



News:

U.S. Department of Transportation, Office of the Assistant Secretary for Public Affairs
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**REMARKS PREPARED FOR DELIVERY
DEPUTY SECRETARY OF TRANSPORTATION MORTIMER DOWNEY
FY 2000 BUDGET CONSTITUENTS BRIEFING
WASHINGTON, D.C.
FEBRUARY 1, 1999**

Today, President Clinton announced his historic budget for the year 2000, a budget that builds on today's prosperity to prepare us for the new century, and the new millennium, we are about to enter.

As the President said in his State of the Union Address, "how we fare as a nation, far into the 21st century, depends on what we do as a nation today."

Today, we have a safer, a more efficient, a more environmentally-sound transportation system. But we know that the 21st century will bring new challenges that call for new responses: an aging population, with new mobility needs; an expanded need for quality education to support transportation systems which increasingly rely on technology; the need to strengthen families and communities, important when lengthy commutes already fray family ties; a truly global economy, with growing demands for a more efficient worldwide transportation system; and new challenges to peace and security, as terrorism can strike targets we once thought were secure.

"Our record \$50.5 billion transportation budget will, as President Clinton says, 'meet our historic responsibility to the 21st century.'"

These are the challenges that our budget must respond to, and I think it will do so, and do so well. Our record \$50.5 billion transportation budget will, as the President says, "meet our historic responsibility to the 21st century." That is especially true in the areas that count the most: the areas that we have identified as strategic goals.

We will enhance safety with a record \$3.4 billion.

We will improve mobility through a record \$36 billion for infrastructure investment, an amount that is 72 percent above the previous Administration's average.

We will promote economic growth and trade, not only through infrastructure improvements and a commitment to growing the future transportation workforce, but also through a record \$1.3 billion for research and technology, 40 percent more than this year.

We will invest a record \$3.9 billion to protect our environment.

And we will support national security with investments totaling \$1.5 billion.

Now, let me tell you more about the budget and how it helps all of us achieve these strategic goals for the nation's transportation system.

The consistent theme across the modes in DOT is our commitment to safety, and the performance of our transportation system reflects the strength of this commitment. Travel *has* become safer during the past six years:

Highway injury and fatality rates are at all-time lows; drunk driving fatalities have dropped by 15 percent since 1992, saving thousands of lives; all 50 states have now adopted zero tolerance laws for underage drinking and driving; the Coast Guard continues to save a life every two hours; we have seen double-digit decreases in rail fatalities; and last year, for the first time in history, no scheduled U.S. air carrier suffered a fatal crash.

The President wants to enhance this progress even as our economy expands and travel grows. Since most transportation deaths occur on our roads, we *must* continue making them safer.

That is why we propose to raise NHTSA spending by 12 percent, to more than \$400 million, and FHWA safety programs by 6 percent, to almost \$900 million. This includes \$160 million to combat unsafe truckers.

These expenditures would support other strategies with a proven record of success: safer road designs; incentive grants for tough laws against drunk driving; community-based programs to expand the use of seat belts and child safety seats; and new technologies.

We are also calling for a billion dollars, a 7 percent increase, to implement aviation safety programs, including the Safer Skies initiative announced last spring. These efforts will augment the modernization of our air traffic control system and make our skies safer, even as the growing economy stimulates growing volumes of air travel.

Our investments are helping people get to where they need to go, strengthening family ties and linking communities. During the past six years, we have made tremendous headway.

Roads and bridges are already in better condition and they are performing better in meeting our needs. Amtrak ridership is on the rebound, and transit ridership has seen double-digit growth since President Clinton took office. Air travel is at record levels. We are ensuring continued mobility as we meet the Year 2000 computer challenge. We have aggressively implemented the Americans with Disabilities Act and expanded accessibility to over-the-road buses. As a result, our transportation system is becoming more accessible for all Americans, something that will grow in importance as people live longer in the 21st century.

We have made a great deal of progress during the past six years, and now it's time to focus on the next 60. This budget enables America to move ahead into the 21st century. President Clinton laid the foundation in 1992, when he pledged to rebuild America's infrastructure.

He has made good on that pledge, and he renewed his commitment last year by signing the Transportation Equity Act for the 21st Century. TEA-21 provides record infrastructure funding to move America into the 21st century, even as we balance the budget.

Today's budget realizes – in fact, builds upon – TEA-21's promise. Our Disadvantaged Business Enterprise regulation, announced in this room on Friday, assures that this promise will be extended to all Americans.

Our investment, and the nation's economic performance, is making a difference in people's lives. Last week President Clinton announced we have the lowest welfare rolls in 30 years. But, in spite of this success, the President recognized that welfare recipients still face barriers: we know people can't go to work if they can't get to work. And so our budget provides \$150 million, double this year's amount, for our Access to Jobs program. This will support innovative transportation alternatives to help people get to where the jobs are.

This new budget also gives localities real alternatives to gridlock on their roads, increasing transit funding to a record \$6.1 billion. Our mobility solutions extend to intercity travel, where we propose \$571 million for Amtrak trains and stations. Recognizing that high-speed rail will soon be in service between Washington and Boston, we have \$67 million to begin other high-speed ground transportation investments.

To sharpen the competitive edge that will sustain our prosperity into the new millennium, we need to make the world's most efficient transportation system even better.

Much of this funding uses innovative financing techniques to leverage transportation investments that our state and local partners are making in their own economic futures. The \$81 million we propose to support the TIFIA program could directly leverage \$800 million in project financing, and attract another two billion in state and private funding for highways and intermodal connections.

There is \$126 million to encourage state actions to improve America's border crossings and trade corridors.

And, as I mentioned, there is a record request of \$1.3 billion for research and development of new technologies that will keep America competitive, improve safety, and reduce transportation's impacts on the environment.

This commitment to protecting the environment is seen throughout our budget. We recognize there doesn't have to be a conflict between mobility and prosperity on the one hand, and a healthy environment and livable communities on the other.

Air pollution contributed by cars and trucks has dropped by 11 percent since President Clinton took office, even as travel has *grown* by 8 percent. We are replacing two-and-a-half acres of wetlands for every acre lost to highway construction, better than double the rate of a decade ago.

Our budget will continue such successes with a record \$3.9 billion, a 13 percent increase, to protect and enhance our communities and the environment.

These investments are central to the Clinton-Gore Livability Agenda. As the Vice President said in announcing this initiative, "we can build an America for our children that is not just better off, *but better*." And so the new budget *doubles* the funds for communities to develop smart-growth plans to combat congestion and sprawl.

