

REAUTHORIZATION OF TEA-21

FIELD HEARINGS AND ROUNDTABLE SYMPOSIA

BEFORE THE

SUBCOMMITTEE ON TRANSPORTATION,
INFRASTRUCTURE, AND NUCLEAR SAFETY

AND THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

REVIEW OF PROPOSALS TO REAUTHORIZE PUBLIC LAW 105-178, THE
TRANSPORTATION EQUITY ACT FOR THE TWENTY-FIRST CENTURY

MARCH 15, 2002

MAY 10, 2002

JUNE 14, 2002

AUGUST 8, 2002—RENO, NV

AUGUST 20, 2002—MONTPELIER, VT

Printed for the use of the Committee on Environment and Public Works



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¹NOTE: During the second session of the 107th Congress, Senator Ben Nighthorse Campbell of Colorado resigned from the committee, and on April 23, 2002, Senator Pete V. Domenici of New Mexico was appointed to fill the vacancy.

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TEA-21 REAUTHORIZATION

FRIDAY, MARCH 15, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The roundtable symposium was convened at 9:30 a.m. on Friday, March 15, 2002, in room 406, Senate Dirksen Building, Washington, DC.

SURFACE TRANSPORTATION RESEARCH

Present: Senators Jeffords and Reid.

Staff present: Jeff Squires, Mitch Warren, Ruth Van Mark, Megan Stanley, Larry Vigil, Ted Michaels, John Anderson, and Kevin Womack [moderator].

Panelists

Dr. Michael Walton, University of Texas
Mr. Robert E. Skinner, Executive Director, TRB
Professor Elizabeth Deakin, University of California at Berkeley
Dr. Taylor Eighmy, Director, Recycled Material Resource Center, University of New Hampshire
Mr. Scott Bernstein, Surface Transportation Policy Project
Mr. Val Riva, American Concrete Pavement Association
Mr. David B. Carlson, National Asphalt Pavement Association
Dr. Chelsea C. White, Georgia Tech, ITS America Representative
Dr. Philip J. Tarnoff, Institute of Transportation Engineers Representative
Mr. Michael M. Ryan, PennDOT, AASHTO Representative
Mr. Dennis C. Judycki, Federal Highway Administration, Director of Research, Development and Technology
Mr. Frederick (Bud) Wright, Federal Highway Administration, Executive Director

STATEMENT OF KEVIN WOMACK, FELLOW, COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Dr. WOMACK. Good morning everyone, we would like to welcome you to this research round table. My name is Kevin Womack. I am a fellow with the majority staff of the Environment and Public Works Committee. I will be moderating this discussion today. I would just like to welcome all of you, and I appreciate all of you coming.

We expect some Senators to come in shortly, or at some point in time during our discussion. When they do, we will allow, if it is

during opening statements, the person to complete their opening statement. Then we will allow the Senators to make their remarks. They may stay for a few minutes or have to go off to a vote. It's a bit hectic around here these days.

But we are looking forward to that. I think they feel this is a very important activity, and I know that some of them want to be here. So we look forward to that. In particular, Senator Jeffords, I believe, will be here.

What I would like to do is, I will go around and briefly introduce the participants. Then I'll give a couple of remarks on our goals and objectives, the format of how we're going to do this, a few instructions, and then we'll get started.

To my immediate left, we have Mr. Bud Wright from the Federal Highways Administration. He is the Executive Director. We have Mr. Dennis Judycki, who is the Director of the Research and Development Program at Federal Highways, out at the Turner Fairbank facility.

We have Mr. Bob Skinner, the Executive Director of the Transportation Research Board; Dr. Michael Walton from the University of Texas; and Professor Elizabeth Deakin from the University of California Transportation Research Center.

We have Mr. Val Riva from the American Concrete Pavement Association; Dr. Taylor Eighmy, the Director of the Recycled Material Resource Center at the University of New Hampshire.

We have Mr. Scott Bernstein, who is representing the Surface Transportation Policy Project; Mr. David Carlson from the National Asphalt Pavement Association; Dr. Chip White from Georgia Tech University, representing ITS America; Dr. Philip J. Tarnoff, representing the Institute of Transportation Engineers; and Mr. Michael Ryan, who is representing the AASHTO Group, and he is from PENNDOT. We appreciate all the panelists being here today.

On the staff side, we have myself and Mr. Squires, who will be coming with Senator Jeffords; Mr. Mitch Warren and Ms. Ruth Van Mark from the Environment and Public Works Committee staff; and Mr. Jensen, as well, from Senator Smith's office; and Mr. Michaels from Senator Chafee's office. So that's who we have at the table right now.

The objective of this discussion is to provide information to the EPW committee staff. We are not having a research hearing, so we are doing this round table discussion in lieu of that.

The idea is to get direction and priorities out in the air and discussed among people who are significant stakeholders and leaders in the surface transportation research industry to help us develop the research title in the upcoming reauthorization bill.

This is a key part of the title. It is a key effort, and very important to the development of our transportation system. So that's our fundamental goal, as we go through this reauthorization, to use information gathered through this round table to be able to develop that in a progressive manner.

As far as the format is concerned, what we will do is, we will begin with the panelists. We will allow each panelist a 3-minute opening statement. I would ask you not necessarily to read what you've submitted in writing, because if you do that, many of those will be much more than 3 minutes; so summarize, please.

We've got the timers out, so you'll know when your time is up. You know, we're not going to shut you off at 3 minutes if you're in the middle of an important statement. We would like to have you say at about 3 minutes.

We will go around to the panelists, and then we will start and allow each of the staff members to ask a question, and kind of circle through the staff in doing that.

The objective here is not to make this a question and answer session. I'm hoping that the questions will spur discussion among the panelists, so that we don't have to keep spurring you on to make comments. With this group, I'm sure that's not going to be a problem. But I just want to let you know that we're hoping the questions will just spur discussion.

We're planning on running until about 11:30, so we have a couple of hours to do that, and I believe that's it. I guess one last request is that if you have something to say, signal me in a manner so that I can call on you by name, so that that will make it easier for our transcriptionist.

This will be transcribed, and a name before a speaker helps the transcriptionist accomplish that task. So I will try to keep my head up and pay attention who would like to be heard from next.

With that in mind, I guess we'll go ahead and begin. We'll start with Mr. Bud Wright from the Federal Highways Administration, and then we'll just proceed from him around the table.

STATEMENT OF FREDERICK (BUD) WRIGHT, EXECUTIVE DIRECTOR, FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Mr. WRIGHT. Thank you, Kevin.

As Kevin noted, my name is Bud Wright, the Executive Director of the Federal Highway Administration. Accompanying me today is Dennis Judycki, FHWA's Director of Research, Development, and Technology at the Turner Fairbank Highway Research Center.

We're pleased to be a part of this discussion, and working with you and the rest of this important constituency, to improve surface transportation research. Kevin, we just want to say that we very much appreciate the leadership of the Senate Environment and Public Works Committee staff and members in putting together this important forum.

Research and technology are key to meeting the challenge before us, maintaining a high quality transportation network, while achieving goals to increase safety, ensure national security, improve mobility, and promote environmentally responsible and efficient project delivery.

We must keep our infrastructure secure, and we must strengthen our commitment to reducing highway fatalities and injuries, even as we squeeze additional capacity from the system.

FHWA has recently developed a new mission and role statement that recognizes the importance of research and technology. Among the key elements of that new mission is to be innovators for a better future. We know we must invest in and conduct transportation research on behalf of our partners and stakeholders, and we are taking very serious actions to corporately raise the bar on surface

transportation research and the delivery of technology and innovation.

While TEA-21 provides funds for surface transportation research, technology and deployment, and training and education, it's important to know that funding for FHWA research and technology activities were reduced under TEA-21 from the level available under ISTEA. This decrease in funding, coupled with substantial increases in earmarks and designations, diminished the FHWA's ability to carry out a national highway research agenda.

We believe, and our many partners support the fact that a reduced Federal role means a diminished national perspective, and a loss in efficiency. Moreover, these factors jeopardize FHWA's ability to remain effective in carrying out carefully conceived multi-year research and technology deployment plans.

FHWA, AASHTO, and TRB created the National Highway Research and Technology Partnership in 1999. This partnership developed a draft national R&T agenda that is unprecedented in scope and focuses on safety, infrastructure renewal, operations and mobility, planning and environment, policy analysis, and system monitoring. FHWA, the States, academia, and private industry will carry out the research needs identified by this partnership cooperatively.

Working through our partnership, FHWA has made significant progress in advancing research and delivering technology and innovation to our stakeholders. For example, the investment in safety research and technology initiatives has led to safety infrastructure improvements that have produced a three to one return in benefits.

It is estimated that the Highway Pavement Design Guide that is being developed by the National Cooperative Highway Research Program with long-term pavement performance data will result in pavement rehabilitation savings of \$1 billion per year.

In the environmental area, as a result of our investment of \$3.9 million over 9 years in noise model research, States and local governments will be able to save more than \$19 million annually.

Significant progress has been made in ITS deployment, including a 37 percent increase in the number of freeway miles, with real-time traffic data collection technologies; and an 83 percent increase in travel or information dissemination.

But much remains to be done. One of the keys to the success of our transportation programs is assuring that we have a well developed work force for the future. Much of America's surface transportation program work force is expected to retire in the next 5 years. The efforts of our National Highway Institute, the Local Technical Assistance Program Centers, the Eisenhower Fellowships Program, and the University Transportation Centers are intended to address this critical issue.

In conclusion, the Federal Surface Transportation Research Program can play a key role in our ability to address the significant transportation challenges that face the Nation today.

I would like to now turn to Denny Judycki, also representing FHWA.

Dr. WOMACK. Mr. Judycki?

STATEMENT OF DENNIS C. JUDYCKI, DIRECTOR OF RESEARCH, DEVELOPMENT, AND TECHNOLOGY, FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Mr. JUDYCKI. Thank you, Kevin.

Good morning. It's good to be with everyone and provide some additional thoughts from the Federal Highway Administration.

Understanding the environment within which surface transportation research is undertaken is central to us, clearly stating the Federal Highway Administration's mission and fully appreciating the partnerships that we're going to be hearing more about today.

The Surface Transportation Research Program is truly a national program, not just a Federal one; and we must continue to advance that philosophy.

The Federal Highway's role in R&T is actually a multiple one of providing leadership for a national program, formulating a vision for the future, conducting research, supporting and facilitating research by our partners, and stimulating and encouraging innovation development and deployment.

Federal Highways is a partner in a collaborative decentralized national R&T endeavor, which includes the State Planning and Research Program, the National Cooperative Highway Research Program, the University Research and Education Programs, and industry research, just to mention some of the principal organizations.

We are working very hard to create a more cohesive program of research and technology, which seeks to involve all of those partners in addressing national research priorities.

The Federal Highways R&T Program focuses intermodally, as Bud suggested, on a broad array of priority needs, to advance the state-of-the-art and put innovation into practice.

It's really a broad array ranging from the physical sciences, such as pavement and bridges, to freight, to general traffic flow, to air quality, to economic impact analysis, to support public policy, and the sharing of innovative practices in areas such as finance and contracting.

You've heard and you'll hear more about our role in conducting gap filling, stakeholder-driven, and longer-term research on emerging issues; but just as important is our leadership role in facilitating the needs of our partners.

The recently re-engineered Transportation Pool Funding Program is but one example, which consists of approximately \$40 million of Federal highway-lead and \$50 million of State-lead research, which is mutually identified multi-state research needs, that comprise that pool-funded program.

We're making available today actually two handouts that I would like to draw to your attention. One is a 2001 Local Technical Systems Report, and the other is the Federal Highway Research and Technology Initiatives Report, which we will make available after today's session.

These summarize our R&T budget distribution, the priority areas within Federal Highways of the research and technology program; the research innovation delivery that's under way; examples of re-

sults from the program, as well as what we should be anticipating for future research.

Finally, authorization has given us the opportunity to sit around the table today, and we'll be working together in the future. We should be guided by what TEA-21 has taught us. There have been successes and there are some opportunities.

I think I would just quickly point to a couple of the successes. The program framework, for instance, I think, was well established and has worked well. The resulting national R&T partnership initiative that was led by Federal Highways, AASHTO, and TRB has been a true success.

In fact, we have delivered; whether it's the ITS Program or the Highway Research Program. We have generally delivered products, and technology has been deployed, and in fact, a professional work force has been trained in priority areas.

But there are some opportunities that we should include on the list. We should be moving away from Federal programs that are overly focused on short-term applied needs, which has impeded us in addressing the emerging issues in a timely fashion.

More could also be done in moving market-ready technology and innovation into practice and encouraging industry partnerships, as well as product commercialization, which is the most difficult part, I think, of the innovation process.

Finally, even with the national leadership, we must have the flexibility to step up to the plate and provide what is expected from us by our partners, to assure that research and technology investments in high priority areas are able to be addressed.

Thank you very much, and I look forward to the discussion following the statements.

Dr. WOMACK. Thank you.

Mr. Skinner?

**STATEMENT OF ROBERT E. SKINNER, EXECUTIVE DIRECTOR,
TRB**

Mr. SKINNER. Thank you very much, and good morning to all of you.

Let me start by re-emphasizing a point that Denny just made, about the decentralization of our surface transportation system. It's incredibly decentralized in this country, and we know that we have 35,000 units of government that are responsible for highways in this country.

Given that, I'd argue that we need to have a research program that is also de-centralized, to an extent, that has significant components with different institutional homes, so that we can exploit the necessary connections between those different institutional actors, and exploit the comparative advantages that these different institutions have and bring to research.

As a result, we've done this, to a large degree, and we have a fairly messy and complicated research structure. It's quite a contrast to the Department of Defense, for example.

But I would argue, this is a good thing, and we've already ticked off some of the components. We have the individual State DOT research programs. We have pooled fund initiatives that Denny mentioned where multiple States work together. We have a national

program, a National Cooperative Highway Research Program, where all of the States pool money for work of common interests.

We have university programs, which combine research needs with attracting new talent and skill development. We have occasional strategic research programs like the Strategic Highway Research Program that the 1987 Act implemented. I'm sure today we'll hear about additional proposals for the future.

Let me, at this point, shift gears and focus specifically on the Federal role. The Federal Government has been instrumental in creating and encouraging a number of the research initiatives that have taken place over time elsewhere.

I'm going to draw upon a recent TWP report that specifically looks at the Federal role in highway research and technology. Let me acknowledge that that committee was chaired by Dr. Mike Walton, who is sitting next to me. That committee completed its work and published a report last Fall. I have copies of it, if any of you at the end would like to see it.

It looked specifically in the beginning at the research agenda, and concluded that the Federal Highway Administration had not given enough attention to fundamental long-term research in its program, and recommended that a quarter of its research resources should be devoted to that area. One-half of the research resources should go to gaps not addressed by other programs and emerging national issues.

Then the final quarter of research and technology resources ought to go to mission-oriented research at the Federal Highway Administration, policy and regulation development and the like, tech transfer, field applications, education and training, and tech support.

They also recommended greater stakeholder involvement throughout the research project and the research programs at the Federal Highway Administration, all the way from initial problem identification through implementation of research results.

The program, to the maximum extent possible, should be based on open competition, merit review, and systematic evaluation of outcomes. Those are the best methods that we know to ensure a quality research product.

If FHWA's research program can be reformed along these lines then that, of course, requires actions by them, as well as the Congress. The committee supported a significant increase in funding. If it was not possible to do that, it recommended that stakeholders work with the Congress to explore other mechanisms for accomplishing these same goals.

Then last, there were several other recommendations that I'll just briefly mention: a continuation of the State planning and research program, which is very, very important. They endorsed the Future Strategic Title Research Program, which I think you'll hear more about later, and they supported continuation of the University Transportation Centers Program, and urged that, again, open competition, merit review, and stakeholder involvement be features of those programs, as well.

I'll conclude right at this point, and I'll look forward to your questions later. Thank you.

Dr. WOMACK. Thank you.

Dr. Walton?

**STATEMENT OF DR. MICHAEL WALTON, PROFESSOR,
UNIVERSITY OF TEXAS AT AUSTIN**

Dr. WALTON. Kevin, thank you and good morning.

First of all, let me express our appreciation to the committee for convening this event. We sincerely appreciate it, and thank the members of the staff for being here and participating, as well. We look forward to the discussion.

My name is Mike Walton. I'm with the University of Texas at Austin. I hold faculty positions in engineering in the LBJ School of Public Affairs.

I'm here this morning to speak to you about a new initiative, the Future Strategic Highway Research Program. As you know, that was called for in TEA-21. It asked the NRC, or the National Research Council, through the academies and TRB, to convene a study group to determine the goals, purposes, and research agenda for projects, administrative structure, and physical needs for a new F-SHRP initiative, building on the previous success of F-SHRP in the past, but looking at it in a broader context.

The effort that was undertaken was to probably convene the most extensive outreach program which I have experienced in my career, and include numerous items of input from groups across the country, some from outside the country, as well, who had participated in previous programs.

From that, we were able to develop Special Report 260 entitled, Strategic Highway Research: Saving Lives, Reducing Congestion, Improving Quality of Life. It recommends the establishment of a Future Strategic Highway Research Program, comprised of four strategic areas, which I would like to quickly identify with you.

First is renewal; accelerating the renewal of America's highways. The research goal in the renewal area is to develop a consistent systematic approach to performing highway renewal that is rapid, causes minimum disruption, and produces long-life facilities.

Now what does that mean? It means, get in, get out, and stay out, basically, on our highway. We think that is an important objective, and one that we heard a great deal from the constituent groups who participated in the discussion.

Safety is the second area, making a significant improvement in highway safety. The research goal in the safety areas is to prevent or reduce the severity of highway crashes through more accurate knowledge of cause factors that create the crashes, and the cost effectiveness of selected counter measures in these factors.

This is a substantial opportunity and goal in which, again, we figured, to the extent of the input we received and the severity of the problem, that this is a major initiative, where we need if not a significant improvement, perhaps a quantum leap, if you will.

Reliability is the third area, providing a highway system with reliable travel times. The goal in this area of reliability is to provide highway users with reliable travel times by preventing and reducing the impact of non-reoccurring incidents.

The fourth area is in capacity. Providing highway capacity in support of the Nation's economic environmental and social goals. The research goal in the area of capacity is to develop approaches

and tools for systematically integrating environmental, economic and community requirements into the analysis, planning, and design of new highway capacity; a substantial objective.

Some of these projects or topics are obviously not new; but in essence, we are looking at resources that could be brought to bear that would provide us the opportunity of leaping beyond the incremental approach to the particular issue.

Special Report 260 provides a strategic direction and a conceptual design for F-SHRP. Additional detailed planning is currently underway. It is funded and supported by AASHTO and FHWA. Under the NCHRP Program, that area is intended, or that initiative is intended to flesh out, if you will, these four strategic areas, and build a research program behind that.

The Secretary of Pennsylvania DOT, Brad Mallory, is chairing this oversight panel, and we now have over 100 members of the highway and transportation community participating in the development of those plans and programs.

There is a list of those who are participating in this initiative, at least on the oversight committee, attached to our report. Kevin, we look forward to further discussion when we have the opportunity.

Dr. WOMACK. Thank you.
Professor Deakin?

**STATEMENT OF ELIZABETH DEAKIN, PROFESSOR,
UNIVERSITY OF CALIFORNIA AT BERKELEY**

Ms. DEAKIN. Thank you. I'm Elizabeth Deakin. I'm a professor at the University of California, Berkeley, where I have faculty appointments in actually four different groups, in city and regional planning, and then affiliate appointments in civil engineering, urban design, and energy and resources.

In addition to chairing one of the 10 regional transportation centers established under the UTC Program, for the last couple of years, I have been serving as the chair of the Surface Transportation Environmental Cooperative Research Advisory Board, which was established, as you know, under TEA-21, through a call to the Secretary of Transportation, to establish a board to look into the needs for research in transportation, energy, and the environment.

The Board has 17 members. The members draw from a very broad range of disciplines and backgrounds. We include State DOT representatives, metropolitan planning organization representatives, people from environmental organizations, and academics.

We started our work by looking at what the State and Federal agencies that carry out transportation environmental research were doing. One of the complications, of course, with this area is that there is not just DOT doing research, and State DOTs doing research, but research also extends into the Environmental Protection Agency, the Department of Energy, Housing and Urban Development, Agriculture, Interior. Lots and lots of different agencies do research on transportation and the environment.

We also held a workshop in which we invited over 100 people to participate and help us identify research needs and discuss what the current research issues were. We based our work on that input that we got.

One of the findings that I think is most important for this committee is that it was very clear that research and transportation in the environment has been under-funded for a very, very time. Because it has been under-funded, there is a gigantic backlog of research needs in this area.

The research that is going on, and there is important research going on, is mostly focused toward the short-term, immediate needs the agencies that are carrying out that research.

While that is very important for the agencies to do, the people who testified to us and our own committee membership identified that a real problem was that there isn't any long-term focus, and there is not a long-term strategic plan, to go beyond the issues that are mitigating environmental problems as they arise, to really looking at the fundamental causes of those environmental problems, and finding ways to avoid those problems.

So the need that we've identified is for a really systematic research program that can look at both short-term and longer-term transportation, environmental, and energy research issues, and get beyond short-term issues, while those are important things to address; but to also look at the longer-term more fundamental issues, where we really think we will find a big payoff.

An investment in that kind of long-term focused strategic research is something that we think we really need to do, and we need to do quite soon, because we have got a lot of catching up to do in this areas.

The committee's report, which is in this form right now, a pile of draft chapters, will be out in about a month, I believe, or at least we're hoping that that's the schedule we can keep to. The report's reviews are being completed right now. The response to reviewers are basically done.

We had 11 reviewers on this report, which I think might be a record for the Transportation Research Board. It is many times the typical number of reviewers.

There were three overall reviewers, and then an additional eight reviewers who looked at specialty areas of the individual chapters, in addition to the National Academy of Sciences Monitor and reviews by senior administrators and staff at the TRB itself. So it will be a very carefully reviewed report, when it is finally issued.

The findings that we've made or that we need to do research are in six basic areas. Those areas are the relationship between transportation and human health; the relationship between transportation and natural ecology, natural systems; environmental and social justice issues; emerging technologies and the role that they might play in addressing transportation energy and environmental issues; land use and transportation; planning and performance measures. So those are the six areas.

In each of those areas, the report provides an initial agenda of research topics, where we think research can profitably be done. It will give us both short-term payoffs and longer term benefits.

In addition to looking at those particular issues, the committee thought quite hard about what the best way of organizing this research would be. We recognize, of course, that we do have this multitude of existing research institutions.

But having looked at those institutions, we also concluded that because we've had such a backlog and such a need for environmental research, we need a cooperative research program for transportation and the environment, that could be a partnership of public and private actors and the nonprofits, who are very interested in this topic, as well, where they could pool resources and try to address some of the conflicts that arise over transportation, energy, and environmental issues in a dispassionate way by having an independent organization that would be able to look at that.

So another recommendation we make, in addition to doing research on these six topic areas, is that we establish a new cooperative research program on transportation and the environment.

I would also like to say just a couple of words about the University Research Program, since I am director of one of those centers. The University Research Program grew under both ISTEA and TEA-21 from the 10 regional centers that we started with in 1987, to 33 centers now. The rest of the centers were earmarked centers, identified specifically in legislation.

We believe all the centers have found ways to be productive and to produce important products, but we also think that the centers are quite under-funded, at this point.

The 10 regional centers, in particular, haven't had a raise since 1987. We are operating on the same budget that we had in 1987, or actually a reduced budget, because we are now subject to Federal budgeting rules, so we have had reductions in the amount of funding that's actually provided to us.

That has made it extremely difficult for us to carry out the role of education and research that we think is so important. It was said earlier that we need to be producing new researchers for our programs in transportation, and we think the University Program is the way to do that. We produce students. That's one of our primary products. But we need funding to be able to do that.

We have been successful so far, and we think we could be more successful in the program were funded at a higher level. Thank you.

Dr. WOMACK. Thank you, Professor Deakin.

We would like to turn the time now over to Senator Jeffords and welcome him.

**OPENING STATEMENT OF HON. JAMES M. JEFFORDS,
U.S. SENATOR FROM THE STATE OF VERMONT**

Senator JEFFORDS. I want to thank you all for coming. This is a very important meeting, as far as I'm concerned. I appreciate the participation.

We are beginning the undertaking of the daunting task of preparing a new transportation authorization bill. The research title within that bill is a key component to the future performance of our highway system. I am pleased that in lieu of a research hearing, we have been able to put together this discussion today.

My thanks go to the panelists, and I appreciate your willingness to share both your knowledge and your time with us. It is extremely important as we move forward on this legislation.

I am a firm believer in the need for research. It is through research that we would be able to take the demands that are placed on our surface transportation system and improve our performance.

The use of new materials, construction methods, and technologies will help us rebuild our aging infrastructure with a modern and more durable one.

In Vermont, at the University of Vermont, we have a project underway that is investigating the use of new wireless technology to ascertain the integrity of the highway structures. It is my hope that in some small way my State is playing a role for the advancement of highway efficiency and performance.

It would be through the application of technologies that we will increase the efficiency and safety of our surface transportation system.

Research can also help us better manage and operate the system. Our roads and bridges are stronger and last longer, thanks to the quality of research we've had in the past. I believe that system efficiency and operational performance can realize similar benefit through research.

So please keep this in mind when you discuss things today, and I look forward to your results, especially if you are going to solve other problems.

Dr. WOMACK. We hope so.

[Laughter.]

Dr. WOMACK. Thank you, Senator. You are certainly welcome to stay with us as long as your schedule would allow. We appreciate you coming.

Senator JEFFORDS. I will be able to stay for a while, so go right ahead.

Dr. WOMACK. All right, thank you.

Mr. Riva?

STATEMENT OF VAL RIVA, AMERICAN CONCRETE PAVEMENT ASSOCIATION

Mr. RIVA. Senator and members of the panel, I was going to say this anyway before Senator Jeffords arrived, but I think it is more appropriate now, even so.

This is the fourth Federal highway bill that I'm going to be working on, in various capacities. I cannot recall a time when either this committee or any committee in the House of Representatives has put research and development at the forefront of the legislative process, as you have today.

Given the size of the Federal Aid Highway Program, I think that it's not only appropriate, but it's putting the entire agenda in a very appropriate order; and that is, to assess what needs to be done in the future, in conjunction with what's being done in the core program areas. So I applaud you for doing that.

I have a lengthy statement, so I won't even both to go through most of that. I would also like to thank the Iowa State Research Center. They have traveled here without any budget, as I understand it, to be here today, and Debra Larsen and Dale Harrington, who is the Director of it.

I have a couple of just very basic points, and I will keep to my 180 seconds. The American Concrete Pavement Association, and

that's the first and only time I will mention concrete pavement in this whole presentation, believes in a couple things. That is that effective research has a couple of key components.

One, it must be useful. We believe strongly it should be applied research, with a goal of promoting cost effective, durable, and safe pavements. We believe that it should be without regard to the type of pavement, even though there are only two types, since you can put down concrete and asphalt.

We also agree on something that Mr. Bud Wright from Federal Highways pointed out. That is that education and knowledge transfer is absolutely critical.

Many of our students coming out of undergraduate, civil engineering programs have very little knowledge of what it is to specify or to understand the different kinds of pavement. They can only get that later on in their programs. In some far-reaching programs, they may have an in-depth indoctrination, if you will, on that, but that is not often the case.

We believe that's something that should be addressed, because these are the individuals that will be going to work for the Department of Transportation and other sectors that will have a pivotal role.

We also believe that the best research is going to be conducted in a cooperative effort between the public and the private sector, in academia, and the State DOTs. To our mind, this makes the best of not only maximizing intellectual capital, but also leveraging the scarce resources that undoubtedly will come into play.

We don't believe that any entity has absolutely the best and only solution to an issue. We find that if you clearly define and delineate the objectives that a research program has, then the best way to go about that is to bring those individuals to those parties together in an open, competitive process, and let them get to work.

We, ourselves, have been involved in an entity called the Innovative Pavement Research Foundation, which we believe has brought some of those key issues to the front.

We also believe that future research should not only be applied, but it should focus on pavement replacement, and upgrading the congested facilities we have in this country. I think it stands to reason that the amount of new construction, in many cases, is going to be hampered.

Therefore, we have to find ways to make better due with the existing facilities that we have, construct the work faster; do so in a way that's environmentally sensitive; and do so in a way that changes or reduces the disruption and inevitable delays that come about as a result of construction.

We also think that in terms of even more specifics, that we should focus on the materials that are used, without regard to the type, again, the education aspects; and with always a mind to environmental mitigation.

In conclusion, I urge you to draw strongly from Government, from academic, from industry, in a partnership that draws the best from each one of those sectors.

Thank you, that's all I have for now.

Dr. WOMACK. Thank you, Mr. Riva.

Dr. Eighmy?

STATEMENT OF DR. TAYLOR EIGHMY, DIRECTOR, RECYCLED MATERIAL RESOURCE CENTER, UNIVERSITY OF NEW HAMPSHIRE

Dr. EIGHMY. I'd like to thank the Senator and the committee staff for the opportunity to be here today, and to participate in this discussion.

My name is Taylor Eighmy, and I direct the Recycled Materials Resource Center at the University of New Hampshire. It's a partnership with the Federal Highway Administration to promote the wise use of recycled materials in the highway environment.

My written testimony that I provided has a number of specific concrete ideas for research needs that were developed out of many stakeholder meetings that have taken place over the last year or two, so I'm not really going to touch base on those.

I want to give you four take-home messages for today. They are really related to barrier reduction about using recycled materials in the highway environment.

The first take-home point is that this research on recycled materials is going to require strategic partnerships. The second one is that these research activities have to be linked to the highway community. You have to put useful information and tangible products in the hands of decisionmakers.

These research activities not only must produce more basic knowledge, but these tangible products that must also evolve have to be things like material specifications; performance specifications; best practices; guidance; evaluation methodologies; particularly to predict long-term performance of recycled materials; policy analysis as research; and demonstration projects. Demonstration projects are a great way to, pardon the bad pun, go out and kick a tire, so that people can understand that a proposed material in a new application can work.

My last take-home message to you all is that a measurement of research success needs to be put in terms of actual use of the product by the highway community, particularly the State DOTs. Although I will mention, I think it is interesting to note that our center also feels that one of our principal clients, in addition to the State DOTs, is also the State EPAs. You can't ignore them in the recycled materials arena.

But the notion here is that if you want to measure return on investment, you have to look at the use of the product. Thanks.

Dr. WOMACK. Thank you, Mr. Eighmy.

Mr. Bernstein?

STATEMENT OF SCOTT BERNSTEIN, SURFACE TRANSPORTATION POLICY PROJECT

Mr. BERNSTEIN. That's a hard act to follow.

Good morning, and let me echo my thanks to the committee and the staff for putting this together. I'm Scott Bernstein. I'm President of the Center for Neighborhood Technology in Chicago, a non-profit community development and public interest engineering group.

It is my privilege to be a cofounder of the Surface Transportation Policy Project, a coalition of 800 environmental, economic development, business, and community interests around the country, who

came together back in 1990 to help articulate a vision for transportation that works for people in communities.

As we've thought about the challenge, in the letter inviting us, on the successes and failures of research under TEA-21, the principal that we identified is that the stated purposes of ISTEA and TEA-21 should really be what guides the federally supported research information and research and development agenda. Just to re-articulate, those purposes are intermodalism, economic efficiency, environmental quality, and equity.

We took a review of the expenditures and the activities against those principles. I want to address really briefly this morning five gaps or challenges that we think are there, and hopefully boil this down in under 3 minutes to three recommendations.

The first of those gaps is in the area of transparency; the ability to actually see how our resources are being used. By analogy in another field, the Home Mortgage Disclosure Act and the Community Reinvestment Act require lenders to disclose sort of the origin and destination, if you will, of depositors' money on a community by community basis.

This has been going on since 1975, and every day in America, hundreds of thousands of people log on to the Internet or walk into their institution, and they can find out where their money is, and where it's getting reinvested in.

The lending institutions have not only gotten used to this, but the Federal Reserve Bank found that the best performers in being transparent in America turn out to be the most profitable in America, as well. So it works. They actually open up the system and, if you will, take an eye glass to how our resources are being used.

If we take a look at the financial management information system of DOT, as an example of what that eye glass looks like for transportation expenditures, it's impenetrably dense.

We have staff here who can speak to it, if you have questions. But every 2 years, we go through an amazing activity to de-code that and make it publicly available. If the codes don't correspond to functions, activities, or outcomes, it's impossible to do a good tracking system.

We ought to be able to do better. That's an example, and there are many other information systems that we think could be similarly re-engineered.

The second is that good data should support good science and good decisions, but bad data is going to work the other way. The National Personal Transportation Survey is the only national source of data on travel demand.

We all depend on it for input into our metropolitan and State models and programming activities. It's supposed to be a representative survey. If you take a close look at who's actually surveyed, it's mostly a middle class survey.

You don't know how higher income people are traveling; but more importantly, it's a telephone-based survey, and it misses many, many low income people; people living in group quarters. It misses the institutional population, living at colleges and universities. As a result, it undercounts, for example, transit users by a significant degree.

It's been stated that this is a money problem, but we don't think so. We think there are ways to include that sort of data collection. We think that it inadvertently also leads to the labeling of people who don't have cards as autoless households, to use a phrase from an annual report put out by one federally supported researched.

That doesn't help us make decisions, particularly for a population where now the overwhelming majority of Americans live in metropolitan areas, and are trying to articulate transportation choices.

The third area has to do with inner city travel. The recently released American Travel survey focuses on long-distance travel. It's interesting that it does state that 81 percent of trips over 100 miles are taken by car. Only 16 percent are taken by aviation, 2 percent by motor coach, and a half percent by train.

We are fascinated by the 81 percent, and think this ought to be taken into account, as we think about intermodalism; but more importantly as we think about security investments, in light of September 11th.

Every day, it seems Congress is being asked to consider very significant expenditures for transportation security. The data on the actual security events, over a 40 year period, seems to show that there is less likelihood of attack with surface transportation; and in particular, with mass transit, than with aviation. This strikes me as a strategic issue for the committee to want to think about.

Then there are the values of fixing it first and thinking about the economic impact on households. The longer things last, the more it's worth. When the useful life of highways was adjusted in the GDP accounts from 60 to 45 years, the value of the United States dropped in those GDP account by \$140 billion. This is just an example of how much this is worth.

In Northeastern Illinois, the agencies there, the MOP and the COG, found that since the passage of TEA-21, the amount of money spent on the program, totally going to fix-it-first activities, preservation and maintenance, increased from 55 to 80 percent, with a new impact of billions in one region alone. But they had to dig that information out.

It strikes me as a performance indicator for what is effectively a fix-it-first bill, that we ought to be getting that kind of information.

Finally, on household economics, it seems that where you live really makes a difference. If you have one car instead of two, or two cars instead of three, there's an enormous economic impact on households and users.

There is no program to speak of on user economic impacts that is anywhere within the Department of Transportation. There is a chapter on economics in the Bureau of Transportation Statistics Report. They don't seem to be directly funded to even consider this. If people aren't the end users of the system, then who are?

So our three recommendations are that first, information and research should be less modally and technology-oriented and more end-use oriented. This was one of the promises of creating Bureau of Transportation statistics. They hardly get enough funding to do a respectable job in this.

The second is that information and research should be approached as a comprehensive effort involving both the Federal Gov-

ernment and other sectors. That's the only way to get on top of this and to address the funding problems that many people have spoken to here.

If I can contrast with this year's Welfare Reform Bill, close to \$100 million was spent by the Federal Government and by foundations in the United States, to get ready with an information set, so that the authorizing and appropriating committees would have the information needed for a good debate.

The feedback we're getting is that it's really paying off. There's time to actually put together that kind of partnership here and we ought to think about it.

Finally, the data collection should really be structured to answer the kinds of critical questions that users are really posing, so that the transportation investigations that result really meet end-use community needs.

Walter Lippman once noted that democracy means paying attention. Every day in America, every week, there are thousands of organizations who have taken the choice to get increasingly involved in planning the future of their transportation system, despite the availability of the quality data they need.

I think we owe it to them to put together the support structure, so that we get the best bang for the buck here, and meet that challenge.

Thank you very much, and we'd be happy to answer any questions.

Dr. WOMACK. Thank you, Mr. Bernstein.

Mr. Carlson?

STATEMENT OF DAVID B. CARLSON, NATIONAL ASPHALT PAVEMENT ASSOCIATION

Mr. CARLSON. Thank you.

Thank you for providing this excellent forum on the Reauthorization of the Surface Transportation Research Program. I ought to mention that our company from Iowa does both concrete and asphalt work, but I'm here today representing the National Asphalt Pavement Association.

NAPA represents companies that manufactures hot mix asphalt, used in the construction of roads, streets, highways, parking lots, airports, environmental, and recreational facilities.

In short, Mr. Chairman, NAPA recommends Congress authorize a multi-year asphalt pavement research and technology program, managed by the Federal Highway Administration, with oversight input from members of the American Association of State Highway and Transportation Officials, AASHTO, and the hot mix asphalt industry.

Our national highway system, as established by an Act of Congress in 1956, has now reached its maturity. President Eisenhower would be astonished to learn that 45 years later, the National Highway System would carry 200 million passenger vehicles, and 3.4 million trucks and buses.

The volume of freight transported over highways is expected to double in volume over the next 20 years. This trend will maintain three decades of growth, as vehicle miles traveled increased 143 percent, and vehicle miles traveled logged by trucks, in particular,

increased 225 percent. Yet, over the same period, miles of roadway increased only 6 percent.

These divergent factors have led to serious congestion on our Nation's highways. The roads are handling more vehicles than the pavements were designed to handle.

The results of highway congestion are often tragic, with more than 40,000 deaths per year, and three million injuries resulting from traffic accidents. The fact is that our national highway system is outdated and breaking down from overuse. Unless we plan effectively and use our highway dollars wisely, there is a real potential for an increase in the number of highway deaths.

Mr. Chairman, there is clearly a need to increase Federal funding to prevent the deterioration of our road system and provide for growing needs. In addition, NAPA strongly believes that there is a fundamental need to invest in research and development.

Funding a focused, multi-year national research program would pay huge dividends to the public, resulting in highways that are safer and environmentally friendly, designed for perpetual use, and repair projects that are quick and reduce traffic congestion.

Highway research is an ongoing need. Exciting opportunities exist to improve pavement performance, develop better methods of maintenance and rehabilitation, and optimize resources through recycling and speed of construction.

The hot mix industry believes a new approach to designing highways is needed that takes into consideration not just the thickness of the pavement, but the combination of materials used to construct an optimal pavement structure, a perpetual pavement.

A perpetual pavement is designed as an asphalt that is designed to last longer than 50 years without requiring reconstruction, with only occasional surface renewal. Examples of long-life hot mix pavements exist around the country.

Criteria needs to be developed so that the selection, design, and construction of perpetual pavements becomes a conscious process. A federally funded and managed hot mix research program could develop the very tools that highway designers and contractors need to build perpetual pavements.

New and improved pavement technologies and materials can also achieve significant long-term savings. The total replacement value of the Nation's highways and bridges is estimated to be \$3 trillion. If research can improve the performance and durability of roads and bridges just by 1 percent, the direct savings would be in billions.

NAPA recommends that Congress authorize and fund an asphalt pavement research and technology program in the next Transportation Reauthorization Bill. Furthermore, NAPA believes the Federal Highway Administration is best suited to manage the APRT Program with oversights that include AASHTO and the hot mix industry as equal partners.

The APRT Program should be funded at \$25 million annually, and focus on fundamental, long-term research aimed at achieving breakthroughs in our understanding of hot mix pavement materials, design, and performance. Such research should also be aimed at addressing research gaps, and not addressing other highway

R&D programs, as well as emerging issues with national implications.

In order to ensure the APRT Program is responsive to the major stakeholders in highway innovation, the oversight structure should include an Executive Committee consisting of HMA pavement experts from FHWA, State Departments of Transportation, and the hot mix industry, each having an equal voice.

The Executive Committee would provide oversight and input in support of an APRT program. Research advisory committees would be formed to guide research projects and consider research initiative studies.

I would be pleased to answer any questions you may have. Thank you.

Dr. WOMACK. Thank you, Mr. Carlson.

Dr. White?

**STATEMENT OF DR. CHELSEA C. WHITE, GEORGIA TECH, ON
BEHALF OF ITS AMERICA**

Dr. WHITE. Thank you, Kevin, for the opportunity to participate in this round table.

I'm Chip White, a member of the ITS America Board of Directors and a Professor at Georgia Tech. I'm testifying on behalf of ITS America, a non-profit 501-C3, which has over 600 member organizations from the public, private, and academic sectors, representing some 60,000 individuals worldwide. ITS America is also a utilized Federal advisory committee to U.S. DOT.

Let me now briefly mention the work needed to continue our efforts to build on the ISTEA and TEA-21 investment in ITS research and deployment, in order to fully realize the benefits of ITS technologies.

Regarding security, last September 10, ITS America last testified before this committee on the oversight of the Federal ITS Program.

The following day, traffic operation centers in Northern Virginia and in New York City, which were designed to monitor traffic flows and respond to crashes, provided the communications needed for effective evacuations and the efficient management of emergency response personnel. Without ITS systems in place, these evacuations would have certainly been slower and less orderly.

ITS America's Homeland Security Task Force has recommended that in reauthorization, we focus attention on a variety of security-related applications of ITS, including planning for evacuations and quarantining, traffic surveillance and incident detection, emergency communications hardening and redundancy, and asset tracking for commercial vehicles, transit systems, and cargo.

More broadly and in compliance with TEA-21, ITS America has recently released the National Transportation Systems Program Plan, which outlines a vision for ITS research and deployment over the next 10 years. Besides creating a transportation system that is well protected and secure, this plan proposes advancing ITS to improve safety, enhance sufficiency, increase mobility, and improve the environment.

In order to meet these goals, the 10 year program plan proposes focusing the Federal ITS Program on four areas: an integrated network of transportation information that involves the instrumenta-

tion of major intersections and roads, as well as data collection from commercial vehicles, transit, and rail; advance crash avoidance technologies, such as collision avoidance and adaptive cruise control; automatic crash and incident detection, notification, and response; advanced transportation management systems that enable area-wide surveillance and detection; and operational responses to traffic flow changes.

In conclusion, ITS technologies hold the promise of continuing to provide our citizens with the most secure, the safest, and the most efficient transportation system in the world. ITS America looks forward to working with you to design the research and deployment programs that will help keep this promise. Thank you.

Dr. WOMACK. Thank you, Dr. White.

Dr. Tarnoff?

**STATEMENT OF DR. PHILIP J. TARNOFF, ON BEHALF OF THE
INSTITUTE OF TRANSPORTATION ENGINEERS**

Dr. TARNOFF. Thank you and good morning. I also would like to express my appreciation for the opportunity to participate in this round table.

I'm Phil Tarnoff. I'm the Director of the Center for Advanced Transportation Technology at the University of Maryland. I'm here today representing the Institute of Transportation Engineers.

