Good morning! I am very pleased to have the opportunity to speak with you today. It's great to be able to visit in bluegrass country and to share some ideas with members of the university, government, and business communities. I believe there is much to be gained from exchanges of ideas and experiences in conferences such as Transpo.

It isn’t often that I also have the privilege to share in a panel with several of my colleagues: Leon Larson, Gene McCormick, and Roland Mross. And, let me not forget our other fellow panelist, Jim Duane, head of Ohio-Kentucky-Indiana Metropolitan Planning Organization.

With the four of us here together from DOT, I would be remise if I didn’t talk about our new Transportation Secretary, Andrew Card, who came just last spring. He has been very decisive, very progressive and very successful. He has already contributed greatly to solving a national rail strike. He has sent to the Hill major new maritime reform legislation. Of course, right now, he’s quite busy in Florida cleaning up after Hurricane Andrew. He has clearly shown himself to be a jack-of-all-trades and a very able administrator. The Department is running very
smoothly and very well under his leadership. He has been an ardent advocate of getting those new ISTEA dollars out as quickly and expeditiously as possible.

**Interstate System**

I guess it’s a law of life that just when you think you’ve finally made it, you find a new challenge ahead. Thirty-seven years ago, when President Dwight Eisenhower established the program to build the Interstate Highway System, the goal was to ensure the effective transport of people and goods across the nation and to keep the United States competitive in a world economy.

We thought that when we finished the Interstate System linking our nation with major highways from east to west and north to south, we’d have it made. Well, we finished it, and wouldn’t you know it, there’s a new challenge up ahead—the challenge of meeting even greater transportation needs now and into the next century.

**ISTEA**

It is because of this challenge that President Bush sent landmark legislation to Congress concerning the restructuring of federal surface transportation programs. That legislation became the basis for the Intermodal Surface Transportation Act of 1991, or ISTEA. As the President said when he signed the bill:

“Transportation is an $800-billion-a-year business. World trade grows larger and, as our planet, because of communications, becomes smaller, an efficient transportation system will become even more important than it is today.”

ISTEA has been both a challenge and a starting point toward the solution. The challenge is, quoting the law, to “develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy-efficient manner.”

**Challenge**

The key word that poses the challenge is “intermodal.” The focus, before ISTEA, had been on individual transportation systems: the highway system, the rail system, the pipeline system, and so on. And, for many years, this strategy worked fine.
But, in this modern world, if we are to be competitive, we have to stop thinking of these transportation systems as discrete units and start looking for ways to link them together into a transportation network.

Starting Point

This is where ISTEA becomes a starting point. It has started us thinking about new ways to advance our transportation systems and unite them into a more efficient network. If ISTEA is the starting point, then the key for accomplishing this unified, efficient network is intermodalism: that is, the development of capabilities to transfer passengers and cargo smoothly and efficiently from one mode of transportation to another, as part of a complete, “door-to-door” journey.

One of the strategies to achieve an intermodal transportation network is for research to provide the kind of innovative transportation policy and technology we need to meet the challenges of the future.

RSPA and Research

The Research and Special Programs Administration (RSPA) has a unique place within DOT in the research arena. RSPA coordinates the entire DOT research and development program and technology transfer mechanisms. The National Transportation Policy, issued by the President in 1990, provided DOT with a strategic vision for transportation and made research coordination a top-management priority.

In 1991, DOT instituted a formal process to improve its research and development management by setting an agenda of research needed to support top level priorities. RSPA coordinated the development of DOT’s first R&D Policy Statement in 1991. This document is the core set of precepts for the departmental research and development management systems, and sets out the criteria for departmental funding of research.

The research program agenda identified 71 research priorities. Each DOT agency was asked to compare its funding items in the research and development area with these priorities, producing what we call research and development “maps.” These maps help give each agency a picture of how its research and development programs relate to the priorities of the Department as a whole. The maps have actually been consolidated into a research and development “atlas” which helps all of us see the total departmental picture as well as each agency’s individual priorities.

Each separate agency of DOT conducts its own research and development activities, dealing with a single type or mode of transportation.
At the same time, the agencies all belong to the Department’s Research and Development Coordinating Council, which is chaired by the RSPA Administrator. RSPA provides staff support to the Council and is responsible for initiating department-wide research and development policy.

Because of the significant responsibilities in providing oversight of DOT’s research and development, RSPA has the lead for assuring development of the “integrated national surface transportation research and development plan” called for by ISTEA. The plan will encompass all surface transportation systems needed for urban, suburban, and rural areas in the next decade.

I want to note that, with a few important exceptions, the Department of Transportation does not do the type of research that is considered on a theoretical or pure science level. Our emphasis, instead, is very strongly on applied research—we want to take the research and see how it can be utilized in the “real world.”

For those of you here from the academic community, I think that this focus on the application of research and technology could be a good recruitment tool to use for students coming into your programs, and for those students who may be thinking about careers in transportation.

Our research is fundamentally oriented toward what methods, what technology can really make a difference in this transportation network we’re trying to build. Our focus is on what will work in the real world.