It also has a record \$1.8 billion for CMAQ, the Congestion Mitigation and Air Quality Improvement Program. That will help communities both clean their air and deal effectively with congestion.

And there is \$20 million for the Advanced Vehicle Program, as DOT's contribution in the effort to develop clean, fuel-efficient vehicles for the new century.

Let me mention transportation's links to national security, links that must be stronger than ever in the 21st century. This is a key transportation mission, and I'm proud to say that we are carrying it out most effectively.

MarAd's sealift capacity for defense purposes grew by 30 percent last year alone.

During the last two years we've seen record seizures of illegal drugs by the Coast Guard. Just two weeks ago, I joined Coast Guard officials in Houston, a day after they had seized nearly five tons of cocaine from a ship intercepted on the high seas, one of the largest seizures on record, keeping drugs *off* our streets and *out* of our schools.

Our budget continues this and other programs to protect Americans at home and abroad. It has \$566 million for Coast Guard drug interdiction programs. \$100 million to fight terrorism through new airport explosives detectors. And funding for MarAd to keep 47 ships available for sealift capacity.

Now, let me turn to some details of the individual operating administration budget proposals.

We have set aside more than \$6 billion, 8.5 percent above this year, for FAA operations. This will bring us 100 new maintenance technicians and provide operating costs for equipment being brought on-line.

This new equipment will be purchased as part of a \$2.3 billion facilities and equipment budget, 11 percent more than this year, to modernize FAA facilities. This equipment, primarily air traffic control and navigation systems, will further reduce the number of outages, reduce delays, and maximize the use of our airspace.

There is \$185 million to support our plans for planes to fly directly to their destinations instead of taking roundabout routes. That will save time and money for airlines and for their passengers, even as it saves fuel and protects the environment.

The budget also will increase airport investment to a record level by a combination of Airport Improvement Grant funds, \$1.6 billion focused heavily on the needs of small and medium-sized airports, with expanded passenger facility charge authority that will be particularly helpful to the large hubs.

And there is \$173 million for FAA research, including \$39 million to research new aircraft safety improvements and \$53 million to improve security.

The budget also includes \$50 million to subsidize commuter and regional flights to small communities that otherwise could lose air service.

We're requesting more than \$2.9 billion for Coast Guard operations, including funding to continue this year's level in the war against drugs and to meet the readiness requirements of our military force.

We will help the service modernize through a \$350 million capital budget, and fund the necessary planning for our upcoming modernization of the Coast Guard's deepwater assets.

To offset some of this cost, we are again proposing \$41 million in fees to recover a portion of the Coast Guard's expenses for its navigational services to commercial users.

*Deputy Secretary Of Transportation Mortimer Downey
FY 2000 Budget Constituents Briefing*

Our highway programs include a record \$27.3 billion obligation limit, reflecting the higher spending made possible because of TEA-21's alignment of budget authority with revenues, a principle we also will propose for the FAA.

Our record \$6.1 billion transit budget includes \$3.3 billion for formula grants and \$2.5 billion for capital investments. The \$980 million for new starts will enable us to meet our outstanding Full Funding Grant Agreement commitments, and also support several new projects.

We are proposing \$10.4 million for the Nationwide Differential Global Positioning System. Together with \$10 million we're proposing for positive train control, this will give us the foundation for safer rail service throughout the country.

In addition to funding the Maritime Security Program, we want to provide \$9.9 million for MarAd's Title XI loan guarantees. That will leverage \$100 million to modernize our shipyards and build American ships.

Funding for RSPA totals \$86 million, 19 percent above this year. This includes \$38 million for pipeline safety, \$18 million for hazardous materials safety, and \$14 million for emergency preparedness grants.

The Bureau of Transportation Statistics budget, at \$31 million, will continue to give government and industry the data and the analyses we all need to make sound decisions.

Finally, as we did last year, we call for the Saint Lawrence Seaway Development Corporation to become a performance-based organization funded at \$12 million per year. That will better enable us to maintain the seaway at lower cost to taxpayers. We'll propose legislation to do this later this year.

Let me end by saying that this budget is about the future: it's about moving America from strength to strength. Over the past six years we have achieved real results in meeting vital national goals, and this budget will help us do more.

This budget also carries forward the spirit of coordination and cooperation shown by our ONE DOT initiative – working together to give America the balanced transportation system it needs. This budget should ensure that transportation remains the foundation of our national prosperity. Thank you.

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REMARKS PREPARED FOR DELIVERY
THE DEPARTMENT OF TRANSPORTATION AND URBAN YOUTH CORPS
DEPUTY SECRETARY OF TRANSPORTATION MORTIMER DOWNEY
NATIONAL ASSOCIATION OF SERVICE AND CONSERVATION CORPS
WASHINGTON, DC
FEBRUARY 2, 1999

Thank you, Bob. I am honored to be here on behalf of Secretary Slater to meet with so many people who are dedicated to working with our young people to create a better nation. I know the Secretary would have been here if it were at all possible -- but this is a very busy week, including a trip to New Hampshire tomorrow.

I want to first acknowledge the leaders of NASCC, President Kathleen Selz, Vice President Andrew Moore and Government Relations Director Marty O'Brien. These are the folks who were behind the effort to include specific Youth Corps language in two programs in the Transportation Equity Act for the 21st Century or TEA-21, and we thank them for their work.

But their efforts wouldn't have paid off without the leadership of Congressman Bob Filner, who, along with several of his California colleagues in the House and Senate, added the Youth Corps provisions to TEA-21.

It is Secretary Slater's strongly-held opinion, which I share, that the Urban Youth Corps program is among the most noble works of our Federal government and our nation.

I believe we are in good company with that belief since this program traces its roots back to the Civilian Conservation Corps, one of the earliest New Deal initiatives of President Franklin Delano Roosevelt.

Roosevelt described the CCC by saying, "It is my belief that what is being accomplished will conserve our natural resources, create future national wealth and prove of moral and spiritual value not only to those who are taking part, but to the rest of the country as well."

The value he placed on the CCC program could apply as well to the Urban Youth Corps when he said, "It will pay dividends to the present and future generations." Two of my uncles were graduates of CCC camps -- and I know first-hand how much that experience meant to them in the depths of the Great Depression, a time of true national emergency.

Deputy Secretary of Transportation Mortimer Downey
National Association of Service and Conservation Corps

The economy of our nation is far different today. Under the leadership of President Clinton and Vice President Gore the nation has had record-setting economic growth for six years while millions of new jobs have been created.