ITE firmly believes that the Federal Government must continue to play a strong leadership role in the coordination and pooling of resources for research and development that cuts across systems and modes. In order to ensure the maximum benefit to the traveling public, the results of this research must be made available as quickly as possible, for application nationwide.

In reflection of that, ITE has prepared six major recommendations on research that we feel strongly should be incorporated into the revised Surface Transportation Bill.

The first recommendation deals with the Future Strategic Highway Research Program, F-SHRP, that was described so capably by Mike Walton earlier. This funding should be provided through a one-quarter of 1 percent take-down of Federal Highway Funds, which would be approximately \$450 million to \$500 million, over the life of the bill, and support the four key program goals, as Mike described them, of renewal, safety, reliability, and capacity.

ITE's second recommendation is to increase funding for the Transit Cooperative Research Program, TCRP, from \$8.25 million per year, which has not increased since 1993 and, in fact, has decreased slightly, to a level of \$15 million in fiscal year 2004, and ensure that future increases are proportional to increases in Federal transit allocations.

A third recommendation is, we feel that there is a need for a much more focused research on intersection safety countermeasures. Currently, 44 percent of all accidents nationally occur at intersections. So it makes perfect sense to provide this focused emphasis.

In November, 2001, ITE hosted an intersection safety conference with the Federal Highway Administration and other transportation organizations. I have brought a preliminary draft of the conference findings for your review.

I would want to say that the transportation professionals who participated in that conference identified the need for additional data regarding human operations and design factors that lead to increased intersection safety. These issues are described in the detailed statement that we're providing.

The fourth recommendation is that the Secretary of Transportation initiated a study through the National Academy of Science to identify the best practices of incorporating operations and safety into the planning process. Currently, these activities are under-represented in the planning process, and additional emphasis is needed.

In 2001, ITE, as a member of the National Steering Committee on Transportation Operations, hosted the National Summit on Transportation Operations with Federal Highways. I have also brought findings of this conference for staff reviews.

Issues related to transportation systems integration and management, jurisdictional cooperation and communication, implementation of performance measures, and data collection were identified by summit participants, and could greatly benefit from research and best practices.

The fifth recommendation is to continue to fund the ITS research and deployment program, focusing on traffic management center operations, traffic incident management, traffic signal system management, public transit management, and advanced travel information systems. While significant progress has been made, there is a continuing need for additional research focus on these areas.

Improved technology is needed in response to increasing travel demands, and the resulting degradation in safety and increased congestion. The public is demanding improved transportation reliability, and so research is essential in this area.

The sixth recommendation is to support the findings of the Transportation Research Board's Special Report 261, prepared by the Research Technology Coordinating Committee of the National Research Counsel. I believe Bob Skinner mentioned this. We believe that investments in transportation research lag significantly those made by most other sectors of the U.S. economy.

As a result, the transportation community cannot take advantage of the many technological improvements emerging from the fields of information technology, materials, reliability, and operations research.

In addition, and possibly more significant, it is difficult for universities and other research organizations to attract the best talent needed to address the needs of this community, because of these funding shortages.

So in conclusion, ITE strongly believes that these recommendations are instrumental to ensuring the future safety, reliability, and security of the transportation system. ITE appreciates the opportunity to share our views, and looks forward to working with you in the future.

Dr. WOMACK. Thank you, Dr. Tarnoff.

We'd like to welcome Senator Reid, who has joined us, and turn the time over to him for a few remarks.

**OPENING STATEMENT OF HON. HARRY REID,
U.S. SENATOR FROM THE STATE OF NEVADA**

Senator REID. I apologize for being late and for having to leave early. The Senate is still in session, and we have some things that I need to be working on there.

Let me just say though that I really support Chairman Jeffords in this symposium, this task force, or we can call it whatever we want. But it's really, I think, the future of how we need to do things here in the Senate.

We have been doing things the same way since I came here 20 years ago, and I think we need to change. That was done, I bet, many, many years before I got here. That is, we have hearings, we have panels, and everyone talks for a few minutes. Senators come in and out; mostly out.

I think we need to do more things like this. While we may not want to admit it, we here in the Senate are not really as in tune with the issues as they are in the House. House members are very limited in their jurisdiction. If you serve on the Transportation Committee on the House, you spend a great deal of time working on transportation issues.

Here in the Senate, we are a jack of all trades and a master of none. We depend very, very heavily on our staff. That's not the way it is in the House. That's why, when we go to conference, even though I'm probably giving away some trade secrets here, we have to have our staff with us because we, a lot of times, don't know what's going on.

We want our staffs to be well equipped to do this. That's what this hearing is all about, this symposium, so that one of the most important aspects of transportation, and that is research, gets a full airing; and these staff people who are so good, and have devoted their lives to public service, are able to better understand the research aspect of this, and then give it to us.

I've been chairman of this committee on two separate occasions, and now I'm the chair of this subcommittee dealing with transportation. I've talked to Mitch Warren, my clerk on this most important subcommittee, and we're going to attempt to do things like this in the future, in addition to our standard regular hearings.

We also, I think, are going to look to maybe developing some task forces, composed of people just like this hearing, people from the academic world, people from government agencies, advocacy groups, people from the private sector, and get them together.

Then we could have a hearing where a couple of people with majority views, and if there are minority views, could report to us on what we should do in a certain area. So we are looking at different ways to accomplish the goal that we're trying to meet, and that is to have a better transportation system in this country.

We all share a goal of building a more durable, safer and efficient service transportation system; but having said that, it's not easy.

So thank you all very much for being here. Understand that Senator Jeffords and I weren't planning on spending a lot of time here. We will, of course, spend time with our staffs. I had a good briefing with Dr. Womack and Mitch Warren yesterday, talking about this and the other things that need to be done in this area.

I am grateful to you for being here, and want you to be as free and open as you can be, because we need to come up with a good bill next year. Thank you.

Dr. WOMACK. Thank you, Senator Reid. We appreciate you coming.

Mr. Ryan?

**STATEMENT OF MICHAEL M. RYAN, PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION, ON BEHALF OF AASHTO**

Mr. RYAN. Good morning and thank you, Dr. Womack, for the opportunity to testify or to present the American Association of State Highway and Transportation Officials' viewpoints on research.

I'm Mike Ryan. I'm the Deputy Secretary with the Pennsylvania Department of Transportation, responsible for highway administration.

I think we all agree that the innovation or the process of innovation involves four activities: the research, the technology transfer of that research, the training of individuals to implement the results of that research, and the education of people to do the research.

While we discuss the various aspects and components of that activity or those activities, the fact remains that transportation demands are increasing on our system.

There is more traffic out there. There are more passengers wanting to use transit systems and aviation. There's heavier vehicles, and our infrastructure is aging. I think we generally agree that no bill is necessarily the option or the solution to this dilemma.

Meanwhile, we need to search for new materials, new technologies, new practices and new policies to help us better cope with the demands on our transportation system.

As we have put together AASHTO's Research Reauthorization Report, I believe two themes have generally emerged. The first one is the need for enhanced fundamental, long-term higher risk research. We need to do essentially more of that type activity.

You don't have to look far to find successes in the recent past: the Strategic Highway Research Program in the late 1980's and early 1990's. I can tell you from our perspective in Pennsylvania, Super Pave is doing a great job in helping us come up with pavement designs to resist the heavy loads of trucks.

On pavement preservation, we have found micro-surfacing and things like Novachip that can give us durable thin pavements that can be economical and cost effective over a shorter period of time. We have changed our concrete pavement design to have 90 degree joints at 20 foot spacing, as a result of the data that we collected from LTPP.

In the areas of winter services, we have essentially revolutionized our work in that arena, just in the last five to 10 years. Roadway weather information systems are providing real time data to our customers out there.

Pre-wetted salt is reducing the demands on the amount of salt. Anti-icing is helping us take care of critical bridges in Pennsylvania. Zero velocity spreaders are enabling us to get over our system a lot quicker and using less material, which can be environmentally friendly.

Another example is in the area of ITS. You've heard testimony today about easing congestion and saving lives. Essentially, what we are doing is talking to our customers in real time, and providing them with the information that they need to navigate our system.

The second theme that has emerged in developing our report is the need to do more aggressive training, technology transfer, and education. AASHTO supports the UTCs. We believe that the future of research is training students that can do a job and do the kinds of fundamental long-term, high risk research that we're looking for. That's our investment in human capital.

We also support training such as NHI and NTI, and the LTAP process, where we convey the knowledge and the results of research over to the local governments.

We also support international scans. Recent scans in the area of truck size and weight, intermodal freight movement, and recycling of materials have all brought back good ideas from other countries, and enabled us to enhance our knowledge in those areas. I think there are opportunities to continue on.

Following ISTEA, I think you've heard today that we've done a lot. F-SHRP has been developed as a way to save lives and improve the quality. We support that.

We are very hopeful that F-SHRP will be like SHRP was. Granted, it's a series of rifle shots. Some will hit their target and some will not. But essentially, when you invest in long-term, high risk research, that's the chance that you take.

The National R&T Partnership was a great effort. It was a bottom-up approach, a voluntary approach, an inclusive approach. We now have a huge catalog of desires in the research arena on a national basis.

If we were to fund all of those recommendations, it would probably cost us about \$700 million per year. That is certainly much larger than we believe we can afford. But the fact is that we used expert stakeholders, partners, to help put together that program, and it represents a great menu for future research.

We also are anxious for the TRB Environmental Cooperative Research Program. We think in the environmental area, from the State's perspective, we need to save time. We need to enhance the quality of life, as we pursue transportation improvements, and we need to build trust with the resource agencies out there.

In the area of FHWA, the RTCC Report finds that the FHWA is best suited to be that vehicle to provide the long-term, high risk type research. That's going to require changes, and we've been hearing from the FHWA a willingness to outreach to our partners and our stakeholders, to be more inclusive in that effort. We're pleased by that approach.

Finally, I haven't said anything about State research at the SPNR level. We are very happy with the amount of applied research that is occurring at the State level now. We are not necessarily asking for increased funding, but just to maintain that program, because that's essential for the States in order to solve their day-to-day problems.

We have taken a stab, for the first time, at recommending funding. The last page of my five page presentation, Table 1, has spe-

cific recommendations to target dollars for the various programs that we've looked at.

We've tried to be very inclusive, in that we wanted to include all the programs, all the research programs, that were contained in TEA-21. So in essence, it's a one-stop shop, in terms of research recommendations.

If you look at the dollars and totaled them, and they are not totaled because it is still a draft report, it represents about 2.5 percent, assuming a \$30 billion a year program. If you add in State and local funding, that percentage drops to well less than a half of a percent, on a national basis. So research is not occupying a very big part of our overall program.

We also support in there several new programs that have been testified about here this morning: environmental quality, the Cooperative Research Program. We think we need research in the area of airport operations and motor carrier safety. Those were not necessarily mentioned today.

I just would like to conclude by saying that AASHTO, in and of itself, is a customer of research. We are not into research, ourselves. We believe that from that vantage point or that perspective, we can be fairly objective in the programs and the suggestions that we're representing.

So with that, I conclude my comments, and I will take any questions later on. Thank you.

Dr. WOMACK. Thank you, Mr. Ryan.

We'll begin the round of questions with the staff members. So we'll turn the time over to Mr. Squires for his questions.

Mr. SQUIRES. Thank you, Kevin.

I'm sorry that I arrived late and didn't have a chance to hear introductions or introduce myself. I'm the Senior Policy Advisor to Senator Jeffords on transportation, and with the majority staff at EPW, and am working with my colleagues on the reauthorization effort.

Let me begin by thanking Kevin for his hard work in pulling together today's event. I think the results speak for themselves. This is a wonderful turnout, and I thank all of you for assisting us.

I was formerly with the Vermont Agency of Transportation, and your comments, Mr. Ryan, on advances in winter maintenance certainly resonate. Certainly, just in the brief time that I was working there, I could see giant leaps; and boy the customers in Vermont certainly appreciated that.

I have a question, as a good and loyal staff person, to advance the charge that Senator Jeffords extended, where he talked about research to help us better manage and operate the system.

My question is this. Can and will our research program do for operations and performance what it has done for the system's physical properties? What steps should we be taking in our work on the research title, to ensure that we achieve that objective?

Mr. WRIGHT. Well, I'll take a shot at that, Jeff, starting the discussion, if that's OK.

Dr. WOMACK. Mr. Wright?

Mr. WRIGHT. Absolutely, there are substantial advances that could be made, and on which there is already some basic research being undertaken.

An example of an area that the Federal Highway Administration and others have been very actively engaged in has to do with work zones and work zone operations. We know that incidents, and work zones being among those, are one of the major causes of delay on our highway systems, and congestion on our highways systems.

We have done a great deal in recent years to try to get at the root of those incidents, and to help States and other local practitioners construct better work zones and understand what the consequences of certain techniques would be.

We have developed a tool called "Smart Zone," which actually allows a planner to determine whether or not a particular work zone model or design will work effectively, what the cues are likely to be, what transportation alternatives would make sense.

We are also working very hard in the area of improving work zone safety. For example, we are currently in the midst of a variable speed limit pilot in work zones. So that is one example.

We certainly see the potential for there to be vast improvements, and would most definitely see a Federal research agenda for the future, focusing very directly on operations.

Dr. WOMACK. Dr. Walton?

Dr. WALTON. Mr. Squires, as you may have noted, F-SHRP has a component that deals with reliable travel times. It aims exactly at that particular issue. It's intended not only to be a compliment to the current programs that are under way, that Bud just described, but also they fall within the ITS arena.

But it is intended to hit on those areas where we think technology and its application can have a substantial benefit to be able to determine reliable travel times. That is the key, the predictable estimate, that has a bearing on economic productivity, as well as safety. I suspect the ITS people will have a comment, as well.

Dr. WOMACK. Dr. Tarnoff?

Dr. TARNOFF. I think the direct answer to your question is resoundingly, yes. I think it can have a tremendous impact.

I also think that it's important that we look at it from the broadest sense; in the sense of management of incidents, which is what Dr. Walton just mentioned, in terms of being able to improve travel reliability.

But anybody that has ever traveled the Capitol Beltway and seen the sign that said, "congestion ahead," and didn't know what to do about it, knows that there is significant room for improvement.

Right now, the degree to which we manage traffic falls short of where we'd like to be, for a variety of reasons. Some of that is just sheer investment in capital facilities required to do that; but also, there is a lack of knowledge, in terms of how best to manage traffic, where to put the traffic, what to tell people, and how they respond to it. There is a broad range of issues.

In the areas of reoccurring congestion, there is significantly more we could do, as well. Again, if you are satisfied with the traffic signal operations in the Washington, DC. area, you're probably in the minority. While some of that, again, is a question of investment in improved operations, there is significant research that could be done to improve that. We can talk about that as long as you like.

Dr. WOMACK. We'll go to Dr. White and then Mr. Ryan.

Dr. WHITE. Certainly, an enabler of good management is good information, good real-time information. I think Dr. Walton and Dr. Tarnoff were also referring to the importance of the information infrastructure that would provide the information, if it's done right, and the proper kinds of information is provided to decisionmakers, like drivers and so forth.

This is one of the essential aspects of the ITS America Program, and the ITS program for the infrastructure in providing the proper kind of real-time information to provide management decisions with the right kinds of information.

Dr. WOMACK. Mr. Ryan?

Mr. RYAN. In the area of operations, I would like to comment on two things. From a motorist inconvenience perspective, we've got to find ways to do more work that minimizes the inconvenience to the traveling public; whether it be asphalt or concrete, but we've just got to be able to maintain and upgrade our systems, and minimize their disruption.

People are not very patient today, and their frustration leads to the kind of things that Bud mentioned in terms of accidents in work zones. So we've got to find operationally a way to do our maintenance repairs, replacement, and rehabilitations without disruption the traffic.

The second area, I think, is 40,000 people are losing their lives on highways across the country. That's not an acceptable statistic. We've got to find ways through research, I think, to bring that number down, to get a positive trend, in terms of reducing the number of fatalities that are occurring on our highway transportation systems.

Dr. WOMACK. Let me just make a comment. I think we all agree that the intelligent transportation systems will play a role in the operations and management arena.

As we discuss ITS, there are two terms that are often used, and I'd like to get definitions for these terms for staff and other purposes.

We often talk about ITS infrastructure and integration. So if somebody would like to take a crack at defining those two terms for us; and then a brief summary in terms of where we are in our national system, with respect to integration and infrastructure.

Dr. White?

Dr. WHITE. Let me take a crack at that one, Kevin.

Let me just see if I can at least start off by describing what constitutes an integrated network of transportation information.

It would certainly involve the instrumentation of major intersections, and these would be loops in the road, cameras on poles, that would be able to sense the position of vehicles in real time.

This is the kind of information that gets fed back to the traffic operations centers that would allow for green and red light switches to be placed in a good sequence, in order to maximize or at least enhance mobility.

This instrumentation would be on primarily major intersections, as we've already heard the importance of intersections in the role of safety; and on roads, both freeways and arterials, in both urban and rural areas.

Admittedly, the impact that we're seeing in some of the studies that we've performed at the University of Michigan, where I was before I went to Georgia Tech, is the impact of this kind of information can be very significant in urban areas, and perhaps less so in rural areas.

But such an integrated network of transportation information would also include data collection from commercial vehicles; routing information, for example, for HAZMAT, and there are a lot of security implications in that; as well as transit and freight and passenger rail.

So let me stop there, at least in giving some indication of what an integrated network of transportation information would look like.

Dr. WOMACK. How about infrastructure?

Dr. Tarnoff?

Dr. TARNOFF. I would define the infrastructure as being the set of equipment; communications; computers; field equipment including signals, signs, weather sensors, that make up the total system that's required to manage traffic. I think that's probably the briefest definition.

I have one other comment on integration, I think, from a very simplistic point of view. Historically, in this business, agencies have tended to install systems independently from agencies in neighboring jurisdictions. Even within a given agency, a particular function has been implemented and operated, completely independent from another function.

To be specific, I'll use my example of freeways and signals. I have other examples, by the way. I'm not stuck on this.

But if in traffic, there's an incident on a freeway, say, on 95, what happens to the traffic that leaves the freeway and tries to travel along the adjacent arterials that are signalized? Is the signal timing adjusted automatically?

Historically, those two systems are operated independently and, in many cases, by different organizations. So the answer is, no. If you leave a freeway due to an incident, you're stuck in heavier traffic on the arterial. That's where integration becomes very important, where things are operated to complement each other. Dr. Womack. Thank you.

Mr. Bernstein?

Mr. BERNSTEIN. On both of these questions, I would just like to add the perspective that what you're measuring makes a difference.

If you care mostly, for example, about work trips, you're going to focus on peak time congestion. The NPTS seems to show consistently, every time it's taken, an increase in the number of non-work trips. There are at least as many people concerned about getting to school, shopping, or what have you, as there are about free flow of traffic on the freeways.

So it seems that some of the comments, particularly that Betty made, about the environmental research, when she alluded to land use, are relevant here. It would seem that in the long run, operations would be easier if travel demand was reduced for certain purposes, in that there may be some ways of doing that, that have to do with structural improvements in city suburbs and towns.

Since the legislation has incentives for that, perhaps we could fine tune this a little bit, to get a bigger bang for the buck.

The other comment that I have is that this integration that you alluded to, I think, needs a little more focus on non-motorized transportation, as well. While none of the numbers necessarily by mode add up to very much, compared to the overwhelming volume of passenger vehicle traffic, the growth is significant in every one of them: in walking, in biking, in mass transit use, which has consistently increased its share over the last several years.

In the most recent census data, and I don't know if FHWA has been looking at some of the "how people get to work" data that showed up in that recently, but I'm very impressed by the growth in every one of the non-motorized categories.

Even in Atlanta where we're working, there's a whopping shift in the number of people sharing cars, walking, biking, use on the mass transit there. We would feel better if, when these comments are made about integration and ITS and setting strategic research goals, that the examples given were about more than managing the free flow on the major Federal highways.

Dr. WOMACK. Professor Deakin?

Ms. DEAKIN. I'd like to add that we need to pay attention to the planning processes. Because one of the difficulties that we're seeing, even in a State like California, that's invested not only a lot of Federal money, but a lot of its own money, in new technologies, is that implementation is very spotty.

There are reasons for that. Some of them have to do with inter-governmental relations and learning how to work in new kinds of partnerships, that TEA-21 and ISTEA before it called for, and we think, rightly so.

But there's still work to be done on those partnerships and those planning processes, taking into consideration a broader range of issues in putting those things together. So that's another area of research that really is necessary.

We need to integrate thinking about operations and safety and pedestrians and transit and automobiles all together in this planning process from the beginning. Right now, too often, we think of ITS or safety as things we do afterwards. We come and try to slap them in to fix a problem that has arisen, and that's a whole lot harder than if we integrated them into the planning process to begin with.

Dr. WOMACK. Thank you.

OK, Mr. Warren?

Mr. WARREN. Thank, Kevin, I'm Mitch Warren with the committee majority staff.

I thank you all for coming today. As Senator Reid indicated in his comments, this is sort of an experiment. We're trying to do things a little bit differently, and see if we might be able to get a little more substance out of a round table discussion, or a research symposium like this, than we might get out of a traditional hearing.

I think it's working well. Kevin Womack has done a great job of implementing it, and I appreciate all of you being here, again.

My question relates to what somebody said earlier. I think it was Dr. Walton, referring to "get in/get out and stay out." I would like to focus for a second on the "stay out" part of it.

My question is simple. I want to get a little bit of a historical perspective on what kind of progress we've made in pavement research, as we look toward the future.

Over the past 20 or 30 years, have we improved the way our roads worked? Do they last longer now than they used to? Do they require less maintenance and rehabilitation than they did 20 or 30 years ago? What progress have we made, and where might we be able to go in the future, with some additional research?

Dr. WOMACK. Dr. Walton, do you want to start?

Dr. WALTON. Actually, I would yield to the others who are here. I'm interested in their comments on this, as well.

Dr. WOMACK. Mr. Carlson; Mr. Riva?

Mr. RIVA. I think clearly this ties into the earlier question that was asked by Mr. Squires. We talked about in terms of planning and a lot of very important issues. But the bottom line is, what you're really paying for is for pavements that will last, and pavements that will do so in a manner that's not only cost effective, but more importantly, as a safe surface for as long as possible.

Ultimately, you have a \$180 billion Federal Aid Highway Program today. I would think one of the primary objectives that you can have on this committee, which is why I commended the work done by not only Kevin Womack, but the leadership, in putting this together, is putting at the forefront, which is perhaps the most important issue, and that is the contour of the Federal Aid Highway Program surfaces, when you get right down to it.

Now admittedly, there's an awful lot more that goes into a Highway Bill than just surface. But it is truly, you know, one of the most, if not the most, important component.

I can speak to the concrete side, and I know that Dave Carlson will speak to the asphalt side; but we have one overriding objective. We have a \$25 million research cooperative effort; not only with the Federal Highway Administration, but one that's almost the same size, with the Federal Aviation Administration.

It has exactly that one objective, in which the money, by the way, is split 50/50 with the agencies, but also involving on every task that's selected, academia, the State Departments of Transportation, the Federal Highway Administration, and industry.

I could not have summed it up any better than what Dr. Walton did; and that is to provide something to the people, who are ultimately paying, the taxpayer, that inconveniences them the least possible way; but also provides them a road surface that keeps its characteristics for as long as possible.

Speaking from my very parochial viewpoint, concrete certainly has come a long way. I think we had a good head-start in doing so, but even more so in the future. We're looking at not just the traditional full-depth concrete on 12 inches thick, that goes on forever; but also solutions for street and local roads, for intersections. These are intersections that can be rebuilt over a weekend, and be brought back on line by Monday, so to speak, with work starting on a Thursday or a Friday.

We've done that in Seattle, Washington, and other areas. So that's the epitome, really, of applied research. We have pavements today that are like ultra white topping, that uses recycled, get this, "rugs," for example, for fiber mesh.

We are also promoting and have effectively done so, the use of steel slag in fly ash from coal production. We find that they make tremendous, what is called, "cementicist" materials; concrete being a combination of cement, what I call Evian water, and an aggregate. That's about as much as I know about concrete, and I've got my experts behind me.

But the bottom line is, every thing we do is to provide something that not only keeps the cost down, but provides a road surface that will be here way beyond the next one or two Highways Bills that are coming up. I think our design specs are well meeting that.

Dr. WOMACK. Mr. Carlson?

Mr. CARLSON. I would throw in some comments about the asphalt industry. Super Pave and the SMA things that we've done have completely changed the way we operate.

It was a cooperative effort of the contractors, the agencies, and the research that led to the development of those processes. It has improved the quality of the roads. I think we've gotten excited, because this is just the tip of the iceberg of what we think we can accomplish, given that research and combined working together.

Being a contractor, and I think I'm the only contractor here, I feel rather out of place. But the field has changed, and the contractors are now responsible for more and more and more things. So that training and that knowledge has to be passed on to the contractors and to their personnel, in order for us to produce the continual higher quality product that we're required to produce.

So I think that the research that we're doing is extremely important. NAPA has put up hard dollars for our end-cap facility down in Alabama at Auburn University. We understand the importance of research and the importance of producing high quality pavements. Like I said before, we've just touched the tip of what we can possibly accomplish.

Dr. WOMACK. Mr. Judycki?

Mr. JUDYCKI. I would like to just pick up on that, because obviously, our customers do know whether or not they're having a smooth ride, and whether or not the pavement in their neighborhood is being reconstructed every 5 years, rather than the longer term.

You know, I think if there's one area, and picking up on what Mr. Carlson said, that we've had some tremendous successes that we can point to, and it is what we've done, the pavement side, the cooperative efforts, that have been underway and that, in fact, still continue.

I think it is fair to say that industry completely changed the way it has done business. It's not only a follow-up to the technical work that's been done on pavements; for instance, in the first SHRP; but also the work that we've collectively done on international scans, in bringing knowledge back home, and applying it to our research and environment.

At the same time, looking to the future, because it was critical that we look through the LTP Program, to the future, as to what

we were going to build into the design of pavements in the future; and anybody that thinks that the LTP Program is just a 20 year program, that's not true.

In fact, there are spin-offs right now that are changing the 2002 Design Guide that will be coming out that, in fact, is estimated that will have benefits to States, and about \$1 billion a year, possibly, just because of the design improvements. So there's been significant improvements.

What we need to look toward, I think, in the future, is something even more significant. That is, if we are going to make real improvements, what should the next generation pavement look like?

What should we be thinking about, instead of talking about, gee, we need to go to a 50 year pavement? What is the 100 year pavement? As somebody said earlier, what is the perpetual infrastructure like, and what research needs to go into accomplishing that?

Certainly, some of the breakthrough technologies that the future SHRP is looking toward are critical for us to address right up front.

Dr. WOMACK. Mr. Bernstein?

Mr. BERNSTEIN. I have just a couple of comments. We endorse the idea strongly of things lasting longer. The question is, how long might they last, just to pick up on the last comments.

My understanding is, the Appian Way was built 2,000 years ago, and it's still mostly in use. When the designer of the Golden Gate Bridge was asked by Wall Street what should the useful life be; how long will this last, he said, forever.

I'm not suggesting that all roads will live forever. But it seems to me our research ought to be able to tell us, first of all, what the distribution of service life actually is, by type and by location, and in a real time basis.

I can't get that information currently. I think you might have a lot of it, but it's not on the website. I think it would help in decisionmaking, if that was available. If it's an average of 45 years, there's going to be a distribution around that. I suspect where people are least happy is where it's not lasting as long, and there's too much premature paving that has to go on.

This leads to a second point. Couldn't we have more research on the value of continuous maintenance on the roads, in terms of the ability of deploying what we know to actually do that life extension and get the benefits?

Again, I haven't heard anything about that; but there's a difference between getting the life extension by continuous renewal, if you will, to get your perpetual pavement, you know, versus making sure the next road is always better than the last road.

Then, I guess, the third thing has to do with the value of information to your State and local partners. The Federal Government, and I can't remember the percentage, funds something like one dollar out of four, I think, when you count the cost to State and local government.

Here you have an asset that just came along, which we mentioned in the testimony. The new Government Accounting Standards Board, Standards Statement 34, requires starting this year, for State and local government to consistently report the valuation and the condition, narratively, of their existing capital assets.

For those of you who don't know, GASBI, as it's called, is the sister organization of the Financial Accounting Standards Board. They took this action because you couldn't compare any two statements from year to year, or between agencies, and be sure that there was a correct valuation.

We did a rough anecdotal survey, and found service lives for similar pieces of infrastructure, ranging from 10 to 100 years. This doesn't make sense.

So I think there could be a role here for the Federal Government in codifying some of what's in the GASBI standards which, right now, are voluntary.

No. 2 would be providing technical assistance to State and local government, so that high performance real-time reporting gets married at the State and local level, with the direction that we're all advocating that Federal reporting go in here. This would give a set of incentives on the State and local level, to marry what comes into performance and accountability reporting, out of TEA-21.

So that's a different sort of idea. It's informational, again, but it's a way of motivating the State and local partners that are part of this equation to do better in the same way.

Dr. WOMACK. Thank you.

Mr. Judycki, and then we'll go to Mr. Skinner.

Mr. JUDYCKI. I would just add one thought. That is, as we look at whether it's the info-structure or the infrastructure that, in fact, a good pavement, a good infrastructure, has a lot more to do with it than the research of the components that make it up. It has a lot to do with financing. It has a lot to do with contracting practices and procedures.

So I think that, again, what I referred to earlier, that toughest part of the innovation process, of delivering innovation and technology, once you have the research deserves a lot of attention. We need to pay attention to that, that most difficult part of putting innovation into practice.

Dr. WOMACK. OK, we'll go to Mr. Skinner and then Mr. Ryan.

Mr. SKINNER. I think we have made a lot of progress in pavements over the years. But what is happening is, our system is very stressed. We increasingly need to raise the bar. That is, in part, why we have an emphasis on the "get in, get out, stay out," because we can't afford to disrupt our highways the way we used to, when we reconstruct.

That's why we have to have greater attention to operations, because we need to operate these things more efficiently, as opposed to the laissez faire attitude that we've had in the past.

We need more attention to intermodal, to options, to environmental impacts, to community compatibility, because the system is stressed, and all of those concerns are greater now. So we've had success, but the expectations have gone up, commensurate with that success.

Dr. WOMACK. Thank you.

Mr. Ryan?

Mr. RYAN. Yes, Mr. Skinner just touched on the point that I wanted add. That is, I think the "get out, stay out" part is a two-prong approach. I think you've heard a number of examples of suc-

cesses, in terms of being able to stay out, Super Pave, denser concrete, thicker pavements, and things of that nature. I think we can work toward a 50 or 100 year pavement design.

But I think just as critical to that strategy is the strategy of being able to maintain the system timely and with the least disruption to the traffic. So it's really a two-pronged approach; not just building something and walking away for 100 years, and then coming back and doing that again.

I think what we've got to develop is a system that has components that you can routinely maintain and continue to preserve that pavement, that infrastructure over a period of time, and do it with minimal disruption to the traffic.

Dr. WOMACK. Thank you.

Ms. Stanley?

Ms. STANLEY. Thank you.

I have two questions in regard to F-SHRP, directed to Dr. Walton and those around him, especially Bud Wright.

The first has to do with what I want to echo as the major problem of over 40,000 highways deaths every year; and the need to do something about that, and not just say that something needs to be done, but to actually do something about it.

So I want to ask how these safety prongs of the F-SHRP proposal will identify or will be conducting research in areas that are already not being done. I know the National Highway Traffic Safety Administration concentrates on vehicle design and safety features of that, and also on driver behavior, and our laws mandate seat belt use, and drunk driving laws and things like that, having to do with vehicle behavior.

But knowing that roads are carrying more vehicles than the pavement or the geometrics were designed to carry, how is this hopeful piece of F-SHRP going to address design improvements, perhaps, or in other areas so we can improve crashes on these systems?

Then second, how will F-SHRP encompass other de-centralized efforts in research that is already going on, so that other research program funds perhaps are going to be decreased or otherwise encompassed into these F-SHRP proposals, especially perhaps some of the environmental research areas that Professor Deakin was referring to, so that we can decrease some of those amounts by virtue of investing in F-SHRP?

Dr. WALTON. Well, certainly, Megan, on the first question, the safety issue is one that we heard a great deal about in our outreach activities. It's one that we struggled immensely with.

In essence, the notion is that we truly do not understand the cause of a crash or an accident. The data over the years has just not been substantial enough or sustained in its collection and analysis to allow us to understand that particular issue.

So while there have been other efforts, and clearly, there are efforts now, not only within NHTSA, but within other groups as well, trying to deal with components of this issue, we have yet to be able to set up a comprehensive way of looking at that particular item, what actually caused the crash, and then what then are some of the countermeasures that we hope can deal with those.

So that's a substantial effort, and it's a considerable debate. In fact, at this particular point in time, with that identified as one of the four areas and, in fact, safety being one that we felt perhaps strongest about, there has been a panel formed that will build on not only the National Partnership Forum Panel on Safety that existed and went through an elaborate hearing process; but we will take that information and deliberation that we had in SHRP, and begin to lay out the framework for this comprehensive element of the SHRP program.

Through that and over the next year or so, and I believe that's the schedule, I think we'll have the opportunity to be able to become very crystal clear on what the work program components of that element are, and how they will impact the targeted opportunities that we feel are there.

Everyone that we talked to and heard from stressed the importance of a better understanding of the crash causation, before you can deal with effective counter-measures.

So that's the essence of the program. We have some tremendous people who have signed up to participate in that particular initiative. They are experts in their field, who have long experience in this particular effort, and have nailed this as the principal way to approach this problem.

Indeed, with 43,000 deaths, we accommodate that. We don't like that, but it's accommodated. I hesitate to use this, but in essence, if we had an aircraft crash every day, we would not tolerate that. But that's the equivalent to what we're talking about, a 737 every day. We cannot afford that.

So how do you deal with that? You come back to, what are some of the fundamental reasons for the crashes? We do not know, after all the time and energy over the years. We do not know some of the fundamental causes.

Now there are companion programs that go along with this that will be integrated into that activity. There is a lot of work in the intelligent vehicle initiative, for example, and within the ITS community, that are looking at, again, some of the safety issues associated with vehicle design and components. We have ongoing extensive programs within Federal Highway and others that are focused on how you make the infrastructure safer and so forth, and it is the integration of those activities.

But this particular element leaps beyond, and we think it is essential to our understanding. That was the message we heard. That is why it is so important, and that's why it is targeted as the priority element within the program.

Now the second element, and I guess you are talking about a rising tide or a lowering tide or an even tide, and how do you deal with the position of the ships?

Well, in essence, that's a priority among those who have the opportunity to allocate resources, quite frankly. The previous SHRP program was, in my view, labeled a success. It is not envisioned to be a long term continuing effort.

This particular program is envisioned, let's say, as a 6-year program, with "x" amount of dollars, predicated on the same formula that the previous SHRP program was predicated upon. It was a bottoms-up effort, as opposed to a top-down, where the previous

SHRP program was very targeted. It focused on a limited activity. It was felt that that was a strategic success, perhaps.

This time, we want to make sure that it was open to a broader forum and a broader audience, and bring it from the bottom up. That's why you have four components that reach into a wide range of compelling issues, quite frankly. Some deal directly with areas that Betty spoke to. But I think there is a complementary program there.

To be honest, there are so many complimentary research programs that are being proposed, and all are worthy in their own nature. But in this particular case, we feel that we've laid out a framework. We have constituent support, for the most part. In other words, the AASHTO community has endorsed this program. It is behind it. It came out of the Partnership Forum discussions.

So in essence, if it is successful, it will come from the SPR Program. It is up to that program to assess how they wish to allocate their resources, and I think they are in the process of doing that.

I am reminded that when SHRP started back in 1987, I think the NCHR Program was under \$10 million, or maybe about \$8 million. Now the NCHR Program is probably around \$30 million. So in essence, it gives you some notion of how everything has increased over time, and how the priority of resources have been allocated.

Again, there are many noteworthy programs. We just felt that this is a unique opportunity, make a stab, and come back to it. We hope that over a 6-year period, we can make a quantum leap in these particular areas that is above and beyond what might be accomplished through an incremental research program.

Dr. WOMACK. We need brief comments. We've got still two more questions to get to with Ms. Van Mark and Mr. Jensen. So we'll go to Professor Deakin first.

Ms. DEAKIN. I just wanted to add that we coordinated the work of the Advisory Board with the R&T partnership. I think we agree that they don't overlap in a way that's negative in any way, and we think they're very complimentary.

The F-SHRP program is a little more short-term focused, and more focused toward providing tools and techniques. I think the Advisory Board supports that kind of work, as well, but would like to see more of the Advisory Board Cooperative Research Program be established to do longer-term work, to try to get away from so much mitigation and toward more basic understanding and new methods altogether for handling these things. So I think they'd be a nice compliment.

Dr. WOMACK. Mr. Bernstein?

Mr. BERNSTEIN. Just briefly, and I wouldn't disagree with Dr. Walton very much, but I think we might know some of the causes of what's going on, and perhaps some clues.

Concerning your comment about the need to coordinate research, perhaps if we approach this the way the insurance industry was approaching it, by determining what we know about growth in congestion, or growth in trucks on the road, or growth in goods movement, or some of the other likely culprits, we may end up with a richer solution set on the safety front.

So I would echo a call for some alignment, an aligning mechanism in the oversight of whatever program comes out of this. Because the critical need in addressing the 40,000-plus traffic deaths is to be able to move in real time. I mean, you can't wait 20 years to answer a question like that, and then come up with a satisfactory answer.

When I was a young community organizer, we organized on the West Side of Chicago a workable streets project, because people thought they did know the causes of some of these things. We filled potholes and we put in early traffic calming devices. We convinced the City Council to change parking and the direction of the streets.

Then in those high accident neighborhoods, morbidity and mortality from traffic accidents, for awhile while we could keep it up, would go down.

I suspect that how we talk about this is very important, in terms of having a credible response and a supportable response. We think there needs to be more research. But it's not just the amount of money; it's how well you aim that.

Dr. WOMACK. Briefly, Mr. Ryan?

Mr. RYAN. Yes, I just wanted to add an observation. I certainly concur with Mr. Bernstein, that in a localized area, you can deal with a lot of issues in terms of trying to identify it. But when you look at the big picture, we still have 40,000 deaths a year, that is not significantly moving up or down. I think to be able to make that quantum leap, we need to do the kind of things that F-SHRP is suggesting.

Dr. WOMACK. Thank you.

Ms. Van Mark?

Ms. VAN MARK. First off, thank you all for coming and taking time out of your busy schedules. I especially appreciate the delegation here from Iowa.

[Laughter.]

Ms. VAN MARK. If we were going to give a prize for the furthest traveled, I bet you'd get it. Thank you very much for coming.

I've heard some conflicting messages today, and I'm hoping you'll be able to help me sort it through. Then I have a comment on what I perceive as a solution, and I would like you to comment on it.

We heard from Federal Highways that we have a lot of diverse research going on and we are spreading out our research dollars very thin.

I think a couple of other people inferred that in their statements, that we have a lot of research to do, we have limited dollars, but it seems like our research isn't focused. It's spread out over a lot of different entities. Yet, at the same time, I heard from several of you that the University Research Program is very important.

Now being a political person by nature, I can tell you right now that the set-up now of the University Research Center begs for Congress to do exactly what you're telling us you don't want us to do, which is to spread your research dollars thin.

In my Senator's home State of Oklahoma, we would love to do transportation research, and I assure you, whatever we come up with will be brilliant.

[Laughter.]

Ms. VAN MARK. Now whether or not it fits in a comprehensive poll is another question. But when a university comes to a member's office and says, I want \$1 million to do research on whatever their wonderful idea is, our goal in life is to get that \$1 million. But are we taking that \$1 million away from something that could actually benefit the Nation as a whole?

So my question to you is, is there any value in trying to do directed research for these universities; in other words, taking maybe the six areas that Professor Deakin identified in environmental transportation, and asking universities to compete for research in those areas?

So while we aren't saying which university does what, we're kind of focusing our research dollars in an area that we've identified as important.

Dr. WOMACK. Mr. Wright?

Mr. WRIGHT. I have comment, that I think you are right on one point, and it's something that we strongly believe in. That is that all that is going on in research and technology in the country needs to be a part of a national plan.

Certainly, we believe the Federal Government has a role in helping to lead and guide what that national plan would be; but there will always be the many partners helping to carry that out.

One of the concepts that has been espoused with regard to the University Transportation Centers is the notion of centers of excellence, where it can be known that a particular institution has expertise in an area of research, and that where there is an element of a national plan that relates to that sort of expertise, then the University Transportation Center can offer that service.

So I think there is a way to better integrate what is occurring today with University Transportation Centers into a national research agenda. We believe it would be important to try to reinforce that with legislative provisions, as we move forward in reauthorization.

Dr. WOMACK. Professor Deakin?

Ms. DEAKIN. Yes, the University Transportation Centers Program is a program that I think has done a lot of good. One of the ways it has done that in research is that it gives faculty members who are associated with the centers, which is a large number of faculty members, the opportunity to identify research topics that perhaps haven't come to the attention of Federal or metropolitan organizations.

So there is a lot of research that's generated that's valuable through universities that wouldn't otherwise be even thought about. It's a way of creating new ideas.

That said, every University Center has a theme, and I think that does sort of focus their research on particular areas where they have expertise on their faculties, and they are able to do that.

The other thing University Centers do is they educate huge numbers of students. We'd like to tell people that we think our most important product is actually our students who are coming out of the transportation centers.

We also think our research is good, but we think our students are marvelous. We spread them around the country, to Texas and

all kinds of places. So they are out there in other parts of the country, doing good work, as well.

That said, I would say if they are a big enough program, and there is enough money to go around, probably every State in the country probably has some people in transportation who are very good at doing research, and would be able to produce good products.

So we support having competitive research programs, where everybody can bid on them, too. FHWA does that now, and we would like to see more of that kind of research go on, as well.

Dr. WOMACK. Mr. Riva?

Mr. RIVA. If you would indulge me, I have someone who is from the university setting, Dale Harrington. Our initiative has taken into account a lot of universities, the University of Texas and others. I think the Iowa State Research Center has done excellent work. If you would indulge me, I would like for Dale Harrington to just briefly explain what they do.

Dr. WOMACK. OK, briefly, please.

MR. HARRINGTON. I appreciate your comments about Iowa very, very much. Our center is a year and-a-half old. Our partnership with the Federal Highway Administration industry through the innovative Pavement Research Foundation is unprecedented.

I mean, I would have never expected this. I think that the Federal Highway Administration and the partnership that they have with the industry is just unbelievable. What we seem to lack is a partnership between other universities to work with us.

I received calls within the last 3 weeks from the University of Texas, Texas A&M, Wisconsin, Northwestern, Purdue, CTL, which is a consulting firm, to partner with us on research along with industry, and to educate our students.

So we must continue on with the partnerships and the dollars associated between industry, and particularly between the Federal Highway Administration and industry, and bring in and encourage through the programming, other universities to work together; because what hurts Iowa ought to hurt Kansas, and what hurts Kansas ought to hurt California. We must think of it in those terms.