**The University Transportation Centers/Institutes**

One of the most significant results of ISTEA for RSPA was the renewal and expansion of the University Transportation Center or UTC program. Three new centers were added to the original 10. The centers are federally funded at $77,000,000 over six years.

ISTEA also created the University Research Institute or URI program with five new institutes. These institutes are federally funded at $37,500,000 over six years.

RSPA has established a requirement for both the University Transportation Center and University Research Institute programs to be “modally balanced,” thus reinforcing the intermodalism theme.

Along with the research element, there is also an educational component that is preparing a future generation of transportation researchers and equipping future transportation professionals to deal with implementing new technologies and strategies.
Although only in its fifth year, the UTC program has recruited and supported hundreds of graduate students all over the country who might not otherwise have considered careers in transportation.

All University Transportation Center and University Research Institute grants have a matching fund requirement in which funds must be matched dollar-for-dollar by non-federal funds, thereby doubling the federal investment.

One of the program's greatest strengths is its mandated mix of regional and national priorities with a technology sharing component so that solutions to problems addressed in one region can be identified, modified, and reapplied in another region.

The structure of the UTC program has encouraged collaborative ventures with local transportation agencies that have developed new operations and management approaches and resulted in the application of innovative technologies.

Most of the centers are formed as consortia of regional schools in order to better benefit from the collective expertise of several schools sharing the same problems and challenges.

The UTCs are still underutilized and we encourage state, local, and private officials here today to make use of this valuable resource and benefit from the UTC's federal matching grants to further stretch their research dollars.

**University Transportation Centers/Institutes—Specifics**

ISTEA specifically created three new University Transportation Centers and five new University Research Institutes, and I'd like to briefly highlight their activities for you, starting with our three new UTCs:

The National Center at Morgan State University was specifically named in ISTEA to help increase the participation of minorities and women in the transportation professions.

The Center for Transportation and Industrial Productivity at the New Jersey Institute of Technology is focusing on the use of transportation management systems to increase capacity, reduce congestion, and reduce costs for transportation system users and providers; and the National Rural Transportation Study Center at the University of Arkansas is focusing its research activities on ways to develop, manage, and operate intermodal transportation systems in rural areas.

Our five new University Research Institutes (located at San Jose State University, Northwestern, North Carolina A&T, University of
Minnesota, and University of North Carolina) are researching such areas as transportation problems in urban areas experiencing growth; and uses of the intelligent vehicle highway system to increase road capacity, enhance safety, and reduce the negative environmental effects of transportation.

Transpo's host, the University of Kentucky, is one of the original members of the Southeastern University Transportation Center. In the Southeast, the Center serves eight states that cover a very large geographical area and share a common regional identity.

The population is spread more evenly throughout the region than in some other regions, with smaller metropolitan areas than in the Northeast or West Coast. At the same time, it is one of the most diverse areas of the country.

The Center's research areas for the coming year include driver safety in paratransit and taxi industries, transit passenger safety and security, and innovations for improving highway safety.

Intermodalism

ISTEA has provided a push to a number of DOT activities:

- It created a formal Intelligent Vehicle Highway Systems (IVHS) program, with approximately $660 million authorized over a six-year period;
- Provided $108 million to implement the products of a completed Strategic Highway Research Program, and to continue a long-term pavement performance program; and
- Also included funding for demonstration activities for magnetic levitation (MAGLEV) vehicles, and development of other advanced transportation systems;
- ISTEA also marked a significant change in transportation policy by making the improvement of intermodal connections a major federal aim.

Among the specifically intermodal objectives of ISTEA are:

- Creating an Office of Intermodalism, reporting to the Secretary of Transportation, to collect and disseminate intermodal data and coordinate intermodal research;
- Authorizing $3 million in grants to state and local governments for the development of model intermodal transportation plans;
• Establishing a Bureau of Transportation Statistics to enhance data collection, analysis, and reporting, ensure the most cost-effective use of transportation monitoring resources, and publish a “Transportation Statistics Annual Report”; and developing the integrated surface transportation plan that I already mentioned.

However, as with all major transportation projects, the construction of intermodal transportation network presents formidable challenges involving such issues as:

• Coordinating among various public and private sector interests; identifying funding sources;
• Resolving zoning and land use issues; and
• Assessing traffic, economic, and environmental impacts.

These issues are complicated even further when intermodal operations extend beyond the confines of one nation. It’s one thing to ship goods “door-to-door” within one country, it’s another thing altogether when shipments are international.

But, in this new age of the “global community,” we must work together to ensure the effective and efficient transportation of our goods. This is vital for the well-being of our economy.

Conclusion

If we work together in partnerships, both domestically and internationally, we can meet these challenges.

When President Bush signed ISTEA, he said:

“Give Americans the tools to compete and I’m confident that we can outthink, outperform, outproduce anybody, anywhere.”

One of the objectives of ISTEA is to give the research community the tools to produce the kind of innovative transportation strategy and technology we must have if we are to remain competitive in this fast-changing world community in which we live.

My challenge to you today is to take the ball and run with it. Take advantage of the opportunities you have, create new opportunities for those you educate, and help us make the transportation network in this country a model for the world. Thank you.