Even so, we know that there are still some who are not participating in the record economic expansion. For many reasons, they lack the schooling, they lack the skills or they lack the opportunity. But they do not lack the desire for a better life and full participation in America's promise.

The 110 Youth Corps organizations around the country deserve high praise for helping those Americans who have been left out of good times to obtain new knowledge and skills that will help them enter the job market.

Since our first involvement in the Urban Youth Corps program in 1994, the Department of Transportation has found that it benefits everyone involved. Participants learn new skills and gain valuable experience. The community is better for their efforts. Transportation agencies get to complete a project that might not otherwise be done. Everybody wins.

Since 1994, 32 states plus the District of Columbia have used Federal transportation funds to implement an Urban Youth Corps project. More than 2,000 young people have participated in these projects.

TEA-21, with your help, gave us new direction to work with state and local transportation agencies to encourage Youth Corps involvement in Transportation Enhancement projects and for recreational trails.

The legislative language clearly puts Congress in support of more Youth Corps' projects in more states -- and DOT will be providing the necessary information, guidance, encouragement and examples to help states that do not now have Youth Corps understand why they should participate in the program.

With the funds they receive through these program, state and local transportation agencies can enter into partnerships with Youth Corps organizations for some exciting and forward-looking projects. These partnerships can do important things. They can leave a legacy of trails and greenways, restore historic railroad stations, and restore wetlands.

Using the TEA-21 provisions, we can improve and expand our efforts. We should be able to cut through the red tape and eliminate the roadblocks that have prevented the partnerships from becoming effective in some states.

There are still too many states that have not implemented the Youth Corps program. DOT officials at the regional and state levels will continue to work with the transportation agencies in those states to encourage them to start their own programs.

*Deputy Secretary of Transportation Mortimer Downey
National Association of Service and Conservation Corps*

With our encouragement and guidance along with the work of your organization, there is no reason why we can't add five new states and another 500 young people to the program this year.

Expansion of the Youth Corps strongly reflects the priorities set by President Clinton from the time he took office in 1993. Despite continuing opposition, he has worked to fund and implement Americorps. Youth Corps programs have received millions of dollars through Americorps.

As President Clinton said of Americorps, "We are the most diverse country in the world with a big democracy. We have people from all different races, all different ethnic groups, all different religions. But when we live together and work together and reach across the lines that divide us, we are the most interesting, the most powerful, the most vital country in human history."

The Department of Transportation is proud to be part of that effort to work together and, on behalf of Secretary Slater, I commend the Urban Youth Corps leaders for their valuable efforts to improve our nation.

And, further on behalf of the Secretary, I thank you for the award. I hope our future efforts and successes will continue to justify this honor for our department.

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**REMARKS PREPARED FOR DELIVERY
REFOCUSING PLANNING FOR THE 21ST CENTURY
DEPUTY SECRETARY OF TRANSPORTATION MORTIMER DOWNEY
TRANSPORTATION RESEARCH BOARD
WASHINGTON, DC
FEBRUARY 7, 1999**

Thank you, Ysela. I am honored to be here at an event which could well have a great impact, not only on transportation, but -- if we do it right -- on the quality of development and the way people live in the 21st century.

First, I want to thank Ysela, her co-chair, Les Sterman, the members of the Steering Committee, and the many people at TRB who worked on putting this event together.

In fact, everyone here deserves praise for devoting your weekend to discuss how we do transportation planning in the 21st century. There may be ways to spend a weekend that are more fun but there are few that are more important -- and the time you spent now should be repaid you over the next decade as transportation planning and decision-making becomes less of an exercise in confrontation and more of a community-based effort towards consensus.

Let me also acknowledge my former colleague, John Horsley, who just recently left DOT to become the executive director of AASHTO. John played a very important role at DOT, both in his position in Government Affairs and then at the office of Intermodalism and as Associate Deputy Secretary. DOT's loss is certainly AASHTO's gain and John gets to do what all of us should experience -- the execution of a law he helped to write.

This important conference will help us begin preparing for the 21st century just as the historic 2000 budget President Clinton announced last week builds on today's prosperity to prepare us for the new century, and the new millennium, we are about to enter.

Today, we have a safer, a more efficient, a more environmentally-sound transportation system. But we know that the 21st century will bring new challenges that call for new responses.

Our budget must respond to these challenges, and I think it will do so, and do so well. Our record \$50.5 billion transportation budget will, as the President says, "meet our historic responsibility to the 21st century." That is especially true in the areas that count the most: the areas that we have identified as strategic goals.

We will enhance safety with a record \$3.4 billion.

*Deputy Secretary of Transportation Mortimer Downey
Transportation Research Board Committee on Pedestrians*

We will improve mobility through a record \$36 billion for infrastructure investment in all our transport modes, an amount that is 72 percent above the previous Administration's average.

We will promote economic growth and trade, not only through infrastructure improvements *and* a commitment to growing the future transportation workforce, *but also* through a record \$1.3 billion for research and technology, 40 percent more than this year.

We will invest a record \$3.9 billion to protect our environment.

And we will support national security with investments totaling \$1.5 billion.

When we look at these strategic goals, it is important to remember how far we have come in just a few years. Just a decade ago, the Federal transportation agenda was still focused on completion of the Interstate highway system, the designated network of intercity connectors and urban roadways that have transformed America over the past 40 years.

The Interstate highways put the exclamation point on the automobile-dominated culture of the 20th century. They opened vast suburban areas for growth and development while our cities struggled to come to grips with the world the planners of the Interstates created.

But *we* need to focus on the fact that a conference much like this one defined the planning process that produced this network -- especially those funded by the add-on decisions to bring the connectors into the urban fabric. It's a reminder that, in public life, we are responsible for all the consequences of our decisions -- not just those that we anticipate.

In the past decade, though, ISTEA and TEA-21, along with the regulations, policies and guidance of the Department of Transportation, have produced an opportunity for a new world of transportation. A few places come to mind as precursors to this trend -- Portland's decision to trade Interstate funding for light rail and San Antonio's commitment to ITS as a way of managing traffic growth.

Following these pioneers, much of the Federal transportation funding is now flexible between different highway programs and with transit.

The planning process for highway and transit projects has been opened to much broader public participation, although not yet with all the tools to make it a transparent process.

Metropolitan planning organizations have been given a strengthened role over projects in their area -- real decision-making as opposed to the technocratic process of mapping a transportation network based entirely on satisfying self-defined demand.

The concept of fiscal constraint has been introduced to the planning process, so that the analysis reflects the consequences of what really will get built and not be a paper exercise of programming mitigations that will never move off the paper.