Our research facilities cannot keep up with the demand of educating our students without the proper dollars, to be able to do the research that we need to accomplish that. We simply have to worry about each other. The only way we can do that is through partnerships with each other.

Dr. WOMACK. Thank you.

Mr. Carlson, quickly?

Mr. CARLSON. I would just like to comment, the \$25 million program that we're promoting is exactly what you're asking for. The national program should be administered by the Federal Highway Administration, and the universities can compete for the work that needs to be done.

I think if you have separate earmarks, it re-dilutes the program. So I think you are better off to have it all funded through the Federal Highway Administration than try to do it separately, and have the little earmarks for research, because there's no organized controlled focus that way.

Dr. WOMACK. Mr. Ryan?

Mr. RYAN. Yes, just quickly, from AASHTO's perspective, and the State Departments of Transportation, the value that the UTCs bring to the table is the fact that they are developing students, undergraduates and graduate students, to do future long-term high risk research. So that's the real value that we think that they bring to the table, and that's why we support the UTC Program.

We also believe, again, that the FHWA is the best vehicle to administer the long-term, high risk nationwide research that needs to be done. So that's the distinction that we see.

Dr. WOMACK. Mr. Jensen?

Mr. JENSEN. Thank you.

I'll say, to start out, thank you everyone one for coming. This is certainly very helpful. But I will say it would have been much more helpful to have more time for a give and take between staff and the experts. I hope that we can do this again.

I spent about 2 hours reading the materials, and would have found it much more helpful to be able to ask more than 2 minutes worth of questions. I do have questions that I would like answered, because notwithstanding the universal chorus that we've heard today, this is going to be a very controversial subject next year for reauthorization.

In that regard, I'd like to express agreement with something, Dr. Eighmy, that you had in your written testimony which is that, "An increase of \$35 billion per year for total capital investment for roads and about \$17 billion a year for bridge upgrade and maintenance is needed each year, for the next 20 years, to rectify the situation."

I agree with that, and anybody that expects that that's going to be funded does not have a good grasp on reality. Every penny that we don't spend on that, and do spend on research, is a value judgment that is going to be controversial; and every penny that we spend on research is money that does not go into concrete paving.

That reality is going to be where we have our debate, and I would love to engage you in that debate and in that inquiry, some time in the next year.

Given the lateness of the hour, I'm just going to ask them one question. I hardly know where to begin, but since I'm an alumnus of Cal-Berkeley, and since they're playing tonight, I will ask you, Professor Deakin, who is going to win—no.

[Laughter.]

Mr. JENSEN. You mentioned that we need research and environmental and social justice issues. I work for a conservative Republican. What do you want me to tell him, because I am going to go back and tell him what was said today, is a good example of a program in that area that he can support?

Ms. DEAKIN. Basically, we're having litigation and we're having arguments that are holding up projects. They are disagreements about what projects we ought to be investing in; disagreements about whether projects are being invested in fairly, that aren't productive. They are productive, in part, because we don't have agreement on what the basic issues are, in some of these things.

There are issues, for example, about whether adverse impacts that are being felt on particular neighborhoods are intentional or

unintentional. There are issues about how to resolve those impacts in a fair way and who ought to pay for them.

Those are research questions that I think are addressable, and would solve a lot of problems and save us time and save us money, if we could reach some agreements on what are the right way to deal with those issues. We haven't really done that, yet. So that's just begging to be addressed.

Maybe we can begin to put some of those things to rest and say, OK, we've settled on a way that we can agree to deal with those kinds of issues and move ahead.

So that's where I would think we could do some good research. If we would do research on that topic, we ought to be able to find some solutions that will work for everybody.

Mr. JENSEN. I'm not sure I understand you. Is that a litigation solution?

Ms. DEAKIN. No, no, I'm saying that the situation we're in now is, we have litigation; we have project delays; we have conflicts among people; we have decisionmakers who aren't sure which way to go at the metropolitan level, at the State level, because they are being pulled in different directions by different people, commenting on what impacts the projects are having.

The more information we have, and the better strategies we have for planning those projects so we avoid adverse impacts to begin with, that would be my first thing, to try to figure out how to avoid getting into these issues. It's always harder to fix them after you've done them, than to avoid them in the first place.

If we can have projects where everybody says, that's a fair project; that's a fair decision process; that's a fair way to get public involvement; we're doing a good job in our planning processes in doing that, we'll all be happier. We'll save time and we'll save money.

I think my AASHTO colleagues would agree with that. We don't need to get into those fights, but we need some help in figuring out how to avoid those fights and how to do the right thing in these situations. I think we can do it, but I think we need to do some research to be able to figure out how to do those things.

Mr. JENSEN. Thank you.

Dr. WOMACK. Thank you, Professor Deakin.

We're past our time, so we're going to wrap this up. I, again, appreciate everybody's participation today.

I think we kind of are perhaps beginning a new way of doing these things, as Senator Reid said. It would be nice to proceed in this manner in the future, and be able to spend more time together in resolving these issues all across the board in the Reauthorization Bill.

Again, thank you all for participating, and we appreciate you coming.

[Whereupon, at 11:55 a.m., the panel meeting was concluded.]

TEA-21 REAUTHORIZATION

FRIDAY, MAY 10, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

A roundtable symposium was convened to discuss improving metropolitan transportation performance and security. The meeting was held in 406 Dirksen Senate Office Building, Friday, May 10, 2002, at 9:30 a.m.

OPERATIONS AND SECURITY IN METROPOLITAN AREAS

Present: Senators Reid, Bond, and Jeffords.

Staff present: Mitch Warren (moderator), Jeff Squires, J.C. Sandberg, Megan Stanley, Ruth Van Mark, and Lauren Jones. Staff representing committee members: Ann Loomis for Senator Warner and Caroline Berver for Senator Graham.

Panelists

Dr. Christine M. Johnson, Program Manager, Operations Director, ITS Joint Program Office, Federal Highway Administration, Washington, DC.

Mr. Henry Hungerbeeler, Director, Missouri Department of Transportation, Jefferson City, MO.

Mr. Elwyn Tinklenberg, Commissioner, Minnesota Department of Transportation, St. Paul, MN.

Mr. John Njord, Executive Director, Utah Department of Transportation, Salt Lake City, UT.

Dr. William D. Miller, Executive Director, Oklahoma Aeronautics and Space Commission, Director of Transportation Security Task Force to Governor's Security and Preparedness Executive Panel, Oklahoma City, OK.

Mr. Jacob Snow, General Manager, Regional Transportation Commission of Southern Nevada, Las Vegas, NV, on behalf of the Association of Metropolitan Planning Organizations.

Mr. Matthew Edelman, Executive Director, TRANSCOM, Jersey City, NJ.

Mr. Steve Lockwood, Vice President, Parsons Brinckerhoff, on behalf of Institute of Transportation Engineers.

Mr. Jack Goldstein, Senior Vice President, Science Applications International Corporation, on behalf of ITS America.

Mr. Richard Bennis, Associate Undersecretary for Maritime and Land Security, Transportation Security Administration, Washington, DC.

**OPENING STATEMENT OF HON. HARRY REID,
U.S. SENATOR FROM THE STATE OF NEVADA**

Senator REID. If I could get everyone's attention, we will get started here. I appreciate, first of all, everyone being here. We will turn this over to Senator Bond in just 1 second. Your participation today in this Symposium on Operations and Security in Metropolitan Areas is very much appreciated.

This is a second in a series of these roundtable discussions, which represent a new way of doing business for the Committee on Environment and Public Works.

How this came about is Senator Baucus, who was the full committee chair, and I have been the chairman of the committee on two separate occasions, and we talked about a different way of gathering information.

We have traditionally, in the House and the Senate, done our hearings behind us, where witnesses come in, and we will have a Senator breeze in and out once in awhile. That is the way we have always done things. There really has not been an opportunity for a good exchange.

So I came up with this idea, and we are going to try this. This format allows a much more in depth discussion of critical issues than would be possible in a traditional format.

Although I do not like to acknowledge this, especially with my colleague next to me, Senators know a little bit about a lot of things. We do not much about any one thing. As a result of that, we have to rely very heavily on our staffs. I have served in the House, and with members of the House, and their jurisdiction is quite limited, in most respects. So they are really knowledgeable about a few different areas.

That is why, when we go to conference, we always make sure our staff people are real close to us, because the staff members usually know more than we know.

This is an opportunity for you to have an in depth discussion with each other and the staff people that really get all this done anyway.

I serve on a number of committees, this one and Appropriations and a number of other committees. The staff are the ones that give me the information. So I want you to know that this is a new format. We hope it works. Your input is critical.

Jacob, I would like to thank you for being here today. Jacob Snow is the Executive Director of the Southern Nevada Regional Transportation Commission. That is the entity that takes care of rapidly growing Southern Nevada/Las Vegas. It has been a tremendously difficult job.

Just to indicate some of the problems we have, we have the sixth largest school district in America. We built, in 1 year, 18 new schools, just to keep up with the growth, and multiply that times the problems we have with roads and the millions of visitors we have every year. It makes Jacob's job very difficult.

The subcommittee held a hearing in September on Intelligent Transportation Systems. This hearing left little doubt that the technology exists to improve the management of our road systems.

The next step is to ensure that this technology is deployed, and that a commitment is made to focus on resources operating regional transportation systems.

This represents a new mandate for many highway departments and metropolitan planning organizations, and requires that new stakeholders be identified, and that someone be held accountable for the performance in our transportation infrastructure.

Too often, the focus is on the condition of the infrastructure, rather than performance. Maintaining our infrastructure will always be our central mission, but a new commitment to operations and management is essential for reduced congestion in metropolitan areas. Transportation is too important to our economy and our quality of life for us not to make this commitment.

A new focus on the operations and management of the system has been an added benefit of improving the security of our transportation infrastructure. The same technology that provides the information needed to manage our system also helps to monitor the system for security purposes, to ensure that emergency personnel can get to the destination, and improve incident response and emergency evacuation.

As the Environment and Public Works Committee proceeds with reauthorization, TEA-21 will be looking for new and creative solutions to our transportation problems. Improved management of the system and accountability for performance must be part of that solution.

Again, I appreciate your participation.
Senator Bond?

**OPENING STATEMENT OF HON. CHRISTOPHER S. BOND,
U.S. SENATOR FROM THE STATE OF MISSOURI**

Senator BOND. Thank you very much, Senator Reid, and I appreciate the candor, my good friend. It is always somewhat humbling to go into a conference with the House. Those poor guys and gals do not have anything better to do, than to get to learn one subject very carefully.

[Laughter.]

Senator BOND. I commend you for the roundtable format. We have been doing that for about 3 years now, in the Small Business Committee. To be quite honest, we could not get Senators to show up for Small Business Committee hearings. But we found that the roundtable format really does give an opportunity to share views, challenge views.

I hope that you will feel free, if you have a disagreement to, in a courteous, civil way, of course, unlike the way we normally handle it on the Senate floor, if you will express that, it will be very helpful.

That kind of discussion, we have found to be very useful to staff. As the chairman, I used to sit in on those a good bit of the time.

My main purpose here is to introduce our Director from the Missouri Department of Transportation, Henry Hungerbeeler, who oversees the work of 6,000 employees; and maintains the State's transportation system, 32,000 miles of highways; and State support of aviation rail transit and port systems. He has been there since 1999.

On the national level, he is here today as a member of the Board of Directors of AASHTO, and member of AASHTO's Standing Committee on Administration, and chairman of the AASHTO Public Affairs Subcommittee.

In September, he was named National Chair of the Task Force on Transportation Security for AASHTO, which is continuing to review security and emergency preparedness issues relating to bridges, tunnels, and other facilities critical to the Highway Transportation System and National Defense.

He has a very impressive background. He served the Nation for 30 years in the Air Force, before retiring with a rank of Colonel. He has done an excellent in a very tough time in Missouri, and I will not bother you with the problems that he is having in Missouri. I sure wish I was back there to deal with the funding shortfalls that Missouri is having.

But having made that introduction, I am going to impose upon my colleagues and my friends here to take a brief moment to highlight an issue of particular importance in the discussion of transportation and security in major metropolitan areas.

Senator Reid and I were just discussing it. A major newspaper, for some reason, with a major reputation for accuracy, discussed it at length on Sunday. I do not mind if they disagree with me on the policy, but it does bother me when they make up the facts and leave out relevant facts.

So just to set the record straight, we are talking about our waterway transportation system. The Missouri and Mississippi Rivers join right at St. Louis. We need to recognize, even if others do not, the fact that efficient water transportation is very important.

One medium size tow on the Mississippi takes 870 trucks off the road. That is two diesel engines, versus 870. That is less highway congestion, less fuel burned, improved safety, cleaner air, in the ozone non-attainment area of St. Louis, and less highway wear and tear. That is one of the things that is killing us in Missouri, on I-70.

With more efficient options being very critical for our shippers, in a growing and competitively international marketplace, sometimes the winner is the country that gets the product there most reliably and most economically.

On the Missouri River, water transportation is an insurance policy against high rates from the railroads. Recent studies show the presence of water transportation competition saves shippers, including farmers, over \$200 million a year.

In closing, I thank Director Hungerbeeler and the other panelists for being here today, and helping us move forward. If you want to know more about how water transportation can lessen the wear and tear on the roads, the Director can talk about that, as well.

Thank you very much, Henry.

Senator REID. We appreciate your, as a member of the committee, being here. What you did not say is that the reason you came is that you are the only one who can pronounce his name.

[Laughter.]

Senator BOND. Henry; it is very easy to say.

[Laughter.]

Senator REID. What we would like is for everyone to give a statement, and we would like you to hold that statement to 3 minutes.

Each of you should know that here is the staff about which I bragged about a little earlier. These men and women are extremely well educated, and have the experience to be on this committee. Without embarrassing any of them, these jobs are very, very competitive, and they do great work for the Senators.

So you are going to be in good hands. I have to go up to the Senate at 10 o'clock this morning, and I will get a report, hopefully early next week from my staff, as to how this symposium has gone.

So feel free to say anything that you think that will help, because this information will be given to all the members of the subcommittee, and eventually the members of the committee, in drafting the new bill next year for highway transportation.

So which way to you want to start, Mitch?

Dr. Johnson?

**STATEMENT OF CHRISTINE JOHNSON, PROGRAM MANAGER,
OPERATIONS DIRECTOR, ITS JOINT PROGRAM OFFICE, FED-
ERAL HIGHWAY ADMINISTRATION**

Ms. JOHNSON. Mr. Chairman and members of the subcommittee, I do appreciate this opportunity, and the opportunity for the roundtable, to discuss how operational and technological initiatives can support both a secure and a reliable transportation system, as well one that is safe and efficient.

Congestion and security are issues at the forefront of many State and local transportation officials. A primary message that I want to communicate today is that two investments offer very high leverage in contributing to the solution of both problems: security and congestion.

The two investments are first, an investment in monitoring technology that yields real-time information on traffic speed and volume; on incident details, large incidents and small incidents; transit and emergency response fleet location or fleet management; weather data; and emergency evacuation details.

The second investment is an investment in institutional infrastructure that routinely brings together transportation, public safety, and emergency managers to collaborate on planning for response to routine traffic incidents and to major emergencies; to develop methods for communicating and sharing information among themselves, with the media, and with the public.

We have proposed a minimum set of information requirements that should be expected of a modern surface transportation system. These are detailed in my written testimony. Suffice it to say, right now, we estimate that only about 25 percent of our highways in major metropolitan areas are capable of producing even a portion of this information. Clearly, there is much progress that needs to be made in even these minimum goals.

Within the department, we have numerous efforts underway to advance better security and better management of our surface transportation system, and these are also detailed in my testimony.

Let me conclude with this observation. Our nation right now is focused on security. We are all investing, in one way or another,

in prevention technology and the planning that is necessary, in the event of an emergency.

If our national strategies are effective and we do not have to respond to a national attack in the next one or 2 years, our plans and our newly formed security partnerships will inevitably atrophy, unless they are regularly used on a day-to-day application to smaller crisis; whether that crisis is an overturned tanker on a freeway system, or the evacuation of a football stadium at the end of a game.

We tend to respond better in a true, large emergency, if we are used to using the technology, every single day, and our relationships are well oiled, because we talk to each other on a day-to-day basis.

I want to thank the committee for this opportunity, and I am ready to both answer questions and engage in the dialog.

Mr. REID. Dr. Johnson, you set a very good example. I forgot to mention that we have a timer up here, and everyone can see it here, or I hope they can. If everyone would stick to that as closely as possible, we would appreciate it.

Before we get to Henry, we are going to hear from the full committee chairman. Senator Jeffords is here.

Senator Jeffords?

**OPENING STATEMENT OF HON. JAMES M. JEFFORDS,
U.S. SENATOR FROM THE STATE OF VERMONT**

Senator JEFFORDS. Thank you very much, Mr. Chairman. I appreciate this opportunity, and welcome you here to Washington. This is an extremely important issue which we are discussing, and I am pleased with the turn-out, and look forward to listening.

I want to welcome you all, in taking the time to help us in our efforts to reauthorize the Nation's Surface Transportation Program. You are all making an important contribution, and we very much appreciate it.

Today, you will exchange ideas on operations in the security metropolitan areas. These related topics are particularly timely.

With limited financial resources and physical constraints that make our roadway's expansion impractical, improvement operations will play an increasingly important role in the future of our highway program. In fact, I believe that the operations, maintenance, and the system preservation will be core of the program going forward.

The need for a focus on security is apparent. The Nation's infrastructure is a tempting target. It must be hardened, and at the same time, our transportation system is vital in times of emergency, from an act of nature or manmade.

We will listen carefully to what you say. This new symposium or roundtable format generates an impressive record which, in turn, will support our work on the next authorization.

So, again, I thank you for your time and consideration. I know that this is going to be a most productive morning, and we are pleased to have you all here.

Senator REID. Thank you, Mr. Chairman.
Henry?

**STATEMENT OF HENRY HUNGERBEELE, DIRECTOR,
MISSOURI DEPARTMENT OF TRANSPORTATION**

Mr. HUNGERBEELE. Thank you, Mr. Chairman, Senator Jeffords, Senator Bond; I want to thank Senator Bond for his kind introduction.

This morning, I will offer suggestions based on recent security experiences in Missouri, as well as for the country, as a whole, based on my position as the chair of the National Task Force.

I am pleased to report that our Task Force has two early products, which we will send to the States early next week, a guidebook for vulnerability assessment, as well as a guidebook for emergency response. We will leave these copies here for you to look at.

We all know that transportation is a fundamental asset in our American way of life, and absolutely necessary in times of emergency. Everyone relies on it every day, and in times of disaster, it will play a huge role in how well we respond and survive.

Every other component of emergency response relies largely on the ability to transport people and goods quickly. Without a functioning transportation network, other emergency response plans cannot work.

My personal conclusion is that there is really no new requirement out there now that we did not know on September 10th. What has changed is that security has become a higher priority, and must be accelerated.

While the emergency management community has the starring role on many of these matters, the State Departments of Transportation are critical members of the supporting cast. Together with first responders, they must face certain key issues.

Some of these issues can be addressed through the TEA-21 reauthorization. Some, we think, need to be addressed as part of funding acts for fiscal year 2003 and beyond, by the Office of Homeland Security and the Federal Emergency Management Agency.

As the 50 States examined the security issue on the Nation's highway system, we focused on four aspects: defense mobilization needs, protection of highways assets, the capabilities of the system for emergency response and special needs associated with the movement of goods.

AASHTO's Board of Directors has approved the policy position to recommend Office of Homeland Security and the Federal Emergency Management Agency support for those purely security-related costs that States will incur, and Highway Trust Fund support through reauthorization for those needs that serve multiple purposes, such as surface transportation, emergency response capabilities for major incidents on or off the transportation system.

AASHTO will provide you copies of our policy position, so in the interest of time, I will not go into detail, at this point.

Thank you very much.

Senator REID. Thank you very much.

We will now hear from the Honorable John Njord, Utah Department of Transportation in Salt Lake.

**STATEMENT OF JOHN NJORD, EXECUTIVE DIRECTOR, UTAH
DEPARTMENT OF TRANSPORTATION**

Mr. NJORD. It is my pleasure to be here today. Thank you very much for this opportunity.

Growth: urbanization of the West is a very big issue for those of us that live in the West, and it is our experience in the West that we are experiencing massive growth, which places a huge demand upon the transportation system. We have a growth rate, over the past 10 years in Utah, of 30 percent, which has been a huge demand on us, as a department.

As a result of this, we decided to aggressively pursue ITS technologies on our transportation system, and over the last several years, we have invested over \$120 million in deploying an intelligent transportation system in our State.

The Traffic Operations Center in Salt Lake City was launched in 1999. It covers the entire Salt Lake area, which the bulk of the population of the State of Utah is centered around that urbanized area.

There are about 2.2 million people that live in Utah. Approximately 76 percent of those people live right near the Salt Lake City area. We have targeted some ITS applications in the rural part of our State, and have deployed some of those so far.

Utah's ITS system, and we call it Commuter Link, is a system that includes closed circuit television cameras; congestion sensors; road pavement condition sensors; 511 traveler information, which by the way, is the first voice activated traveler information system in the country, and is very successful and a key player in the success we had in the Olympic Games.

We have also got an award-winning web site, which during the Olympic Games received 74 million hits during the month of February. There is an incredible amount of traffic taking place on that particular site.

A key component of the success of a traveler information system is coordination with other agencies. The Traffic Operations Center that we have in Salt Lake City houses the highway patrol dispatch, which has strengthened the relationship between the Department of Transportation and public safety officials, in order to make the system overall work better.

Some of the benefits of ITS we have seen already in our part of the country. We have seen a decrease in the amount of congestion on our roadways, as a result of the reconstruction of the I-15 project, as well as the deployment of ITS. We have seen a delay of approximately 30 to 40 percent on the freeway system. We have also seen a reduce of delay on surface street by up to 20 percent.

Now the goal of Commuter Link is to reduce overall delays by 20 percent by reducing the secondary impacts of congestion, of accidents, and that type of thing.

We have seen a lot of success, and we need Federal support, and we are here ready to discuss what kind of Federal support in the future. I appreciate this opportunity. Thank you.

Senator JEFFORDS. Thank you very much.

Please proceed, Mr. Tinklenberg.

**STATEMENT OF ELWYN TINGLENBERG, COMMISSIONER,
MINNESOTA DEPARTMENT OF TRANSPORTATION**

Mr. TINKLENBERG. Thank you, my name is Elwyn Tinklenberg. I am the Commissioner of the Minnesota Department of Transportation, and I have been serving as the leader of AASHTO's effort to define reauthorization proposals for ITS operations.

Mr. Chairman, 2 weeks ago, I had the privilege of participating in the University of Minnesota's first James L. Oberstar Forum on how we will or should respond to transportation long-term, after 9/11.

One panel that I was asked to moderate included the U.S. DOT Administrators of Special Programs, NTSA, Federal Aviation Administration, and the Commandant of the U.S. Coast Guard.

I asked them what they believed was the one thing, if they could focus on one thing, that they would change first. They all said communications.

That was an important insight, and I think it goes to the heart of the discussion you are leading today concerning operations and security. Fundamentally and broadly based, it is an issue of communication.

Certainly, it involved the obvious things, making sure that our emergency responders can talk to each other, but it goes well beyond that, as well. On the operations side of our transportation systems, for example, it means better communication between those systems and management, and adjusting the focus of our development plans, so that they incorporate enhancement of that capability.

This might include the strategic deployment of advanced sensing technology within our highways and transit infrastructure, as well as on board our vehicles, which will help us communicate in real time with those systems: the use of cameras and digital imaging systems that can help us manage and protect vulnerable infrastructure; and advanced signal integration systems that can quickly respond to the needs of changing demand or emergency conditions.

These and other ITS technologies are the direct outgrowth of the policies and financial resources you have made available in ISTEA and TEA-21. When they are combined with other communications improvements between us and our customers, like 511 and C-vision, and improved variable message capabilities, they are providing powerful and cost-effective tools, to help us meet the mobility challenges of the 21st Century.

In doing so, they are also supporting the transformation of State DOTs, themselves. While their traditional focus on building, replacing, and rehabilitating infrastructure remains a critical part of their mission, DOTs are fast becoming mobility managers, whose goal it is to effectively manage multi-modal and inter-modal transportation systems to optimize the customers' traveling experience.

Empowered by ITS technology, State DOTs are assuming an increasingly operations orientation in order to make the best use of existing transportation infrastructure and preserve or improve system performance.

To that end, we think there are three broad areas that must be addressed in reauthorization. First, reauthorization should incor-

porate policy initiatives that strength ITS development and deployment. Many of these initiatives will require a combination of legislative, regulatory, and administrative actions.

Second, reauthorization should provide financial support for ITS deployment. AASHTO supports the continuation of the current ITS deployment program at a level of funding of about \$142 million per year for advancement of these initiatives.

Third, reauthorization should support critical research and development. This funding should be in the range of \$125 million per year.

Again, Mr. Chairman, I want to thank you and the committee for this opportunity. At the appropriate point, I would be happy to answer any questions.

Mr. WARREN. Thank you.

Mr. SNOW?

STATEMENT OF JACOB SNOW, GENERAL MANAGER, REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA, LAS VEGAS, NV, ON BEHALF OF THE ORGANIZATION OF METROPOLITAN PLANNING ORGANIZATIONS

Mr. SNOW. Thank you, Mr. Chairman, my name is Jacob Snow. I am the General Manager of the Regional Transportation Commission of Southern Nevada. I am here testifying on behalf of the Association of Metropolitan Planning Organizations, of which I am a member of their Policy Committee.

I was very impressed, listening to John's statistics about growth in Utah. I believe it was 30 percent in the last 10 years. Not in an attempt to "one-up" you in any way, but in Las Vegas, we have had 100 percent growth in the last 10 years, and in the four decades previous to that, we had 100 percent growth. So we have some tremendous challenges.

My Board told me that they wanted to appoint a group of community stakeholders to address growth in transportation in Las Vegas, and come up with a plan to make sure we could hold congestion in check.

We appointed that group. After a year and-a-half of work, they recommended an \$8 billion program, where we would raise taxes locally to that level, to fund new capital improvements, mainly street and highway infrastructure.

When we finally convinced them that that was not a realistic approach, we had to think more intelligently, if you will excuse the pun. We had to get the benefit of \$8 billion worth of infrastructure, at a cheaper cost.

So we turned to intelligent transportation systems, and we came up with a program where we would expand our freeway management system, and our arterial management system, and we would leverage the new commuter choice benefits that we have available to us now.

When we included those elements in the program, we were able to come up with a program of \$2 billion worth of capital investment, and \$762 million worth of investment in ITS, and we have the same benefit as an \$8 billion approach.

So we would suggest to the group that, indeed, that increased emphasis on ITS, that Senator Jeffords spoke about, will be more

and more important to the success of the overall functioning of our national transportation system.

To summarize AMPO's position, we encourage the development of a performance-based management and operations element of our regional transportation plans. We encourage DOT and the Office of Homeland Security, to assist in funding needed info-structure, to provide data that will assess the system's effectiveness.

We hope to accomplish this among all 340 MPOs and the new ones that are on their way, but we desperately need adequate funding to support this planning effort.

Currently, the Secretary of Transportation may authorize up to 1 percent of the overall transportation program to metropolitan planning. AMPO believes that this should be increased to 2 percent, to ensure adequate funding growing MPO responsibilities.

We are fortunate, in Nevada, in working with our State Department of Transportation, that they allow us to program flex funds; namely, STP and CMAQ money, in support of ITS operations.

This is not the case in many areas around the country. Those types of flex funds need to be sub-allocated to MPOs, so that the local officials, dealing with the local transportation problems, can come up with the solution to those local problems.

Finally, it is at the MPO where local elected officials work with professional staff to decide cooperatively on a region's transportation priorities.

Thank you very much.

Mr. WARREN. Admiral Bennis?

STATEMENT OF ADMIRAL RICHARD BENNIS, ASSOCIATE UNDER SECRETARY FOR MARITIME AND LAND SECURITY, TRANSPORTATION SECURITY ADMINISTRATION

Admiral BENNIS. Good morning, as a matter of introduction, I am the new Associate Under Secretary for Maritime and Land Security at the Transportation Security Administration, and I am the leader of a very small group at the moment, but we are growing.

The focus at TSA, obviously, has been on aviation security. Our focus is going to be on the security of passengers and cargo movement throughout the maritime and land modes, to include maritime, rail, highway, mass transit, and I have also got aviation cargo, and even pipeline, as that is a cargo, as well.

I just want to say, it is a real pleasure to be here. It is a great opportunity for me to establish some relationships with all the folks in the room. I salute your efforts. They have been and continue to be exceptional, and I look forward to working with you in the future.

Thank you.

Mr. WARREN. Mr. Edelman?

STATEMENT OF MATTHEW EDELMAN, EXECUTIVE DIRECTOR, TRANSCOM, JERSEY CITY, NJ

Mr. EDELMAN. Good morning, and thank you for inviting TRANSCOM to today's session. As a coalition of 18 agencies in the New York, New Jersey, and Connecticut region, TRANSCOM has seen the value of transportation information to the public safety community, particularly after the tragic attacks of September 11th.

We are honored to have public safety agencies in our membership: NYPD, New Jersey State Police, New York State Police, as well as the Port Authority of New York and New Jersey, whose own police force suffered such tremendous losses on that date.

Through ITS technology, the quality and quantity of information that transportation agencies can make available to each other and to the police has constantly been improving. The week of the attack, as a ban on single occupancy autos in parts of Manhattan took effect, ITS technology was used by three key Hudson River crossings.

With little precedent for predicting the effects of these restrictions, they were able to use these systems to react in a measured way to the changes in demand. On the day of the attack, bus operators were able to use our multi-agency video network to make the best use of their resources.

TRANSCOM also used the I-95 Coalition's network to advise drivers throughout the Northeast, linked to a massive deployment of traveler information systems, to avoid the entire New York area.

But a regional approach to operations and security is not only about technology. It is about working relationships among organizations and individuals. After the attack, many seemingly intractable inter-agency conflicts were resolved effectively through quick conference calls of transportation police professionals, who already knew and trusted each other.

We are also learning that we do not always need two different networks of transportation information: one for operations and one for public safety. We are tying police agencies into our video network, and our regional ITS architecture, the new backbone of our information sharing network.

We have also learned, as transportation professionals, that much of this flow to police agencies can be one way. While their missions are different from ours, we can provide them with transportation information that helps them to fulfil their responsibilities, and we are proud to do so.

Looking to the future, I want to emphasize the need to fund ongoing operations and maintenance costs of ITS systems. As these systems become more effective, demand for them will grow and, correspondingly, so will these costs.

Currently, our member agencies pay for most of our 24/7 base operation costs. They are hard pressed to meet a wide range of needs, and are finding it challenging to fund the operation and maintenance of ITS.

While these costs are eligible for Federal funding, the need to compete with other priorities may not leave sufficient funding for regional operations.

Thank you again, and I look forward to this morning's discussion.

Mr. WARREN. Thank you.

Mr. Lockwood?

STATEMENT OF STEVE LOCKWOOD, VICE PRESIDENT, PARSONS BRINCKERHOFF, ON BEHALF OF THE INSTITUTE OF TRANSPORTATION ENGINEERS

Mr. LOCKWOOD. Good morning, and thank you for the opportunity to provide the Institute of Transportation Engineers' perspective on transportation systems management and operations.

My name is Steve Lockwood. I am Senior Vice President of Parsons Brinckerhoff, a member of ITE, and Vice Chair of the National Dialogue on Transportation Operations Steering Committee.

ITE is a 16,000 member educational and scientific association of traffic and transportation engineers, transportation planners, and other professionals responsible for meeting society's needs for safe and efficient surface transportation.

ITE has been involved in facilitating an important national initiative, the National Dialogue on Transportation Operations. The focus is on how to improve the transportation service available from the existing system, in the relative short run at low cost and without major construction efforts, using new technology concepts and appropriate institutional arrangements, that will maximize customer focus on systems performance.

This initiative is sponsored by FHWA, managed by ITE, and involves many of the Nation's key transportation-related interest groups, several of which are here today.

The vision of the dialog is to bring the system to a point where it is managed and operated so that its performance exceeds normal customer expectations. The focus is on integrated systems and services that preserve and improve customer-related performance.

In October of this year, the Dialogue held a National Summit on Transportation Management and Operations in Columbia, Maryland, attended by over 250 professionals in academia, transportation, and State and local government.

The summit reached consensus on the need for increased focus on transportation system management, the importance of focusing on activities with measurable performance improvement value, the value of promoting improved inter-agency coordination, the importance of creating linkages between the capital planning process and planning for management operations, and the relevance of system operations in supporting whole and security initiatives.

Participants felt that the Federal Government can play a key role in several ways: accelerating the evolution of incorporating systems management into State and local agency decisionmaking by clarifying support of Federal policy; supporting a higher priority for performance-oriented improvements; provision of appropriate funding flexibility; and promoting stronger operations-oriented planning and multi-jurisdictional partnerships at the regional level.

ITE has provided recommendations more fully developed in the written statement, and I would be happy to expand on the National Dialogue and ITE's recommendations during the open discussion.

Thank you.

Mr. WARREN. Thanks.

Mr. Goldstein?

**STATEMENT OF JACK GOLDSTEIN, SENIOR VICE PRESIDENT,
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION,
ON BEHALF OF ITS INTERNATIONAL**

Mr. GOLDSTEIN. Thank you for the opportunity to be here today to represent ITS America in this important discussion.

The central theme of my message to you today is that the same ITS technologies that are today being deployed as operations tools to improve system performance in metropolitan areas can be used and, in fact, are being used to enhance the security of the Nation's surface transportation system.

I want to focus on two points out of my written remarks that I have given you. One is the need for a focus on operations and the role of ITS in operations; and second, the relationship of ITS technologies with security applications.

First of all, with respect to operations, systems operations and management of the existing capacity offers both short-term and long-term strategies to improve the flow of people and goods throughout the transportation system.

Enhancing system performance, however, is predicated on the ability of skilled transportation professionals to collect, analyze, and archive data about the performance of the system, during the hours of peak use.

With this data, traffic operators have the ability to respond to incidents, adverse weather, or other capacity-constricting events now with respect to the role of ITS in operations.

Intelligent transportation systems are the tools of the traffic operators. Traffic management systems, incident management systems and travel information systems are among the ITS tools that traffic operators use to manage a metropolitan area's transportation system, and manage it at its optimal efficiency.

Now in order to bring these improvements to the entire Nation, ITS America proposes the creation of a national transportation information network, which will link all existing and future metropolitan and rural transportation systems in the Nation into an integrated, yet distributed, data network. The network will collect information on system performance through a variety of technologies.

Let me shift now for a moment to security in ITS technologies. Research indicates that 58 percent of international terrorist attacks in 1998 were on transportation targets; and of these 92 percent were on surface transportation.

The important point is that the same ITS technologies that serve to improve operational efficiency also serve to protect both critical transportation infrastructure and people who travel on it.

In conclusion, ITS technologies and services play a critical role in improving system operation and performance, while at the same time, enhancing the security of our surface transportation system.

With these duo purposes in mind, ITS America urges the Congress to redouble its commitment to ITS operations and the reauthorizations of TEA-21.

Thank you very much.

Mr. WARREN. Thank you.

Dr. Miller?

**STATEMENT OF WILLIAM D. MILLER, EXECUTIVE DIRECTOR,
OKLAHOMA AERONAUTICS AND SPACE COMMISSION, OKLA-
HOMA CITY, OK**

Mr. MILLER. Thank you for the opportunity to be with you today. In the lexicon of the warrior, we are faced with what is called "defender's disadvantage." We must defend against all possible attacks, while the terrorist only has to find one weakness in our system.

We are confronted with the momentous task of securing the Nation's transportation infrastructure. An effort of this magnitude, which involves every level of Government, the private sector, and private citizens, requires the addressing of a number of issues.

We appreciate the opportunity to discuss with you today the Oklahoma Department of Transportation efforts and thoughts on improving operation of our metropolitan transportation systems, while enhancing emergency response procedures, in the security of our transportation infrastructure.

Since September 11th, it is imperative that our Nation develop and implement a clearly defined Homeland Security Program, that incorporates a comprehensive assessment of national threats and risks, and that clearly articulates, roles, responsibilities, and accountabilities.

We must, as a Nation, review our policies on immigration and the security of our borders. Our seaports and our airports need particular attention.

The Oklahoma Department of Transportation is working on and has completed a variety of transportation enhancement initiatives, and we look forward to this symposium as a vehicle to achieve increased effectiveness and security in our transportation systems.

As the transportation leadership for this Nation, we are charged with developing a vision that includes national, State, and local objectives, that develop and ensure effective and efficient technologies, management systems, and security for our transportation systems. We must identify the essential elements that constitute every level of Government strategies for an effective and secure system.

We are fortunate that intelligent transportation system technologies can be a powerful tool in aiding first responders and traffic managers, while assisting the efforts to secure our transportation infrastructure.

The Oklahoma Department of Transportation has implemented a multi-phase ITS integration program that will include the design and completion of a fiber optic communications backbone, capable of integrating a myriad of ITS components, enhance security and preparedness, establish a network for information and data sharing across and between jurisdictions.

Our program will link and integrate our department, State, Federal, military and local agencies into a common communication backbone, capable of multi-user, multi-point interface that will facilitate the rapid real-time sharing of information.

We support a multi-agency approach to developing solutions to these difficult issues of operations, management, and security, and pledge our support and efforts to that end.

Thank you.

Mr. WARREN. Thank you, and thanks again to everyone for being here. I will quickly review the agenda, before we get into the next section of the discussion, which is going to be the staff questioning.

Each staff member here is going to get 8 minutes to ask questions. We can ask it any way we like; if it is directed at individual people, or to open it up for the whole group for discussion. After that, we will take a 5-minute break, and then come back for a general panel discussion, where panelists can ask questions of each other. Staff can ask follow-up questions, if necessary.

We will try and keep control of that, and keep that more like Phil Donahue than Jerry Springer, if we can.

[Laughter.]

Mr. WARREN. Then we will wrap it up, once that discussion begins to die out, or we get to the point where we are kicked out of this room at 12:30.

We have food and drink behind us to keep everyone awake, so feel free to grab some coffee or juice or donuts or bagels, now or during the 5 minute break.

I will start off, but if each person could just briefly introduce themselves, before you ask your questions. One more thing, this is all for the record. So before you speak if you could just quickly say who you are, so that the transcript can reflect that.

I will begin. We have had a lot of examples so far, and I will ask this, and I will start with Dr. Johnson, but I will open it up to everybody. It is sort of a multi-part question.

We have heard a lot of examples about different operations or initiatives around the Nation. Many areas have implemented their own initiatives, but how do you take it to the next step?

How do you bring it all together in a comprehensive metropolitan operations program? Who plays the central coordinating role? Who is accountable for the performance of the system, and who brings together the multiple jurisdictions and agencies, who need to be part of a comprehensive operations initiative?

Is it the State DOT; is it the Metropolitan Planning Organization; is it a separate organization like TRANSCOM? Where should that take place? Is an actual physical operations center needed to bring together all the relevant parties?

Ms. JOHNSON. That is a lot of questions.

[Laughter.]

Mr. WARREN. That is.

Ms. JOHNSON. I am sure you would like a clear, definitive answer to the "who does it" and "who brings them together" questions. We would have two.

I cannot remember, and I know Matt participated in the discussion. It was nine to 12 months in panel discussions, trying to answer that question.

What we ultimately came up with is, yes we need that kind of a table. We need a regional table that has, at minimum, the transit agencies at the three levels of Government; transportation and transit; public safety and emergency management. But it will be done differently in different regions.

We have begun to explore what we need. It is sort of an incentive or a catalyst to say, and so, get on with it; but allowing that flexibility to occur.

Do they need to have a physical structure? No, we do not. We have examples without physical structures. They can, I think be very successful with a distributed structure, but the people have to meet and get along, and figure out ways to share information.

But you can have a virtual collaboration, as long as you are wired to each other and capable of sharing information with one another, and you are meeting and collaborating. So it does not have to be bricks and mortar that brings you together.

I think the third question was, and what are the next steps in the ITS piece of it. The thing that I have suggested in my own testimony is, in sorting through all the possible next steps, we have come down to two very high leverage ones that we think will lead to others, on their own.

The first is, it has been called, I think by ITS America, an information network, an info-structure. I think each of them have their own words, but we are talking about the same thing.

Getting a minimum set of information being produced about the surface transportation system; there are lots of ways of doing it. But that minimum set of information is required, and so it is going after that. The second investment is investing in that regional table.

Mr. WARREN. Does anyone else want to jump in?

Mr. Edelman?

Mr. EDELMAN. Looking at the first issue of how one starts a regional operations initiative, I would agree that there cannot be a "one size fits all" approach; that looking at the experience, we see the leadership and the interest and the motivation is truly different, from region to region.

I will give you three examples. In the Bay area, much leadership in that area has come from the MPO, the Metropolitan Transportation Commission. In the Buffalo area and in Southern Ontario, it has come from the State DOT, working with administrative transport.

In our region, it started with operating people, who saw an need, in terms of massive construction projects that were taking place, and with all these jurisdictions, nobody was in charge.

They realized that if coordination was going to take place to serve the public, that we had to face the fact that nobody would ever be in charge, perhaps, but we could have a means of coordinating with each other and, in effect, having that regional benefit.

Now in terms of our region, we had a gentleman named Lew Gamseni, who was the Deputy Executive Director of the Port Authority, a large transportation and multi-modal agency.

He was, to use a term coined by my colleague, John Corbin from Wisconsin DOT, an entrepreneurial bureaucrat. He was someone who was in the region, who had the vision, who realized there had to be another way of doing things.

So that is where it started, with senior operating people who said, we have to coordinate on a regional basis to get these benefits.

In terms of the physical location, again, "one size does not fit all." We have seen distributed networks. We have seen everybody in one facility, such as in Houston.

We have a facility which ties in other facilities. It is relatively small, in terms of the late shifts, perhaps two people. But what we do find is, if you have a distributed network, you need human beings to absorb that data, to react to it, to question it, and then to implement it.

So the systems make us smarter and give us better data, but we still believe that if you do not necessarily have a physical presence, you have to have human beings who are entrusted with absorbing that data and reacting to that data. It is their job.

The final thing, in terms of future growth, everyone has said it, and we have seen 22 percent numbers. There are just geometric expansions and benefits with every additional mile of instrumentation you add.

You have a link, you get smart. You have many links, you have a corridor. You have parallel corridors, you have a region. And every time the ability we have to manage the system and help our customers, it expands significantly.

Mr. WARREN. Anyone else; Mr. Lockwood?

Mr. LOCKWOOD. I think I am going to sort of restate what has been said, in a slightly different nature. But based on the dialog that has occurred among a wide range of interest groups on this topic, I think one thing that the national dialog very much exposed is the need for a broad consensus on the nature of the enterprise itself; in other words, within the metropolitan area, what is it that we are talking about, because there is a fair amount of confusion and misunderstanding.

But once the notion is understood that we can substantially improve the performance of the existing system and should do so is excepted, and we are doing that on a regional basis, along with the consequent need to focus on performance and the information needed to talk about performance and use performance, then the institutional response within a region or at the State level, in terms of the participation and the leadership and so on, will emerge, depending on kind of the legacy of relationship in institutions that are already there.

