative and Customs – Trade Partnership Against Terrorism, and the Department’s Intelligent Transportation System and the Borders and Corridors Programs.

These efforts will continue once TSA and the United States Coast Guard transfer their missions and functions to the proposed Department of Homeland Security. Secretary Mineta fully supports these efforts to improve our Nation's homeland security, and if approved by Congress the Secretary has pledged to fully cooperate with the new Department to ensure that security over all modes of transportation is enhanced.

Building on TEA-21

As we consider the reauthorization of TEA-21, we continue to face many of the same challenges that confronted the authors of ISTEA and TEA-21. Applying an intermodal approach to these challenges enables us to extract the maximum amount of capacity from our existing infrastructure through creative programs and wise investments.

Accordingly, intermodalism plays a large role in the core principles and values that motivate the Department's preparation for TEA-21's reauthorization. We will seek to do the following:

- Preserve funding flexibility to allow the broadest application of funds to transportation solutions, as identified by States and local communities.
- Strengthen the efficiency and integration of the Nation's system of goods movement by improving international gateways and points of intermodal connection.
- Focus more on the management and performance of the system as a whole rather than on "inputs" or functional components.
- Develop the data and analyses critical to sound transportation decision-making.
- Foster the development and deployment of technology, to support intermodal freight security, productivity, and safety.
- Expand and improve innovative financing programs, in order to encourage greater private sector investment in the transportation system, and examining other means to augment existing trust funds and revenue streams.

Supporting the efficiency of commercial freight transportation continues to be a cornerstone of the Department's vision for America's transportation system. ISTEA and TEA-21 legislation gave us many tools to bring this vision to reality, and our experience has given us new ideas for programs that will get us even closer to our goal of a seamless transportation network. Greater investments in transportation infrastructure and wider use of information technology will certainly be required to achieve this goal.

The Department looks forward to working with our partners in State DOTs, metropolitan planning organizations, and private industry to apply innovative funding strategies such as TIFIA and State Infrastructure Banks to develop large-scale projects that might otherwise be beyond the financial means of the individual stakeholders.

We will also consider possible changes to the Borders and Corridors Program that would encourage broader transportation planning on the basis of economic regions and export markets to ensure that our infrastructure investments are truly integrated with regional and national business developments.

Private industry has made it clear to the Department that reliable information on product shipments is of critical importance to them. If our transportation system is to provide adequate levels of service for the freight industry and their customers, we must continue to apply

innovative technologies through the ITS Program and collect information on commodity movements to provide a firm foundation for transportation planning.

The Department will also work with the private sector to formulate innovative approaches to providing transportation solutions and develop the professional capacity to apply these solutions to the challenges that confront us. We will consider new ways to develop public-private partnerships that can leverage public infrastructure investments and ensure that the private sector is more engaged in our planning processes.

I am confident that working together, the Administration, Congress, States and localities, and the private sector can preserve, enhance, and establish surface transportation programs that will result in increased mobility, security and prosperity, as well as more transportation choices for all Americans.

Mr. Chairman and members of the committee, thank you again for the opportunity to testify before you today. I look forward to responding to any questions you may have.