Transportation policy and transportation planning have been linked directly to the requirements of the Clean Air Act -- with funding to help communities meet their air quality goals.

We have attempted to create a level playing field for transportation decision-making -- highways and transit -- through common matching shares, joint planning regulations and the increasing cooperation between FHWA and FTA as part of One DOT, especially in our field operations.

Secretary Slater, recognizing the transportation linkages to other policy areas, has made transportation an important tool for brownfields development in urban areas by reversing the long-standing policies limiting the location of highway projects near contaminated sites.

Vice President Gore has led the effort for sustainability while Administrator Linton has placed FTA in the forefront of the movement with his leadership of our Liveable Communities initiative.

Throughout DOT, we are integrating transportation into larger efforts to support families and sustain communities.

As Secretary Slater says, transportation is about more than asphalt, steel, and concrete: it's about people, and about giving them the opportunity to lead better, more fulfilling lives. Transportation alone doesn't solve anything if it doesn't take people where they want to go; economic development can't achieve its promise if people can't get there.

Responding to his view, transportation policy has come a very long way during the decade of the 90's. In short, transportation has been transformed from simply making a decision on how to move cars and trucks from one point to another to a societal tool that must be coordinated with social, environmental and economic development goals.

In theory, this is not a new idea. Over the past decades, we have had the 3C process, the creation of MPO's, comprehensive planning and A-95 reviews, for example. But it is, I hope, going to be more effective because there are new factors at work.

Today, when we talk about equity, as we did in TEA-21, we mean more than just equal amounts of funding. We mean opening access to the transportation system for all parts of our society and providing equal opportunity for a wide range of transportation solutions.

Transportation planners and policy-makers must now pay attention to a wider range of voices -- and that is a big change.

Deputy Secretary of Transportation Mortimer Downey
Transportation Research Board Committee on Pedestrians

We have made a lot of changes in the 90's, building on the vision of the first participants at the 1958 Sagamore conference and the drafters of the "3C" planning process in 1962. It is your challenge to put these processes in the context of today's transportation realities.

These changes came about because people in communities all across the nation want a different transportation system -- one which is responsive to their needs. They want a locally-based decision-making process that allows greater flexibility in funding and in alternatives. At the same time, we recognize there are national and global concerns that our planning must recognize and respond to.

As Thomas Jefferson said, "The excellence of every government is its adaptation to the state of those to be governed by it." As our society, our economy, our environment have changed, so must our approach to mobility and related societal needs.

Those who have positions of trust in Washington, legislative and executive, have recognized the new concerns on the environment, community preservation, land-use, economic development and the range of other issues that have been raised by both traditional and non-traditional interests.

If we weren't making these connections on our own, you can be sure that public reaction at the polls would be getting our attention.

We have, as Jefferson would say, adapted, but the question for us as we stand on the brink of the 21st century is whether we have adapted enough. Do we have the processes in place that meet the needs of the communities now and will they be sufficient for the 21st century?

Or have we simply put a new face on the old 3C process, itself a 37-year-old reaction to the early excesses of the Interstate era, and created a technocratic puzzle that only the transportation elite can comprehend while the vast majority of people remain on the outside?

Public participation is now required but is the process truly responsive to those members of the public who take part?

A transportation decision-making system that ultimately throws major decisions into the courtroom for judges to make our transportation policy is no system at all.

The reaction we have received to the new Transportation and Community and System Preservation Program has shown us some of the problems with the current planning system as well as the opportunity for change.

TCSP is a new Federal Highway Administration program created in TEA-21 to help integrate transportation with community development. Its sponsor, Senator Wyden, drew his inspiration from the Portland experience but it is a widely applicable program. That's evident

from the fact that we received 525 applications from state and local officials seeking 30 times more money than is available through the program for many excellent, innovative projects.

While TCSP holds tremendous potential for the future direction of our transportation program it has also demonstrated the frustration in many places with the existing planning process.

TCSP's promise is that it can link transportation with community development and the creation of more livable communities across our nation. But the current planning process has not responded to the need in many communities to plan and implement these forward-looking projects.

This response tells us we need to rethink what we are doing. It also tells us we need more money for these activities and we're responding to that need by doubling the funding for TCSP.

Now it's up to *you* to help design a new, flexible process.

I am pleased to see that there are so many new faces here to help us with our thinking. The representation of groups that have not been involved in transportation decision-making or when major policy decisions have been made is encouraging.

An effective transportation planning process will require broad-based participation from the outset -- but it also will require staying power. This is not a quick process. Change will not come overnight, nor will it come without understanding and accommodation of *all* the interests at the table.

As we begin to think about the process, we must emphasize the long-range system perspective. A continued focus only on short-range project funding levels will prevent us from moving forward.

We should set sustainability as our top priority. The goal of sustainable communities, as defined by President's Council on Sustainable Development, is to "encourage people to work together to create healthy communities where natural and historic resources are preserved, jobs are available, sprawl is contained, neighborhoods are secure, education is lifelong, transportation and health care are accessible, and all citizens have opportunities to improve the quality of their lives."

We need smart decisions targeted at sustainable prosperity and a sound quality of life, and we in the Clinton Administration want to give communities the tools they need to make them.

And beyond the bounds of our communities, we must look at the important environmental issues that face our planet, such as air pollution and global warming. What are the best

Deputy Secretary of Transportation Mortimer Downey
Transportation Research Board Committee on Pedestrians

transportation programs and technologies to address these crucial problems? -- and aren't they the same solutions that make sense at the micro-scale?

How do we deal with the new technologies? ITS holds tremendous potential for the future of transportation but deployment decisions cannot be made based on traditional jurisdictional concerns.

How do we assure a system that is responsive to the non-traditional voices of bicyclers and pedestrians, smart-growth advocates, environmentalists and preservationists while maintaining the system performance that has provided the economic engine for a prosperous nation -- a nation that is spreading its benefits to all in the society?

Can we create a system that gives priority to getting people to jobs even though they may lack a connection to the existing transportation system?

Can we bring about true flexibility so that transportation decision-makers can reach a decision that addresses all these concerns in a context-sensitive manner?

Can we balance a focus on *mobility* with one on *accessibility* -- linkages to all of the services we need, while we decouple economic growth from traffic growth and pollution growth?

These important issues are being addressed every day in individual communities on a case-by-case basis. Many state transportation departments have begun to develop new flexibility and a new outlook in the face of these issues.