As I think both Christine and Matt have said, there is no single model. But essential to move ahead is to get this sort of common understanding of what one is talking about, and every region will do it in a way that is appropriate to its circumstances.

Mr. WARREN. Thank you.

I will now turn it over to Ruth Van Mark.

Ms. VAN MARK. First off, I welcome all of you to our symposium this morning. I want to especially welcome the folks from Oklahoma.

I have to kid my colleague here from Nevada, that once again, Oklahoma is on the cutting edge of technology. You stepped right there and you have pulled together something that is going to help the State, not only for security, but for traffic management.

One of the themes that I keep hearing throughout today's discussion and earlier discussions that we have had with some operations folks, is that communication and building of relationships among various agencies, to facilitate that kind of communication.

I am curious to maybe discuss in greater detail exactly what were the events that triggered either the discussions initially for

the communities that do have somewhat of an advance ITS operation. I am assuming for Utah, it was the Olympics, although maybe you were well on your road toward that, even if you had never had the Olympics. TRANSCOM said it was an enterprising bureaucrat, which we all wish we had those types of people.

But what types of things can the Federal Government do, and specifically can we do in our next bill, that would trigger or encourage or incentivize communities to do what you have started to do, for those that have done it?

Mr. NJORD. I appreciate the opportunity to answer that. The advance traveler information system that we have in Utah was not developed specifically for the Olympic Games. The impetus behind developing such a system really evolved out of the serious growth that we are experiencing and the extreme congestion that we had on our system.

We recognized very clearly that we could not, and I hate to almost say this, completely build our way out of the congestion that we were experiencing. We had to have a combination of expansion, as well as optimization of the system.

Now you ask the question, what can the Federal Government do to help incentive folks to engage in that same type of activity? I think that there are many things that can be done. There are many lessons that can be learned from one State to another, as they engage in dialog and talk about things, lessons learned, what was successful, what was not successful.

I cannot tell you how much we learned from Atlanta, when we deployed our system. We actually entered into an agreement with Atlanta, wherein they gave us all of the software that they produced for their traffic operations center. It was nearly an \$8 million investment on their behalf.

They gave it to us. We used that software and enhanced it and, in fact, have given pieces back to them, to enhance their system. So here are two States cooperating, one with another, in order to have a better product.

I think the Federal Government can help us in initiating those types of partnerships and other things, not to be too long winded, here.

Ms. VAN MARK. It would seem to me that now as metropolitan areas plan their major transportation system, one component now has to be ITS, I guess technology, to be redundant.

How do we then encourage people to include that in their planning. Dr. Miller, you mentioned that that is what Oklahoma is doing. As you move forward, is ITS just automatically an item that you consider, and then how do you pool various groups together, in order to implement that?

Mr. GOLDSTEIN. First, back to John, with your software issue, that has become a very important topic to many of the States, and we hope to come to you and to Georgia, in an effort to share that software and acquire it from you.

All this kind of took place because of the ITS meeting that was in Long Beach, California, 2 weeks ago, where we had opportunities to share those particular things, and find out about this software. It is going to be wonderful.

Ruth, to address your question, typically, what we have looked at, in surface transportation, has been condition and performance. Condition, typically, you know, is what the road surface is like. Performance has not really been anything that most DOTs have looked at, over the course of the last couple of decades.

Now we have added lanes of traffic, but not until recently, when the technologies have become available, have we been able to address the performance side of this transportation concept.

Here in Oklahoma, Ruth, basically what we do is meet with the various governmental entities, whether we are talking about sister State agencies, or more to the point, meeting with our municipalities, and talking about what concepts, technologies, are going to become available through this system; and then figuring out a way that the municipality can join on to what we are calling our TRANSNET in Oklahoma.

Clearly, our initial focus is in our large metropolitan areas. That is where the build-out is going to occur. But we are also sharing this with our rural areas, too, to give them an opportunity to look at how they would tie into the TRANSNET system.

I think that ITS is really the first opportunity to take a real hard look at performance issues, principally because of ITS technologies.

Ms. VAN MARK. Well, am I hearing that the role that the Federal Government has to play in this is the gathering of information and the depository of information?

Mr. GOLDSTEIN. I think so. I think what was brought about a few minutes ago, looking at exactly what are the improvements that we want, and what are the notions of what ITS is.

If you talk to 10 different people, and you will get 10 different answers as to what ITS is. That may not be a bad thing, because every State is a little bit different and, you know, what Jacob requires in Southern Nevada may not be necessarily what Oklahoma requires out in its rural areas, in terms of what the notion of ITS will do.

Mr. TINKLENBERG. Could I respond—El Tinklenberg from Minnesota—there are, as Dr. Johnson mentioned earlier, a couple of things, in terms of supporting a minimum level of information that is gathered by the system; that there is a capability within our systems in the metropolitan areas to gather and generate a certain amount of base data from our systems; and I think that expectation should be there.

The development of that capability has been quite slow and very sporadic around the country. I think supporting that would be an important initiative.

In doing that, I think the Federal Government also needs to look at, for example, the cost of that setup in how we do procurement. Obviously, procurement of ITS systems is very different from the general procurement of a construction project or things like that.

I think right now the rules kind of assume a building process. I think as we look at more and more ITS installations, some changes in those procurement processes are necessary.

The other thing is maintaining the flexibility, so that regions can use dollars from different programs within the transportation authorization, to allow them to fund some of these kinds of initiatives.

I think that is going to be very important. Being able to accelerate and streamline that procurement process, that development process for the States or the regions is going to be important, as well.

Mr. EDELMAN. On the question of incentivizing, what can the Federal Government do, to bring about cooperation, we have found, with all the parts in our regional coalition, and not just in our region, there is just a natural conflict between the financial interests of each individual agency, and the collective interest.

There is just going to be that natural tension. One of the ways to incentivize it is have a separate pool of money for regional organizations.

In the early days, our chairman was actually, when confronting another member for dues, some \$50,000, that potential member said, "That \$50,000 could go into repairing a guardrail, and that guardrail could save a life."

That argument made it very hard for us to talk about the regional interest. But there is a regional interest, as we have shown. And I think trying to eliminate some of that financial tension between the parts and the whole would help.

Ms. JOHNSON. Ruth, if I could, I would like to give you three examples, just to go back in history, that I think would help you in your deliberations.

The Federal Highway Administration did a major campaign in the 1990's for incident management, and to do incident management, you need to bring at least some of those same people that we are all talking about together. They went all across the country and set up those tables.

In sort of going back and doing some evaluation, we found that many of them had disappeared, because the champion had been promoted, retired, et cetera.

Two other examples, then, that I would contrast that to, and those were sort of jawboned in place, would be actually TRANSCOM, and I know that same entrepreneurial bureaucrat. I cannot quite remember the amount of money that the Port Authority of New York and New Jersey agreed to put up, basically, to support the whole, when the parts did not see it in their best interests.

But for a period of four or 5 years, they said, this is important for the region, and so we will pay everyone's dues to at least put a couple of staff members together to regularly convene you in a meeting.

The other example I would point to, that has stayed in place, is the I-95 Coalition. While the department abhors the congressionally designated projects, that has been a congressionally designated project, primarily for the purpose of ITS.

But I would argue that they have stayed together and expanded extraordinarily, the work they are doing together, because there is a small amount of money coming in, that holds the table together. Now they are working far beyond that earmark, at this point. And that would be worth looking at.

Ms. VAN MARK. I think I have eaten into Jeff's time, so I apologize, Jeff.

Mr. SQUIRES. That is quite all right. I thought it was stimulating stuff that we were hearing.

Well, thank you, my name is Jeff Squires. I am the transportation senior policy advisor for Senator Jeffords, with the committee. I also want to share in welcoming all of you here to Washington, and express my appreciation.

I also want to commend Mitch and Ruth and J.C. and Lauren, who just left the room and will now miss this, and Duane, for their good work in organizing today's session.

As Senator Reid said, these are pretty valuable opportunities, and the logistics of organizing one of these is daunting, but I think it is well worth the investment in time and effort that was made.

My question goes to the readiness of operations technology. One of the issues that we will address during reauthorization will be the programmatic treatment of ITS deployment.

Today, deployment is included in the research title. In a sense, it is in the R&D phase, research and development phase. Some believe that the time has come to move it out of research, either into a new program category, or into one or more of the core program categories, as an eligible activity.

To me, the question comes down to readiness. If we extend the R&D analogy to that of a consumer product, then I would envision two main criteria that should guide our thinking.

One, does the product have sufficient reliability? Does it work? Have we gotten the bugs out of the product? Two, is there a market for the product? Can it compete in the market place? Is it, in fact, a better mouse trap?

So my question to the panel is basically, are operations technologies, or ITS technologies, ready to move out of R&D? Are they sufficiently proven, and can they deliver sufficient benefit to compete with conventional build responses?

I guess I would like to first target the question to our panelists from the Departments of Transportation and from the Metropolitan organizations; the people who make programming decisions. If those of you could respond first to this, and then perhaps the others who were in the groups that talked about technology.

Henry?

Mr. HUNGERBEELER. I would be happy to give a brief response. Yes, I think certain parts of it are ready to move out of R&D. There will be a continuing need for R&D, of course. But we have some systems that are deployed, and certainly, we ought to expedite that deployment. A lot things that are capable of being deployed simply have not been, because of the lack of funding.

Mr. NJORD. Certainly, I think that we have witnesses in our State that this stuff is ready for prime time, Jeff. There is no question in my mind that it is ready for prime time, and that it is ready to be something much more than what it is, today.

One of the things that we struggle with in the Federal program is deploying the systems in a rapid fashion. We had to put together a great deal of infrastructure for the Olympic Games. We had approximately 5 years to do it.

In putting that together, there were many pieces of it that we clearly knew that using the Federal program would never get it done. Of the \$120 million that we have spent on ITS deployment so far, most of it has been State-funded; about 73 percent of it.

The reason for that, in many cases, is because we knew the Federal program would be so difficult to get through, that it was much easier just to do it with our own funds.

If you want an example, just in summary, CMAQ funds. There is no bigger "bang for the buck" than ITS technology in reducing congestion and increasing air quality. Yet, CMAQ funds can still only be used for 3 years' worth of operation. After 3 years, you have to find some other funding source. We think that that needs to change.

Mr. TINKLENBERG. We, as many in the room know, had the opportunity to do a major study of our ramp meter system, which is one of the components of our traffic management.

Mr. SQUIRES. Elwyn, let me tell you, my family is from Minnesota. My father is, as a person who drives a car, of course, an expert on this subject.

[Laughter.]

Mr. TINKLENBERG. There are many in Minnesota.

Mr. SQUIRES. He followed your work carefully.

Mr. TINKLENBERG. Some of them, unfortunately, have radio programs.

[Laughter.]

Mr. TINKLENBERG. But one of the things that we discovered in that study, and I will just give you a few statistics, and this is from the summary of the findings, crashes increased by 26 percent when metered freeways and ramps in the peak period, when the meters were turned off.

Rear end crashes increased by 25 percent. Freeway travel times increased by an average of 22 percent when meters were turned off. That is the travel time, and the amount of time you spent on the freeway increased.

Freeway travel times decreased by an average of 14 percent when the meters were turned off. The big one, and we do a lot of customer surveys, and in one of them, the customers say constantly, we want a smooth, safe, predictable trip. The reliability of travel time, the buffer time, decreased by 91 percent, when the meters were turned off.

These are real benefits; and when we get to, as Dr. Miller said, performance measurements, and really doing more in terms of measuring the performance of our systems, I think we are going to see more and more that these technologies are mature enough to make real substantive differences on the system.

Our calculation was that it provides annual benefits. The ramp metering system itself provides annual benefits of about \$40 million to our system. The cost of developing the system and operating the system is about \$2.8 million per year. So there is a huge cost benefit relationship, as well.

Mr. SQUIRES. If I could ask a quick question, before we move down the line, notwithstanding John's concerns about just working through any Federal process takes a long time, can you respond to a congestion or traffic flow challenges more rapidly through technology deployment than through a build solution?

Mr. TINKLENBERG. I believe so. Again, it goes back to, I think there are some changes in the procurement process that need to be made, and some streamlining that is appropriate to ITS technology

and the development of that technology, that are different from building another lane.

But I think you can respond much more quickly, and with less disruption. If you go into a major freeway in a metropolitan area, and have to start buying right-of-way, the impact of that is enormous. Whereas, if you start wiring it, or providing the technology, it is much, much less noticeable.

Mr. WARREN. Jacob?

Mr. SNOW. For the record, this is Jacob Snow.

Certain parts of the ITS infrastructure, I think, are definitely proven to be more specific signal controllers; particularly from a security standpoint.

Previously, in Las Vegas, we had a centralized architecture, where everything was in one place. If you had a backhoe dig up a cable, the system would go down. We are much more vulnerable to disruptions of that sort.

Now, with the advance signal controllers that we have, where the intelligence is actually located in the traffic signal itself, if there is a disruption somewhere else, we can still keep those signals in step with each other.

What we see the role of the Federal Government doing, to kind of move back toward Ruth's question, is to function as a clearinghouse and as a repository of best practices for ITS, and with more funding, have agencies compete for those demonstrably effective ITS technologies in performance.

One specific measure that we are doing with our bus fleet, because we are also the transit operator, as well as the MPO, people do not believe that our buses can keep up with regular traffic.

Well, I am here to tell you that our buses run as many red lights as anybody else out there, and we can go as fast as any of the other vehicles on the freeway system.

[Laughter.]

Mr. SNOW. We have satellite GPS-equipped transceivers on all 400 of our vehicles. We are using those satellites to keep track, real time, on our street and highway and arterial network in the valley.

We can test different signal parameters, real time, to actually measure their performance. We have an embryonic performance measurement system going with that as the basis for it, and we plan on expanding that.

So there are definitely demonstrable ways where ITS is definitely out of the research category, although we need to continue research and development.

But we also look, and we would agree with John, to CMAQ money and, indeed, STP money needs to be broken loose, to be programmed at the MPO level, to be eligible for these activities; and we need to do that in a more aggressive fashion.

Mr. GOLDSTEIN. My name is Jack Goldstein, and I want to speak wearing two hats. Let me speak for ITS America and then I want to comment on El Tinklenberg's report, with respect to procurement, wearing my private sector hat. So let me first make a couple of comments about deployment.

I think it is very critical to continue the deployment of ITS, in several ways. There are many widgets out there now that are performing at a very, very satisfactory way.

First, you need wider distribution of those existing capabilities. Second, there are things are the drawing board ready to be deployed, that need to be pushed to be deployed, to enhance that is already out there, and to spread the word more widely across.

Third, you need to keep the R&D effort going, to keep things in the pipeline, and very importantly, to keep the private sector involved, to keep things moving along, to keep their R&D programs going, to come up with those innovative ideas that will give you the next generation of good things that are going to make a difference for the people that are operating the State systems.

Now let me wear my private sector hat. What El Tinklenberg said is absolutely correct. The procurement process has to change in order to keep the private sector interested in being involved in this whole arena of ITS.

Some things just do not lend themselves to fixed price, low bid procurements. Software development, which is critical to all of these ITS things that we are talking about, falls into that category.

Having had experience with trying to develop software under a contract that is the same as for pouring concrete along the road, believe me when I tell you, that is very, very difficult, and impedes, in many ways, good private sector companies from wanting to stay involved in the industry, because it is a very, very risky business to the bottom line. Thank you.

Mr. WARREN. It would be better if we can keep it to about 30 second, so we can move on to Megan's questions. I would like to hear from the Oklahoma perspective.

Mr. SURRETT. I am Mitch Surret. I am counsel to the Secretary of Transportation in Oklahoma. I will make a real quick point.

This is something we experienced. We received \$3 million last year in ITS funding, and we went to actually implement some of the ideas we had in the programs we were pursuing. It was integration funds which we could not use for deployment of some of the systems we wanted to use.

So I would say flexibility in the funds you receive is very important to us in Oklahoma, and probably to some of the other States. That would be all I wanted to say.

Ms. STANLEY. I am Megan Stanley. I am the general counsel for the Republican staff of the committee. I would like to allow a couple more questions to Jeff's questions, because I think those are key; especially talking about the technology, and then also talking about moving it from the research title to perhaps some of the core programs.

So I know Steve Lockwood and Matt Edelman wanted to respond to that, so please go ahead.

Mr. LOCKWOOD. I will just make a brief point. This is Steve Lockwood, and I am associating myself with the previous comments, which I certainly agree with.

Just to generalize a bit, implementing ITS in management operations, the technology dimension is part of the cultural change challenge that everybody is struggling with at the Federal, State, and local level, in both the public and private sectors.

Many of the technologies and systems that are essential to get a grip on these issues evolve at a relatively rapid pace, compared

to those technologies that are the traditional transportation technologies.

The institutional arrangements, which include procurement, the development of standards, the allocation of funds, how one thinks about programming for incremental upgrades and so on, is simply not part of our culture. Heroic efforts have been made in many corners of Federal and State, to deal with these issues.

You can see here and there, innovative procurement approaches, some of which do exist, and have been very successfully used, dealing with the issues that Jack referred to.

The standards efforts that FHWA has led have been very important and continue to be important, in terms of upgrading and maintaining standards, because the technologies changes, and the research and development efforts, as well.

The way of thinking about the technology, and the way it permeates all the institutional and administrative arrangements, has not quite sort of been institutionalized. I think we know what many of the answers are, and I think there are some significant legislative issues, some of which may simply be clarification, a distinct from the needs for change in law.

Mr. EDELMAN. This is Matt Edelman. As to the question, Mr. Squires, of "ready for prime time," we see the assistance in prime time every day. We see an extraordinary contrast between those corridors and facilities that are instrumented with ITS technology, and those that are not.

In some of the corridors where, for instance, we are using probe technology to instrument it, where we have this instrumentation, we detect that everybody responds far faster.

The quality of travel time that we can give to the public, which is ultimately what we think they want; the travel time information that can go on that variable methods sign is precise and it is exact.

The ability to help bus operators with this information, in terms of re-routing and re-deployment is precise. It is exact.

For construction zone management, it makes those people out in the field, with all the pressures they are under, respond more effectively.

Contrast that to the many corridors where we are not instrumented, and it is sort of aggressive "shoe leather data grubbing." A well meaning member, maybe from another agency, calls from an interstate run by a DOT. Something is wrong. Well, we did not hear anything; we will check.

You call a DOT. Maybe the DOT regional office does not have it. Maybe they will call the office at the Headquarters.

Maybe, in turn, someone will call the local police. Maybe someone will call and say, well, there is a construction crew here, we have their number in the trailer.

That process, however aggressively we do it, can take from 5 minutes to forty minutes. So we see it every day, how much better we can serve the public, when we have this kind of information from ITS.

Mr. MILLER. This is Bill Miller from Oklahoma. I just had a point for Admiral Bennis. When we started looking at security of our airports, we were fortunate in that we were able to bring in

a Washington, DC.-based security firm, to look at some general aviation security issues.

The guidance that we gave them was that they were going to have to utilize ITS technologies, as the foundation upon which to build this security plan, minus a couple of biometric pieces that we put in it.

So what we intend to do is take these ITS technologies, Mr. Johnson, and extend them beyond surface transportation, into all realms: rail, waterways, transit. It turned out, and we put a 5-year tag on it, also, to look at what the lifespan on it would be.

It was expensive, Admiral, there is no doubt about that. But we felt like we could get a pretty good product with this. The part about it is this airport sat right in between; on the west side was the interstate highway, and on the east side was one of two major rail corridors, running through the State or Oklahoma.

So we took a very modal look at this particular instance, and it worked out, primarily using ITS technologies. Thank you.

Ms. STANLEY. My next question is for Mr. Njord. Congratulations on the successful Olympic Games. I know that you had a lot of challenges in completing the I-15 project. But I was very impressed by the statistics that you said, about reduced congestion in that corridor, to both the structural improvements to I-15 and the ITS improvements.

Can you, perhaps attribute to either of those components, and give us a little idea about the challenge of that project; what it entailed; and how those two components work together, to contribute to the reduced congestion?

Mr. NJORD. I would be happy to try. Thank you for the compliment. It was quite an experience to go through both the reconstruction of I-15, and then also to stage the Olympic Games.

When we began the construction of the I-15 project, we had some very serious deficiencies, both structural and operational, along the I-15 corridor. We had a lot of accidents that were taking place there, and a lot of people were losing their lives along the I-15 corridor.

It is interesting that through the four and-a-half year period of time that we were building the project, the project took on an Olympic name. It was the Salt Lake Luge.

[Laughter.]

Mr. NJORD. That was indicative of the barriers that we placed upon the entire corridor. Once you got inside the luge, you could not get out of the luge.

We literally shut down miles of connecting roads to the project. But that enabled us, really, to complete the project in a very short period of time; a very large \$1.6 billion project in four and-a-half years.

We decided, from the very start, that we would implement the latest and greatest ITS technology in the project, and that it would be incorporated in every element of that particular project; which, by the way, once again, like the ITS deployment, was largely State funded—approximately 88 percent State funded.

We deployed ITS technologies along the entire corridor; fiber optic cables and enough to expand into the future. We have got 200

cameras that are out there, giving us real time information, full motion, tilt, pan, zoom, information.

I mentioned the statistic that we had 74 million hits on our website during the month of February. In a regular week, we have about one and-a-half million hits on our website. We believe the reason that they go to the website is because they get good, accurate real time information.

We have a system where folks can be paged on their pagers or their cell phones, to tell them about their commute ride on the way home or on their way to work. That gives them real time information about what is taking place out there.

We are continuing to expand the system. Right now, we are in the process of integrating all the construction plans that all the entities have on all of the various facilities that are built by either local or State or utilities, et cetera.

We are putting all of that information together in one site, so that we can once again, as others have communicated here, we need to be able to communicate that.

I think it was you, Matt, that said, we have got to be able to communicate to our customers what is happening on all the system, not just the system that we own. We talk about how important it is to collaborate and to cooperate, one with another, in order to make our customers satisfied with what we are doing.

Ms. STANLEY. To clarify, you described the ITS component, and what was the structural component of the I-15 corridor project?

Mr. NJORD. Well, I-15, it is 17 miles long, and the portion that we were constructing, it was three lanes in each direction when we started. It is now five to six lanes in each direction, plus an HOV lane, plus an auxiliary lanes.

We reconstructed 142 bridges, depending on how you count it. I am always interested to talk to our structural engineers. It is 142 to 156.

[Laughter.]

Mr. NJORD. I think now how can we build that many bridges and not know how many bridges it is. But apparently, where bridges come together and go apart, there are discrepancies about, is that a bridge or not a bridge.

But there were a lot of physical impairments along that corridor. There was one bridge that I called the sacrificial bridge. It was a steel structural bridge, that got hit about four or five times a year.

We always left that bridge just a little bit low, because we knew if they did not hit that bridge, they would hit the next bridge, which was much more critical to us. So we kept it artificially low, just so we could make sure we would catch everybody.

[Laughter.]

Mr. NJORD. So all those structural deficiencies have been taken care of. We have a system now that is very safe. In fact, the accident rate has decreased incredibly along the corridor, as well as the death rate, which is even more important to me.

Mr. LOCKWOOD. This is Steve Lockwood. I just wanted to add a comment about I-15, which I think illustrates an important component about the notion of systems management and operations.

In addition to the application of technology and design standards, one of the other key features of the project was its accelerated proc-

ess, which was accomplished by design build and program management.

Within the context of a management and operations perspective, that the department brought to bear, essentially saying, look, instead of disrupting people for, you know, 12 years or whatever it would have been, we are going to concentrate the action and maintain traffic in a very effective way, over the shortest possible period of time.

That is a point of view that is customer-oriented, and is part of the new mind set of management and operations. So it is not just an ITS issue or a technology issue. It is everything that owners do, that departments do, is infused with this notion of customer convenience. So it affects other things like procurement, like how design and construction is done, and so on.

Ms. STANLEY. I have one last point. Would it be fair to say, though, that you used 88 percent State funds, because a greater Federal contribution to the project would have actually caused more delay in the accelerated procurement and design build and construction processes that you were trying to accomplish?

Mr. NJORD. We would have gladly accepted more Federal funding. In fact, on the I-15 project, we followed all the Federal processes. Once you put a dollar of Federal money into it, it all becomes Federal.

I talk about the deployment of other projects within the area, that are ITS related, that were totally State funded. They were accelerated just because we had to have them accelerated.

But the I-15 project was done as a Federal project. It was just that the percentages were reversed. It should have been the other way.

Mr. SANDBERG. My name is J.C. Sandberg, and I am counsel to the majority staff on the Environment and Public Works Committee.

I wanted to tell Mr. Njord that I was an early participant in the Salt Lake Luge, when I was going to school in Utah, quite some time ago, and remember the Jersey barriers.

I wanted to focus on security. One of the other hats I wear is helping the committee oversee the Federal Emergency Management Agency. We speak all the time with the first responder community.

As many of you have mentioned today, security has become the buzzword, or the watch word, since the unfortunate incidents of September 11th. My question, I guess, would be how can we use operations to better enhance our communication between our first responders, to move people in times of disaster, and to increase both surveillance and monitoring capacity of incidents and of critical infrastructure.

I guess I would like to start with Mr. Edelman. We have had a conversation about this, and if you could kind of talk about your experience, following September 11th, and how you used operations and ITS to evacuate and reroute traffic around the city.

Mr. EDELMAN. The first thing that we realized, and we were starting to realize it prior to the attacks, and then it became very quickly confirmed afterwards, that those of us in the transportation community thought we had a big enough job creating systems to

talk to each other, working with each other, toll authority to DOT, DOT to bus agency, bus agency to rail agency, et cetera.

Then there was the realization, even prior to September 11th, that we are creating these architectures to exchange information, largely among civilians; and that the police community was hungry for this information. The Emergency Management Committee was hungry for this information. They did not necessarily have the time or the resources to replicate these networks.

So literally on that date and at that moment, we had to sort of redefine ourselves, from a transportation coalition to a transportation and emergency management and public safety coalition.

As the information went out, in collective hourly sweeps, of what is going on across the region, as the demand for information was huge, and the amount of information was huge, DOT would call and say, could you add my emergency management unit to that information? A State police unit would say, would you add the following stations? It would grow and grow.

Through the I-95 Coalition, DOT would say, throw on this State police, and it grew from 40 transportation agencies talking to each other, to literally hundreds of agencies, exchanging information on that day and the days afterwards.

Just through the reality, the police wanted to know, and we thought, in your building coalitions, it is a big enough job to get transportation people to work with each other; go lightly with regard to police people; you have a big enough job; do not overstate it. They were hungry. They were open for it.

What has been happening since is, for example, our video network, which we thought was a big enough deal to get 14 transportation agencies to talk to each other; since September 11th, we are installing that in Police Plaza with NYPD.

Now what is done with that information, we do not have statutory to command evacuations, to lead evaluations. But what we do know is we are transportation people. We have an infrastructure here that police are hungry for it, and we make it available to them in any way.

What they do with that information, sometimes they tell us and sometimes they do not. But as public servants, anything that we have invested in and anything we can share with them, we do, and that is growing and growing.

With our regional architecture, it is the same thing. It is largely civilians, and the number of work stations that are going up to our police colleagues are growing and growing.

Your actual question about what happened on that day, it is hard to give a short answer to that. What we can say, and more of this will hopefully come out with discussion, but empowering our police colleagues in any way when they made the difficult decisions of what you open and what you shut down, this was strengthened through this transportation information.

I will give just one example, and I will yield. You had a bus terminal in western Midtown Manhattan, that had tens of thousands of people, in effect, trapped there. They could not get the buses in to take them home. They could not, because they were concerned about running them through a tunnel under the Hudson River.

Everybody wanted to do the right thing, and the right thing was, get the buses one, one agency; open up the terminal, another agency; get the highway from the tunnel running, another agency; and secure it, another agency, in this case, a police agency.

We had an early investment in ITC probe technology in that corridor. We knew what was going on. We knew what conditions were, and with the relationships that we had, we could open it briefly, and close it.

But what was happening, everybody was making transportation demand decisions. The people are here, I want to open the terminal. The buses are here, I want to get them in.

Everybody tied in through the ITS technology of the conference call button, to quickly figure out what was going on. We gave them the information and they made the decisions. They said yes; they said no; and when they said, sorry, it is not secured, cannot do it; you have got 30,000 people in there and you want to get them home, but you want to get them home alive, and we deferred.

So we had the knowledge, they had the power, and it worked out very well.

Mr. SANDBERG. Mr. Hungerbeeler?

Mr. HUNGERBEELEER. Thank you, Henry Hungerbeeler; certainly I agree with what Matt has said, and I compliment them on their response on September 11th.

I think it may be a little known fact that, in many cases, transportation agencies are first responders. I mentioned earlier that the first responders did the starring role, and transportation is usually a supporting cast member.

But this week, in the State of Missouri, we had over 100 State highways closed due to flooding. In almost all cases, transportation was the first responder for that.

We have had cases of train derailments, where transportation has not only been the first responder, but the one who first realized there had been a train derailment, and called the traditional first responders.

There is universal agreement with the traditional first responders, that we need a better communication system, so that we can all talk together and coordinate together. I am talking about a tactical system, a radio system. Certainly, the coordination and communications at the ops center level are needed, as well.

We are all working on those things, but we would like to, I think, suggest that the Federal Government could help in that regard through funding, for example, that comes from Homeland Security or FEMA.

Mr. TINKLENBERG. This is El Tinklenberg from Minnesota. I want to reinforce that we have developed transportation operations communication centers around the State, where we have a joint dispatching center for our own vehicles, and for the highway patrol vehicles. So we have a communications link there that works very well for us.

But we still have not developed the technology, especially in the out-start State portions of Minnesota, that allow us to speak to all of the emergency responders at the same time.

You are carrying all kinds of different radios; one to talk to the county sheriff, and one to talk to the city police, and one to talk

to fire department, and one to talk to EMS. That really needs to change.

It is not just in terms of what we think now in terms of emergency response; but natural disasters, if we have a tornado, and we had this experience in Minnesota, where a whole bunch of people came, but they could not talk to each other, in coordinating the communication.

That is why I mentioned earlier at this forum, each member of the U.S. DOT was there, responding with communication as being a central issue. I think the Federal role in helping us deal with that is a vital security interest.

Mr. SANDBERG. Ann?

Ms. LOOMIS. Welcome, everybody, I am Ann Loomis, and I am with Senator Warner's office from Virginia.

Virginia is pleased to be home to many Federal agencies, both military and just being a part of the Metropolitan Washington Region. Like many of you all, we struggle every day with congestion in major metropolitan areas.

I want to be sure that I understood correctly your earlier remarks that of the changing culture within DOTs, that because of the resource demands of building new facilities or adding lanes to existing facilities, particularly if you are in a non-attainment area, and the length of time it takes to implement those strategies, that perhaps over the past few years, there is a more growing investment and intention in ITS technologies, to improve your performance of your existing systems.

It is those resource challenges that are getting you to be a little more inventive in looking at installing ITS technologies on existing facilities. Is that sort of the demands that you all are looking at? Mr. Goldstein?

Mr. GOLDSTEIN. Ann, Jack Goldstein; you know, I want to comment, right here in Virginia, you had a classic example of how ITS can help on 9/11.

When the Pentagon was hit, and they had to use ITS capabilities to actually re-deploy the traffic and, you know, under the good guidance of Tom Farley, whom I am sure you know in Northern Virginia, it was very, very successful.

But part of your question relates to Jeff's question with respect to deployment, in a very important way. That is that ITS cannot only help on the major throughways, but can help on the arterials, as well.

As you continue to deploy ITS and provide the funding for that deployment, in some way that clearly continues it along, it would have helped tremendously on 9/11, if once traffic was routed off of 95 and off of 66, if there had been some way to move it through the arterials in a much more efficient way.

Ms. LOOMIS. Absolutely.

Mr. GOLDSTEIN. I was one of those that was caught in the traffic. I am sure that several of you were the same way.

There have been some examples, not entirely successful, of attempts at this. For example, the Smart Corridor Project out in California, was started after the earthquake back in Los Angeles, and it was an attempt to find a way, when a major thoroughway is down, like I-10 that goes through Santa Monica, to be able to move

traffic off of the I-10 and through the arterials, using ITS to help speed the way through that. Hurricane evacuation in the Southeast is another example.

So in my mind, when you think about continuing deployment, you have to think about how do you take what you have and do more and more with it, and the arterial deployment is one of those ways.

Mr. LOCKWOOD. This is Steve Lockwood. I want to make sure that you were not suggesting that there was a convention now, within the transportation arena, that resource shortages that most owners are feeling is somehow inexorably leading them to ITS, because I do not think that is the case.

All owners of certainly State DOTs and major local governments, first of all, they have an enormous legacy project inertia; things that are in the pipeline, to which commitments have been made, and many of them have very big backlogs of projects that are important to those States.

In addition to this, institutionally, given the stovepiping that exists in any large institution, in the absence of a very clear policy, and reorganization of priorities, focusing on management and operations, ITS projects and other kinds of management operations' investments are not likely to have the highest priority. That is just a practical reality that is faced virtually nationwide.

I think the best expression of this is, with very few exceptions, State DOTs in particular and local governments, as well, do not have a line item in their budget that say ITS, or say systems management and operations.

It is most often imbedded in other general activities or sometimes it is an earmarked program. So the challenge that we are facing here, in an environment of perpetual resource shortages, from the point of view of management, is actually a shift in policy and priorities, saying in that environment, we are going to look hard at where we get the best performance bang for the buck in a reasonable timeframe.

But that is not the habit; that is not the convention, and we face an important uphill battle. Here is an area where I think Federal aid program leadership is important, to highlight the significance, to highlight the need to look at cost effectiveness and pay attention to performance.

Ms. LOOMIS. Yes, Mr. Snow?

Mr. SNOW. This is Jacob Snow, for the record.

Ann, sometimes the traditional approach of just adding capacity to deal with the congestion problem just is not feasible. You cannot get the right-of-way, or you may have some serious political problems.

Ms. LOOMIS. Well, that is what I thought some DOTs were saying, that because of all those issues, particularly, if you are in a non-attainment area, that now you can see, you can more quickly implement some congestion relief through an ITS project, as opposed to a new capacity project.

Is there more of a growing acceptance of looking at both ways to deal with congestion, as opposed to traditionally, it was new construction?

Mr. SNOW. A survey that we did, or I should not say we, but a survey that AMPO did, of people throughout the country, throughout the MPO planning process, indicated that there was higher preference for improving system management and operations, as opposed to adding capacity, which is certainly a new trend that we are seeing.

In Las Vegas, we are going through somewhat of a minor freeway revolt. We have built our own beltway in that community, except for on the eastern part of the valley. To continue that beltway through, we would have to acquire 2,000 homes. Despite the environmental disruption, the cost to do so is going to be prohibitive.

The Mayor of the city of Las Vegas is on our board. He would go to meeting with me, and he is a very flamboyant individual. He would say, we have got good news and bad news. The good news is that the RTC has all the traffic signals synchronized. The bad news is that they are all red.

[Laughter.]

Mr. SNOW. He always got a big laugh out of that. I never thought it was funny.

[Laughter.]

Mr. SNOW. But it has become a populace issue that many politicians are now seizing saying, we have got to get these traffic signals synchronized and coordinated. It is now becoming a real popular political issue to look at ITS.

Ms. LOOMIS. Yes?

Mr. HUNGERBEELER. This is Henry Hungerbeeler. I do not think there is any question but that we can implement ITS solutions that help us with our capacity problems, and we can do it faster and cheaper than we can with concrete and asphalt.

I think it is imperative that we responsibly use the taxpayer dollars to get the maximum efficiency that we can from the existing system, before we expand the system further.

Ms. LOOMIS. I have the red light, but I need to ask one more question, please. This is a more parochial question, that maybe Dr. Johnson and Admiral Bennis could comment on; and it sounds like, Mr. Edelman, you certainly have had extensive experience in this area.

It is clear that ITS collects a lot of information. But I have greater interest in how we utilize that information. I know many of you have spoke about the need for greater coordination.

Since September 11th, we have found nothing more challenging in this metropolitan area than coordination. You have two States, the District of Columbia, multiple local governments. You have a transit system. You have two commuter rail systems, and most importantly, you have the Federal Government.

We are struggling with how to use the information that is collected from ITS, and to use our existing ITS systems to communicate to the population at large, if another major event unfortunately would occur.

We find our greatest struggle is coordinating with the Federal Government. We have existing systems in place through OPM, that if you have a snow day, whether the Federal Government is closing or not, and that is a whole spider web of who has to call whom, before you decide that simple fact.

But we are learning now, we have several MPOs in the region, under the umbrella of the Washington Council of Governments, and they are trying to coordinate who calls whom, and who makes some decisions about what happens.

On September 11th, as many of you all will remember, incorrect information was, was the 14th Street Bridge open or closed? Was the subway system, WMATA, running or closed? The police were on the TV saying it is closed, and then the Mayor is on saying it is open. We realized, many people, you know, who has authority to make those decisions? Nobody could answer that. So we are all struggling now. I know the District of Columbia has a significant appropriation for coordination and evacuating plans, along with Virginia. But we find the Federal Government, one, not coming to the meetings; or two, coming and not offering to say what their role is.

FEMA comes and says, well, we only play a role after the event happens. I did not know, Dr. Johnson, if you were participating in these meetings, or Admiral Bennis, if you are participating; and who decides if the Federal Government is open or closed; and how you communicate with everybody, to have rush hour trains run during the mid-day; all these are just types of coordinating examples.

It sounds like, Mr. Edelman, you have been quite experienced within the Metropolitan Washington Area and in New York.

Ms. JOHNSON. Well, I think you are describing what I would have described to exist in the New York/New Jersey region, prior to TRANSCOM being invented, in essence. We need, in this region, in my opinion, something very similar to TRANSCOM.

Your direct question as to whether I am participating, the Federal Highway Administration, nor does DOT, have the authority to open and close things. I think that is OPM's responsibility.

The appropriate entity to participate would be our division office, and I do not know the answer to that. What I will do is try to get back to you.

Ms. LOOMIS. And Admiral Bennis, now in your new role, clearly, what the Federal Government decides to do in this region impacts greatly on the performance and the operations of our existing network. I know sometimes a Homeland Security officer goes to the meetings.

I was just wondering, who is the right person in the Federal Government, to coordinate, and do you participate; or does your office participate?

Admiral BENNIS. As I said, we are small, but we will be participating, from this day on.

I would like to add that I was in New York, and the work that community does up there is exceptional; with TRANSCOM, it is truly unique, the jointness of the Federal, the State, the local, in the New York area.

I mean, you can go to any one of those Command Centers, any of the Task Forces, and they are all speaking together, talking together, working together. It is really a model that all communities should follow.

The comment has frequently been made that they picked the wrong country and they picked the wrong city. New York was able to respond in a remarkable fashion.

The Secretary of Transportation is shortly going to open his Transportation Information Operations Center, which is also going to bring together an awful lot of information from an awful lot of transportation modes.

It is not just from the modal administrators; it is from the representatives out in the industry and in the community. It is something that we certainly need, an opportunity to bring together intelligence and information, and disseminate that rapidly to the appropriate people. I believe that is a step in the right direction, as well.

Ms. LOOMIS. Thank you.

Ms. BERVER. Thank you, and welcome everybody, I am Caroline Berver, with Senator Graham of Florida's office.

I have got a two part question, perhaps first for Dr. Miller and Admiral Bennis, and then anybody who would like to comment.

Looking into the future, can you share your thoughts and the linkages or relationships between the various modes of transportation and national security? How does rail security affect highways and bridges, how do ports and cargo containers affect, airports, highways, and bridges, rail security, and then what kind of linkages there are there.

Then from a policy perspective, are we better served as a Nation by developing one comprehensive transportation security plan, that covers all of those modes, or if this committee works on highways, bridges, tunnels, railways, and strengthens those, and cargo and port security goes for it, do we, just on an independent track, eventually reach the same level of national security, or is it better to try one more comprehensive plan with all of the modes? I would like to get your advice and comments on that.

Admiral BENNIS. I have organized my world in the Transportation Security Administration in an umbrella type of organization. Instead of having rail, highway, and maritime, whatever, we have broken it out by cargo, by passenger, by infrastructure.

Because I believe we need the same level of security in an umbrella mode, as that individual or that cargo or container moves from Rotterdam to Rochester, or wherever it is moving from; and two, we should treat it the same as it crosses borders, as it crosses modes, as it goes from one mode to the next.

Since 9/11, the modal administrators within the department immediately stepped up to the plate with some tremendous initiatives and some wonderful projects and vulnerability assessments of their modes. As they have done that, we hope to identify best practices, set industry standards, and set out from there.

But my personal belief is that it works very well if you have an umbrella over the cargo and an umbrella over the passengers. There is no reason that we should look at the passenger on an airplane any different than a passenger on a 4,000 passenger Staten Island ferry, or a passenger on mass transit in any of our cities.

Ms. BERVER. Is there anybody else that could add anything to that, on the linkages between the modes of transportation and security issues, that we could keep in mind?

[No response.]

Ms. BERVER. I have one other question, with respect to ITS. we had talked about using that technology to respond to terrorist events or unpredicted events. Florida is heading into hurricane season. It will start next month.

Dr. JOHNSON OR MR. Goldstein, you talked a little bit about using ITS for natural disasters like hurricanes. Are there things that you have on the horizon, that you are hoping to do, that would address perhaps mass evacuations, because of hurricane or other natural disasters?

Ms. JOHNSON. We have just completed three or four workshops in the Southeast on evacuation, and both learned a great deal ourselves, for the next round.

Hurricane Floyd set off a new relationship between DOT or FHWA and FEMA. So I could give you lots of information there.

Now just following on, yesterday, as a matter of fact, we kicked off kind of a twin sister to those workshops, focusing specifically security. We will do another 10 of those in sequence, and then look to whether the investment is good, and continue that.

But I just debriefed the individuals that were involved in that, and it really was successful. One of the things that came out, it was funny, we do not usually talk to these people, at least before we leave this workshop. We have an e-mail group, and it is those kinds of things that were coming out.

Mr. GOLDSTEIN. This is Jack Goldstein. The only thing I would add to what Christine said is, again, back to this issue that I talked about. There are a lot of technologies out there right now that will permit a more orderly evacuation, with respect to routing, with respect to traffic control, with respect to flow; and those things are ready to be deployed. It just takes the resources to get them out there in the different States to deploy.

I know that there have been several private sector/public sector interactions with respect to making the States in the Southeast aware of what is available, once the funding becomes available for deployment of those initiatives.

It is not only traffic control. It is not only security, but it is hurricane evaluation, and all the other ancillary benefits that argue for this continued deployment. It goes back to the point I made, there are things out there and they need to be more widely spread. The new stuff needs to be deployed.

What you do not want to do is lose the impetus that you now have, because there are things available to get out in the field.

Mr. LOCKWOOD. This is Steve Lockwood. Just to reinforce that point that several of us have made here, is the advantages of the kinds of technologies that are now called, somewhat annoyingly, info-structure, which we are growing to love to hate. These can serve multiple purposes, clearly, for conventional traffic management in a congestion or incident environment. Certainly, for hurricane evacuation and also for security-related events, there have been several studies of the application of ITS technology in hurricane evaluation settings. These are still inconclusive.

But one component or one aspect or one conclusion that has been reached is, of course, it is not an inconsiderable undertaking; and that perhaps for hurricane evacuation alone, the justification would

not be as strong as it is when you begin to look at the multi-purpose benefits of application, and that is where there really is a demand for resources.

Many of the groups here around the table believe that an important part of the Federal aid program in reauthorization is to focus on those resource requirements for those multiple purposes.

Mr. EDELMAN. This is Matt Edelman. I have one brief comment regarding future synergies between the transportation community and the emergency management community.

In the months prior to 9/11, FEMA came to see us, to look at our regional ITS architecture and said, you know, this may be a means of disseminating information, before we have a duplicate investment.

They were then kind enough to send one of our planner engineers down to Miami for a week-long evacuation planning workshop, relating to hurricanes. We learned a phenomenal amount; and after they learned about us, in terms of what we can do for information dissemination, we learned about them, and just how sophisticated they were, and the kind of tools that they can help us use.

Ms. VAN MARK. Dr. Miller, did you have something to add?

Mr. MILLER. Thanks, Ruth, just a question from Jacob and from John, in your preparations, did you do any type of computer-based simulations, to figure out what kind of bang you were going to get for the buck?

Mr. NJORD. Yes, in the years prior to the Olympics, in the years of planning, I used to tell our people, we are in the process of planning what will be an orchestrated disaster. We did a lot of simulations, to simulate what we thought would happen.

But I think one of the things that we learned, and one of the things that I think is key to the effective implementation of an ITS system, is you have to start out with the premise that the customers that we serve are intelligent human beings; and that intelligent transportation systems, if we provide them good information, they will make intelligent decisions.

We have seen that over and over, again. The campaign that we rolled out for the Olympics was a campaign that we called "Know Before You Go," and we asked people to know before they left their homes, what was going to take place; know before you leave your work; know before you go to the grocery store, before you pick up your children; know before you go.

What we found is that if people know before they go, they will make good decisions. I think as long as we keep that in the back of our mind, that we have to give them good information, reliable information, they will make good decisions, if they know.

Mr. SNOW. Dr. Miller, this is Jacob Snow.

We did utilize some systems dynamic modeling. We brought in experts from UNLV. The core of that was our trans-plan traffic domain and forecasting model; but, yes, we did use system dynamics modeling to come up with "bang for the buck" estimates.

Mr. WARREN. I have a couple of administrative items before the break. Somewhere around, there is a sign-up list for everyone to sign up, so that we can get you a transcript of this, once we get it back in a couple of weeks.

I also wanted to reiterate Jeff's comments, since Lauren was out of the room, thanking Lauren Jones and Duane Nystrom for their help in putting this together.

I think the one administrative mistake that we made was last night, Lauren and I came in here and decided to put everyone's name cards out, and did not take into account the humidity of the room. They all kind of melted over night. We came in and they were flat.

[Laughter.]

Mr. WARREN. So Duane did some first aid and they are still drooping, but he got them back up a little bit.

We have food here. I want to thank AASHTO for generously supplying the food. Take advantage of that during the break and we will see you in about 5 minutes.

[Recess.]

Mr. SQUIRES. Before we really get rolling, I want to just share one thought. I have been thinking about this extraordinary figure of 74 million hits in the month of February, and I have concluded that 73 million of those were people ordering those blue USA berets.

[Laughter.]

Mr. GOLDSTEIN. From a Canadian country.

Mr. WARREN. Well, I guess we are still missing a couple of panelists, but we can get started. If everyone can remember to just say your name before you speak, so we can get you down on the transcript, that will be a big help.

But I want to open it up to anybody from the panel, who might want to ask a question of another panelist, or make a comment, or take advantage of Admiral Bennis generously agreeing to be with us, to make suggestions as to how the Transportation Security Administration might be able to work with you on security issues.

Ms. VAN MARK. Following up on that, Mitch, and this is Ruth Van Mark, Admiral, your agency is somewhat of a mystery to all of us.

[Laughter.]

Ms. VAN MARK. So we are very excited to see you here, and we are hoping you can help clear that up.

But I noticed in some of the comments of our panelists, they were talking about communicating with the Homeland Security Office. Is it more appropriate that we should be directing our transportation security questions to you, or is Homeland Security the place we should be going?

Admiral BENNIS. It is two different worlds. It depends on what your focus is and what your question is. My mission, my focus, is very clearly delineated. I mean, if you are talking about passenger and cargo security, that is my world.

The Office of Homeland Security, everyone is waiting and watching to see what they are about to build or recommend, as far as emerging or existing agencies. ut their primary focus is homeland security, border security, protecting our borders. Also, they look at areas of security that perhaps need a little guidance and direction.

As I have met with those folks at OHS they, too, were pleased that we are standing up, the maritime and land side, of TSA. So

it is very clear, you know. If you are talking passengers and cargo, that is my world.

Mr. HUNGERBEELE. Certainly, I have no expertise in either one of those, being from a State DOT, and this is Henry Hungerbeeler, for the record.

But I think Homeland Security probably should be involved, to some extent, because of the overriding importance of transportation to our national security and to the economy of our Nation.

We believe that because of some of the new expenses, if you would, of improving the overall security of our transportation system, things that are not necessarily related to our normal course of business, that perhaps there is room for some of those expenses to be covered through the Homeland Security budget. We believe that they should be involved to that degree.

Otherwise, I mean, there are an awful lot of things that have direct security implications for what we are doing, but also have daily utility in the transportation system. I mean, the ITS is the perfect example.

So for that reason, we also believe that we need, you know, significant increases in the next Reauthorization Act, just to help us with those things that do enhance security, but also to help us in our every day lives, as we transport ourselves and all the things that we use.

Admiral BENNIS. I concur fully, absolutely. I was focusing on what my world is; but I am a part of that world, as well. I mean, OHS has a huge responsibility. Certainly, they are part of everything.

Ms. JOHNSON. I had wanted to make a comment. I think it was either Carolyn or Ann that was trying to raise the question, and explore to what extent State DOTs were being pushed into the use of ITS, because it was so hard to add capacity. I think that that is occurring.

But the comment that I wanted to make is, that has been a historic perception of various operations activities; that is, that they are a substitute for capacity expansion. I would at least like to suggest in this discussion that operations need to be thought of as parallel to capacity expansion, and parallel to maintenance.

We would not, any more, think about building a roadway system, and just totally writing off any maintenance to it. We assume that we have to maintain it, and we do not think of maintenance as a substitute for construction.

In the same way, I would like to suggest that in densely populated, heavily used roadway systems, we now need to think of operating a roadway system as another component that we inherit when we build a road. It is just like we inherit the cost of maintenance, as opposed to a substitute for construction.

Mr. WARREN. Matt, and then J.C.

Mr. EDELMAN. I would like to affirm that point with a specific example. I do not think that anything that we, as a coalition, have dedicated ourselves to, in terms of both the institutional and the technological changes needed for regional operations and for ITS, is meant to be a substitute for the politically painful, but sometimes necessary decisions that will have to be made by our leaders,

with regard to adding capacity, at times, in a focused way, even in a region as congested as ours.

One example is, one of our member agencies has been working on twinning a bridge. The original bridge, which is four lanes, was built in 1929. It serves the seaports on both sides of a river.

Even if you did not have another vehicle of growth in demand in our region, just because of the goods movement issues alone, just because of the national security issues alone, in terms of having access to those ports, you would want to twin those bridges, and allow for 12 foot lanes, and allow for everything else that you need to do.

It is a tough thing to do, and they are doing it, and they are having the courage to do it. I know, as Christine said, when they do it, they will make sure they have all the latest ITS and operations and management systems.

But they still have to confront the painful situation of adding capacity; and I would not want what I do, in any way, to be seen as a substitute for that.

Mr. SANDBERG. Back to a few points that were made with the Homeland Security, I actually have sat in some of those meetings. As many of you have talked about, one of the big issues is the communications piece.

I know that AASHTO has some ideas on the table. Let me just say that we are getting ready to try and authorize how this First Responder Grant Program is going to go forward, \$3.5 billion. I know a big piece of that, in several of the hearings that we have had, post-September 11th, has been the communications piece.

So I welcome and offer that to you. We are very much open to suggestions that you may have about how we can effectively go about improving communications between the first responders, and tying that into improved operations systems.

We look forward to any input that you would have, if not in this setting, then in papers that you might have drafted or through e-mail or phone conversations. But we very much look forward to any suggestions that you might have about that.

Mr. WARREN. John Njord?

Mr. NJORD. I just wanted to say my "here, here" to what Christine said. ITS, as wonderful as it is, is no substitute for infrastructure. The experience that we have had in our State has been, you have to have both of them.

As a result of the success that we have seen on ITS, we have now made it a matter of course that any new project that we install includes all the latest ITS elements that we can put in there, in order to maximize the capacity of a particular facility.

To your question, J.C., about integrating other groups into the ITS system, as I mentioned before, in our traffic operations center, we have highway patrol dispatch at that location, watching our cameras, and actually dispatching the highway patrol troopers; as well as our instant management teams from that particular location.

That has been huge. It has been so important to the integration of what we have tried to do, as agencies together.

I did also mention that it has been difficult to integrate. Well, it has not been difficult. We just have not accomplished it yet. We

have not been able to integrate the emergency services people: the ambulances and those types of fire dispatch from that location.

But it is interesting, when public safety officials sense what we have got, the information that we have got, they want it. I think, Matt, you mentioned that in your testimony, that once they see it, they want it, and they want to have access to that information. We have been very generous in providing that information to whomever can use it, to enhance their operations.

Just before I took off on my plane yesterday to arrive here today, I was at the Utah Transit Authority main office, and they have all of our commuter-link technology right there. They have the camera linkage. They watch all of the light rail vehicles that are going in and out of the stations, and have used it, to a great degree, to maximize their system, as well. So sharing the information is really important.

Mr. WARREN. Mr. Hungerbeeler, did you have a comment?

Mr. HUNGERBEELER. Well, yes, this is Henry again, responding to J.C. We have been following your hearings and so forth and what you are doing.

I think what I have been trying to say is that transportation, in a lot of ways, is like a public utility, you know, like safe water supply or electricity or something else, a sewer system. I hate to use that one.

Mr. WARREN. Yes, right.

[Laughter.]

Mr. SANDBERG. Waste water.

Mr. HUNGERBEELER. But we are not appreciated until something goes wrong, you know. I mean, we are kind of taken for granted, until something goes wrong.

Governor Holden in Missouri formed a security panel, which closely mirrored a lot of the things that have been happening at the Federal level.

Of course, the first responders, the emergency services people, the public health people, and so forth, were the ones who had the most interest by everyone, by the public, by the Government, and every one. But they all readily agreed that they could do nothing without a functioning transportation system.

So because we are taken for granted, I guess I just want to keep reminding you that as you do this, as you pass out that money, for example, for an improved communications system, remember that transportation needs to be a part of that system; that we need to be able to talk with those other players, so that we can all do our job properly.

Mr. EDELMAN. Just to also follow through on the issue of communications, including the very literal of telecommunications costs, as it relates to these systems. This relates to some of our concerns for reauthorization and hopes that funds are available for long-term operation and maintenance.

Much of operation and maintenance is communications costs. These costs are often higher than we had hoped. One reason they are higher is because the systems are useful. The only way not to have confronted this issue is for the systems to fail and be ignored. But because people use them, there are more communications costs and more utilization.

Right now, as an example, one very small example, our video network, within the amount of the Federal grant, was of a scope that it did not initially include the NYPD installation that I talked about. That is something that is now not even a question, after 9/11.

We are talking about thousands of dollars per year for installation. Why; because they use it and they value it. What is happening here, in terms of tying it to more first responders, and again, as I said, taking the transportation community's information and giving it to the public safety community, there will be a cost, which is the more that they buy in and the more work stations they have, and the more servers they have, and the more they consume it, someone is going to have to pay for it.

We do not have it, yet, and we will be looking to the future for some solution.

Mr. WARREN. Christine Johnson, and then Jeff Squires.

Ms. JOHNSON. A practical suggestion is, you may want to ask your grantees to at least acknowledge the transportation system architecture that most of the transportation folks have in place, so that there is a link between the architectures.

Generally if you can at least get that far, you can go the next two levels in systems engineering, to ensure that there is some ability to communicate across the systems that have been developed.

Mr. WARREN. Are there any responses to that, before Jeff asks another one?

[No response.]

Mr. SQUIRES. I want to put a couple of topics on the table. One is a follow-up to comments in the first part of our session; the concerns over procurement, and that perhaps the standard methodology in transportation does not fit well with technology.

If someone knows of other programs within the Federal Government that serve as models, and either wants to speak to them or perhaps follow-up with us on that, that would be very valuable. We would like to look at other ways to do things, if we need to find another way.

I will pause here. Does anybody have anything right at the tip of their tongue on that issue; if not, perhaps somebody could get back to us.

Ms. JOHNSON. I was going to raise this off-line to my AASHTO colleagues. From the time I came into my job, that has been the cry. I have expended more money than I care to admit on trying to uncover what the problem is.

The fact is, under Federal regulation, we are covered by some of the same regulations that everyone else is. There are alternatives to the traditional means of procuring roadway kinds of construction. That is available to the State DOTs.

As near as we can determine, we have worn such a well-worn path to that type of procurement, the other methods of procurement are not well understood, and we are trying to make our division aware of it; and through our divisions, make our partners aware of it.

Mr. SQUIRES. So it is not a matter of legislative——

Ms. JOHNSON. Well, we do not think so. But we are at the point, because we agree with them. We do not think that this should be a low bid, low everything else. I am going to get informed.

Mr. Tang, can you just explain that?

Mr. TANG. Yes, I am Benjamin Tang.

We have what we call the Innovative Bridge Researching Construction Program, where we would move technology to funding. We used to have projects to demonstrate their feasibility, and actually to test out the R&D.

As you mentioned earlier about moving to implementation, that is one area. The other area is design build. That is very innovative funding mechanism for moving technologies in these design build contracts.

Mr. SQUIRES. Maybe we can all explore this a bit over the next few months.

Mr. GOLDSTEIN. This is Jack Goldstein.

Jeff, the ITS America Board of Directors has had a standing committee for a long time, looking particularly in the area of software potential alternative procurement procedures.

I would like to offer to submit to you, subsequent to this meeting, for the record, the latest proceedings of that standing committee, which would give you at least insight into the thought process. Because on that standing committee are private sector companies that face this problem on a day-to-day basis.

Mr. NJORD. I do not have any solutions for you, Jeff. I appreciate Benjamin's comment about design build, because it is a technology delivery system, that has been very successful.

But to give you a sampling of the frustration that we felt, we are in a situation, in ITS now, where we are dealing with television stations. We supply live video fees from our 200 cameras to television stations, and they can pick any four cameras that they want and get a live feed directly.

Now when we negotiate those kinds of situations with the television stations, that is a new world for us. It is entirely different than the standard world that we are dealing with, on a day-to-day basis.

We need help in understanding how to deal with those people. Clearly, if there is some sort of incident out on the freeway, the last thing we want to have happen is for them to take control of our cameras, and zoom in on some dead body.

Mr. SQUIRES. Do they control the camera?

Mr. NJORD. They cannot control the camera, but they control which camera they pick.

Mr. SQUIRES. Do you charge them for this?

Mr. NJORD. No.

Mr. SQUIRES. That is a big mistaken.

[Laughter.]

Mr. NJORD. When you are dealing with the networks, it is an entirely different ball game. With negotiation, it is an entirely higher level of negotiation.

But we want to be able to just shut that off. If there is an accident, we want to be able to clip the feed, so that they cannot see it. They do not want that. They want to be able to keep it. So those are some of the frustrations that we feel.

Mr. SQUIRES. The other topic that I wanted to ask you to amplify a bit, Matt mentioned, the ops costs on pure telecommunications.

Mr. NJORD. Yes.

Mr. SQUIRES. Operations have been a thing apart from the traditional Federal aid highway program. Are we entering a new era where we need to start to think about the role of operations in its relationship to the Federal aid program?

Mr. EDELMAN. Well, if I can answer that first, this is Matt Edelman. The situation we are facing, already as a coalition, we have our sort of 24/7 low tech manual architecture, for lack of a better word. We have to sort of define what we did before ITS came along, so we called the manual architecture. That takes just staffing of a center. That takes phones, faxes, alpha-numeric pagers.

What we have done, and we are proud that we have been able to do it, is over some 12 years, get our member agencies to largely pay for most of that cost, despite all the other constraints on them, financially.

That has been enough of a bear, but we have done it, and we have done it unanimously for 12 years straight. We are now up to 18 agencies. But it is very, very hard to get that, and it does not get any easier.

You then ratchet up to ITS, to a new way of communicating with each other, and a better way of communicating with each other.

Then beyond the normal operation and maintenance, as we have defined as, you know, our rent and our furniture, is then the operation and maintenance for our ITS systems.

You are talking about tying in 400 cameras, with the kind of lines required; and wide area networks, which if they are not going to be going to one point, are not going to be vulnerable. They are going to include several servers. There is not just the communications from TRANSCOM to each server, but server to server.

All this is so bad, because it is so good. With that art coming, it will be hundreds of thousands of dollars, beyond our member agencies' dues. Now the way we are doing it, after the 2 year Federal period, we enter into agreements with the member agencies, and that is just beginning now, for paying these thousands of dollars.

Every agency has a different culture. Every agency has a different way of funding. They have a different approval process. It has been back breaking, but we have to do it, when we realize we are on our own and after the Federal period.

That is where we are really going to look to the future, to hope to avoid this same sort of inter-agency constituency building pain we went in, when we were first created, and we are going through it again, now, because it is a whole other level of funding.

We feel if we are implementing these systems and spending the capital dollars, and getting it done, that we will be looking to future legislation to sustain this for the long run.

Mr. WARREN. I have a question, and I do not know if anybody else wants to follow up on that, before I ask another question.

I just wanted to follow up on something. I think it was Matt Edelman who said this earlier; that you get a geometric increase in benefits for every additional mile instrument.

I wanted to see if you could expand upon that. Is there a level of instrumentation needed to reach critical mass, to really do operations effectively? I would appreciate if you could expand on your comment. I would also be interested in Jacob Snow's perspective, or any of our DOT directors on that issue. Taiwan

Mr. EDELMAN. Yes, and I think you would probably have a region by region difference in some of those answers.

In the initial days, when the first corridors were implemented and people had quicker ways of knowing what was ahead of them, and they had better information that they could put up on the variable message signs, people would say, well, that is very nice, but what do I do about it; where can I go?

It was very good for the management of our Tappenzee Bridge north of region, to have 19 miles into this key crossing of the Hudson River instrument. People knew it was ahead. We avoided secondary incidents. It helped with the management of the construction projects.

About a year or two ago, the parallel, and even large, George Washington Bridge and the approaches, and the George Washington Bridge, I believe, is the busiest vehicular crossing to the world, 15 miles to the south, the other real safety valve around our region, they instrumented, using some of the same technology.

Then what happened is not only did you have an arithmetic increase, and you had another bridge, but you could suddenly view these huge links as a corridor.

To put that in very practical terms, a few days after the attack, we had a single occupancy vehicle ban into Manhattan, as I said in my opening statement. Those were the two crossings just to the north of that ban.

We had no precedent of knowing, is the George, the first permissible link, going to go from 20 minute delays to 4 hour delays? Are they all going to go north to the Tappenzee Bridge? How do we know quickly, and then how do all the support agencies change their signs and radio systems to channel that traffic?

Well, what happened was, we knew, literally up to the minute, up to the second. There was no precedent for SOB bans after a terrorist attack into Manhattan.

But the two most impacted crossings had this instantaneous information, and it could be shared from crossing to crossing, and the information systems could be varied accordingly.

So that, I think, is an example of the arithmetic increase was, you added another bridge. The geometric increase is, you could view it as a system, an entire corridor across the northern part of our region.

Mr. SNOW. I think if we are looking at just basic infrastructure, we have it as a policy, since we are a street and highway agency, as well, that every project we do has conduit in it, for future expansions. Because the last thing we want to do is to go in and dig something up to install it.

But just from a baseline, we have got to have the conduit there. We look at some sort of remote sensing capability; whether it is cameras or loop detectors. We need to have the communication links to emergency management services and to the public.

We do not have as many cameras as they do in Utah, that John talks about, but we need to expand upon that, with the concept being that you can sit from at home or at work, and check on the cameras on your route, and plan your route accordingly, based upon what you see off the Internet.

As the other factor that we would look at, just as a minimum for instrumentation, it would be dynamic messaging signs. That is basically what we look for.

Mr. HUNGERBEELE. This is Henry, again. I think as part of that, I mean, I would note that our two major metropolitan areas, for example, are on our eastern and western borders.

So we need to let travelers know, in Kansas or in Illinois, what the problems are or what the situation is, in Kansas City or St. Louis, before they get to our borders, so that they can take the appropriate route, if there is any kind of a problem. So for that reason, a system of some size and a system that is regional in nature is very beneficial to us.

Ms. JOHNSON. This is Christine Johnson, for the record. That is what we essentially attempted to do in laying out, you know, a couple dozen requirements, ranging from military to traffic management to snow management; and then saying, OK, what density do you have to have; the surveillance; what kind of information came back with several boxes of sort of what you need and requirements.

That was all boiled down to what is in the more detailed testimony, saying we think, at a minimum, every State ought to have the software capability and the reporting capability of near real time information, any constriction on NHS.

That would be construction, and that does not mean that I say it in May for what is going to happen in August. That means the hour that construction is changed, it is logged on. It is the same for police, on any major incident, and it is the same for any major weather incident. It is sort of near real time, but not sensed.

But then in our major metropolitan areas the complete limited access system, as well as major arterials, having visual contact, as well as sensing contact, for speed, volume, and then the camera capacity, it is sort of the minimum on our roadway system.

Then in those same large metropolitan areas, it would be automatic vehicle location. Actually, I think that was talked about in the Las Vegas system. I think Utah has a similar system, yes, for the transit properties.

Mr. TINKLENBERG. This is El Tinklenberg. This is one of those areas where it is so important to maintain the flexibility. Because that base level is going to be so different in different areas.

We have about 80 percent of our freeway system that is instrumented, both in terms of loop detectors and cameras, throughout the freeways.

What we do not know is what happens when we start making management adjustments on that system. If we slow down the ramp meters and volume goes down, where does that traffic go?

There is not going to be enough money to instrument all of the arterials off of that, that pick up the traffic, the county roads that get the traffic, when they get off of the freeways or the city streets.

It may be that in the future, those sensors will be in the vehicles, and what we will be monitoring is not what is happening on our

roads, but what is happening and the flow of the vehicles, themselves. There are all kinds of privacy issues with that and, you know, they have to be addressed.

But you can identify and track flows and movements of vehicles in gross amounts, and that will be the information. That is on all the systems. That is the city streets, county roads, and our free-ways. Maybe that will be the approach, rather than having stuff actually imbedded in the concrete.

I think that is why it is so important, and what makes your job so difficult, you look ahead 6 years. You have to try and anticipate not only where Beta is going VHS, but where it is going to disks. This is changing so rapidly, that I think the important word in all of this is going to be maintaining that flexibility that allows that movement and that change.

Mr. WARREN. Jack, and then I know Megan has a question, next.

Mr. GOLDSTEIN. In the prepared remarks that I submitted to the committee, we talked about an ITS perspective on the national transportation information network, which is a staged implementation project to incorporate both new and existing ITS technologies.

The idea is that there are several things that can begin now to contribute to this national information network, to tie all these pieces together, you know, in a nationwide-type system.

Among these are things like 511 and C-vision and other things that I have illustrated in the paper. I would just commend those ideas to you, because it gets at the point that is being made around table here. That is, how do we tie all these pieces together, and how do you transmit information from one corridor to the next corridor, from one State to the next State?

There are technologies now that begin to get at it. It probably will take the next decade to fully deploy that system, but there is enough to get started.

Mr. WARREN. Thanks.

Megan?

Ms. STANLEY. Many people around the table have mentioned that monitoring technology, especially cameras, have both traffic response and security uses.

So my question is whether any parties have raised Fourth Amendment concerns against unreasonable searches and seizures, when these monitoring technologies are made available, both in theory and by example, from many parties around the table, to law enforcement officials; and if the ITS community is discussing any limitations on the use by law enforcement officials of the traffic monitoring technology?

Mr. HUNGERBEELE. This is Henry. The answer, at least for us in Missouri is yes. There are concerns about privacy rights, and I do not know the solution.

I know there has been an awful lot of concern expressed about the use of red light cameras, for example. You know, we have a lot of arguments that they should be used, and that no one's privacy is violated, unless they break the law. But nevertheless, it is a public perception that we have to overcome.

As we were deploying the system in our Kansas City metropolitan area, we made a pretty big deal out of the fact that we were not going to share the information for law enforcement purposes.

It was going to be used for traffic purposes. Now we are having to rethink that, and I am not sure yet what our solution is going to be.

Mr. NJORD. Megan, we have not had a serious concern about that with the cameras that we have deployed. However, we recognize that that would be an issue, when we begin to deploy our camera equipment.

Intentionally, we selected technology that had lower resolution than we could have. We could have gotten cameras that could have zoomed in on the spectacles of a person, if we wanted to, but we intentionally chose to have cameras that, when you got that close, the person is blurry. That is because of that reason.

Now all of our cameras are monitored, as I mentioned before, by six television stations, 12 radio stations, and anybody can click on the Internet any time, and see what we are looking at.

So I believe that that kind of control, where everyone is watching what we are watching, has enabled folks to feel comfortable that we are not looking at things that we should not be looking at.

Now when you talk about turning this information over to public safety officials, we do not let them do an "OJ" with our cameras. If "OJ" is going down the freeway, they are not tracking him in that manner with our cameras.

We do not let them chase criminals or prosecute criminals with the information that we are collecting. In fact, we had a fellow, and maybe this only happens in Utah, but he was on the freeway with a bow and arrow, shooting deer on the side of the freeway.

[Laughter.]

Mr. NJORD. And we were watching him with a camera. Immediately, the public safety officials wanted a tape of what we were watching, so that they could prosecute the fellow.

Well, we intentionally do not tape anything that we watch and, in fact, have instructed our employees that if something like that happens or occurs again, we are not to watch it at all, just because of the concerns that you have raised, Megan.

Mr. EDELMAN. Matt Edelman; our traffic camera network, at this point, is of our transportation member agency's cameras, and they are cameras that are, for the degree of resolution, as John just said, relate to traffic management.

Now in saying that, we are just now beginning with one major agency, and hopefully more, to add a police agency to it. So if I say we have had no problem up to now, it is because we have not really been in the situation yet, but that could change.

The way that we view it is, these are cameras run by civilians for transportation. They share it with each other. They share it with bus operators, and more and more, they hope to share it police agencies.

Each of those civilian agencies has the ability to unilaterally block out any image. The police agencies that will have it are generally sending it to their traffic command.

We do not share our cameras, yet, with the public. We felt in our region, it was a big enough leap just to get all these agencies in three States to share 400 cameras. We are not at that point in terms of the public.

But there have been no problems yet, and maybe since 9/11, people perhaps are a bit more understanding; maybe in our region and maybe in others. But we have not seen any problems, yet.

Mr. GOLDSTEIN. ITS America has looked quite a bit into this privacy issue related to cameras and traffic flow, and we have actually submitted a paper to U.S. DOT related to privacy issues associated with deployment of cameras; one of the major points being that none of the information gathered from traffic information should be shared with law enforcement officials, similar to the point that John made.

But I want to make another point, and that is that as you continue to make the argument that you will use the things that you deploy for ITS for homeland security applications, you are going to get proposals with finer and finer resolution, and you really will butt right up against the issue that you have just raised, privacy. It is a question of, how far do you want to go?

You know, you could go way beyond the cameras that John has deployed in Utah, and do lots of things related to homeland security.

My personal feeling is that, you know, we may have to sacrifice some of the privacy issues for the issues related to homeland security, and that is going to be a tradeoff that people who are a much higher pay grade than I am are going to have to make. But it is an issue that we are going to face, for sure.

Mr. WARREN. We are running out of time now. Ruth has a question, and then we want to just end by opening it up for final comments by any of the panelists, if anyone wants to say anything to us or each other, while it is on the record, before you leave.

Ruth?

Ms. VAN MARK. Ruth Van Mark, for the record; and in order to get this question in, I had to promise Mitch that I would keep your answers short. So I will just direct it to anybody from the State DOTs.

I think what I am hearing you tell us is that you need more money, obviously, in the next bill, for ITS deployment and operation. Are you suggesting that you want a separate funding category like interstate maintenance, or NHS, or STP, or do you just want more flexibility in the existing program, so that you can spend those dollars across a broader range of items?

Mr. TINKLENBERG. El Tinklenberg; there are a couple of areas that I mentioned in my comments that relate to specific funding initiatives. The \$142 million, for example, for continuation of the current ITS deployment program is a specified amount. The research and development, we believe that is something in the range of \$125 million per year.

I know that Henry and his group have looked at things related to security. So we think that both is necessary. There needs to be money for deployment, continuing money for deployment. There needs to be money for research and development.

But there also needs to be the flexibility, so that within existing programs, that allows States that are ready to make those priority decisions to move in that direction.

So I think it is a matter of both having funding available for the kinds of research and deployment issues that we have talked

about; but also having the flexibility available in existing programs.

Ms. VAN MARK. So you are not suggesting that you need a new apportioned category, like ITS on the same level in the apportionment round as NHS or STP. You can use the money you get now. You just want to have greater flexibility.

Mr. TINKLENBERG. Yes.

Mr. NJORD. Can I just add to that? If the funding source is the Highway Trust Fund, please do not create a new category. Just provide us more flexibility.

Mr. LOCKWOOD. Ruth, this is Steve Lockwood. Just to be clear, I think from the ITE point of view and I think some of the other groups, there is a desire not to categorize funds, to restrict flexibility.

But the demands that are evident and the importance of management and operations now, plus the security issue, does suggest that there is a need for increase in resources, both in the Highway Trust Fund, and possibly from general funds, with regard to security issues.

But I think there is a broad consensus, at least, that those funds can be channeled through the existing categorical programs to where they are needed, but there is definitely a need for an increase in funding.

Mr. SNOW. This is Jacob Snow. There is also a significant need, as has been emphasized here today by a number of folks, for communication between the various parties involved.

What you really need to have, to facilitate that communication, is a regional ITS master plan. There certainly needs to be more funding for capital programs, to expand our ITS infrastructure, but there also needs to be more money for planning for ITS, as well.

We would suggest that the flexibility with the existing sources of funding needs to be expanded and maintained. We need to maintain what we have, and we need to expand, like John said, CMAQ eligibility, and extend the period for CMAQ eligibility for operations. That is a good way to do it.

Mr. WARREN. Let us finish up with Matt, and then we will conclude.

Mr. EDELMAN. Speaking as a non-DOT, we would need more than flexibility. Because the whole issue that I was saying before is, in terms of, you are not going to have regional operating coalitions, I think, in a New York, a Buffalo, a Houston, or wherever, if there is going to be that constant struggle between the collective interests and the individual interests.

There are real needs, as I said, for long-term operations and maintenance costs; real needs for some collective instrumentation and regional architecture.

There are capital costs, operating costs; and we would respectfully hope that there would be separate funds that would fund the regional interests, so that you are not sort of dead at the starting gate, because in putting this whole regional effort together, you have had such a degree of tension with your DOT components.

We are not the only multi-DOT region in the country, and we do not like that tension, and we would hate to see anyone else have

it, too. A separate fund, I think, would be very important for regional operating organizations.

Mr. WARREN. We need to begin to wrap up. Are there any final comments, suggestions, questions?

Mr. HUNGERBEELE. This is Henry. Yes, I mean, I think El and John have expressed the position of the States very well. Certainly, flexibility is very important.

We do not want you to lose sight of the fact that a significant funding increase is very important. Flexibility alone will not solve our problems.

I think when the position the States, when AASHTO provides that to you, you will see that we are also suggesting places where you can find that revenue; and I believe it is a very reasonable position that the States are taking.

Mr. WARREN. Are there any final comments on other issues or questions, before we wrap up?

Mr. LOCKWOOD. I have just a general one, because I think it explains a bit why there is a sense that more resources are needed, but not ones that are somehow narrowly channeled.

I think it is important to recognize and I think there is a broad consensus that what systems management and operations means covers a fairly broad range of what you might call sort of program or activity areas. With routine traffic management on arterials, there is a tremendous backlog of need for improved traffic operations.

With freeway management technologies, these are the typical ITS applications of one sort or the other. But it is the whole public safety and emergency response arena.

Improvements in incident management, where money is not so much the issue as is communication relationships and procedures; weather response; construction zone management; automated regulatory and enforcement activities, for example; travel and information; these are a set of concepts and programs which are in various stages of sophistication and development around the country, that draw on new technologies of varying degrees, that need to be linked together and thought of together. These all require greater attention and additional resources, but it is not a simple formula matter.

The response in the mix and match that is going to be done will be done differently, State by State and metropolitan area by metropolitan area, and it has to be left to those decisionmakers, to put together the right kind of package.

But it is a broad set of activities, and a lot of new thinking, and a lot of new concepts, that require resource support.

Mr. WARREN. All right, well, we better close it up there, or we are going to be kicked out of this room.

We greatly appreciate all of you coming, traveling here today, and your testimony. It was a good discussion. We will get you the transcripts, and I am sure we will be having continuing conversations with all of you.

Thanks a lot.

[Whereupon, at 12 o'clock noon, the meeting was adjourned.]

TEA-21 REAUTHORIZATION

FRIDAY, JUNE 14, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

TRANSPORTATION SAFETY

A roundtable symposium was convened to examine safety programs funded by the Highway Trust Fund 406 Dirksen Senate Office Building, Friday, June 14, 2002, at 9:30 a.m.

Present: Senator Reid.

Staff present: John Haifley (moderator), Jeff Squires, Mitch Warren, J.C. Sandberg, Megan Stanley, Ruth Van Mark, and Matthew Kooperman. Staff representing members of the committee: Ann Loomis for Senator Warner; Laurie Saroff for Senator Boxer; John Stooddy for Senator Bond; and Karen Bachman for Senator Voinovich.

Panelists

Mr. Frederick (Bud) Wright, Executive Director, Federal Highway Administration, Department of Transportation.

Mr. Bruce Warner, Director, Oregon Department of Transportation Salem, OR, Chairman, Standing Committee on Highway Traffic Safety, American Association of State Highway and Transportation Officials.

Mr. William Walsh, Associate Administrator for Plans and Policy, National Highway Traffic Safety Administration, Washington, DC.

Mr. Edward Hamberger, President and CEO, Association of American Railroads Washington, DC.

Ms. Tricia Roberts, Director, Delaware Office of Highway Safety Dover, DE, on behalf of the National Association of Governors' Highway Safety Representatives.

Mr. Brian Holmes, Executive Director, Maryland Highway Contractors Association, on behalf of American Road and Transportation Builders Association.

Ms. Wendy Hamilton, National President, Mothers Against Drunk Driving Irving, TX.

Mr. D.B. Hill, III, President, D.B. Hill Contractor Inc., Little Rock, AR Chairman, Workzone Safety Committee, Associated General Contractors.

Ms. Kathleen Holst, President, American Traffic Safety Services Association Romeoville, IL.

**STATEMENT OF JOHN HAIFLEY, FELLOW, COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS**

Mr. HAIFLEY. Good morning, ladies and gentlemen. Welcome to the Subcommittee on Transportation, Infrastructure and Nuclear Safety Symposium on Highway Safety.

I want to thank you, the witnesses, for traveling to Washington, DC to discuss with this committee and its staff the important safety issues facing us today and in the future.

First, I would like to begin by introducing my colleagues and myself. I am John Haifley. I am privileged to be Federal Highway's detailee to the Senate Environment and Public Works Committee. On my far left is Jeff Squires. Jeff, do you have any opening statement in the sense of saying hello to these people?

Mr. SQUIRES. I say hello to these people.

[Laughter.]

Mr. HAIFLEY. My other boss, on the majority, Mitch Warren. He does have something to say to you.

Mr. WARREN. I just wanted to follow up on what Duane said about the vote. We have a vote at 9:35, in fact we have two votes. Senator Reid is going to come in between the two votes, make a quick statement, listen to the 15-second sound bites that hopefully we could keep to no more than 30 seconds. And then he has got to go vote again. So what we will do is we will start with the 2-minute opening statements. When he gets here, whoever is speaking could finish up their statement. He will give a brief opening statement, then we will go around the room and do the 15-second sound bites to give him a quick overview of what each group is looking at in terms of highway safety.

Mr. HAIFLEY. On my right, Ruth Van Mark.

Ms. VAN MARK. I have nothing to add to that.

[Laughter.]

Mr. HAIFLEY. And Megan Stanley.

Well, with that, the Symposium will begin with each witness stating their name, title, organization, and then presenting their 2-minute statement, which is to describe their priority legislative recommendations, with suggested funding requirements. As Mitch said, we will go to the 15-seconders the moment Senator Reid gets here.

Bud Wright?

**STATEMENT OF FREDERICK (BUD) WRIGHT, EXECUTIVE
DIRECTOR, FEDERAL HIGHWAY ADMINISTRATION**

Mr. WRIGHT. Hi. Good morning, everyone. My name is Bud Wright. I am the Executive Director of the Federal Highway Administration. With me today is George Ostensen, the Associate Administrator for Safety of the Federal Highway Administration.

On behalf of FHWA and DOT, thanks for scheduling this important discussion. We are very much looking forward to beginning this dialog or continuing, really, this dialog, preparing for reauthorization of Federal surface transportation programs. It is absolutely important that we focus attention on ways to improve highway safety. We cannot continue to accept the toll of over 41,000 lives lost and 3 million injuries each year on our highways.

To significantly reduce fatalities and injuries, we must use a comprehensive approach that addresses the roadway environment, driver behavior, and the vehicle. On the roadway, the area that Federal Highway Administration has primary responsibility for, we should target our safety investments to the high-risk crash areas—run off the road crashes, crashes at intersections, speed management, and pedestrian safety to provide the greatest possible safety improvement for each dollar spent. Most of all, we need a joint effort involving all of our partners.

We must develop a better knowledge base to guide both national-level policy and State and local efforts. Accurate crash data collection and analysis are essential to identify the most critical safety problems and to deploy the most effective countermeasures. Data development and analysis has been identified by Secretary Mineta as a key priority for reauthorization.

We must maintain a robust research and technology program. R&T can give us new safety tools for behavioral, infrastructure and vehicle improvements. For example, linking future ITS solutions like cooperative highway vehicle systems can solve safety problems and save lives.

We must also find ways of improving the safety and operation of work zones for both highway workers and motorists traveling through work zones. R&T may again provide solutions to those problems. And we must continue to improve the delivery of the Federal Aid Highway Program through administrative simplification and an increased focus on safety.

The USDOT has set a goal of 20 percent reduction in highway fatalities by 2008, and ISTEA and TEA-21 have provided us with a solid financial and programmatic framework to build on to reach this goal. But we must maximize the flexibility of our programs and work across jurisdictional boundaries using all of the tools in our arsenal if we are to succeed.

Thanks very much. I look forward to the dialog.

Mr. HAIFLEY. Bruce Warner?

**STATEMENT OF BRUCE WARNER, DIRECTOR, OREGON
DEPARTMENT OF TRANSPORTATION, SALEM, OR**

Mr. WARNER. Thank you.

I am Bruce Warner. I am the Director of the Oregon Department of Transportation and also the chair of the American Association of State Highway and Transportation Officials Standing Committee on Highway Safety.

After three decades of decline, the reduction of the highway fatality rate has stalled—41,800 people were killed in crashes in 2000. We know what is causing these fatalities. Forty percent of the fatalities are alcohol related; 20 percent are speed related; and 73 percent of the people only use their seat belts. Regarding the roadways themselves, as Bud mentioned, one-fourth of fatalities are at intersections; one-third of them are run-off-the-road accidents; and 45 percent of all the fatalities are on rural two-lane roads. Aggressive action is needed.

We believe that a higher overall investment in a highway program is essential. The highway program must be increased by at least one-third, to a level of \$41 billion by 2009. And we believe the

investment in transportation safety should be almost doubled. Specific recommendations are that assuming a substantial increase in the Federal aid program reauthorization should ensure that \$1 billion per year of additional funds for roadway safety improvements and other safety activities is provided. Two, each State should develop a goal-oriented, performance-based comprehensive highway safety component of its long-range plan, incorporating education, enforcement, emergency medical services and highway infrastructure improvements. Third, the current Surface Transportation Program 10 percent set aside for safety needs to be made even more flexible. Four, Congress should create a single Section 402 Highway Safety Program by folding in seat belts, occupant protection, alcohol use and child passenger protection programs, and then going on, incentives here should be based upon performance-based criteria and the magnitude of deaths and injuries associated with a particular safety concern.

Five, funding needs to be substantially increased, as Bud also mentioned, for Federal Safety Research Programs. And six, the State transportation and safety agencies should not be prohibited from proactively supporting new State and local safety measures. They should be able to actually provide information in support of these kind of laws.

That would end my comments. Thank you for your consideration. I think you will find a more detailed discussion of these in my written testimony.

Mr. HAIFLEY. Mr. Bill Walsh?

STATEMENT OF WILLIAM WALSH, ASSOCIATE ADMINISTRATOR FOR PLANS AND POLICY, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Mr. WALSH. Good morning.

My name is Bill Walsh. I am the Associate Administrator for Policy as NHTSA.

We have based our reauthorization thinking on a number of important principles: One, streamline the grant program structure to reduce the administrative burden on the States; two, develop performance-based programs to encourage States to direct resources to programs with the most significant safety benefits; three, reward States who make the most significant strides in improving safety; four, design a balanced approach that recognizes the complexity of the problem; and five, at a minimum, maintain the overall funding support at levels provided in TEA-21.

Every State currently has a highway safety program that depends on a combination of Federal, State and local funds to address critical issues such as seat belt use, child passenger safety, impaired driving, police traffic services, traffic records and emergency medical services. NHTSA-managed programs have included a combination of formula grant programs to support startup and evaluation of new highway safety countermeasures, incentive grant programs to induce States to pass effective laws or adopt scientifically grounded programs aimed at specific programs, sanctions where appropriate to assure that effective highway safety legislation is passed, and a strong Federal research and demonstration program to develop and evaluate new, more effective countermeasures.

We are currently in the final stages of developing departmental recommendations on the reauthorization. Our challenges have included: strengthening and building on an historically successful formula grant program; developing performance measures that will encourage States to invest in effective countermeasures; performance measures must be fair, consistent, related to real-world safety improvement, and measurable; defining the most effective strategy to cause primary seat belt laws to be passed in all States and increase overall safety belt use; working with the States to improve traffic records; supporting the States in developing effective impaired driving countermeasures that address the entire system, from law enforcement, adjudication, education, treatment and record keeping; and finally, in this difficult post-9-11 era, strengthening our emergency medical responses to not only safe crash victims, but serve as the first line of public health and safety from terrorist acts.