We need to encourage a transportation planning and decision-making process that is meaningful and relevant to the issues being raised *in* the communities. We have set national goals -- safety, mobility, economic growth and trade, protection of the environment and national security.

We believe these goals are shared at state, local and community levels -- and we need a planning process that will help us and you reach them.

This conference must be the first step in creating that new process for the 21st century. We must move quickly to develop our agenda and then to implement it. The American people are looking for a responsive process and they don't want extended time spent on research into planning issues.

My challenge to you is to help us develop a responsive, flexible transportation planning process that will meet the needs of our nation in the 21st century. If everyone in this room commits to help us, we *can* have a better planning process and we *will* have a better transportation system. Thank you.

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**TALKING POINTS
DEPUTY SECRETARY OF TRANSPORTATION MORTIMER DOWNEY
TRANSPORTATION TRADES DEPARTMENT, AFL-CIO
MID-WINTER EXECUTIVE COMMITTEE MEETING
MIAMI, FLORIDA
FEBRUARY 16, 1999**

(You are to give brief opening remarks followed by a question and answer period. Nancy McFadden, Eugene Conti, Jack Basso, Jolene Molitoris and Steve Van Beek will all be present at the session.)

- * I want to thank Sonny Hall and Ed Wytkind for inviting us to be with you this morning. Joining me today are Nancy McFadden, our General Counsel; Gene Conti, our Assistant Secretary for Policy; Jack Basso, Assistant Secretary for Budget and Programs; Jolene Molitoris, our Federal Railroad Administrator; and Steve Van Beek, Deputy Administrator of the Research and Special Programs Administration. *This is just about a full staff meeting for the DOT.*
- * America's unions ~~give~~ ^{are an best means of to give} voice to the concerns of this industry's working men and women, ~~and~~ ^{as we have on several prior occasions} I'm glad we have the chance to exchange ideas on how best to meet those concerns. *This conversation will be very useful to us as we set our agenda for the next two years.*

* The last six years have been very good for the transportation industry -- we've seen more than a half-million transportation jobs created since 1993, and tens of thousands of others preserved by the ^{the new work force to} ~~rebuild~~ restoration of industries like shipping -- shipbuilding -- airlines -- and aerospace manufacturing.

* Thanks to your efforts and those of your members, we have achieved a number of successes:

TEA-21: record level investment -- over \$200 billion over 6 year period will support more than a million jobs while maintaining proven labor protections such as Davis-Bacon and 13(c).

This sort of oversight is a team

Amtrak: first authorization bill since 1992 in late '97 ^{mandatory} without changes to labor protection or contracting out; landmark labor agreement with BMW ^{has followed by} E has resulted in agreements covering 85% of Amtrak's employees ^{we think the market is well on its way to meeting the challenges of self-support and growth in the service.}

Worker Safety: improved through initiatives as diverse as railroad workers' "right to tell" about safety problems and partnerships to protect workers on rail roadways ^{beds} and in highway work zones.

Aviation: new partnership between FAA & NATCA with historic labor agreement last summer -- it's balanced, fair - good for the agency and, ^{early} more importantly, good for the worker; our foreign repair station rule is in the final stages of clearance -- we're glad that we've been able to work together to ^{seek} find a regulatory solution to this issue; recent agreement (Feb. 9) with ALPA and ATA on safety procedures related to land and hold short operations -- this is an excellent example of this Administration's efforts to find commonsense solutions to safety issues through partnerships; ^{on} FAA reauthorization bill includes safety and security improvements and "whistleblower" protections for workers who expose unsafe conditions -- we listened to you on the issues of foreign ownership and cabotage -- they were not included in our bill.

Was NATCA part of this agreement?

New guidelines for unruly passengers who threaten flight attendants

Project Labor Agreements: beat back attempts by the Congress to prohibit us from entering into PLAs. ^{on an asbestos project}

and the
regular appropriations
process

- * The agenda for this year is no less ambitious -- with FAA reauthorization; hazardous materials reauthorization and rail safety before the Congress -- we have much to talk about and much work ahead of us. Before we^{all} get to your questions -- I'd like Gene Conti to say a few words about our workforce agenda and for Jolene Molitoris to tell you about the safety conference we'll be having in Washington on March 2nd and 3rd.

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REMARKS PREPARED FOR DELIVERY
DEPUTY SECRETARY OF TRANSPORTATION MORTIMER DOWNEY
AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION
OFFICIALS WASHINGTON BRIEFING
WASHINGTON, D.C.
FEBRUARY 24, 1999

Thank you, Dan. Good morning. It's a pleasure to be with you all this morning for your 1999 Washington Briefing. It's good to see John Horsley here this morning -- I want you all to know that his leadership is missed at the Department. Clearly, you have made a great choice in selecting John as your new Executive Director. John will be able to carry on the tremendous legacy of Frank Francois.

This morning, I'd like to touch briefly on some of the issues that I think you will be discussing ^{among yourselves + with my colleagues} over the next couple of days, ~~along with a few others.~~

Budget

Are we going to hand out the Budget in Brief + Rev F. Plan
Conclusion?

Earlier this month, President Clinton presented to the Congress and the American people a budget for fiscal year 2000 that was historic -- not just because it is the budget that will take us into the 21st century but because it is a balanced budget that makes vital investments that will prepare us for the challenges of that new era.

Today, thanks in large part to your efforts, we have a safer, a more efficient, a more environmentally-sound transportation system. But we know that the 21st century will bring new challenges that call for new responses.

Our budget must respond to these challenges, and I think it will do so, and do so well. Our record \$50.5 billion transportation budget will, as the President says, “meet our historic responsibility to the 21st century.” That is especially true in the areas that count the most: the areas that we have identified as strategic goals.

We will enhance safety with a record \$3.4 billion.

We will improve mobility through a record \$36 billion for infrastructure investment, an amount that is 72 percent above the previous Administration’s average.

We will promote economic growth and trade, not only through infrastructure improvements and a commitment to growing the future transportation workforce, but also through a ^{another} record ~~\$~~1.3 billion for research and technology, 40 percent more than this year.

We will invest a record \$3.9 billion to protect our environment.

And we will support national security with investments totaling \$1.5 billion.

TEA-21 Implementation

This budget will serve as a key tool as we continue to implement TEA-21. Last November, I joined you all in Boston to give you a progress report on TEA-21 implementation. The Department continues to move ahead on a number of fronts and we have found that there is tremendous interest and need for some of the new programs that were created by TEA-21.