Thank you.

Mr. HAIFLEY. Mr. Edward Hamberger?

**STATEMENT OF EDWARD HAMBERGER, PRESIDENT,
ASSOCIATION OF AMERICAN RAILROADS**

Mr. HAMBERGER. John, thank you.

I have the privilege and honor of being President of the Association of American Railroads. We have one major issue before this committee, and that is the Section 130 Grade Crossing Protection and Separation Program. Because, unlike our reputation, we really are a high-tech industry, behind you have some not reenactments, but two videos of actual crashes that have happened. Norfolk Southern has mounted video machines on the lead engine of many of their trains, and we will just go ahead and run through it in real-time. You will see, and we will back up then, and point out what happens here. The horn is blowing. The gates are down. Cars are stopped, and unfortunately . . .

What you can hear there, if you will back it up, we will walk through it real quickly on a slower basis. As you get up close, you will see that the second car—the first car is stopped. The second car pulls out around the first car, thinking he can make it. It takes a mile to stop a train. It goes around the gates and unfortunately he guessed wrong and he did not make it.

You also heard, perhaps did not concentrate on, the discussion among the two crew members in the cab. It is a tremendous safety problem for the crew as well as obviously a psychological ongoing problem when they are faced with these kinds of situations.

The next one is a passive grade crossing. The car comes out; does not stop. You will see that there are crossbucks. It was, again if we will back up, there are cross bucks. There are markings on the road. The woman comes out, stops, and unfortunately the car overhangs. Fortunately, no one was badly hurt in that accident. But there are over 400 people a year killed at grade crossing incidents.

We have made tremendous progress through the Section 130 Program that this committee has funded. It is important to also take a look at NCHRP, I believe it is number 480, that just came out talking about markings at passive grade crossings. We urge you to increase, doubling the size had a nice ring to it. It is about \$150

million a year now. We would love to see more money in the Section 130 Program.

Mr. HAIFLEY. Mrs. Tricia Roberts.

**STATEMENT OF TRICIA ROBERTS, DIRECTOR, DELAWARE
OFFICE OF HIGHWAY SAFETY, DOVER, DE**

Ms. ROBERTS. Good morning.

I am Tricia Roberts. I am Director of the Delaware Office of Highway Safety. I am here today on behalf of the National Association of Governor's Highway Safety Representatives.

The States have made significant advances in the safe behavior of drivers and road users. These advances have been made possible in large part due to the programs and resources provided under the Transportation Equity Act of the 21st Century. Yet, there is much more to do. We have reached the easily influenced, and now we must reach those populations who are resistant and impervious to traditional safety messages and programs. To make inroads in these populations, significant efforts must be undertaken to reduce motor vehicle-related crashes, deaths and injuries from the unacceptable levels that they are today.

The States need appropriate Federal tools and additional Federal resources in order to make further progress. First and foremost, the States need stable and reliable sources of funding in order to address the behavioral aspects of highway safety. With assured sources of funding, States can plan their highway safety programs over a longer period of time, facilitate their work with and get commitments from grantees, and plan and implement improvements to the highway safety information systems. The budgetary firewalls that were authorized under TEA-21 have provided that stability. NAGHSR strongly supports their continuation in the next reauthorization.

States also need to maintain the right to determine how Federal funds are spent within their States, without Federal approval of every aspect of State plans and programs. This flexibility, which States have had since 1994, has enabled us to focus on State data-driven problem identification and performance-based strategies. It has allowed the States and the Federal Government to work together on a more cooperative basis.

Second, States need fewer Federal programs to administer. NAGHSR represents consolidation of all the grant programs into a single behavioral highway safety program with incentive tiers. The incentives would be given to States that enact specific legislation, improve their performance, or maintain a superior level of performance.

Third, States need adequate resources to be able to effectively address safety problems. At current funding levels, States could maintain the programs that have been implemented under TEA-21. But with additional funding, States could support significantly more enforcement of State highway safety laws—laws that are needed in order to reach the hard-to-influence populations. With additional funding, States could also undertake a whole range of programs to address specific target populations and emerging highway safety issues.

Fourth, States need timely, accurate and accessible data with which to make safety-related decisions. States use data to identify significant safety problems, select appropriate safety countermeasures, and evaluate the effectiveness of selected countermeasures. Nearly all States have strategic plans for improving their highway safety information systems, but they lack the resources for implementing these plans.

Finally, States need more research on driver and road user behaviors. Relatively little is known about the effectiveness of many State laws and most highway safety programs. Further, there has been no recent research on crash causation. As a result, States implement programs without knowing if they are addressing the root causes of crashes and/or whether or not the implemented programs will work.

Thank you for this time.

Mr. HAIFLEY. Thank you.

Mr. Brian Holmes?

**STATEMENT OF BRIAN HOLMES, EXECUTIVE DIRECTOR,
MARYLAND HIGHWAY CONTRACTORS**

Mr. HOLMES. Thank you.

I am Brian Holmes, Executive Director of the Maryland Highway Contractors Association. I am here today on behalf of our national organization, the American Road and Transportation Builders Association.

Roadway safety is a major national public health issue, and improving it must be a primary objective of the 2003 reauthorization of the Federal Surface Transportation Program. The most recent USDOT condition and performance report documents that to maintain the existing physical road conditions, Federal investment of \$50 billion a year is needed. The next needs report, which is due out later this year, in the AASHTO bottom line report, which is to be released in September, are expected to show that this minimum level of investment has grown to \$60 billion.

Accordingly, the American Road and Transportation Builders Association calls on Congress to enact a highway and bridge investment level that at a minimum maintains these existing roadway condition and safety levels. To achieve this increased level of investment, we have identified a number of ways to generate funds to rectify unsafe roadway conditions. Growing the overall level of investment will allow for the continuation of Federal roadway safety programs, without diluting investment in other areas. We have recommended specific safety initiatives in programs to enhance the overall safety of the system, which include improving safety on rural two-lane roads with a new \$1 billion two-lane roads initiative; focusing and investing in highway and road construction work zone safety initiatives, where over 1,000 people are killed and 39,000 are injured each year; and continuing with the Federal investment in the Federal Roadway Infrastructure Safety Program, such as the Highway-Rail Grade Crossing Program and the Hazard Elimination Program.

But road safety initiatives must be considered in the overall context of the Federal Surface Transportation Program. I want to stress that expanding and developing programs to increase safety

should not become a zero sum game. There are tremendous public safety benefits of improvements to roadway infrastructure. Our data shows that since 1950, investment in infrastructure improvements has had a two dollars to one dollar public health return. And for every \$1 billion of investment by the public in government-financed road improvements, there has been a prevention of 1,400 premature deaths and nearly 50,000 injuries.

With traffic increasing at almost 3 percent a year, this safety gain will be squandered if proper investment is not made in maintaining the existing system and adding capacity. Without a commitment to an adequate level of investment for making highways safer and more efficient, crash statistics will only get worse.

Thank you.

Mr. HAIFLEY. Wendy Hamilton? Good morning.

**STATEMENT OF WENDY HAMILTON, NATIONAL PRESIDENT,
MOTHERS AGAINST DRUNK DRIVING**

Ms. HAMILTON. Good morning.

My name is Wendy Hamilton. I am President-elect for Mothers Against Drunk Driving. In 1984, my sister and her baby were killed by a drunk driver.

In 2000, 16,650 people were killed in alcohol-related traffic crashes. The economic loss attributable to these crashes cost the Nation approximately \$230 billion. However, as someone who has lost a sister and nephew due to someone's careless decision to drink and drive, I can tell you that the human loss is immeasurable. In spite of these appalling human and economic losses, NHTSA's annual budget is only \$400 million. Alcohol is a factor in 40 percent of all traffic deaths, yet only 26 percent of all funding available to the States through TEA-21 is spent on alcohol-impaired driving countermeasures. TEA-21 severely underfunds highway safety. It does not provide adequate financial incentives to the States to enact meaningful impaired-driving legislation and to implement effective programs.

MADD recommends that the subcommittee consider the following actions. First, provide a significant increase in funding for highway safety programs. Congress should allocate at least \$1 billion annually for the creation of a national traffic safety fund. It is time to increase the Federal Government's commitment toward reducing the devastating and costly consequences of motor vehicle crashes.

TEA-21 encourages States to adopt open container and repeat offender laws in Sections 154 and 164, respectively. Failure of a State to enact these laws results in the transfer of a portion of the State's Federal highway construction funds to its highway safety program, as well as the hazard elimination program. Highway safety program funds should not be allowed for the use of the hazard elimination program. States that do not comply with Sections 154 and 164 should only be permitted to direct funds for impaired driving programs.

We also recommend modification of Section 164 to incorporate a comprehensive program to target higher-risk drivers, including repeat and high BAC offenders. There should also be an increase in the percentage of highway construction funds to be redirected to impaired driving countermeasures if a State does not comply with

these laws. Fifty-eight percent of alcohol-related traffic fatalities in 2000 involved drivers with a BAC of .15 or higher, and one-third of all drivers arrested or convicted of driving while intoxicated are repeat offenders.

We also call for the reauthorization of Section 154 that addresses open container laws. There should be an increase in the percentage of highway construction funds to be redirected if a State does not comply. And finally, we call for support for the enactment of a national primary seat belt standard. Eighty percent of the people who are fatally injured in impaired driving crashes are not wearing seat belts. The best defense against a drunk driver is a seat belt.

Thank you.

Mr. HAIFLEY. Mr. Hill?

STATEMENT OF D.B. HILL, PRESIDENT, D.B. HILL CONTRACTOR, INC., ON BEHALF OF THE ASSOCIATED GENERAL CONTRACTORS

Mr. HILL. Good morning.

I am D.B. Hill, III. I am president of D.B. Hill Contractor from Little Rock, Arkansas. I am chairman of AGC's Work Zone Safety Committee.

As our highway infrastructure ages and our population expands, road construction will continue to be necessary. Much of the road work will be done under traffic. Motorists must be aware there are increased dangers in the work zone to themselves and to workers. Therefore, a key element in work zone safety is impacting the attitudes of drivers. The second component is enforcement of speed limits and other work zone restrictions.

AGC urges Congress to include in the TEA-21 reauthorization legislation incentives for States to pursue work zone safety initiatives. We recommend the creation of a discretionary fund administered by the Federal Highway Administration to provide funding incentives that encourage States to carry out communications initiatives, including driver education programs. AGC encourages Congress to provide funding for incentives to make widespread use of law enforcement officers and devices such as photo enforcement and radar.

Even if we are successful in changing driver attitudes toward the work zone, workers are still placed at risk because their workplace is located next to live lanes of traffic. Steps need to be taken to further ensure worker protection. AGC encourages that the national policy include guidance on the use of positive separation in work zones. States should be directed to use positive barriers on high-risk projects and funding should be made available to encourage their use.

Incentives could be used for creative work zone safety initiatives. Initiatives that should be considered include classifying work zones into different categories depending on the level of risk to the workers and motorists. Another example of this might be how we set up traffic control on projects. Motorists are sometimes frustrated that speed limits are lowered in work zones. As they drive through them, they only see work in a limited area. We should consider looking at the work zone to determine if it could be set up with sub-zones within it so that the lower speed limits and the strictest

enforcement happens in those areas where workers are present or where there is extreme danger to the motorist.

Other creative approaches to work zone safety should be encouraged and providing incentives will hopefully encourage those creative forces.

Thank you, sir.

Mr. HAIFLEY. Mrs. Kathleen Holst?

**STATEMENT OF KATHLEEN HOLST, PRESIDENT, AMERICAN
TRAFFIC SAFETY SERVICES ASSOCIATION**

Ms. HOLST. I am Kathi Holst, President of the American Traffic Safety Services Association.

Forty-two thousand dead, three million injured, \$230.6 billion in societal costs with taxpayer costs of \$21 billion a year—five times more people have died on roadways since 1900 than in all our Nation's wars. One child in 84 born today will die violently in a motor vehicle crash.

With these facts in mind, ATSSA contends that in no other public policy arena should such horrific numbers be tolerated without a significant attempt by Congress to reverse the trend. We believe there are three key areas of focus in saving lives on our roadways—the automobile, the driver and the roadway itself.

Automobiles have evolved from having no seat belts to the state-of-the-art vehicles we have today. Driver behavior has never been more positive thanks to NHTSA and others in reducing impaired driving and increasing the use-rate for seat belts. The last remaining area to be aggressively addressed is the roadway itself. ATTSA proposes a roadway safety program that calls upon Congress to invest \$3 billion per year during the life of the reauthorization bill to aggressively counteract the role of the roadway itself in causing death and injury in America.

The program targets high-risk areas of the roadway. It also addresses the special needs of older Americans who will represent one in five drivers by the year 2020. If we do not address their needs now, we will be faced with a situation that age-related diminished driving capabilities will surpass alcohol as a causal factor in traffic accidents. Targeted areas of the roadway safety program include older drivers, work zones, intersections, run-off-the-road crashes, pedestrians and bicyclists, speeding, research and emergency management.

The most important concept is the idea of creating a dedicated core roadway safety program, with reporting requirements that give the Congress, Federal Highway Administration, the States and the motoring public a better understanding of what is being accomplished to improve roadway safety.

Equally important is dedicating safety dollars that target low-cost safety improvements, such as wider pavement markings, brighter and more visible signage, rumble strips and modern guard rails. All have wide application and can be installed relatively quickly and at a lower cost.

I would be happy to answer any questions and I thank you for the opportunity.

Mr. HAIFLEY. Thank you, and thank you all for your 2-minute presentations. And thank you again for keeping relatively to the 2

minutes. Senator Reid is still detained, so we will go to staff question.

I would like to start with explaining just two small ground rules—one from the court reporter, please when you speak, state your name so we do not have to sort through and listen and perhaps get the wrong position with the wrong person; and second, my colleagues have encouraged me to encourage dialog between each of you. It is very important for us to hear how the experts dialog with each other.

To that end, I would like to start with a direct question for each of you. Does any group oppose the expenditure of Federal funds for causal safety research. Many of you mention it. AASHTO wants \$75 million. Does anyone oppose that? OK.

Now—I am sorry. Brian?

Mr. HOLMES. What is causal . . .

Mr. HAIFLEY. Safety research—well, I will let Bruce Warner who wants \$75 million for it, and Tricia Roberts who thinks it is a good idea, and others, to help with that. Please begin and I encourage each of you to address questions to other witnesses.

Mr. WARNER. Bruce Warner, Director of the Oregon Department of Transportation. Well, clearly what we are seeing, and you have heard around the table, there are a number of issues that we know about that cause accidents and fatalities and injuries on our State and local transportation systems. However, as you also heard, the demographics are changing. You are seeing more and more elderly drivers on the road system. As the baby boomers like myself begin to age, you are going to see many more of those. We need to apply research to find out what are the best ways, as an example, that we start to help those elderly drivers with some of the impairments.

I think we also need to do research into just identifying what is an impaired driver, as an example. We have been struggling in the State of Oregon with our legislature to secure funding to actually put into some pilots some equipment that would allow us to identify at-risk folks and folks that needed to have further medical testing before they were allowed to continue with their driving privileges in the State.

So we need to have research information to get to some of those kind of things, as an example. You will hear from other folks I am sure in the various other types of issues where we need research to really understand the cause, the base root cause of the accidents so we can design education, engineering and enforcement programs that can actually effectively deal with those issues.

Mr. HOLMES. This is Brian Holmes again. It is basically systematic research about why accidents happen.

Mr. HAIFLEY. And what we can do to prevent them.

Mr. HOLMES. And then that leads to what you can do to—thank you.

Mr. HAIFLEY. Tricia, would you like to add anything?

Ms. ROBERTS. I would just concur. In some cases, it is sort of a shot in the dark, if you will, as far as our program planning without really knowing what the root causes of the crashes are. Having that information will help us to more effectively use the money and the resources that are made available to our States.

Mr. WALSH. Bill Walsh from NHTSA. It is interesting. We have done a number of these studies over the years. The last study, broad study was called the Indiana Tri-Level Study. It was done in the early 1970's. It is literally 30 years old. About 20 years ago, there was a Harry Hirt study on motorcycle crash causation, but that is dated. And now we have seen a spike in motorcycle crashes.

I support what the other people have said. One contribution NHTSA can make, we are doing right now. We are supporting the Motor Carrier Safety Administration in doing a heavy truck causation study. That money was provided to Motor Carriers, and we have been assisting them. We would like in the future to begin a larger crash causation study that would help answer the questions that have been elucidated so far—the contribution of the roadway, different vehicle types, the aging population—so that we can all devote the resources to solve the problems most effectively.

Mr. WRIGHT. This is Bud Wright with the Federal Highway Administration. As I will probably have to say more than I care to throughout the day, the Administration does not have a final position on its reauthorization proposal. But one of the concepts that has been advanced by the Transportation Research Board and others, and which I know AASHTO has supported, is the concept of the so-called "F-SHARP" Program. Some of you may be familiar with the SHARP Program that was undertaken through ISTEA to identify advanced pavement techniques and other advanced technologies, in the work zone area for example. Extremely successful and has been in some ways replicated through this so-called "F-SHARP" proposal. They would look at a new agenda of strategic highway research, including highway safety as one of the principle elements of that.

One of the distinguishing features of this proposal is that on the safety side at least it would get into what is, as Bill was just stating, what would be the most comprehensive causal analysis on safety that has been undertaken probably ever, but certainly in the last 30 years.

Also importantly, as identified by the Transportation Research Board Group, this would not require the authorization of specific funds to be carried out. In fact, following the precedent that was established with the original SHARP Program, the States would be taking off of the authorizations that are made available to them a small percentage in order to fund this effort. So it is distinguished from the remaining research and technology program in that it would not have to be authorized through what under TEA-21 was Title V. This would in fact be an authorization to allow the States to set aside some part of the moneys made available to them for this purpose.

Mr. HAIFLEY. Can someone tell us what this program would look like—the causal research—a little more detail? Anyone want to flesh that out? Bud perhaps could tell us what NCHRP is. What I am looking for is for you to help us describe what this program should look at. And the next question is how much money should it get. That is what I want you guys to come forth with.

Bud, can you tell us a little bit about what NCHRP looks like? NAGHSR recommended NCHRP as what they would want for their proposed safety research model.

Mr. WRIGHT. Well, NCHRP is a cooperative research undertaking which States, Federal Government, interested parties identify an agenda, again drawn from moneys contributed by the States, not funds authorized specifically for research at the Federal level. It is a comprehensive agenda under NCHRP. It would include all aspects of highway and surface transportation research.

The F-SHARP proposal is the so-called causal safety analysis, is built around a similar sort of a model, but it would actually be substantially more funding than is available through the NCHRP program, which I believe is at about \$30 million a year. This concept would be \$75 million a year. One element of it would be safety and again the initial thinking, though not fleshed out fully yet, is that safety would probably represent at least half of that amount, if not slightly more.

Again, much yet to be determined as to what would be done, but essentially it would involve fully instrumented vehicles that would, not unlike the video that we saw of the train, would actually record data regarding crashes that occur so that we understand what factors were at play. Did it involve driver behavior? What was the condition of the roadway? What were the circumstances that might have been able to prevent the crash from occurring? It really is extremely complicated, and because of the fact that it would require vehicle instrumentation, you are not going to have 100 percent, but you are going to have a large enough percentage that you are going to capture the crashes that are occurring on a daily basis in the country.

So it would require substantial investment in order to yield the kind of results that really are going to provide the data that we need to say, here are where are problems lie and here are what the solutions are that would be most effective.

Mr. HAIFLEY. Anyone else have any more comments on what this—yes, Bruce.

Mr. WARNER. Bruce Warner, with Oregon again. I think the other thing, in addition to understanding what the causes are and the potential solutions, AASHTO is a believer that we need to actually get out and pilot some of these solutions to make sure that they actually work. We have a lead State concept where we actually encourage various State Departments of Transportation to actually get out ahead and put some of these innovative technologies and ideas that have been developed by research in place to see how they work.

So another key component, I think, of the research program really needs to be some of this piloting of some of these to determine what are the most effective solutions, to determine how they work, and then again figure out a way to actually move those things to full implementation throughout the United States.

Mr. HAIFLEY. Brian?

Mr. HOLMES. Brian Holmes. I hate to be the skunk at the picnic, but it sounds to me like we are talking about spending a lot of money in pursuit of the obvious. It seems to me you have two problems when it comes to driver behavior. You have the fact that, taking work zones as an example, the conduct of normal drivers is not what we would like it to be, and that they go through our work zones too fast and they are following each other too closely.

The second problem is the aberrational driver. In other words, with a lot, a great deal of the work being done, you have work zones functioning at the time that, you know, after the bars close and you get the people who no matter how good your signage is, they are going to find their way into your work area. So it would seem to me that I do not know what we are going to gain so much from this effort that we don't really already know. I mean, speed, following too closely, inattention and impairment seem to be about it, as far as I can see.

Mr. HAIFLEY. My time is almost gone, but I would like to ask Bill Walsh to respond to that.

Mr. WALSH. Well, he makes a point. We do know a lot from our crash data. But when you actually work in the business and you are looking at the environment and the behavior and the vehicle contributions to any crash, they are like snowflakes. To really understand all the things that lead up to some crashes, many crashes, you need to have a holistic approach to collecting the data. Retrospectively looking at police crash reports—police crash reports serve their purpose, but they do not have the richness of data that you need to really understand the circumstances and the contributing factors. Many of the issues we are facing today are very difficult and not responding to many of the programs we have in place. It is a very modest investment in making us smarter in how to invest a very large sum of money. I think that is where the safety community is coming from in recommending resources be spent on this area.

Mr. HAIFLEY. Thank you.

My time has expired. We are now entering into the period of senior transportation EPW staff questioning, beginning with Jeff Squires.

Mr. SQUIRES. We are expecting the Senator shortly, and if he does arrive, then I will just give way, and we will return to this.

Before I ask my question, let me say a couple of things. One, welcome to everyone. Thank you so much for taking the time to join us today. This is extremely valuable in terms of building the information base that we will use to do our work going forward on reauthorization.

Second, I want to commend my colleagues, and especially John Haifley, for the fine job they have done in organizing today's symposium. John has worked long and hard on this, and I think the results speak for themselves. Thank you, John, good job.

This is a very sensitive topic that we are discussing today. Any injury or certainly any fatality is an enormous tragedy. And so statistics are pretty much irrelevant if that tragedy touches you personally. Like everybody in this room, I assume, I have had personal exposure to highway-related injuries, fortunately not fatalities. And so I think we all have a shared empathy on these issues. That needs to be the context for our discussions.

With that in mind, however, I do want to pose a question. The question is based on what appears to be the recent performance record or track record. According to data provided by the Bureau of Transportation Statistics, fatality rates declined from 1.9 per million vehicle miles traveled in 1991 to 1.5 per million vehicle miles traveled in 2001. This 20 percent reduction would seem to

represent a significant success story. This gain coincides with the ISTEA and TEA-21 transportation policy era, if you will.

Now, during our work on reauthorization, we have been asking two questions. What lessons have we learned over the last 10 years? And second question, how have conditions changed or how are they likely to change in the future? And then based on those questions, and answers to those questions will guide our refinements and enhancements on reauthorization.

So looking back, we are trying to understand what we should do going forward. In that context, I would like each of you to consider the reductions in fatality rates achieved during the last 10 years. Now, I recognize that there has not been, as one of the witnesses described, there has not been a fall-off. It has been a fairly flat number of fatalities annually, and that is tragic. But the growth in VMT has been dramatic. And so recognizing that reduction in fatality rates achieved during that last 10 years, I wonder what do you attribute this positive trend to, and how might we continue and perhaps accelerate this trend through reauthorization.

Mr. WRIGHT. This is Bud Wright with Federal Highway Administration. Jeff, I think you are right, that there have been some significant very positive actions that have occurred over the past decade. Certainly, the increased investment level made available through ISTEA and TEA-21 has made a difference. We know many things that do work and work well and we are making those kinds of right investments.

I would say by far the single biggest contributing factor is the fact that while we are at only 73 percent, seat belt use in this country has increased substantially over the last 10 years. That is most definitely saving lives. We made some gains, albeit briefly, in alcohol-impaired fatalities. So again, some of the behavioral programs, some of the laws that have been passed both federally and at State level most definitely are making a difference.

But I think as we look ahead, as you note, we are at a plateau. We have not made much progress in the numbers. The rates, yes. Travel has increased. Fatalities have not gone up thankfully in proportion to that travel increase. But we also see factors which are troubling. As we look at the belted population, those that are not belted are the difficult to reach audiences. We have not made the substantial headway in alcohol prevention programs that we might wish to. We see a much older driver population facing us as we move ahead, which will require greater attention in terms of roadway features, whether it be signs, pavement markings, geometry et cetera in order to operate safely.

So there is every reason to believe, unfortunately, that without making further inroads and taking actions which have yet to be taken, that we could unfortunately see that number increasing over time if we allow trends to continue as they would regarding demography and other factors.

Mr. SQUIRES. Ed?

Mr. HAMBERGER. One trend I think you need to keep in mind is the study by DOT which shows that freight transportation will double between now and the year 2020. This is not, let me say up front, this is not an anti-truck screed. We get along very well with our biggest, fastest growing partners, intermodal truck carriers.

But we have formed something called the Freight Stakeholders, which includes ATA, includes IANA, includes the Port Authorities, includes the Association of American Railroads. There are several ways I think that this committee can help get some of that freight off the highway, and when it is on the highway, have it move more safely—for example, to have a little bit more emphasis on freight transportation in the MPO process; to put more money into the intermodal connectors which are highways which connect intermodal yards with the main Interstate or NHS system; and three, to provide, not in this committee's jurisdiction, but tax incentives for investments for all parts of that logistics chain into capacity to move intermodal freight. It is obviously an important part of keeping the economy moving, to move the freight so we can compete on world markets. With the doubling foreseen by DOT, and in fact the ports of L.A. and Long Beach think it will triple between now and 2020, and so if you would look at those kinds of freight movement and those kinds of incentives to improve the intermodal cooperation and the intermodal transportation of freight, I think it would have a positive effect on safety as well.

For the record, this is Ed Hamberger speaking.

Mr. HOLMES. Brian Holmes. I think one of the factors that would explain the statistics you offer is the increased traffic on the Interstate System. Fatality rates for traffic using the Interstate System is something like .04 per million VMT. The rate for, for instance, a two-lane undivided is 1.-something. So there is a huge differential. If you can take substantial amounts of traffic off of these less-safe facilities and put them onto controlled-access expressways, you will be able to achieve an enormous safety benefit. Then you get into the issue of the capacity on our expressway systems, which is something that we think ought to be addressed in this context.

Mr. HILL. I am D.B. Hill with AGC. Jeff, while I think that, and it is a fact that we have seen overall deaths go down, as we begin to rebuild more of our older highways, there are going to be more work zones. We have seen those deaths and injuries go up in the last few years. And if we do not do something now to stem that with better work zone traffic enforcement, public awareness and communications, and positive barrier separations between workers and traffic, I think you could see that number actually go up over the life of the next highway reauthorization bill.

Ms. HOLST. Your statistics are certainly valid, and we are happy to hear that. I am sure everybody here is proud of the contribution that we all as an industry and the public and private sectors have made. However, we also need to be aware of the fact that in 1994, the cost of crashes was \$150 billion. Today, it is \$231 billion. From a taxpayer cost standpoint, we are talking about a comparison of just under \$14 billion to today's cost of \$21 billion.

As I mentioned, and it certainly endorses over and over again, we need to focus on the needs that are coming up right around the corner as well. As Mr. Hill said, there are more work zones. More work is being done at night. We have to prepare for that. We also have to prepare for those demographics that are approaching, and certainly coming up right around the corner for me. We have to prepare for 20 percent of our driving population being 65 and older.

We have to give them better information, better opportunity to use their reaction time to prevent crashes and fatalities and injuries.

Ms. HAMILTON. Wendy Hamilton with Mothers Against Drunk Driving. Strides have been made in many areas, and in fact drunk driving deaths went down dramatically in the early 1980's and the early 1990's. But things have plateaued drastically since then, and you have to remember that still 40 percent of the American public is killed in alcohol-related crashes. We cannot lose sight of that focus. This is a segment of the population that we have research on.

Forty percent of the people killed in traffic crashes are alcohol-related. We do have research. We do have effective programs. An example is the sobriety checkpoint programs. Those have proven to have a 20 percent reduction in fatalities and arrests in Tennessee and New York, even 21 months after those programs have been finished. So the overall education and deterrent is important.

Enforcement is critical to this issue, as is education about that enforcement. Because it is not just about arresting drunk drivers. It is about getting people to understand they should not be drinking and driving.

Ms. ROBERTS. We have seen significant improvements in highway safety. I attribute it and agree with Bud Wright that one of the biggest things that we have done is increase seat belt usage. There is no question about that. But there is still a lot more to be done.

I believe that the comprehensive approach that the States have taken in looking at the driver and the vehicle and the roadway has contributed significantly to these successes, and that we should continue that comprehensive approach. Also, the combination of education and enforcement is absolutely key here. The one-size-fits-all type of approach does not work. Every State has to have the ability to set its own priorities through data-driven problem identification, and to implement performance-based strategies that are appropriate for that State. Again, the one-size-fits-all does not work and will not continue to work.

One problem that I see and continues to grow, continuing highway safety program, is the number of teen drivers that we are seeing on our road and their over-representation in crashes. It is a very critical issue that we have to address.

Mr. HAIFLEY. That was Tricia Roberts, for the record.

Mr. WARNER. Bruce Warner with the Oregon Department of Transportation. I just want to state that first off, we believe TEA-21 was very effective. I think our State, through some of the initiatives, the increased funding and the cooperation between the agencies that was made available through some of the flexibility of TEA-21, actually caused in my opinion about 375 fewer deaths and 25,000 fewer accidents and injuries on Oregon's roads and highways. I think it is important to note, I also wanted to get on the record, we start talking about the fatality rates overall and the fatality rates on the Interstates, I would remind everybody that the fatality rates on those rural two-lane roadways are somewhere approaching four fatalities per million miles traveled. And that is completely unacceptable.

I think for the future, one of the things that is very important that you ought to continue that I think was partly responsible for us getting some of the rates down was the requirement that States consider safety in their planning efforts, and those become criteria whereby you are making decisions on investments and where you place your money. I think that should be continued. I think it should be strengthened and should force the States to work with their local cities and counties and all the other folks to come up with that comprehensive program that we described.

I do want to state that again seat belts is clearly an area we need to focus on. Again, I think we ought to also have on the record, I think a couple of years ago the average rate throughout the United States was about 68 percent user rate. If we could raise that to 90 percent, and there are States that are at the 90 percent now, that in and of itself can save over 5,000 lives a year in the United States.

I also want to emphasize, I believe teenage drivers are a problem. The State of Oregon initiated a graduated drivers license program which has severe restrictions on the time of driving within 6 months of getting a license, and actually continues until they are age 18. In just 1 year of experience, we have seen a 29 percent reduction in the number of 16-year-old drivers behind the wheel with fatal or injury crashes. We think this is something that should be studied a bit and part of that research program that should be probably be implemented throughout the United States.

Mr. SQUIRES. Thank you all very much.

Mr. HAIFLEY. Ruth Van Mark.

Ms. VAN MARK. Thank you.

I want to maybe build a little bit on Jeff's line of questioning. As he stated, and I agree with him—surprise, Jeff . . .

[Laughter.]

Mr. SQUIRES. How refreshing.

Ms. VAN MARK. One life lost is one life too many, but given that we do have limited resources, it seems that it is prudent for us to try to focus those resources on those areas where we get the most benefit, or the greatest number of lives saved.

With that in mind, I think Mr. Warner you mentioned some statistics in your opening statement on the types of fatalities on the roads, it seemed like. Could you refresh my memory on that?

Mr. WARNER. Yes, I would be glad to. Let me see if I can actually find the statistics. I think you are referring to the causes of fatalities. Again, Bruce Warner, the Oregon Department of Transportation. Again, as you have heard over and over again, 40 percent of the fatalities are alcohol-related, so booze is clearly an issue; 20 percent are speed-related, so speed is clearly an issue and a cause; and only 73 percent of the people use their seat belts. This is updated from the 68 percent a few years ago. So belts, booze and speed are some of the big areas of focus that we think upon which you ought to place some emphasis. Thank you.

Ms. VAN MARK. Thank you.

With that in mind, then, for Mr. Walsh, given that NHTSA has placed a big priority on reducing the incidence of drunk drivers, along with MADD, the good work that they have done in that area, but also given that excessive speed appears to be a big bloc of the

causation of accidents, could you explain to us what NHTSA has done with respect to trying to, if not educate drivers, encourage States to enforce minimum or maximum speed limits?

Mr. WALSH. Well, actually I think you should have asked Bud about speed, but NHTSA and Federal Highway within the Department do have significant research and demonstration programs and we are working with the States to try to reduce speed-related crashes. Education is only part of it. I think what you are going to find out from any behavioral change program, I am going to say first of all you have to have reasonable speed limits, and I think the core of our program is to set speed limits that people think are reasonable. Because people will not obey speed limits that are not reasonable, and then that makes the whole system impossible to work. If everybody is speeding, enforcement does not work. So it starts with that, and that of course, I will let Bud talk more about that in a minute, but from NHTSA's point of view any behavioral change starts with enforcement, and you have also heard public education and letting people know that the laws are going to be enforced, and that of course is general deterrence.

One of the things that I think personally will make a big contribution in the future will be automated enforcement because we can never put enough police on the streets to stop red-light running, for instance. And I know that is controversial in some political domains and people talk about lack of privacy, but when people are breaking the law and putting other people's lives at risk, I do not think they should complain about getting a ticket for it. So one of the hopes for the future in enforcement is automated enforcement.

But why don't I turn it over to Bud, and you might want to talk about setting the speed limits.

Mr. WRIGHT. This is Bud Wright. I do not have a lot to add to what Bill said because I think he stated it well. This does begin with setting and posting reasonable speed limits. We know that analysis does not always take place, does not necessarily have to take place on an individual roadway basis, but it certainly should relate to the kinds of design characteristics for a roadway and take into account local conditions. We know that speed limits are not properly set throughout the country.

So with regard to any enforcement mechanism, whether it be at intersections where we see red light violations occurring or whether it be on speed limits on general roads, the engineering analysis needs to take place first to say that we have in place a system that makes sense, and then aggressive enforcement needs to take place to ensure that motorists are complying with those laws. We are doing some things with regard to speed limits which we think are going to demonstrate some new techniques that might work for the future. We are spending research and technology money, for example, to look at the effectiveness of variable speed limits, that take into account time of day, roadway conditions et cetera. There is much technology today that would allow us to post variable speed limits that could change, again given conditions at the time of day.

We also are looking at pilots regarding speed limits in work zones, as was referred to by Mr. Hill earlier. We recognize that as a significant problem, and using the technology that we have avail-

able today to make sure that the right information is available to motorists as they pass through, including using variable speed limits in work zones could make a substantial difference.

One thing that I would add to the statistics that Bruce related to you is that you can cut this pie in a lot of different ways. And when we say 40 percent are alcohol-related, and x-number are related to speed, we also know that close to 38 percent of the crashes that result in fatalities are single-vehicle run-off-the-road crashes, and 30 percent approximately are related to speed. Those are not conflicting statistics. They are just cutting things from a different perspective. There is a behavioral element associated with many crashes. There is also a roadway element associated with those same crashes. The individual speeding might be an alcohol-impaired driver and might be the victim of a single vehicle run-off-the-road crash.

I guess my point is that it is a multi-dimensional issue that we are looking at, and certainly much more aggressive and effective enforcement of alcohol incentives or prevention programs would make a difference. But at the same time, taking steps to ensure that even someone impaired, unfortunately, is less likely to be a party to crash by putting in rumble strips or taking other measures on the roadway itself can make a difference as well, and a substantial difference, we think.

Mr. WALSH. If you would permit me one last comment, since we are tag-teaming you, in our economic impact study, we looked at crashes in which at least one driver was exceeding the legal speed limit or driving too fast for conditions, and the costs were estimated to be \$40 billion in 2000. This is related to 12,350 fatalities and 690,000 non-fatal injuries. It represents 30 percent of all fatalities and 13 percent of all non-fatal injuries. So it is a very significant problem.

Ms. VAN MARK. Mr. Holmes?

Mr. HOLMES. Thank you.

I think we have lost the battle on speed. I think our speed limit signs have very little if in fact no credibility. Fifty-five miles an hour basically means 68 miles an hour, and that is based on an analysis of people's actual speeds. I think the policy in many States is if you are going 69 they will pull you over, and in a 55-mile-an-hour zone if you are going 68, they won't.

People flout speed limits. Why don't we forget about speed and concentrate on following too closely? I mean, the only problem with speed is that you cannot stop in time to prevent a collision. So if we would figure out a mechanism to enforce leaving proper distances between vehicles, which the distances increase with speed, I think you might get a little more bang for your buck.

The other thing which was alluded to by one of the earlier speakers is that we can have—it is unknown what impacts we can have on driver behavior. The folks from MADD have been part of a huge success. You have seen a societal sea-change in terms of people's attitudes toward drunk driving. In other areas such as speed, I do not think there has been any impact. I mean, seat belts is kind of a no-brainer, and yet we have a substantial chunk of the population which for one reason or another just won't take advantage of them.

We can, however, control the roadway environment. We can make sure there are shoulders. We can make sure the turns are graded. There are physical things that we can do in the structures that we build that will be more forgiving and thus help prevent accidents.

Ms. HAMILTON. May I just make comment? MADD has done a lot, as well as other people in this room, to change behavior about drinking drivers. But there are still 40 percent of the people out there who are drinking and driving and being killed. We cannot lose sight of that fact. We have done a lot, but there is so much more that has to be done to change that problem.

Ms. HOLST. This is Kathi Holst with ATSSA. It is rewarding to know that when I back out of my driveway with my children in my car they do not allow me to put my car in gear before I put my seat belt on. Organizations are commended for that effort in teaching our children that. And it is nice to know that at least people know what a designated driver is. We certainly have a long way to go before everybody follows those rules.

But the one thing of those three factors—the road, the automobile and the driver—the one thing that is static and can be controlled, at least to a great extent, is the roadway itself. And that is why we certainly look for dedicated safety dollars that certainly can be flexed at the State level. There are opportunities in New Hampshire and Vermont and more rural areas with two-lane rural roads that need emphasis on safety dollars toward those goals that differ from the Chicago area, where it is highly urban and congestion and mobility are bigger issues. So we do endorse certainly flexibility within the State.

We urge the focus be on dedicated safety dollars to improve roadway safety. And when we do so, we are talking about target areas that have been identified as high risk—intersections, as has been said. Mr. Wright offered the statistics on the number of crashes that occur there. A third of all fatalities involve the roadway itself, and that factor certainly cannot be overlooked.

Other target areas—older drivers, as I mentioned earlier, based on current estimates, the number of driver fatalities for older drivers will triple by 2030. That is a big number. That is about 24,000. Work zones—something near and dear to my heart, as I am a traffic safety contractor in the Chicago area—more and more work zones are being done at night. There is always a great deal of controversy as to whether or not we should keep a full stretch of construction highway closed, or if we should open lanes back up and let traffic expand back into the full lanes and close them again. More nighttime work poses a huge concern for us in terms of the work zone target area because I would certainly rather have my workers working beside congestion than high-speed traffic that, as was mentioned earlier, typically will involve more impaired drivers who left the bar at midnight or one o'clock in the morning and are driving home at high speeds.

So it is important that we not lose focus on the fact that the roadway itself is something that we can control with more dedicated safety dollars that can be flexed at the State level.

Ms. VAN MARK. Thank you.

I have just been given the green light, so I can ask another question, according to our moderator.

This is for you, Mr. Hamberger. I will admit that the world of the railroad industry is a mystery to me, so I am hoping you can help me understand a few things. I know that the rail itself is private property, so when a person crosses over the rail at a grade crossing they are actually on private property, which is why I am assuming you refer to people who are on the track when a train hits them as trespassers, because they are on your property.

Mr. HAMBERGER. That is correct.

Ms. VAN MARK. Under your proposal, you are asking us to increase the amount of money for Section 130 money to now handle the maintenance of those grade crossings. Who currently handles that maintenance and who is liable for that maintenance, or is anyone?

Mr. HAMBERGER. The individual private railroads handle that maintenance. Our survey indicates that it costs the industry about \$200 million a year to maintain the signal systems. If they don't work, we are liable. And so it is a major effort on our part, obviously, but what we would like to see, and just building on Kathi Holst and Brian Holmes on your previous question, those investments in the Section 130 program, if you separate a grade crossing, for example, it is a permanent remedy to a safety problem. You are not working on trying to change people's behavior. It is a physical investment that can be made that can remove that from a possible accident in the future. So if it is separated and, of course, if you improve the gates and have it be a more active grade crossing warning system, then obviously that has a tremendous impact as well.

There was a study—I guess it was officially done in the 1990's, I think John, that the Department of Transportation was directed by the Congress to determine what the proper cost allocation and whose responsibility it is to put those grade crossing signals in. It was determined that it is a highway responsibility, it is a highway safety responsibility, and the industry, the freight rail industry is responsible for as much as 10 percent of the cost, but it is generally in the 5 to 10 percent investment. Then we have over the years taken on that responsibility of maintaining them.

Ms. VAN MARK. Just a real quick follow up to that, then—as I understand it, right now the railroad industry does pay a fuel tax that goes to deficit reduction.

Mr. HAMBERGER. That is correct.

Ms. VAN MARK. And you would like, obviously, to eliminate that tax, but at the same time you are asking the highway community or specifically the Highway Trust Fund to make greater investments which you just showed us . . .

Mr. HAMBERGER. In highway safety.

Ms. VAN MARK. . . . is private property. I am wondering, what would be the reaction of the rail industry if that money was redirected to the highway trust fund, thereby opening up more money for the types of program improvements that you are suggesting?

Mr. HAMBERGER. Well, there are several problems with your question. It is not an investment in private property. It is an investment in highway safety.

Ms. VAN MARK. I guess from the perspective, you are asking the question is whether or not there is a problem, but go ahead.

Mr. HAMBERGER. No, it is not an investment in private property. It is an investment in highway safety that is determined by the Department of Transportation, that this is a highway safety issue. The request that we have is that that Section 130 Program that is currently funded out of the Highway Trust Fund, properly so, as a highway safety program, recognize that there could be an even greater return on that investment if more money were spent. And so, the 4.3 cents, just to echo again what my friends in the highway industry say, the best way to improve safety and the best way to improve safe operations is to make sure that you have enough investment in the infrastructure. I have heard \$41 billion, \$50 billion, \$60 billion needed to invest in the highways. The freight railroads invest in their own infrastructure. We are the most capital intensive industry in the country. We routinely invest 16 percent of our total revenues back into our own infrastructure, compared with manufacturing of about 3.5 to 4 percent.

So what we suggest to you is that that money, which went for a very good cause, I suppose, to get rid of the Federal deficit, should be returned to us, as well as the barge and towing industry asking for the same thing, so that we can invest it in our own infrastructure.