You'll be hearing in greater detail about the status of many of these provisions throughout the course of this conference. I wanted to take a moment to mention a few that have been of particular interest to states and localities--especially those that were still ~~unfinished~~ ^{in the works} when we spoke in Boston.

One of those was the Borders and Corridors program, and we have moved it ahead. The applications for our Borders and Trade Corridors Program have been submitted and are currently under review. There were over 140 applications seeking more than \$2 billion in FY 99 funding. With only \$124 million in obligation ceiling

available for the Borders and Trade Corridor Program -- we, clearly, have our work cut out for us.

extraordinary
The interest in this program demonstrates that there is clear need for this type of coordinated planning and design -- not only in areas that cross the border into Mexico and Canada but also in areas where there is significant economic growth and interregional trade-- further evidence, *if* any were needed, of the linkage between transportation and the economy.

Parts of what funding? | Parts of this funding uses innovative financing techniques to leverage transportation investments that our state and local partners are making in their own economic futures. The \$81 million we propose to support the Transportation Infrastructure Financing and Innovation Act (TIFIA) could directly leverage \$800 million in project financing, and attract another two billion in state and private funding for highways and intermodal connections.

The TIFIA notice of proposed rulemaking was published on February 8, 1999, and comments on the regulation are due by March 10. The Department will begin to consider applications for grants beginning in late Spring of this year, and hopes to grant awards in September.

A few weeks ago, we posted our discussion options for the environmental streamlining and planning provisions of TEA-21 which responds to what we heard during the outreach sessions that were held last year. We look forward to hearing from you all as the process moves along. We believe there is room to do a good job on our environmental responsibilities even as we move ahead key important priorities.

There was an overwhelming response to our Transportation and Community and System Preservation Program. We received 525 applications from state and local officials seeking 30 times more money than is available through the program for many excellent, innovative projects.

The reaction to TCSP demonstrates that there is clear frustration with the existing planning process and that we need to do more to link transportation to community development. We have responded by proposing to double the funding for TCSP in this year's budget.

We see similar intense interest in maglev and HSR -- will act quickly on applications and we welcome the National Governors Association's endorsement of our view that States need greater funding flexibility to address those needs.

Adding more resources to TCSP or to rail will only get us so far. We need to also take a long, hard look at how we do transportation planning. The Federal Highway ~~Administration~~ and Federal Transit Administration^s are focused on how we ~~design~~^{re design} a planning process ~~--~~^{making it} one that is flexible and looks at long-range transportation system needs.

It means we'll all need to think outside of the traditional transportation planning box. Our transportation decisions should be targeted toward building sustainable communities. We in the Clinton Administration want to give States and communities the tools they need to make those discussions which is why President Clinton and Vice President Gore have put together a livability agenda for the new millennium.

Many state transportation departments have begun to develop new flexibility and a new outlook in the face of these issues. We applaud you for your efforts and look forward to working with you to build sustainable transportation systems.

Overall, I'm still confident that all of TEA-21 will be up and running on the anniversary of its signing.

Year of Aviation

As we continue to fully implement TEA-21, we also have a full legislative agenda for the coming year. Coast Guard, hazardous materials transportation, STB and rail safety programs are all up for reauthorization. These programs are crucial to the Department's agenda -- whether it's on our nation's waterways, highways or railways and we expect to ^{link} ~~limit~~ some of these activities together ⁱⁿ ~~in~~ our maritime systems, ~~etc., etc.~~ ^{initiative}.

We're focused on ensuring that we continue to have the safest aviation system in the world. The Secretary and the Congress have called this the "year of aviation" and we recently transmitted our FAA reauthorization legislation to the Congress.

Our five-year reauthorization proposal is modeled after President Clinton's best principals for reinventing government as it establishes a performance-based organization for air traffic control operations and reduces costs to taxpayers through innovative financing methods.

With over 600 million people traveling by air last year and with more than 1 billion expected by 2010, we need to invest in aviation to meet the nation's growing

safety and efficiency needs. To expand system capacity, we must also address the needs of our nation's airports.

Our legislation proposes a record level of investment, which includes \$8 billion over five years for the Airport Improvement Program and authority for airports to increase Passenger Facility Charges from \$3 to \$5. Raising the PFC cap is expected to generate an additional \$800 million each year to fund capacity expansion and other airport projects. Our plan also eliminates the cap on AIP discretionary funds, letting us target projects of highest national significance.

Our legislation also seeks to break down barriers to competition by eliminating the High Density Rule at O'Hare, LaGuardia and JFK. This provision along with some of the changes we're making to the AIP program and our proposal for aid to new carriers will improve air access to under-served parts of the country.

There will be vigorous debate on Capitol Hill about FAA reauthorization -- the House, as you may know, overwhelmingly passed a six month extension bill while

the Senate Commerce Committee recently reported out a two-year bill. We will continue to work with the Congress to make sure that the final bill includes our safety, efficiency and access priorities--and, as with TEA-21, respects the budget agreements that have given us budget balance.

Y2K

This is not only the year of aviation but it is also the year of Y2K. With just 310 days until the new millennium, I would be remiss if I didn't take this opportunity to plug my favorite technology management issue.

By now, just about everybody has heard of the Y2K bug and as the clock ticks on toward the year 2000, we need to make sure that our information technology systems have been fully tested so that they are functioning as well on January 1, 2000 as they were the day before.

We cannot overemphasize the need to make contingency plans to ensure business as usual for the public.

And don't forget to communicate your plans through your speeches, your press releases and your websites.

The public needs to know sooner rather than later that your systems will be ready for the year 2000.

We also urge you to continue to coordinate with your local partners -- it's not only important that your systems are Y2K compliant but also that those systems that you interface with will work.

AASHTO has been a great partner to us whether it's TEA-21 implementation, our legislative agenda or Y2K, we look forward to working with you on all of these and more in the weeks and months ahead. Thank you.

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**Remarks by Deputy Secretary Downey
Government-University-Industry Research Roundtable
February 24, 1999**

**"Strategies for Linking Social and Behavioral Science
Research
with Agency Missions"**

- Good morning, and thank you for inviting me to talk about this important issue with you today. I want to thank Dr. Joe Wyatt, ~~your~~ Council chair, and Tom Moss, ~~your~~ Executive Director, for their leadership and for their interest in ^{putting} ~~keeping~~ ^{social + behavioral} these issues first and foremost on ^{the Council's} ~~your~~ agenda.
- I have always found the Government-University-Industry Research Roundtable an excellent ~~policy~~ forum for discussing these types of issues, issues which I believe are as critical to the nation's future economic strength and vitality as the more traditional "hard" sciences.
- As you can imagine, we in the Department of Transportation have both a special interest, and ^{an important} ~~a profound~~ responsibility, ^{to} ~~in~~ ^{ensuring} that the results of the latest and the best research is incorporated effectively into our nation's transportation system.
- This is one of the key means by which the Department fulfills its own mission, to:

"serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets

our vital national interests and enhances the quality of life ~~of the quality of life~~ of the American people, today and into the future."