So I guess I have a disagreement with your basic premise that the investment of a grade crossing safety, whether it is a separation or whether it is a signal system, is an investment in private property. Rather, I think the Department of Transportation has determined it is an investment in highway safety.

Ms. VAN MARK. Since I have gone over my time by 9 minutes and 40 seconds, I will be quiet, but I hope we get a chance to talk about this some more.

Mr. HAMBERGER. We will come back to it. Sure, of course, thank you.

Mr. HAIFLEY. Mitch Warren?

Mr. WARREN. Thanks. I would also like to thank everyone for making the trip and making another one of these symposiums a success. I want to thank John Haifley for his work in putting this together.

I will ask a couple of more specific questions, I guess. One, in Ms. Roberts' written testimony, you propose consolidating the incentive grant programs into one large highway safety grant program, and the testimony provided some compelling arguments about the bureaucracy and bureaucratic issues involved in administering a number of similar programs.

I wanted to give Ms. Hamilton an opportunity, as a representative of an advocacy group, just to respond to that proposal and provide your thoughts.

Ms. HAMILTON. You are talking about moving the 410 into the 402 funds?

Mr. WARREN. Yes, consolidating.

Ms. HAMILTON. Consolidating everything together? I think that what we have to look at is, taking the numbers away from the sections is not the issue. What is important to look at is the effectiveness of the programs that are within those, in the repeat offender

and in the open container, and making sure that the laws get passed across the board. We are not condemning those programs because they have been very effective. We do not want to close any doors on these. It is a good idea to know where that money is being spent, and if it is being spent effectively.

Mr. WARREN. Mr. Walsh, any thoughts on the issue?

Mr. WALSH. Well, you know, in my 2 minute summary, we want to simplify the grant structure. The more grant programs there are and the more requirements that have to be met and the more reports or applications that have to be made, it puts a significant strain on the States that have to do the work.

On the other hand, the tension, you know, mentioned by Ms. Hamilton is if you really believe there are specific actions that need to be taken to make a difference, arguably you have to target funds for those differences. It is a very complex equation.

Mr. WARREN. I will suspend my question for a moment and introduce Senator Reid.

Senator REID. Having just left cloning . . .

[Laughter.]

**STATEMENT OF HON. HARRY REID,
U.S. SENATOR FROM THE STATE OF NEVADA**

Senator REID. I apologize for being late. We were doing terrorism insurance, and all of a sudden cloning showed up. And I spent the last night and this morning trying to work that out. I think we have it worked out. We are working on an anti-terrorism insurance piece of legislation. It is extremely important to the country. We have realtors, developers, insurance industry and the financial institutions who are having real trouble because they are simply not writing anti-terrorism legislation. We have construction projects around the country on drawing boards that cannot go forward. We have construction projects that are being shut down, so we are trying to complete this, but the rules of the Senate make it real tough. But I think we are going to be able to get something out of the Senate next week.

So that is where I have been. I apologize for being late. I will just take a little bit of time. My schedule is really a couple hours behind time already today. I have been on this committee since I came to the Senate. It is an extremely important committee. It is the public works committee of the Senate. And we address many important issue in the series of hearings and symposiums that we have had this year. We have developed a new way of approaching legislation. I thought we would try something different. For decades and decades, what we do is we have Senators up here and to be frank with you, that is about how it looks when we have a hearing. We do not have many people show up. So we have these Senators conducting the hearing, and the people that are really well-placed to ask the good questions are the staff sitting around doing nothing. They cannot ask questions in a formal hearing like that. So I thought we would come up with something else.

We are fortunate to have extremely dedicated, loyal, public servants who work on various staffs in the Senate. They are really well-educated and extremely good. They are not involved enough, and they usually—not usually—they do most of the work as far as

getting the legislation so that we are in a position to move it either out of the committee or on the Senate floor. And I felt this might be a good way to get them involved, and it has worked so well; that there is a good interchange of ideas and these valuable staff are able to ask questions. They usually, I am sure, sit back there while we are there, and say, why didn't you ask the question—and mumble a few other things, I am sure they do. This really has been a big help. We have made great progress.

Now, we all understand the importance of moving things in our economy—freight. We understand how important it is to reduce congestion for improving our quality of life. And in the final analysis, though, we really have to take a look at safety. That is what this is all about here today. We have made great strides in safety. It goes without saying the progress we have made over the years. Roads are safer. Vehicles are safer to be in. But the level of fatalities still remains very, very high and it is unacceptable.

As all of you know, more than 40,000 people die on our roads each year, and more than 3 million are injured every year. Highway safety is an issue that touches every one of us, and that is what this symposium is all about. I am glad we have people who are experts in this field to talk today to this committee.

Once this symposium is completed, the information will of course be taken and shared with the rest of the committee members in preparation for moving next year our very important highway bill.

So thank you for being here, and I again apologize for being late.

Mr. WARREN. Do you want to go through the 15-second quick sound bites or your presentations?

Mr. WRIGHT. Thank you, Senator Reid, for the opportunity to be here, and thanks to your staff and their leadership in putting together this symposium. I am Bud Wright with the Federal Highway Administration.

Transportation safety, as you noted, is a national health issue resulting in more than 40,000 deaths and 3 million injuries per year. We must do better at addressing this epidemic. Our approach must be comprehensive, addressing drivers, vehicles and the roadway. It must be based on good data and it must be a collaborative effort in which Federal, State and local agencies and the public and private sectors work together.

Thanks again.

Mr. WARNER. Thank you, Senator. I am Bruce Warner. I am the director of the Oregon Department of Transportation, also here representing the American Association of State Highway and Transportation Officials.

To put the numbers in a little different spin, if the day is an average day, 114 people will lose their lives today on the States' and the Nation's highways and roads. Almost 9,000 people will be injured. I agree with Bud that something needs to be done. I believe that the overall Federal investment in this program must be increased substantially, we believe at least one-third from where we are today. We also believe that the investment in transportation safety needs to nearly be doubled during that same time period.

Mr. WALSH. Thank you, Senator Reid. This is a wonderful opportunity for us to get together and discuss a very important issue. My

name is Bill Walsh. I am from the National Highway Traffic Safety Administration.

Bud has mentioned the size of the problem. You cannot calculate the cost to American families of these tragedies. We have calculated the economic cost as being \$230 billion. That is direct economic costs. It is something that affects the daily lives of everyone.

We are in a position where we can make a difference and we must work together to make a difference.

Thank you.

Mr. HAMBERGER. Senator, Ed Hamberger with the Association of American Railroads. It is pleasure to be here.

As you know, freight railroads are currently the safest mode of transportation in America. Our biggest problem is the grade crossing fatalities that occur—about 400 a year, a little over 400. There is a very worthwhile, effective Section 130 Program that this committee has funded over the years, which has brought that number down from over 1,000. We just encourage you to continue to fund it at higher levels, hopefully when you reauthorize.

Ms. ROBERTS. Good morning, Senator Reid. I am Tricia Roberts with the Delaware Office of Highway Safety and I am representing the National Association of Governor's Highway Safety Representatives.

States have clearly made a lot of progress in highway safety, primarily as a result of TEA-21, but more must be done. In effect, we have reached the low-hanging fruit—those persons that are easy to convince to drive safely. If we are to make further headway with the more difficult populations, States must have stable and reliable funding, simpler more consolidated programs, more resources to address specific target populations and emerging safety issues, better data, additional safety research and other tools.

Thank you.

Mr. HOLMES. Good morning, Senator. I am Brian Holmes, Maryland Highway Contractors, here today for the American Road and Transportation Builders.

We believe that all aspects of the Federal Highway Program have significant safety benefits and that absent a commitment to substantially increase funding, we are playing a zero-sum game here. We are just trying to eat each other's lunch instead of working together collaboratively to really address and get a real handle on safety issues.

Thank you.

Ms. HAMILTON. Good morning, Mr. Chairman. My name is Wendy Hamilton and I am President-elect of Mothers Against Drunk Driving.

We are deeply concerned at the number of people that are killed in alcohol-related crashes. That is 40 percent. That number is not moving. MADD's goal for the reauthorization of TEA-21 is to save lives and our objective is to ensure a substantial funding increase for priority traffic safety programs.

Thank you.

Senator REID. I appreciate very much everyone—oh, I missed a couple. Let me just say this, though, on drunk driving. Reno, Nevada recently we had a drunk driver go the wrong way on a freeway; killed five in a family. He was uninjured, of course. I just

have so much difficulty understanding why people still drive and drink. I just don't understand it. It is a mystery to me and I do not know what more we can do, but that is one thing I want to make sure that we do whatever we can to get these people off the roads. It is a terrible tragedy—all five of this family killed for no reason. There was no way this family could have avoided being killed.

Mr. HILL. Good morning, Senator. I am D.B. Hill, III. I am a highway contractor from Little Rock, Arkansas.

Senator REID. You sound like it.

[Laughter.]

Mr. HILL. Thank you. I am going to take that as a compliment.

[Laughter.]

Mr. HILL. I am also chairman of AGC's Work Zone Safety Committee.

In 2000, nearly, 1,100 people were killed in highway work zones, most motorists and our employees. Just Wednesday, 2 days ago, there were six deaths in a single work zone accident on one of our jobs in Eastern Arkansas. AGC contractors are deeply troubled by this trend. Incentives need to be created to promote more driver awareness, to provide better enforcement of traffic laws, and to encourage States to make wider use of positive barrier separation and other work zone safety devices.

Thank you, sir.

Ms. HOLST. Good morning, Senator. I am Kathi Holst, President of the American Traffic Safety Services Association.

ATSSA's core purpose is to advance roadway safety. I am here to urge you to invest \$3 billion annually to make America's roads safer by addressing high risk roadway activities, targeting older drivers, work zones, intersections, pedestrians and speeding. I very much appreciate the opportunity to be here.

Senator REID. Mr. Hill, I did mean that as a compliment.

Mr. HILL. Thank you, sir.

Senator REID. Thank you all very much for your being here. Just from the little bit that I have been able to hear, I look forward to my briefing on this next week.

Thank you very much.

Mr. HAIFLEY. Mitch Warren?

Mr. WARREN. I will just finish up real quick.

Ms. HAMILTON. Can I clarify one thing, please, on the Section 402 response that I had given earlier?

Mr. HAIFLEY. Sure.

Ms. HAMILTON. In regards to consolidating—Wendy Hamilton from MADD—the impaired driving countermeasures to a single 402 program, MADD's priority is to reduce the number of traffic fatalities and injuries. The committee should evaluate the effectiveness of all programs. MADD supports streamlining the grant programs and the consolidation should be an option with the goal of saving lives through the proven effective programs.

Mr. HAIFLEY. Thank you.

OK?

Ms. ROBERTS. If I can just address your question also. Tricia Roberts from NAGHSR. I cannot stress enough how difficult from a State perspective those who are responsible for administering these

dollars and administering all eight of the grant programs, plus the two penalty provisions, how difficult and cumbersome all of these programs have been to administer. Not that we are not grateful for the increase in funding and all the programs it has allowed us to do, but it has caused an incredible amount of administrative headaches and much, much too much time put on just administering the programs, rather than focusing on what the money is really there for, and that is for program development, implementation and evaluation of the effectiveness of the programs that we are implementing. Consolidation is essential.

Mr. WARNER. Bruce Warner with the Oregon Department of Transportation. I want to make it clear from AASHTO's perspective, one of the things we are recommending is that you folks require that States come up with a goal-oriented performance-based comprehensive safety plan that looks at all elements—engineering, education, enforcement and emergency services. We believe that if the States do that and do that with the coordination and cooperation that should be required, they are going to identify the priority areas for the State. If for example somebody said that they wanted to put the majority of their efforts on seat belts, they ought to have the ability in their States to use the money as flexibly as possible to attack what they believe is the No. 1 problem in their particular State, where they can again get the biggest bang for the buck and make the most impact in terms of the lives saved and the injuries reduced.

So I think that what we are saying is we want flexibility in the use of those dollars to implement those strategic and safety plans that the States should do and should do in a comprehensive, coordinated manner.

Mr. WARREN. Mr. Walsh, a quick question for you on intersection-related crashes. Do you have any data or any feedback that has shown whether or not red light cameras have been effective at reducing crashes at intersections?

Mr. WALSH. Yes, but I cannot remember the number.

[Laughter.]

Mr. WALSH. Yes, in fact there is a wide range, and I would be happy to supply it to you. There have been a number of research studies done, and many of the studies it is shown to be very, very effective, very high percentage of crashes are eliminated. I will provide that for you later.

Mr. WRIGHT. I was just going to add that as was stated earlier, enforcement really is a key in many areas of what we do. It is also clear pre-9–11, but certainly post 9–11, that the enforcement community has many priorities and many activities to deal with. Anything that we can do to advance enforcement using automated technologies is going to be a net benefit. There are right ways and wrong ways to do it, however, and we very much believe that ensuring, as I stated earlier, that proper engineering takes place at intersections before automated technology is used is a key element to that.

But given that circumstance, we do believe that automated technology and red light running enforcement can make a difference. As Bill stated, there are statistics that show that they are effective means and effective tools.

Ms. ROBERTS. Tricia Roberts. Just a little add-on to the red light running—I have just been told that the Insurance Institute for Highway Safety actually did do a study on an automated red light running project that is happening in Oxnard, California, I believe. They did show a 29 percent reduction in fatalities through that project evaluation.

Mr. HOLMES. Speaking from a personal experience with a red light camera, I did not stop making a right turn. I did not go through it. I mean, I did not go through the intersection. But the idea, and this was in Maryland, the idea that you pay a fine. It does not get reported. It is a civil matter. The insurance company never finds out about it. I think it would have huge benefits if you would install some of them in construction work zones. I do not know if the technology is there, but if we could just start mailing them out to people and said, hey, when we said slow down to 45, we meant it. Please give us \$75. I think people would start slowing down pretty quickly.

Mr. HAIFLEY. That was Brian Holmes, for the record.

Mr. HILL. And I am D.B. Hill, and I concur with him wholeheartedly, that we think it would significantly reduce speed through a work zone.

Ms. HOLST. This Kathi Holst with ATSSA. There is the technology available. There has been tremendous strides in smart work zones, intelligent transportation systems, all of which could certainly be incorporated into automated enforcement.

Mr. WARREN. Thank you. Thank you all very much for coming again. I appreciate it.

Mr. HAIFLEY. Megan Stanley, for 8 minutes.

Ms. STANLEY. Thanks.

I think I am going to pick up on the end of this discussion about work zone safety and enforcement. Anecdotally, I think that 10 years ago, I had an expectation that I would get a ticket if I sped through a work zone, probably because I did get a ticket speeding through a work zone around that timeframe. But over time, I think that as work zones, as we do more highway construction and people are used to seeing them more often, and then they do not see people often when they are going by the traffic cones, so that expectation of safety risk and of enforcement of the speed reduction has disseminated over time, and I think that that is probably part of the cause, as I am sure you well know, of the increasing dangers of work zone fatalities and injuries.

So I think whatever we can do in that area to raise awareness is going to be a positive benefit. I bet everyone in this room, like I do, wears their seat belt and does not drive drunk. But perhaps after today, you will not speed through work zones anymore. So I would like to ask a question of Mr. Hill. You mentioned incentives for doing some of what I think are extremely good ideas, like the different classifications of work zones, obviously increased enforcement. But who is responsible for implementing these measures in a work zone and how would incentives be targeted to make improvements?

Mr. HILL. Generally speaking, the people that implement them are the State highway transportation organizations. That is who tells us as contractors what traffic control devices and develops the

traffic control plan. Some States, contractors have input into the traffic control plan. Other States, they do not. The incentives we are talking about are an additional amount of money. We do not want to take it from other funds that are generated now. We want a new batch of money. In AGC's comments on reauthorization, there are several places it can come from. But we do not want the State highway organizations to have to make the choice between more asphalt and concrete and safety. Because in fact, they are doing that right now. We want this new money so if they have a good idea about how to make a work zone safer, then the Federal Highway Administration can award them extra dollars to do that.

That is what we are talking about as incentives for work zone safety. Some States do a better job with it than others, from what I understand. Safety is a greater issue in some States than in others. Sometimes it seems to be where there have been accidents that kill workers, that those States are more interested in work zone safety, but do not let them have to choose between the two.

Thank you.

Ms. HOLST. This is Kathi Holst with ATSSA. Mr. Hill's point is dead on. When cuts have to be made or when projects involving work zones have reached funding constraints, in all cases that I am aware of it is the safety aspect that gets cut from the program. I would like to share with you a very recent story as an example. I am the traffic control subcontractor on a very large reconstruction project on Interstate 70 in the down-State area in Illinois. The project involves reconstruction of a bridge deck. One of the safety devices that was called for in the traffic control plans, which was designed by the Illinois Department of Transportation, called for a very low-cost temporary barrier, a type-three barricade, the technical term is, which is a three-rail device, to close off a lane temporarily where the bridge deck was being removed. That is a very slow process, and so for a great deal of the time that that particular lane is being constructed, the route is actually driveable.

Local residents and motorists figured this out quite early in the project. So on a regular basis, the motorists during the night hours would actually get out and move the type-three barricade and continue on through what was the closed lane of the reconstruction project. In all of our reports to the contractor and the Department of Transportation, we urge them to reconsider substituting these type-three, very portable devices with concrete barrier wall, which as you all know, a 10-foot section you cannot pick up just by getting out of your car.

Because of budget constraints, that request was denied and we continued to use these type-three barricades. And because part of my responsibility on the project is to perform a surveillance operation every night to make sure that the project is in good working order, we would continue to come upon these type-three barricades that had been moved and we would put them back, and we would continue on through the 20 miles of the project and come back and quite often find them moved again.

About 3 weeks ago, I received a call from the foreman on the project who informed me that once again these type-three barricades had been moved by a local motorist. Unfortunately, however, that day the rest of the bridge deck had been removed and it was

no longer driveable. Therefore, his car plummeted to the roadway below and he was killed. Today, concrete barrier wall is now on that job site, but that is what it took.

I am certain that there are many other contractors in this room that can relate those same types of stories. Let me give you another very quick one. There are now truck-mounted attenuator crash cushions that are mounted on follow vehicles in slow-moving or mobile operations throughout the country. These are extraordinary devices and have saved thousands of lives, I am certain. Because of some crash-worthiness studies at higher speeds, there is new technology for improved crash cushions that are called for on speeds of over 45 miles an hour. However, because of safety funding constraints, not all Departments of Transportation at the State level can keep up with those new technologies. Very recently, within the last month, a motorist was killed when he was driving 70 miles an hour and crashed into a crash cushion, which if he had only been going 45 miles or under would have saved his life. Unfortunately, however, that did not occur.

So often, safety is the first thing to go. Maintenance of pavement markings will be delayed if the States run out of money. However, on a project when you have to choose between tons of asphalt or pavement markings, you cannot reduce the tonnage of asphalt and complete the project. So the pavement markings get delayed, both in construction and maintenance projects. I am certain that we have all driven the Nation's highways and seen signs that are terribly illegible—the sheeting has faded, the words have faded, some copy has perhaps even fallen off. I drive I-65 between my office in the Chicago area and another of my offices in West Lafayette, Indiana. There is a guidance sign that has been down for the 3 months that I have been driving. It is still there, but it is down—certain that the State funding is too tight to have to replace that sign.

However, if there was a major asphalt problem on that road where cars would not be able to pass, I am pretty certain that the asphalt trucks would be out there fixing that problem.

So we certainly urge that safety dollars be dedicated to these low-cost target area type improvements—pavement markings, signage. They are low cost. They have high benefit-to-cost ratios. Pavement markings, for example, is a 60 to one benefit-to-cost ratio. These types of eligible safety programs and activities have multiple uses, and certainly a wide coverage of benefits and opportunities.

Mr. HOLMES. Brian Holmes. I cannot speak to the issue of safety getting short-changed when it comes to the design of work zones. I do not have any knowledge of that. But there is a cost-based bias against positive separation. In other words, I think it would be helpful on the issue of work zone safety is basically we did not have work zones. If we had detours, if we constructed our pavements to begin with wide enough so that you could shift traffic over and put a barrier between them, so that you do not have the situation where you are directly—you know, you are working right next to traffic with a visual guide, instead of some physical protection next to you.

I think that ties in with what was said earlier by one of my fellow panelists about getting safety and actually its maintenance, too, at the table in the planning stage. If you plan your facilities

to maintain them, you can address some of these issues. It is kind of foolish to build a bridge and know you have to replace it in 40 or 50 years and you do not have any right-of-way. You should actually have twice what you need to build a bridge so that you have a place to build its replacement.

Ms. HAMILTON. Wendy Hamilton with MADD.

We certainly agree that spending money on roadway design and vehicle design is incredibly important. We also know that focusing on people's behavior does make a difference. That is what was proven in the 1980's. We have to use consistent visible enforcement and we have to continuously educate and re-educate the public on the problems. Billions and billions of dollars are spent every year on roadway construction, fixing the roads, and that is critical. But we are spending only a fraction of our resources on highway safety programs.

Let me reiterate this point, that if 90 percent of the people in this country use seat belts, that 5,000 lives would be saved. That is a pretty simple fix. With regular highly publicized sobriety checkpoints that we conduct in every single State, we will see huge reductions in alcohol-related fatalities. We know what works. We just need more money to do it, to change behaviors.

Ms. STANLEY. Thank you for that point. I agree. I think that it is a matter of visible enforcement and it is a great challenge, I am sure, because that is a local law enforcement and a resources issue. I seem to think that there used to be a lot more police officer and law enforcement in and around work zones in the past than I have certainly seen anytime in the past recent years. So there has been a change in that kind of activity. I think that more of that would go a long way toward improving safety.

My time is up. Thank you.

Mr. HAIFLEY. Thank you.

I think it is time for a break. We are 18 minutes behind schedule, so could we make it a very brief break. And could I call on the gentleman with the American flag tie and the ODOT people there in the back to pull the sodas out from under the tables. I thank Ed Hamberger and Association for providing refreshments to all of you.

Mr. HAMBERGER. It was railroaded in today.

Mr. HAIFLEY. No more than 10 minutes—hard 10 minutes.

[Recess.]

Mr. HAIFLEY. I want to take this opportunity again to thank the Association of American Railroads—Ed Hamberger—for the fine refreshments. Thank you all for returning quickly. I would like to recognize a very senior individual, Ann Loomis, Senator Warner.

Ms. LOOMIS. Thank you, and thank you all for coming today.

I had some initial questions planned which I now intend to modify based on the conversations. Senator Warner was very involved in the repeat offender program and extremely supportive with Senator Chafee—he was author of our safety belt incentive grant program. We are very anxious to continue following how they have been effective, how we can improve them or perhaps modify them or other directions we need to take with those basic programs.

I think from what I have heard this morning, though, I would like to engage everyone's response in this whole question of consoli-

dation of the safety programs. As many of you know, this committee does not completely have jurisdiction over all the safety programs. We share jurisdiction with—we do not share jurisdiction. The Commerce Committee does have exclusive jurisdiction over some of the NHTSA programs.

But I think Senator Warner has been privileged to be a member of the committee since 1985 and has worked on three Surface Transportation Reauthorization bills. I think we see the multiplication of these types of programs over time, frankly because of frustration on the part of the States' attention to these problems. Now, maybe we have all matured and grown over time, and we would like to work with the States and others on how we can simplify them to improve their effectiveness.

But the key issue is going to be to ensure that we do not lose focus on what each one was intended; if it is just a pure block grant, that we do not lose focus on drunk driving initiatives or increasing safety belt use, and many other things. And maybe Ms. Roberts and then Mr. Warner, you can comment on how we could accomplish that without losing that focus.

Ms. ROBERTS. Tricia Roberts, thank you.

The fact that the States have been given incredible flexibility since 1994 to do really just what you are hoping that we will continue to do, and that is to focus on problem areas that have been identified in every individual States based on State data-driven problem identification, to create performance-based strategies based on the data that is available in the States.

I want to assure you, speaking on behalf of the States, that should we be allowed to continue to have this flexible use of this money, of these funds, that we will continue to base our programming decisions and initiatives on data-driven problem identification. It is no secret to anyone that in every State, the top problems, the leading problems based on the data available is, as was mentioned in earlier testimony, booze, belts and the more broad, beyond speed, aggressive driving. I see no chance of emphasis coming away from that if we continue to be able to base our programming initiatives on data-driven problem identification in our individual States.

Mr. WARNER. Bruce Warner, the Oregon Department of Transportation.

I think that was a very good response, and I would say the same. Again, based on if the States are required and do a comprehensive look at the safety requirements from all of the aspects of the programs, and for example if they could declare victory in seat belt usage, as an example—we are not there yet—and they wanted to focus more of those revenues toward drunk driving or DUII type of issues, based on the data and the priorities, that may be what they want to do. I still think we are a long ways. We need to continue to focus on the three top areas that you just heard about. I suspect that you will see the States come up with those. But again, as information becomes available, as we make progress in other areas, we may want to find that elderly drivers, for example, should be an emphasis area that we want to focus on, especially as the demographics and the age of the population changes over time.

Ms. LOOMIS. Well, I think that is another thing that we have been hearing this morning. Clearly, TEA-21 did focus a lot on safety belt use and drunk driving issues through the repeat offender and the .08 Incentive Grant Program and the open container requirements. But clearly, we did not address as much attention to work zone safety and the more prominent issue, really, of older American drivers.

How do we address the issue to give a Federal focus on those two additional problems without further creating more problems that you are describing, Ms. Roberts, in administering? Because States could focus on older Americans today. You could focus on increased safety measures in work zones today. But if you feel you need a Federal focus on that to get States to pay attention to those two problems, how are we not further creating more multiple programs, that you say are difficult to administer and take more staff time to administer?

Ms. ROBERTS. Tricia Roberts. I am not sure that we really—how can I put this? I am not sure the issues will really change. When you identify a particular priority highway safety problem in your State, whether that be booze, belts, aggressive driving, once you have identified that problem, you have to identify appropriate strategies to address or alleviate whatever that problem is.

We are really talking about a specific population. We are not really putting mature drivers in the category of the highway safety problem, so to speak, like booze, belts or aggressive driving. But rather, they are a target population that needs to have education and enforcement initiatives or programs developed that address the problems associated with that particular population, just like a young driver, minority populations that may be over-represented. This is just another population that a State can effectively address the specific problems that have been identified to that population, like the elderly or the mature driver.

Ms. LOOMIS. I guess, our States doing that today? Or do you not see that as still as high a priority as safety belt use and drunk driving issues? So my question is, what direction do you need from the Federal Government to focus on older American drivers or do you? Mr. Warner, you may want to comment.

Mr. WARNER. Again, Bruce Warner, the Oregon Department of Transportation. I want to make it clear that first off, I think we are talking about we need an increased investment in safety. We do not believe what we have is adequate. And what I think we are saying, if you look at the grants or the programs that are there, some of the things we are talking about do not fit in very well with those. The impaired driver, elderly driver is not the term I like to use. The word “impaired” driver is what we really want to talk about.

I think we need some flexibility to be able to put some money into some of the things I have talked about in terms of identifying some of the impairments that maybe we need to work on, so that again we can get drivers off the road that should not be driving. We do not have some of the tools or the technology. I would like to quite frankly use some of these dollars to get to that. In some cases, because of the demands for the dollars to do some of the ba-

sics, the priorities we are talking about, we do not have the funds to invest in those kind of technologies or research.

Ms. LOOMIS. Well, are you saying you would like flexibility to use your existing safety dollars that may be for safety belts or alcohol-related programs to spend on other safety programs? Or do you want flexibility from construction dollars for these programs?

Mr. WARNER. Again, if you look at the AASHTO proposal, what we are suggesting is we need to create a single 402 grant program that essentially combines all of those together so that we can have the flexibility to do what we think—put the money where we think it will do the most good. If impaired drivers is one of those areas, we ought to have the flexibility to be able to do that. We also need additional revenues to address the issues sufficiently.

Ms. LOOMIS. Thank you.

Mr. HAIFLEY. Go ahead. I yield the gentlelady two additional minutes. Ann?

Ms. LOOMIS. I just wondered if Kathi could . . .

Ms. HOLST. Thank you. Kathi Holst, ATSSA.

Whereas the current safety programs that have been referred to target behavioral issues in general, what we are looking for is a distinction that takes congressional priority for those types of infrastructure issues—low cost, high value, target areas—such as older drivers. The Federal Highway Administration has developed guidelines and recommendations here to address the needs of older drivers. That is an example of the things that might be incorporated into a roadway safety program, distinctive of behavioral issues.

Older drivers needs things like brighter signs, wider edge lines, larger fonts on signs so that they can be read from a further distance. You need three times as much light to see something at 65 as you did when you were 20. At 40, we need twice as much. And gosh knows, I am already there. So there is an issue between—a distinction that we would like to see between behavioral types of issues and infrastructure-type issues that target these areas at a low cost.

Ms. LOOMIS. Thank you.

Mr. HAIFLEY. Lori Saroff, Senator Boxer's office.

Ms. HAMILTON. Thank you. Wendy Hamilton from MADD.

I would like to thank Senator Warner for his leadership on the repeat offender issues. We have to remember that 58 percent of the people that were killed in 2000 in alcohol-related traffic crashes were killed with a .15 BAC or higher. We cannot lose focus on that kind of thing. So I would like to submit for the record MADD's program for controlling the higher risk driver, which includes the repeat offender drunk driver, those with a blood alcohol concentration of .15 or more; and to remind people that we are looking for restrictions on driving for those people. We are looking for restitution sanctions for people. And we are looking for recovery provisions which will address the alcohol use problems of these drivers.

[Information provided by MADD follows:]

MOTHERS AGAINST DRUNK DRIVING (MADD) PROGRAM FOR CONTROLLING THE
HIGHER RISK DRIVER

Higher Risk Drivers Are:

a. Offenders convicted (conviction is defined as receiving a court-imposed sanction) of a second driving-under-the-influence offense within a 5-year period. b. Offenders

convicted of a first driving-under-the-influence offense with a BAC of .15 percent or higher. c. Offenders convicted of a driving-while-suspended offense, where the suspension was the result of a conviction for driving under the influence.

Minimum Sanctions for Higher Risk Drivers:

- a. RESTRICTIONS on Driving:
Repeat Offenders and High-BAC Drivers:
 1. A 1-year administrative license suspension for people who fail the breath test or a 2-year suspension penalty for refusal of the breath test. A portion of that license suspension must be a hard suspension (recommended time: 90 days)
 2. Impoundment/immobilization of the vehicle driven at the time of arrest for the period of hard license suspension.
 3. A 5-year period from the date of conviction during which the offender is subject to a .05 BAC limit and required to provide a breath test, if requested by an officer following a legal traffic stop.
 4. Alcohol ignition interlock required prior to issuance of probationary/hardship/work permit license and for full license suspension period.

Driving-While-Suspended Offenders:

1. Alcohol ignition interlock device required for remaining license suspension period and any additional suspension period imposed as a result of the conviction for driving while suspended.
2. A 1-month vehicle impoundment or immobilization upon the first offense for driving while suspended with vehicle forfeiture for any subsequent offenses.

b. RESTITUTION sanctions:

- Repeat Offenders and High BAC Drivers:
 1. Ten days incarceration, 30 days in a special facility, or 100 days house arrest with electronic monitoring.
 2. \$1,000 fine earmarked for drunk driving prevention, enforcement, and prosecution.
 3. If arrest resulted from involvement in a crash, the court shall require restitution to the victims.

Driving While Suspended Offenders

1. If arrest resulted from involvement in a crash, the court shall require restitution to the victims

c. RECOVERY provisions

- Repeat Offenders and High BAC Drivers:
 1. The court will place the offender under probation for 2 years.
 2. The court will require, under the terms of probation, that the offender attends a treatment program of up to a year in duration, as required by a State certified substance abuse treatment agency.
 3. During the treatment period, the offender will be required to meet with a case manager at least once a month who will ensure that the offender is attending treatment as specified by the treatment agency and remains abstinent.
 4. The court shall order the offender to attend a victim impact panel, if such a panel is available.

Sobriety Checkpoints

MADD advocates the use of regular, highly publicized sobriety checkpoints as a means of deterring, identifying, and apprehending higher risk drivers and other potential offenders.

Data Collection and Record-Keeping

MADD urges the establishment and implementation of statewide DUI tracking and recordkeeping in order to effectively identify higher risk drivers and to ensure that States gather and keep accurate records on offenders.

Ms. Saroff. OK. Take two. Hi, I lost my name tag here, but I am Lori Saroff and I work for Senator Boxer.

The questions today are not necessarily hers. They are my view-points since I am trying to find out while I work with her to work on TEA-21 reauthorization. In the past, she has been very involved in safety issues—crash test dummies, ensuring different sizes for testing cars, hours of service for truck drivers, rollover standards,

and we are still strongly working on NAFTA trucks and the safety issues that are going to happen on California's highways.

I really also want to thank the committee for holding this today. I think it is a great forum to start talking about these issues. At the same time, I am sorry that advocates for highway safety are not here. Consumer Union is not here. They have done a lot of work on rollovers. Though we are talking a lot—the quality of the roads, the behavior of the drivers—a third component I think is also the cars people drive. They drive a lot of SUVs. You know, it is interesting how the rollover is impacting our crash numbers.

And also, I think somebody from academia that we can work with as we are going through this—some new ideas in safety. Because one of the major things that I have heard and read last night and the testimony I have heard today is more money. Everybody wants more money. I am trying to figure out how you would use this more money. This is a different era than it was back when we were doing ISTEA reauthorization. We wanted to get it to a \$32 billion program. You mentioned a \$41 billion program. We are very constrained with the war on terrorism. So I really want to know, if we are able to get more money, where is that going to be spent.

The first, I guess, MADD testimony talked about more money for NHTSA. How do you envision NHTSA having more funds, because I do know that they are underfunded?

Ms. HAMILTON. You mean the National Traffic Safety Fund? Yes. Where we would get that money?

Ms. SAROFF. No. How would you envision them spending that money? Where would you see more money for NHTSA being spent?

Ms. HAMILTON. More money being spent on . . .

Ms. SAROFF. How should they be using their resources?

Ms. HAMILTON. On more programs that are effective that are proven with the research that we have, and certainly on more enforcement and education in all areas of traffic safety, but certainly to be sure that because 40 percent of the people are killed in alcohol-related crashes, only 26 percent of that money is spent on alcohol safety programs. We want to make sure that there is more money spent in those areas.

Ms. SAROFF. Have you thought about how NHTSA would be complementing what the States are doing? Would it be a separate program? More of a national educational level? I am trying to figure out, if we give NHTSA more money, where should we put this more money? Should we give more money to the States for their safety programs or should we really concentrate it at the Federal level?

I can also go to NHTSA. How do you feel like you need more—I know, you don't want to have a question—but how would you feel? Where do you think that NHTSA is lacking in funding and where you could use more money?

Ms. ROBERTS. We would say the 402 Program.

Mr. WALSH. Are you doing anything for lunch?

[Laughter.]

Ms. SAROFF. I know it is a long question, but . . .

Mr. WALSH. I don't mean that. I mean privately.

I think what you will hear from NHTSA when we wind through the whole process is that in this behavioral area, which is really the primary focus of this meeting, we do have a Federal role in our

Section 403 Research and Demonstration Program. You know, the real action—the States have to do it. The local governments have to do it. The 403 Program develops new programs, potentially more effective programs, more effective enforcement schemes, looking at more effective deployment of enforcement resources et cetera.

I think that the problem is so complex that we probably could be a value to the States if we had the ability to do more research. The emerging areas that you have heard about with elderly. We have distracted driving. There are emerging issues that more work needs to be done on. But clearly, I think you have heard today that it is such a difficult program and problem that the States need more resources to carry out the actual interventions.

So I think it would be a balance. I am going to be very general. I cannot really be specific. But it would be—I think the need is great and that we could make use of the money and be effective. I know that is really insipid, but that is the best I can do here.

Ms. SAROFF. I do not know if Mr. Warner or Ms. Roberts want to follow up on that, because both of you I think in your testimony talked about more funding. I know you had talked about a \$41 billion program, and obviously all of that is not going for safety. But I am just trying to see if you see new money, new programs, or just enhancing what you have, that you cannot do what you need to do now.

Ms. ROBERTS. Tricia Roberts. It is clear I believe that the States could maintain the programs that we have implemented under TEA-21 with the current level of funding. There is no question about that. But could we improve upon those programs and enhance the amount of enforcement? The answer is no. There is clearly more funding needed for those efforts. With additional funding, the States could support significantly more enforcement of highway safety laws, laws that are needed in order to influence these populations that we have been talking about—the populations. And those are the hard-to-influence populations, be they the mature driver, the teen driver, the non-seat belt user. They are incredibly difficult to reach with the amount of resources that we have right now.

With additional funding, the States could also undertake a whole range of programs to address specific target populations that I just mentioned, and as must mentioned, emerging highway safety issues.

One thing we have not talked about at all today, this is the first time I have even heard it brought up, is distracted driving.

Ms. SAROFF. Cell phones.

Ms. ROBERTS. Well, distracted driving.

Ms. SAROFF. I have just gotten one. My boss, because I have talked about it, I know Senator Corzine has a bill about cell phones, and there is an article in here, “Should Legislators Regulate Cell Phone Use While Driving?” So I mean, those are new things coming up.

Ms. ROBERTS. Those are emerging issues, hot on the minds of most of the general public, and little to know research, again, is available for us to really effectively address those issues at this point. Again, more need for more resources for research are needed.

So the answer is yes, we do need more money to be able to do more than what we are doing right now.

Mr. HOLMES. Hi, Brian Holmes.

It seems to me that it is evident that safety, transportation safety ought to become a serious research discipline so that, No. 1, that would of course be built on a solid source of reliable data. Several people have complained that the data they get now are kind of a hodgepodge of different recording systems. It seems to me that we are kind of fumbling here in the dark. We are trying to achieve an objective and we all have an angle on it and nobody really knows the answer.

So it seems to me that if we are going to take this seriously, we ought to make a commitment and start doing some serious study on it, and that is one of the objectives that ARTBA has for seeking the increased funding levels we keep talking about.

We do not know all the answers, so it is really hard to say that, well, if you gave us more money, we could do this and do that.

Ms. SAROFF. Then that is an issue. We do not want to just—these are tight budget times. We obviously do not want to just throw out money and not know where they are going to be spent, because we need to get the bang for our buck. I think congressionally, I think that that is what the Senators are going to be looking at.

Does Ms. Hamilton want to follow up?

Ms. HAMILTON. Yes, I think we do need to make sure that we are spending that money effectively. One of the things that we would suggest is that we remove the hazard elimination component of the Section 154 and 164, and put that money back into just highway safety programs for alcohol-impaired countermeasures. The other thing is that on October 1 of 2004, the sanctions component for .08 is going to kick into effect, and States are going to—that money can go back into 402 funds. I believe that is about \$100 million.

Ms. SAROFF. Do you feel that—I guess this was after TEA-21, but the .08 sanction that was passed 2 years ago, do you feel that that is working? Do you see more States implementing .08 legislation?

Ms. HAMILTON. Well, clearly, we worked for years and years and years in the States to get .08 passed, and one State a year would pass it. After Congress passed .08 in 2000, we saw 13 States come on board and now it is up to 31 States and the District of Columbia. So sanctions clearly worked in that area. They worked with the 21 minimum drinking age and zero tolerance.

When we look at this patchwork quilt of laws that we have across the country, I want to know that my family is going to be just as safe driving in Utah and New York as they are in Louisiana and Alaska where the fatalities are horrendous. We have got to do something that is going to make these States come into compliance with what the Federal Government is asking them to do on open container, repeat offender, the other laws, and make sure that everybody is safe.

Ms. Saroff. Thank you very much. That is it. Thank you.

Mr. HAIFLEY. Mr. Hill?

Mr. HILL. From the contracting community, we think more funds could be used in work zone safety. Like Ms. Stanley was talking about, she has not seen as much law enforcement in work zones

in recent years as she said 10 years ago. Additional funding could be used for that.

Ms. SAROFF. To supplement the State Police?

Mr. HILL. Yes, ma'am.

New technology, photo enforcement, radar, intelligent technology systems that warn people of construction ahead, lane closures, traffic backups. So the contracting community does feel that additional funding could be very helpful in those areas.

Ms. HOLST. In terms of roadway safety-type activities, let me just give you some numbers. Federal Highway recommends that lane markings be expanded to a minimum of six inches, for example, for older drivers. The cost of that over a 6-year period of a reauthorization bill is just under \$4 billion. Crash cushions, both in temporary use and in permanent use, at bridge abutments at the end of concrete barrier wall, that is about a \$.27 billion investment.

AASHTO tells us that the overall driver older driver issues that would, or needs that would need to be addressed would be just under \$20 billion. Rumble strips alone for run-off-the-road crashes, which is a high-target area and a high cause of fatalities, would cost \$5 billion. Sign replacements would cost about \$3 billion for higher visibility, more legible signs. Just those items alone total \$31.5 billion, and we have not even discussed things like mandatory training for workers, mandatory training for guard rail installers, research, breakaway systems, guard rail installation, increased presence of law enforcement, which has been mentioned here on a couple of occasions this morning and has a high success rate, emergency management, countermeasures for interceptions, automated enforcement. Those things are not even addressed in the \$31.5 billion over the 6 years.

Ms. SAROFF. Thank you.

Mr. HAIFLEY. Mr. Womack?

Mr. WOMACK. Thank you, John.

I am going to head in a bit of a different direction and address my questions to Mr. Wright and perhaps Mr. Walsh.

Mr. Wright, you mention in your written submittal, the Intelligent Vehicle Initiative, and its relation to safety, so I am going to focus my questions on that. First of all, to what extent are the auto manufacturers participating in this program and in the research?

Mr. WRIGHT. They are very much involved, Kevin. There are a number of specific initiatives involving General Motors, involving Delco, involving others from the private sector. One of the key elements of the IVI initiative throughout its course has been that this is a public-private joint undertaking. I do not have the specific dollar splits. I can certainly provide that to you for the record, but that has been one of the key components of this activity, that it does involve those who will be responsible in the end for manufacturing new devices that will be necessary for this to be successful.

Mr. WOMACK. Great. I would appreciate those numbers if you can send those to me.

Second of all, up to this point in time, what types of products or systems do we have or have been developed?

Mr. WRIGHT. Give me 1 second, please. I do have some information on that, Kevin. Just 1 second. Well, let me speak to one that

I can talk to off the top of my head. One of the things that we I know can be very successful are what we call vehicle highway cooperative systems. Those are one of the elements of the IVI agenda that is very much in play—where the roadway basically is talking to the vehicle and vice versa. For example, as a vehicle approaches an intersection, the driver may not be aware that the signal is about to change or that there is a vehicle approaching from another part of that intersection. Vehicle roadway cooperative systems provide that kind of information to a driver so that ultimately it might even contain a system that could brake the car, but certainly initially it could at least contain a system that would warn a driver that there is a crash about to occur in the intersection.

Some of the other things that have been done, in Minnesota there has been the development of technologies for inclement weather, so that snow plows actually are able to detect where the side of the roadway is. We do not necessarily encounter it much in this part of the country, but for those from that part of the world, you know that the snow is often so high that you do not know where the edge lines are and that it presents a real risk to those operators. Using global positioning satellite is part of this IVI initiative and working with the private sector, we have been able to identify or to utilize technologies that allow for a much safer operation for those kind of services.