- In doing this, we have not limited ourselves to the "hard" sciences even though they are basic to our engineering-oriented missions. We realized that ^yfor new technologies ~~to~~ ^{we} to make lasting improvements to the nation's transportation system, they have to be implemented within a human environment -- whether it is an air traffic control center, a Coast Guard cutter, an automobile, or even a neighborhood.
- You have to be sure that the human involved -- whether they are pilot, driver, controller or passenger -- knows what is going on and what to do.
- This is true not only at the level of the individual, but at the social level as well.
- It is for this reason that modern transportation research must include consideration of how both individuals and society are affected by technology. A very important means for doing this is to include both elements throughout the design, development and implementation stages.
- This is ^{especially relevant} particularly important to us, as ~~so much of our own~~ ^{our} activity ^{is} ~~is devoted to~~ enhancing the safety of transportation.

- The Department has a long history of research in the 'individual' aspects such as human factors, ergonomics, and human-machine interface in nearly all modes.
- Unfortunately, we have somewhat less experience in including some of the other broader social dimensions, such as taking into account the interests of all stakeholders in developing consensus^{-based} public policy. This could include land-use and environmental impacts, institutional relationships and investment decisions. But both aspects ^{these individuals and are social} are needed to move technologies into practice.
- The 'individual' aspect includes the behavior of operators of transportation vehicles and control systems; the impact on performance of fatigue, stress, ^{or impaired} controlled substances and so on; and minimizing the physical and mental discomfort associated with using equipment.
- To take just one example, but an extremely important one, ^{you don't} ~~one needs to understand more than just physics and statistics to truly understand the causes and consequences of traffic accidents.~~ ^{More physics + statistics alone.}
- ^{on} As the National Highway Traffic Safety Administration (NHTSA) researchers well know, about one-half of all crashes are associated with driver inattention, and perhaps up to 90% of all crashes are due to ^{such} human performance or behavioral "failures" ^{as} These include aggressive driving, inattention, driving under the influence or while drowsy, and failure to detect and respond to road hazards.

- There is a social psychology of driving: a variable measure of risk-taking by individual drivers, and even incidents of "road rage," can further complicate potential crash situations.
- This knowledge about human behavior and performance is as important to assessing the best means of improving highway safety as is knowledge of physics and engineering.
- Let me give you three examples of work at the Department of Transportation that rely heavily on such knowledge. They are from the areas of: Intelligent Transportation Systems, air traffic control, and automobiles of the future.
- The Intelligent Transportation Systems program, or ITS as it is better known, is developing new concepts such as in-vehicle collision avoidance and collision warning and driver information systems. These will need to be very carefully engineered so that their introduction into vehicles will not cause additional hazards due to poor person-vehicle interactions.
- There is probably little question that advances in areas such as human factors, cognitive engineering, and psychology are of great importance to transportation. ~~It is also true, but~~ ^{also} ~~however, that~~ areas such as economics, sociology and political science are both relevant and important.

- Let's take again the example of ITS. The next few years ^{should} ~~will~~ see the introduction of a variety of new systems and features into both driving and transit that can improve the safety, efficiency and environmental characteristics of transportation.
- But more than engineering and technology is needed if we are to succeed in this. We also need to make sure that the general public -- the ultimate users and beneficiaries of these improvements -- understands the value and benefits of these features.
- We should not automatically assume that new systems would be readily accepted, or even accepted at all, just because we the developers know that they are improvements.
- Introducing a new technology that improves the public good, especially one that also carries a cost to use it, is very much like a company introducing a new product into the marketplace.
- If you don't understand your market, or the characteristics of those you see as your customers, you may just fail.
- I'm quite sure that knowledge of math and engineering alone will not be sufficient to keep this from happening. You also need to create the ^{new} public-private institutions to ~~serve as a forum for~~ considering all of these issues, including the ^{new} economic, political and social aspects.

generate + disseminate
information of use to
drivers, and the development of
such institutions means

The
institutions that create
the technology
systems are
not necessarily
right for this
task. But
as the public, we need to

- ^{Now,} However, I don't want to make this sound as if a transportation researcher needs to be part-engineer and part-advertising copywriter -- even though that might not be such a bad idea in some cases.
- The point I want to make here is that successfully introducing a new technology into a human environment -- and what transportation environment is not essentially a human one? -- requires that you both understand and take account of all of the important aspects of that environment that can affect the success of your effort.
- This applies to aviation as well as the highway, as can be seen from my second example. Several years ago, an effort was begun to replace the aging displays^{systems} used by air traffic controllers. In an effort to save time and money, the FAA tried to replace this equipment using a commercial off-the-shelf, or COTS, approach.
in the terminal environment.
- Unfortunately, the existing COTS equipment had not been developed for airspace that had the same levels and mix of complex air traffic as our U.S. environment. In addition, neither human factor specialists, nor the ultimate users of the equipment, the air traffic controllers, had substantial involvement in the development of the requirements for the new system.

- known as "STARS"*
- As a result, the STARS program has incurred substantial delays, has not yet been deployed, and is under congressional scrutiny. I believe FAA's new efforts to involve controllers, under the aegis of NATCA, will be successful, but they should have started years ago.
 - This is what can happen when you forget to incorporate the human dimension into the overall project at the right time and to the right extent.
 - This raises a very important point. We may now have the technical capability to design and build the most elaborate, safety-conscious and efficient highway or air traffic management systems that the world has ever seen.
 - We could have closed-circuit cameras and traffic sensors everywhere they are needed. We could have automatic systems that will take control of a vehicle or aircraft away from an operator showing signs of degraded performance. We could track where every person is during a trip just the way we can now track packages around the globe in real time.
 - We could have all of these things. We could even have included the latest knowledge from human factors and behavioral research, and yet never succeed in implementing our new advances.
 - But why? The benefits, especially in safety, seem so obvious.

- One needs to ask two questions. First, who will pay for all of this, and are they willing to pay what it will cost? And second, will travelers willingly give up ^{very} so much of their personal freedom in return for all of these benefits?
- On the first point, cost is always a constraint on the application of technology to the real world. Without a buyer, there is no market. And buyers must be convinced that the price is both affordable and reasonable. If you don't understand your economics, you won't do well on this point.
- The second point may be a bit 'fuzzier' to assess, but it is no less important.
- Americans value their personal freedoms very highly. ~~That is, after all, what makes us America.~~ The continued popularity of the private automobile is due greatly to the freedom of movement that it offers.
- How much ~~of this~~ personal freedom would Americans be willing to give up for a safer and more efficient traveling experience? The answer to this question may do more to determine the success or failure of any transportation innovation than any other single issue.
- The ITS people found out, for example, that people ^{will} may accept drive-through electronic toll collection using short-range radio transceivers and paying transit fares by "smart cards". What they often did not want, however, was the

fact that their behavior was recorded in some anonymous database where others could pinpoint their behavior. They considered that an invasion of their privacy. Even in Singapore, where the government regulates everything from auto access to ~~hand guns~~^{chewing gum}, this was a factor that had to be dealt with. *in their highway pricing system.*

- Sociology can also provide useful insights to understanding how to implement new technologies.
- Most transportation decisions involve both people and organizations as users and providers of goods and services. Understanding how people interact can help to design a successful new system; but understanding organizational behavior is equally important to success.
- We have often discovered in studying the innovation process that institutional issues can be a strong impediment to successful technology deployment. If the traditions, culture or goals of an organization are not compatible with the new concept, or if they are in any way diminished or threatened by it, the prospects for success fall dramatically.
- We're all familiar with the '**NIMBY**' phenomenon -- Not In My Back Yard. This can occur when the residents of a community^{directly} affected by a new infrastructure project oppose it because of the negative impact it may have on their own quality of life. *- without regard to the broader community benefit.*

- Their concerns could include increased noise levels, more traffic on local streets, diminished property values, environmental degradation, or a combination of such unwanted consequences.
- The history of public works in this country, and indeed in most of the industrial world, is replete of examples of NIMBY in action. This can be a difficult factor to overcome, even when it appears obvious that the benefits of the new project far outweigh any disadvantages.
- If you want to succeed, you cannot just pretend that eventually the NIMBY reaction will go away. Often times, it doesn't go away; in fact it can even intensify if the community believes that its legitimate concerns are being ignored. *The next step is where NIMBY is how who BANANA*
- I suggest that *all the math + science the world* ~~extensive training in math and science~~ is not sufficient to deal with such a situation. Again, one has to have a more comprehensive understanding of the broader environment in which transportation occurs, and of the factors that motivate individuals and organizations.
- This requires knowledge of these other areas we call the social and behavioral sciences, of political science and economics, of psychology and sociology.

- Fortunately, technology can also assist in such situations. By developing computerized models and simulations, for example, one can ^{in a way that adds to public discourse} show how different project options will create different mixes of consequences, so that the most acceptable option can be chosen.
- To summarize here, what we are talking about is finding ways to help succeed in implementing technological innovations that bring real public benefits. This requires a range of skills and expertise.
- Knowledge of the technologies themselves is of course essential, but so is knowledge of how to assess their impact on people's lives and organizational behavior, how to decide when the advantages outweigh the disadvantages, and how to educate the users and the general public about these issues.
- Let me give you one final example. We're all familiar, of course, with our nation's reliance on imported oil for a significant proportion of our energy usage, particularly in transportation fuels. We are also increasingly aware of the health effects of air pollution, as well as the potential damage to the global environment from continued increases in the generation of greenhouse gases.

- These are two of the primary factors behind the search for new, lighter-weight and alternate-fueled vehicles. The public-private Partnership for a New Generation of Vehicles consortium, in which DOT participates, has been looking into this for a number of years now.
- One thing that the consortium did at the beginning -- and this was both a very bright and a very important step -- was to define what they wanted the characteristics of their ideal future product to be.
- What they stressed was that drivers must feel comfortable with the new product -- that it should retain as many of the characteristics of current vehicles as possible. This included styling, performance, accessories, and price. What the new product would do, however, is get triple the miles per gallon when compared to today's vehicles.
- These program managers realized at the outset that the ultimate success of their project depended not just on developing the new vehicle, but on the prospect that it would be bought and driven by millions of people. That had a much better chance of happening if it seemed familiar and comfortable to the users.
- DOT's interest in utilizing this whole range of skills in our own work is reflected in our staffs. The Volpe National Transportation Systems Center, in Cambridge, Massachusetts, is part of the Department's Research and Special Programs Administration.

- The Center performs transportation-related technical projects for all parts of the Department, as well as other Federal agencies and even some foreign governments. They have a senior professional staff of about 200 persons.
- About one-half of them hold advanced degrees in engineering and science. Another thirty or so have degrees in math, economics, or operations research. About twenty have degrees in business and public administration. Among the remainder are degree-holders in law, psychology, political science, community planning, and geography.
- So as you can see, DOT itself takes advantage of all sorts of training and knowledge in our own technical work. That is because we do understand the need to be proficient in both the technologies themselves, as well as the overall environment in which these technologies are deployed. You could say that we do practice what we preach in our own workforce planning and training activities.
- In fact, the foundation for the Federal government's strategy for strategic planning in transportation science and technology is an effective education and training program.
- I refer you to the National Science and Technology Council's *Transportation Science and Technology Strategy* document of November 1997. It was prepared by the NSTC Committee on Transportation Research and Development, which I chaired.

- Other similar activities are geared to introducing an appreciation for transportation as a possible career in elementary and secondary education, better vocational and technical training, and to bringing new knowledge to mid-career professionals.
- These programs support more than just technical training. They acknowledge that other highly developed skills and an appreciation for the larger environment are necessary as well.
- It is important to include the social and behavioral sciences in the education of scientists and engineers. But it is also important to include scientific and technical training in the education of social and behavioral scientists.
- We also need to approach our own R&D activities with the same breadth of knowledge and skills. We should make sure that our own R&D activities incorporate necessary social and behavioral science information and techniques, and that they look at both the individual and the social dimensions of every topic.
- This can best be guaranteed by using a total systems approach to each task that accounts for all of the relevant aspects of the technology, the person, the system itself, and the overall environment in which it is designed, developed, and deployed.

- In summary, then, we are quite aware in DOT of the valuable contribution the whole range of social and behavioral sciences have made, and continue to make, to the success of our nation's transportation system.
- We will do whatever may become necessary to make sure that this effective partnership will continue.
- Thank you very much.
- Now, I welcome any additional comments and perspectives that can be offered to this topic.