With the Michigan Transportation Research Institute, MTRI, and DOT we have developed and are testing roadway departure systems that warn drivers when they are about to leave a roadway, again using advanced technologies that might be in the vehicle are that are in fact again vehicle-roadway cooperative systems. We have also worked with General Motors, Daimler-Chrysler, Ford, Nissan and Toyota to develop a tool for measuring the workload associated with new in-vehicle information systems. It is not specifically related to the issue of cell phones, but certainly as we are trying to put additional technology into vehicles, that is one of the legitimate issues that has been raised. So again, part of the IVI initiative is addressing issues such as that.

Those are just a couple of examples of some of the things that we are doing. Let me add just one additional one that I think is an important one. It relates to a topic brought up earlier regarding vehicles and spacing between those vehicles. Another part of this initiative has been with General Motors and Delco to test a rear-end collision-avoidance system on passenger cars—so again, passing information between vehicles to avoid the kind of collisions that can happen in high-speed circumstances in particular.

Mr. WOMACK. Thank you.

How close are we to implementing things like the road-car interactions, the rear-end collision avoidance, roadway departure types of things?

Mr. WRIGHT. Well, many of these, as with any kinds of improvements to vehicles, are generational kinds of improvements. Once we have proven that the technology works, then it is a process of installing those technologies in vehicles or outfitting roadways so that they can pass information between the vehicles and the roadway. Certainly, we are at a point where in the foreseeable future we will start having those kinds of technologies implemented, or in-

cluded as part of standard features in vehicles. But realistically, you are looking at least a 10-year period after that point before you are getting the full benefit of those kinds of improvements. So for some of the earlier technologies, we can certainly imagine that they will be a part of instrumentation in vehicles in the very near future, but that does not mean that we immediately get all the benefits of those systems.

Mr. WOMACK. One last question—GM has the night vision-type of thing, so that kind of fits in this category. Do you see the manufacturers just by themselves as these things mature putting them on, or are we going to have to spur them along?

Mr. WRIGHT. I don't really know the answer to that, Kevin. I think in some areas it will likely require the Federal Government, as has been the case in the past, to provide either requirements or incentives for the manufacturers to include those devices. But one of the things, of course, that we see also happening today is that consumers are much more safety-oriented. They are looking for these kinds of new features in their vehicles. So it very well may be that the consumers are going to be demanding these kinds of improvements, and it would require less of the direct Federal intervention than might have been the case in the past.

Mr. WOMACK. Thank you.

That is it. Thank you, John.

Mr. HAIFLEY. Thank you.

To quote from your invitation letter to this Safety Symposium, "we . . . will conclude with each witness making a 3-minute closing statement. The committee expects the closing to address the issues raised by the other participants, your colleagues, to enlighten the staff to new thoughts and concepts, to make specific funding and programmatic recommendations, and to make suggestions on how the ideas of other safety groups can be incorporated seamlessly into legislation that will save lives, reduce injury and reduce property damage."

With that petty task set before you in a 3-minute period, and we do need to hold to the 3 minutes, I recognize Bud Wright.

Mr. WRIGHT. Would you like for us to hand over legislative language as well?

Mr. HAIFLEY. That would be very helpful.

[Laughter.]

Mr. WRIGHT. Given that formidable charge, let me make these closing comments.

I think one of the things that has been emphasized here today most certainly is that the best safety results come from joint efforts. Hearing the proposals that have been advanced today, and the commitment of all the people in this room most clearly to advancing highway safety, I am confident that we will be able to make the kind of real progress that we need in tackling fatality and injury reduction.

I believe that we really are, and as has been demonstrated, I think quite effectively in this forum, on the same page in many of the core areas and are focusing on many of the same issues, whether we represent government or the private sector. We are all looking for ways to make existing programs work better and assist the States to maximize their safety investments. Identifying and tar-

getting high-risk crash areas is a strategy that we all advocate, and we all seem to agree that improving our causal data can help us accomplish this.

The need for a strong research and technology program is another area of agreement, I think, and you have heard that throughout this day. A robust research program and leveraged advanced technology can be a key factor in jump-starting a reduction in fatality numbers from the levels of the last decade or so.

But I think it is also important to emphasize, and again I think you have heard it expressed today by this group, that there is no single strategy and we have no magic wand. Real progress will require refinements in actions already underway, as well as new initiatives implemented over time in a coordinated, non-duplicative, and most important, cooperative effort. At the same time, we recognize that State and locality-specific needs and problems cannot be overlooked.

In my written statement, I described some of the efforts that we currently have underway to improve highway safety, but we know that we can and must do more. Substantial improvement in transportation safety has been identified by Secretary Mineta and by Federal Highway Administrator Peters as a core principle for the Department's reauthorization proposal. As the Administration bill evolves, we will carefully consider the issues that have been raised and discussed today, and obviously we certainly are interested in the views of this committee and the many other partners that we work with in highway safety.

We want to continue to work with everybody here to ensure that roadway, driver and vehicle safety is given consideration in every aspect of the reauthorization of surface transportation programs.

Thanks again for the opportunity to participate in this discussion. I hope what we have had to add is going to be helpful for the committee.

Mr. WARNER. Bruce Warner, Director of the Oregon Department of Transportation.

I think you said it well, Bud. What I see around the table here is a consensus and agreement that safety is a priority, and that the loss of lives on our State and Nation's roadways is unacceptable and we need to address it.

I also feel that we are all around the table saying that we do need additional resources for transportation safety. We also need to work closely together and I am very encouraged by the discussion that we had today. I also believe that there is a consensus, and again we have to check this, that we need flexibility, we need to have the ability to put the money and the resources in the areas that are most effective for reducing deaths and injuries.

We do not have all of the data, as Bud mentioned. I think we need to do additional research to not only deal with the issues that are here today, but the things that are going to be confronting us in the next five, ten, or 20 years.

In terms of investments, I want to make it clear that I do believe we need to increase substantially the amount of money dedicated to safety. We spend about \$1.2 billion a year on transportation safety now, between the programs administered by Federal Highway Administration, NHTSA and the Federal Motor Carrier Safety

Administration. We are suggesting that that be bumped up by an additional \$1 billion a year.

We also believe, and I believe, that you as the Federal Government should put language that encourages or even requires the States to work together and get to some of the synergistic and cooperative things that you are hearing today, because right now I think some of the politics and some of the organizations, frankly, of the various States get in the way of coming up with some of the unified and coordinated responses that we need to address transportation safety in a way that really addresses the needs.

And then finally, in terms of the question I did not get a chance to answer from you, is that again the additional resources for transportation in general need to be recognized as a major priority because most States—not most States—I would say that many States, mine is one of those, are struggling just to maintain and preserve the system we have today, let alone trying to enhance it and to deal with the safety improvements that need to be made to intersections to deal with a quarter of the fatalities that are out there, or to deal with upgrading of two-lane roadways to just put things in like rumble strips or, as suggested, redoing signing. We are going to be focusing most of our energy in terms of just making sure our bridges are structurally sound and that our pavements are in good enough condition so they themselves are not hazardous to motorists.

So I am very encouraged by what I see here, but again I think investment in transportation in a holistic way needs to be looked at, and transportation safety is a component that needs to have a stand alone program and funding. But overall, everything we do in terms of enhancing and improving the road system and transportation system with investments from the Federal Government will yield safety benefits in a big way.

Thank you.

Mr. WALSH. Thank you. My name is Bill Walsh from NHTSA. We have heard today from a broad segment of the highway safety community about the terrible toll highway crashes place on families and the economic health of our Nation. Losing almost 42,000 people and suffering millions of injuries is not acceptable.

NHTSA is very interested in working with the Department and the executive branch, with the Congress and with the broad partnership of State and local governments, safety advocacy organizations, and the private sector to define, develop, and implement the most effective highway safety programs possible. What the successor to TEA-21 must do is provide the authority and resources to support a balanced safety program that incorporates a safe operating environment, safe vehicles, and safe behavior by vehicle operators.

In the context of NHTSA's statutory responsibilities, we need to develop programs that increase safety belt use, reduce impaired driving and speeding, provide timely and effective post-crash emergency medical care, and support efforts to improve motorcycle, bicycle, pedestrian and school bus safety. The bottom line is to improve safety. The potential return on investment is large. Two programs stand out for their potential to save lives and reduce injuries—increasing safety belt use and reducing impaired driving. The failure

of crash victims to wear safety belts lead to an estimated 9,200 unnecessary fatalities each year and 143,000 avoidable injuries, costing society \$26 billion. In 2000, alcohol-related crashes resulted in 16,792 fatalities, 513,000 injuries and \$50.9 billion in economic losses. The Department recently reexamined how it would meet its long-range fatality reduction goal. It examined the entire range of highway safety initiatives and concluded that two out of three lives that need to be achieved to reach this goal would be met from achievable increases in safety belt use and reductions in impaired driving.

These are the most significant challenges and opportunities before us today.

Thank you very much for allowing me to participate.

Mr. HAMBERGER. Mr. Chairman, Ed Hamberger, Association of American Railroads.

Rail safety, of course, is not under this committee's jurisdiction, but I do appreciate the opportunity to be here and to point out that in fact freight railroads are the safest mode of transportation in the country. In fact, it is safer in terms of lost days at work from injury or illness incurred on the job to work for a freight railroad than it is to work at one of these fast food restaurants that we will probably all go to in a few minutes here up on Constitution Avenue.

So as we take a look around, the No. 1 issue surrounding railroad operations is highway grade crossing safety—that is the Section 130 program which is under your jurisdiction. It has been an incredibly successful program. It is, to underscore our view and the view of the Department of Transportation, a highway safety problem. It is a highway safety program. Separation of grade crossings does not improve rail operations, it improves congestion and the smooth and safe flow of highway operations. So we continue to urge you to take a look at that and to fund it to the highest possible degree.

And as you take a look down the road at what some of the challenges this committee will face, the growth in freight, the need to take a look at intermodal connectors, the need to take a look at intermodal yards, the need to take a look, and I understand there may be a hearing next month and I would welcome the opportunity to come back and get into more detail, but I see Kathy Evans out here from the Motor Freight Carriers Association—we work together with the trucking companies, with the ports, with the Intermodal Association of North America to try to move freight safely and get it off the roads.

I would like to point out that I have eschewed the opportunity here, as I promised Senator Reid I would, to get into any of the other truck safety issues and I think we need to keep this in a positive vein and talk about how we can work together.

If I might offer my apologies to the other members, I unfortunately have to run. I again want to thank you for the opportunity to be here and I am sorry I will miss your wrap-up, but excuse me.

Thank you.

Ms. ROBERTS. Tricia Roberts, National Association of Highway Safety Leaders.

What is most clear from today's hearing, and I am very grateful for the opportunity to be here today at the Symposium, is that de-

spite all of us having individual key emphasis areas, we all share single mission, and that is to save lives and reduce injuries on our highways in our Nation. It can only be accomplished through joint efforts. There is no other way to do it. It is only through a comprehensive approach, the approach that I hope that we have all been taking in all of our States, and that is to look at the driver, the vehicle and the road, where we accomplish and build upon the successes that we have already realized.

There is considerable consensus around this table today on the following issues: the need for stable, reliable and increased funding for safety is needed to improve again on the successes that we have realized. There is a need for better data and programs to support data improvements. There is additional need for additional research, particularly in the area of crash causation. And there is an absolute need for program consolidation and streamlining of the process.

We need performance-based incentives and data-driven safety programs. There is a need for further discussion on areas such as sanctions and penalties. We are heartened by the fact that there is so much agreement on many of these issues. We believe that new programs focused on the areas of agreement will have a significant impact on reducing the terrible toll of motor vehicle crashes in this country.

Again, thank you very much for this opportunity.

Mr. HOLMES. Brian Holmes.

At the risk of sounding like a broken record, we need to invest more in our highway transportation system. The figure that has been used here today is \$231 billion, representing the cost of the highway fatalities and injuries. As I said in my opening remarks, if you spend a dollar for highway improvements, you get a \$2 reduction in terms of public health benefits.

What does that mean? That means if we increase the investments to the \$50 billion or \$60 billion that is recommended by USDOT in its condition of the roads report, that would mean ramping up the At-grade Crossing Program. It would mean ramping up the Hazard Elimination Program, possibly folding into it the issues of older drivers. It might mean a new two-lane road program that would address specific locations where fatalities have occurred and remedying them so that more will not occur.

For work zones, maybe it will mean more positive separation, and where that is not possible, why not look at the work zones as laboratories and look at automated enforcement and other intelligent transportation systems, as well as human factors research. Maybe we could learn some stuff by working in the work zones that we could apply to the system as a whole.

All of these and all of the other fine ideas that we have heard this morning are tied to the investment level. If we do not significantly increase the level of investment in the reauthorized version of ISTEA, we are going to be competing. How are we going to compete? How are we going to say that the story ATSSA tells is either more or less compelling than what MADD is saying? We are all talking about fatalities and injuries and we all have a different take on it, but if we are not talking about a significant increase in funding, it is difficult for us to collaborate effectively.

Thank you.

Ms. HAMILTON. Wendy Hamilton with Mothers Against Drunk Driving.

I think we all agree that we are part of the puzzle and that working together we can put this big picture together. MADD has a close working relationship with Governors and Traffic Safety Offices and agree with States that the process needs to be simplified and additional resources need to be made available for traffic safety.

Since September 11, approximately 12,500 people have been killed and more than 386,000 have been injured in alcohol-related crashes in America. With the reauthorization of TEA-21, Congress has the opportunity to redouble the commitment to fund and properly equip those fighting the domestic war on alcohol-impaired driving. Congress, the executive branch, the traffic safety community and the public have become complacent in addressing the human and economic carnage caused by alcohol-impaired drivers. Perception and reality problem here. The drunk driving problem is far from solved in this Nation. This complacency has shifted the Nation's attention and resources to other issues and other traffic safety concerns.

This past January, MADD convened an Impaired Driving Summit in Scottsdale, Arizona to focus on the lack of progress in addressing alcohol-related traffic crashes. This Summit brought together traffic safety experts from across the country to discuss the issue and develop effective strategies to revitalize the fight against impaired driving. Participants included representatives from Federal, State and local government, law enforcement, the medical community, researchers, advocacy groups and the corporate sector. The findings and recommendations from the Summit will be released next Tuesday, June 18, by MADD.

The Impaired Driving Summit was an important first step in renewing the fight against impaired driving. Research demonstrates that the actions recommended in the Summit report will reduce alcohol-related traffic fatalities.

MADD is calling on Congress to incorporate the following priorities as elements of any renewed TEA-21 Traffic Safety Program. First, increase resources for aggressive impaired driving enforcement, especially the use of frequent, highly publicized sobriety checkpoints. Sobriety checkpoints are cost-effective tools to deter individuals from drinking and driving. Second, require States to enact comprehensive sanctions for higher-risk offenders defined by MADD and others as repeat offenders or those with a blood alcohol level of .15 percent or higher, or impaired driving offenders who drive with a suspended license. A comprehensive system to target this population should require license and vehicle sanctions and studies show such sanctions to be effective.

Additionally, we call for support for the enactment of a national primary seat belt standard. And last, to establish a national dedicated traffic safety fund to support State traffic safety programs and Federal initiatives to reduce highway crashes, deaths and injuries. Research and experience demonstrate the effectiveness of a variety of laws in reducing alcohol-related traffic crashes, deaths and injuries. There are States that have not passed some of the

most basic laws. Ten States have not passed administrative license revocation. Eighteen States have not passed .08 percent blood alcohol laws. Adoption of these and other laws across the States would save lives.

The war against drunk driving has stalled in traffic. Drunk drivers are dangerous and deadly, and last year over 500,000 American families were directly affected by this 100 percent preventable crime. This Nation bears the \$230 price tag and there are solutions that will benefit us all.

By focusing on these recommendations, we will bring about real reductions in impaired driving fatalities. The Nation must reverse the escalation in deaths and reinvigorate the fight to prevent impaired driving. It is going to take strong political will, resources, and the public commitment to save lives and prevent injuries.

Thank you.

Mr. HILL. I am D.B. Hill with Associated General Contractors. AGC and the contracting industry is pleased to be a part of this Symposium. We, too, agree we must work together for a total highway safety program, and for additional funds for the safety program. Our members feel very deeply that improving work zone safety should be a top national priority. The number of deaths and injuries annually in the work zone is unacceptably high, and has been rising steadily over the past several years.

Too many of our members can tell sad stories about employees that have been lost to work zone traffic crashes. This cannot and should not be tolerated. AGC believes there should be a national policy on work zone safety. The three key areas that AGC believes should be addressed in this policy is work zone traffic enforcement, public awareness and communication, and positive barrier separation between traffic and workers. A national policy should look to change driver behavior in work zones, rather than attempting to design work zones to meet or accommodate drivers' attitudes.

AGC also believes that we need to look at creating incentives for States to pursue work zone safety initiatives. We urge Congress to include in the TEA-21 reauthorization legislation incentives for States. We recommend the creation of a discretionary fund administered by the Federal Highway Administration to provide funding incentives.

These initiatives should also provide funding to make wide use of law enforcement officers and devices such as photo enforcement. We thank you again for us being a part of this Symposium.

Ms. HOLST. Kathi Holst, American Traffic Safety Services Association.

I would like to begin by once again thanking the sponsors of this Safety Symposium for allowing me to present ATSSA's roadway safety program proposal.

The major question before the Senate as we approach reauthorization is how best to allocate \$30 billion in roadway funds when you are receiving requests for more than \$50 billion. I certainly do not envy your task.

We all agree today that safety must be our highest priority. Yet the reality is that safety is often the first item dropped from a highway construction project. Under our proposal, States would have great flexibility in how they would allocate these funds, pro-

vided they would be used for eligible safety activities. However, because of the paramount importance of safety, we believe the roadway safety program funds should not be flexed into highway construction.

The safety needs of our country support enhanced roadway safety funding. ATSSA has proposed a roadway safety program that we believe could easily sustain a \$3 billion funding level. The fact is that just improving lane markings, initiating some older driver programs, replacing signs and installing rumble strips and crash cushions alone would cost nearly \$31.5 billion over the next 6 years. More remains to be done in the areas of upgrading intersection safety, pedestrian and bicycle safety, speed management and work zone safety, especially in the area of mandatory training for workers.

ATSSA supports a dedicated core roadway safety program with reporting requirements that give Congress, Federal Highway Administration, the States and the motoring public a better understanding of what is being accomplished to improve roadway safety. Equally important is dedicating safety dollars that target low-cost safety improvements such as wider pavement markings, brighter and more legible and visible signs, rumble strips and more modern guardrails. All have wide application and can be installed relatively quickly and at a lower cost.

Every eligible activity in the Roadway Safety Program has a benefit-to-cost ratio that is at least three-to-one, and as high as 182-to-one, according to the Federal Highway Administration. Our Roadway Safety Program not only would resolve problems that exist today, but also better position the Nation well into the future.

Thank you once again for the opportunity to testify today.

Mr. HAIFLEY. Thank you all.

I personally want to thank each of you for working together today. It has been very educational, at least for me, and it is difficult addressing highway safety issues. They are clearly national problems requiring cooperation, and coordination. They are more than numbers and more than policy decisions. They are ultimately about people.

I would like to mention something about one of our witnesses. Today, she is celebrating 22 years of marriage, and I was wondering if you would join me in congratulating Kathleen Holst for 22 years of marriage today.

[Applause.]

Mr. HAIFLEY. Thank you all. The meeting is adjourned.

[Whereupon, at 12:30 p.m., the meeting was concluded.]

TEA-21 REAUTHORIZATION

THURSDAY, AUGUST 8, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION, INFRASTRUCTURE, AND
NUCLEAR SAFETY,
Reno, Nevada.

The subcommittee met, pursuant to notice, at 3:10 p.m. at the Reno City Council Chamber, Reno, Nevada, Harry Reid [chairman of the subcommittee] presiding.

WESTERN TRANSPORTATION NEEDS AND THE FEDERAL LANDS HIGHWAY PROGRAM

Present: Senator Reid.

OPENING STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

Senator REID. The committee will come to order.

Let me just say that this has been a busy day already. We've had a nice event at the airport, where we announced the construction of a new tower at the airport. We've got the same tower for air traffic control since 1957. As you know, that was when we'd just started having black-and-white TV and we had just started having rotary phones, and we have the same tower, basically. It's really inadequate, and in some areas unsafe, and we're going to build a new tower. Instead of being 55 feet high it will be about 200 feet high. All parts of the airport will be able to be seen.

That's one thing we were doing today, and then we just left with the Federal Highway Administrator, Mary Peters, here on my right, the groundbreaking for the Spaghetti Bowl. It's a big project, as you know, and, as Governor Boyd said, it's between Reno and Sparks—didn't want to favor either entity. It's a massive construction project that will take more than 2 years to build. It's going to have a number of new lanes. It will be a Spaghetti Bowl. It will be lanes going around and up and down. It's going to have seven miles of sound barriers that will be constructed. So it's going to be a good project.

I'm happy to call this meeting to order. Some may ask why we're doing this meeting, why are we having a congressional hearing with Washington staff here. The reason we are doing this is that I, as some of you know, was chairman of the full committee on two separate occasions, and voluntarily gave it up a few months ago, but I'm still the chairman of the subcommittee that writes the transportation bill that's reauthorized every five or 6 years, and

that's why we're here. We will be holding hearings this entire congressional year. We've held hearings in the full committee. I have spoken to Chairman Jeffords and Ranking Member Senator Smith, and we have been doing some things differently this year.

A number of people in this audience, and certainly you, Ms. Peters, have come to Washington when we have had congressional hearings and you have Senators walk in and out and you feel lucky if there's two there. Usually there's only one, because of a wide range of jurisdiction. It's just hard to do that. So the work is done by the staff, and so I figured why not just admit that. And we've done, instead of having so many congressional hearings as we've had in the past, what we've done is we've had a number of symposiums. Senator Jeffords or I will kick off these symposiums at a table much as where we are seated today, and we get started, and then we have people who are able to talk at length discussing with each other, witnesses actually talking with each other, talking with our staff, and it has worked out extremely well, gathering information for the massive, new, hybrid bill that's going to come out next year.

This hearing here today is based upon our writing this new transportation bill. Congress passed the last transportation bill, called TEA-21—that term has come from the words Transportation Equity Act—and we did that in 1998, authorizing highway and transit programs through fiscal year 2003.

Now, Nevada, because of TEA-21 for the year 2003, we have \$218 billion for highway and transit programs, and this includes over \$1 billion for the State of Nevada. Nevada, I hope and am confident, will do better next year—I should say in the next bill. There's no question that a smooth, functional transportation system is critical to Nevada's continued economic growth, safety, air quality, way of life.

Nevada's rapid population growth presents unique challenges to our transportation infrastructure. Administrator Peters, I'm happy that you are here. We tend to focus so much on southern Nevada because of its massive growth. The numbers coming out of southern Nevada are mind-boggling—almost a 90 percent growth we've had in the last 10 years. We've had in the last 20 years, for example, Hispanic population in southern Nevada has grown 750 percent. These are numbers that are just unbelievable. But kind of a quiet growth is taking place right now in northern Nevada, and I thought we should focus on this, because we focus so much on southern Nevada, and recognize the unique transportation problems that we have in Northern Nevada.

More people means more traffic, more congestion, more wear and tear on the roads. And we have problems up here that are certainly different from the southern part of the State. Because of the colder temperatures, we have to deal with the freezing of the potholes. We don't have to worry about that in southern Nevada. That's just wear and tear. But we have in northern Nevada some very difficult winters. So we have some transportation challenges here and we need to keep up with those.

We know, as we heard Nevada transportation chairman Stephens talk about Nevada being a fast-growing State, and Arizona. In numbers we're not the fastest-growing State; we are proportion-

ately. Some of these other States—Arizona, Colorado—have grown as far as numbers more than us, and Utah and Idaho are also growing rapidly. Rapid growth is a factor of life in midwestern States. Western State needs are different from the rest of the country, just like northern Nevada has different problems than southern Nevada. So in keeping with today's western theme, our first panel we're going to hear from the Federal Highway Administrator—and we're so thankful that you're here. We really appreciate your being here. Mary Peters is so uniquely qualified to be the highway administrator because she is from Arizona, and Arizona has many of the same problems we have, and I think looking through her eyes at something will help us.

Our second panel will discuss the Federal lands highway program. This program provides funding for park roads, parkways, forest roads, Indian reservation roads, and refuge roads. We've chosen to examine the Federal lands highway program as part of the hearing because it is of particular importance to the western States. What we learn here today will not only be used for what we're doing in Nevada with the Federal lands program, but also the rest of the country.

No State has a higher percentage of Federal land than Nevada. Of the State of Nevada, 87 percent is Federal lands. We received about \$90 million from the program in the last 3 years, and I really think that's far too little. We're going to look at some ways of changing that.

As I indicated, we're fortunate to have Ms. Peters here. We do acknowledge your being here. I would ask you to tell us what you think is important on the highway program, generally, and what you think we ought to do.

STATEMENT OF HON. MARY E. PETERS, FEDERAL HIGHWAY ADMINISTRATOR, U.S. DEPARTMENT OF TRANSPORTATION, WASHINGTON, DC

Ms. PETERS. Mr. Chairman, thank you for convening this hearing to examine the important transportation issues of the western States. As you said, there are some very unique issues, transportation issues that we face here in Nevada.

I want to take a moment to introduce three Federal Highway officials who are here with me today. Art Hamilton is our Associate Administrator for the Federal Lands Highway Program; John Price, our Nevada Division Administrator, short-timer that he is. He's still with us, of course. And Bill Kappus is the Nevada Assistant Division Administrator. I appreciate you all joining me here today.

It is a great pleasure to be back in Nevada to discuss the progress made in TEA-21 and to address the transportation issues of the western States, particularly in implementing the Federal Lands Highway Program, which is very important to this part of the country.

If you look at a map—and I have looked at a map—at the amount of Federal land here in Nevada, it is overwhelming to look at the color schemes on a map.

Mr. Chairman, I would ask that my written statement be part of the record. I have gone into much more detail.

Senator REID. That will be the order.

Ms. PETERS. Thank you so much.

Nevada is a very appropriate setting for discussing the Federal Lands Highways Program. The greater part of all Federal and tribal lands is located in the 13 western-most States, and Nevada, as the Senator said, has a higher percentage of federally owned land than any other State.

Our Federal Lands Highways Program works with Federal land management agencies and with tribal governments and State and local transportation agencies to provide access to and within Federal and Tribal lands. Our goal is to create the best transportation system possible, balancing the environmental and cultural values of Federal and Tribal land.

In TEA-21, a total of \$4.1 billion was authorized for the Federal Lands Highways Program to be distributed in five categories: Forest Highways; Public Lands Highways Discretionary; Indian Reservation Roads; Park Roads and Parkways; and Refugee Roads.

In fiscal years 1998 to 2002, about 66 percent of Federal Lands Highways funds were allocated to projects located in the 13 western-most States. Projects such as the State Route 28 Forest Highway project in Lake Tahoe Basin, Park and Parkway work in the Lake Mead National Recreational area, Public Lands Discretionary funding for U.S. 95 in Clark County, and road improvements at Ruby Lake National Wildlife Refuge.

TEA-21 also reaffirms our commitment to providing safe and efficient access to and within tribal lands. Since the enactment of TEA-21, the Indian Reservation Road Program has provided funding to construct or improve 2,000 miles of roads under the IRR program set-asides, and \$27.6 million has been obligated for 51 projects to improve or replace deficient bridges on tribal lands.

TEA-21 also strengthened the commitment of the Federal Government to increasing the involvement of tribal governments in transportation programming and planning for the Federal-aid Highway program as well as the Indian Reservation Road Program.

States consult with tribal governments in the development of long-range transportation plans and State transportation improvement programs and tribes can use IRR planning funds to participate in metropolitan and State-wide planning as part of the Federal-aid program.

Overall, the Federal-aid program and the Federal Land Highways Program are working well in supporting the Nation's economy and improving the quality of life for our citizens. Under TEA-21, Nevada, for example, will have received \$200 million per year in Federal highway funds, allowing the State to expand and improve its highway transportation network, such as the project that we saw today, Senator, at the groundbreaking. Oregon, for example, will receive about \$1.8 billion over the life of TEA-21, and this has made possible improvement and the reconstruction of I-5 in the Salem area, as well as highway and transit projects in the Portland area.

The populations are growing and vehicle miles traveled are increasing substantially, especially here in the west. The challenges facing us are to maintain and improve our transportation system,

to provide safe and efficient and convenient transportation options, while protecting the environment.

Senator I know that the programs are not returning nearly enough to these areas, these high-growth areas, and we look forward to working with you, with Senator Ensign, and with Representative Gibbons who represents this area as we approach reauthorization.

I thank you so much for the opportunity to participate in this hearing today, and I look forward to answering any questions.

Senator REID. As former director of the Arizona DOT, as we've established, you're familiar with the strains that rapid population growth places on a transportation system. Our formulas, though, for distributing funds under TEA-21 don't account for the rapid population growth experience for Nevada, Arizona, and other western States. This makes it more challenging for our system to keep up with its growth. How do you suggest we address these issues?

Ms. PETERS. Senator, I think we should address these issues within the context of looking at the allocation formulas and reauthorization. As you know so very well, those are sometimes controversial projects to undertake when we look at the allocation formulas, but I think it is incumbent on the Administration and Congress to not shy away from that very important issue.

Senator REID. One of the things that I mentioned briefly in my statement, Nevada is 87 percent Federal land, but the majority of that Federal land is administered by the Bureau of Land Management. Roads owned and operated by the Bureau are not part of the Federal lands highway program and are not taken into account when distributing money and in the highway funding formulas. Do you think this can be changed or should be changed?

Ms. PETERS. Senator, we have already initiated conversations with the Department of Interior and Bureau of Land Management to discuss this and a number of other issues that have to do with BLM roads. Currently, BLM classifies those roads as administrative or even public roads and, unfortunately, as such they are not eligible for Federal funding. But, again, we have initiated discussions with the Department of Interior and BLM and would hope to, as part of the Administration's reauthorization proposal, come forward with some recommendations resolving this, because it is, as you say, a very important issue.

Senator REID. Senator Kyl of Arizona knew I was going to hold this hearing, and he said, "Make sure that you ask the administrator about Hoover Dam."

For those of us 450 miles away, Hoover Dam has become a tremendous bottleneck. Traffic can be backed up there 8 or 10 miles trying to get on the bridge which is the dam, actually. And, as a result of 9/11, people are even more concerned.

What hope do you have for us to move that project along? I think we've gotten \$40 million—\$90 million, but that's a project that that's just a—I won't say "drop in the bucket," but it is a project that I think will cost around \$300 or \$350 million.

Ms. PETERS. Senator, it is. As you know, and as Governor Gwynn knows, I worked very hard on that project when I was the director of the Arizona Department of Transportation and continue to see the importance.

We believe that the design work will be completed later this year and be ready to have a construction contract. Construction would be expected to take about four or 5 years. I think we are looking at construction completion in the year 2005. But, as you importantly point out, there is a funding gap there to be closed.

I do have to be a bit cautious in talking about the project—and I will defer to Art Hamilton, my counterpart here—because I am prevented from talking in detail about Arizona projects for 1 year. Suffice to say that I very much recognize the importance of closing that funding gap and would be pleased to work with you and with the Arizona delegation to find a way to do that.

Senator REID. I think one of the things—and I have language in one of the bills—is to allow the project to go forward with the financing, even though we haven't appropriated all the money. It is so important. OMB has signed off on the proposal—I'm quite conscious of that—to allow that to go forward and that means we can move on that.

Ms. PETERS. Sir, I would be very happy to work with you on that, because, as you say, it really isn't a bridge. It's a road on the crest of the dam, and the grades going into that area, the congestion, are significant problems in terms of connectivity that need to be resolved.

Senator REID. Well, we're fortunate, as we've said several times today at this event and the one we had previously out at the Spaghetti Bowl, Nevada is very fortunate that you have been selected to be the head of the highway programs in this country. You know, Rodney Slater is a good friend of mine. I think he did an outstanding job and, you know, he became Secretary of Transportation, but Rodney was always playing catch-up because it was hard for him to understand the problems we have here in Nevada, and with rare exception that's the way it has been, so we are fortunate to have you. We're grateful that you came to spend some time with us today.

Ms. PETERS. Thank you very much, Senator.

Senator REID. I do want to say that Senator Ensign is not here. We were together earlier today. He is certainly supportive of what we're trying to do here and I want to acknowledge that. And Congressman Gibbons was also invited to attend this hearing, but he had other obligations. They are here in spirit if not in person.

Tom Stephens, our own fine transportation director, is our first panelist. He's here to talk about Nevada's State-wide transportation needs.

Greg Krause, the executive director of the Washoe County Regional Transportation Commission will talk about Washoe County's transportation needs. As we know, the needs are not always highways.

Juan Palma, executive director of the Tahoe Regional Planning Agency, I first met when we were trying to do some good things up at Lake Tahoe. Juan, certainly good to see you. Juan did an outstanding job there at the Forest Service. He was there and he was instrumental in our developing and carrying out, to everyone's surprise, that great summit we had where we had the President and Vice President there, and we had five Cabinet officers that came here. We're happy to have you here, Juan.

Gary Carano is here to discuss the importance of transportation from the perspective of Washoe County's business community. There's no family—and I say that without reservation or hesitation—than the Carano family who dedicated more of their time, energy, and resources to maintaining the tourism industry in northern Nevada.

Thank you all for coming today. I look forward to hearing your testimony.

We'll first hear from Stephens, Krause, Palma, and Carano, in that order.

STATEMENT OF HON. THOMAS STEPHENS, DIRECTOR, NEVADA DEPARTMENT OF TRANSPORTATION, CARSON CITY, NEVADA

Mr. STEPHENS. Mr. Chairman, I am Tom Stephens, for the record, Director of the Nevada Department of Transportation, and I am pleased to testify for Nevada, as well as brief you on the Western Governors Association policy statement on reauthorization, which I helped coordinate as president of the Western Association of State Highway and Transportation Officials, thanks to Mary Peters being elevated.

I commend you for seeking a western perspective on reauthorization. One-size-does-not-fit-all, and the west is considerably different than the rest of the country. I especially want to thank you, Senator Reid, for your leadership on highway issues.

Nevada is the Nation's fastest-growing State, as the map shows behind me. Nevada's growth rate of 66 percent in the past decade is far ahead of second-place Arizona at 40 percent. Of that, 85 percent is Clark County and 35 percent is the rest of Nevada. You blend those in, and they become 66 percent.

As you mentioned earlier, 87 percent of our State is under Federal control. These are untaxable lands and must be accessed and crossed with highways.

Nevada has recognized the tremendous need for transportation. The Governor is the chairman of our State Transportation Board. Our taxes for transportation are high; however, these taxes are not enough. We desperately need an increase in Federal funding to match the growth of our State.

In northern Nevada the highway issues are preservation, safety, and congestion. Aging highways with greatly increased truck loadings must be maintained. State-wide traffic fatalities are up 20 percent over last year. Northern Nevada is growing. As I mentioned, if we were in two States, Clark County being one—which would be about the area of Massachusetts—and northern Nevada being the other, which would be the area of Wyoming, with 25 percent more people, northern Nevada would be the third-fastest growing State at 35 percent. Obviously, we cannot ignore the growth-driven needs of northern Nevada.

On the maintenance front, although congestion gets the attention, NDOT must still spend more than half of our construction dollars on maintenance projects. For example, truck traffic on Interstate 80 is greatly increased due to California's growth, and the change in distribution from regional warehousing to just-in-time delivery, but increasing maintenance needs have not been fully

meet in Federal funding. If Federal funding is reduced to bridge States like Nevada, as some suggest, the Nation's interstate systems will deteriorate.

In 1996 I spoke to a group of California transportation officials who were advocating keeping all of California's Federal revenue collected in their State. As it was the 150th anniversary of the Donner Party, I pointed out that the reason the Donner Party got in trouble was because there were no good roads across Nevada. And the same thing would happen to California's economy today if they cutoff Federal funding for interstate maintenance across Nevada.

Since Interstate 80 was finished, the population of the Reno/Carson area has tripled, and we have been building U.S. 395 to freeway standards since that time. The last remaining nine-mile segment between Reno and Carson City is ready to go out to bid for bridge construction starting early next year. If funding is available for this nine-mile segment, we should be able to complete it all by 2007. Phase one of the Carson Bypass around Carson City is scheduled to go to bid this year absent delays. The whole nine miles, including the bridge, is about \$250 million.

We also need additional freeway widening in the Reno area. We need to widen it north from the Spaghetti Bowl, we need to widen it from keystone up to Robb Drive, we need to widen east from McCarran to Vista, and, of course, we're going to need to widen past the airport. It's getting more and more crowded there, and in the next 10 years we'll have to do that.

We've got a number of two-lane highways that need to be widened to four-lane because of increased traffic and increased accidents. These include the Fallon/Fernley Highway and the Dayton/Silver Springs Highway.

Five years ago Senator Reid led the effort to bring national attention to the degradation of water quality in Lake Tahoe, and Juan is going to talk about that, but Nevada has 39 miles of highway along the lake. We have spent \$40 million on 13 miles of road thus far. We still have 26 miles of roadway remaining at a cost of \$80 million to do the erosion control and the runoff collection. Lake Tahoe is a national treasure and deserving of continuing national attention.

I'd like to just real briefly go through the Western Governors Association policies and put forth just a couple of bullets, things that they asked for in their policy. This is the first time they've come up with a policy. We did not do that last time, and they did not ask WASHTO to help them, so this was a big step forward for us transportation officials.

Well, surprise, surprise, they asked for increased revenues. I'm sure you haven't heard that before.

They want you to address the gasohol issues in Congress.

They want to retain the firewalls.

They want to provide flexibility in transferring funds among categories. They don't want to create any new set-asides or sub-allocations.

They want to define timeframes for resource agencies to conduct environmental reviews so these aren't endless processes.

They want to have one-stop permitting for Section 4-F and 106 reviews. Section 4-F means that you can't go through a park, 106 is the historic preservation. We go to ridiculous ends in some cases for very little impact on any one of those, so we'd like to have one-stop permitting.

Define an environmental dispute resolution if we have disputes between Federal agencies and the States. That needs to be better defined. We want to clarify the points in the process where environmental judicial challenges are appropriate. Right now, the Sierra Club is trying to stop U.S. 95, which is under construction, and yet we've been working on that for 5 years. They could have filed a lawsuit at any time. The defendant in that case is the Federal Highway Administration.

We want to study the impact on tax collections of energy efficient technologies. I think Administrator Peters has brought this forward, also.

We want to address the loss of revenues from service stations on tribal lands. It's a big issue in certain States.

We want to provide guidance for security vulnerability assessments and provide some non-transportation funding for the security issues.

They want to allocate the public lands highway funds to areas of greatest need and to the States with the largest public lands acreage. You're going to talk about that on the next panel.

They want, for earmarked project requests, they'd like to establish criteria to address the ability of the project sponsors to meet program design time and contract standards so that appropriations aren't made to projects that aren't even going to go for three or 4 years.

And they want to reform the trade corridor program.

In conclusion, I would like to recognize that TEA-21 has been very good for Nevada, but I believe it needs to be refined a little bit and I strongly urge that Nevada's Federal funding be increased to match our growth.

Thank you again for the opportunity to testify. I guess I've gone over my time.

Senator REID. We'll have some questions for you, Tom, as soon as the other witnesses complete their statements.

Everyone should also understand that public access cameras are picking up whatever we have been saying, and local stations are going to use this, so I should have warned you, Tom.

Mr. STEPHENS. Did I say something wrong?

Senator REID. Greg?

**STATEMENT OF GREG KRAUSE, EXECUTIVE DIRECTOR,
WASHOE COUNTY REGIONAL TRANSPORTATION COMMISSION,
RENO, NEVADA**

Mr. KRAUSE. Good afternoon, Mr. Chairman and Administrator Peters. My name is Greg Krause. I'm the executive director of the Regional Transportation Commission of Washoe County, and I very much appreciate this opportunity to testify before you regarding the transportation issues we're facing here in Reno and Sparks and really our neighboring communities and counties in northern Nevada.

As Director Stephens has noted previously, we have been growing very rapidly, and that has placed tremendous demands on the transportation system.

We are fortunate in northern Nevada that the Federal Government and the State Department of Transportation has really done an exceptional job of developing the transportation system, particularly the freeways, principal arterials, and the major investments that have been made in public transportation over the past decades. I'd really like to acknowledge the leadership and vision of this particular committee. I think the ISTE and TEA-21, and I'm sure the successor to TEA-21, will continue to provide great assistance and policy direction to continue the great work that has been done.

I certainly want to thank you, Senator Reid, for your great assistance to us here in Washoe County. With your help, in just the last 3 years, \$14 million in new transit centers and new buses for city fare and city lift and our intelligent transportation system have been critical to our success. Our flagship vehicle, the articulated bus, has just been put into service on South Virginia Street, which is our busiest corridor. I'll talk about that in just a minute.

Our challenge is really the future. Our agency does long-range transportation planning, and we spent many hours with thousands of community residents trying to develop a vision for the future, the 2030 transportation plan. This is a document. A document is helpful, but it doesn't get the job done, clearly. We need to find a way to implement. I want to talk a little bit about a couple of the key issues that we identified.

One of them has to do with a new type of mass transportation that I'm sure you're familiar with that will be a new addition here in the Reno/Sparks area, and that's bus rapid transit. The city of Reno has, as I mentioned, a very busy corridor. We are running a city fare bus, a regular-sized bus, every 10 minutes, plus our new articulated bus, and we have standing room only loads. We have been working with the land use planners to try to develop a plan that further concentrates within easy walking distance more homes, more jobs, more businesses, more services. We think that this is the perfect corridor to utilize bus rapid transit.

As you probably are aware, bus rapid transit or BRT is the rubber-tired version of the rail investments, and it has the great potential to serve Reno and Sparks and many medium-sized cities in the United States. Clearly, it has been used in Europe and South America. It is a newer technology here, but it has great potential. It can provide the quality, the capacity, and the convenience of light rail at a fraction of the cost. And, more important, BRT is an approach to improving transit service that allows for incremental development. We don't need all of that money right at once.

By protecting the dedicated right-of-way for the future, it really sets the stage ultimately for future generations, if they so choose and it is appropriate, to make that rail investment.

In order for communities like Reno and Sparks, and, as I mentioned, probably many other cities across the country, to have an opportunity to invest in bus rapid transit, I think it is very important to consider having a dedicated funding source for this particular application. I think it would pay great dividends.

When we were doing our planning process, we also acknowledged the importance of the freeway system. We had the great opportunity to celebrate the start of a key project in the improvements in our Spaghetti Bowl. We envision in the year 2030 that we would have made substantial improvements throughout the system. And, as Director Stephens has talked about, it is not just the growth issue we have to address in increasing capacity, but as the system ages and it approaches 335 years and over the next 30 years, much if it will have to be rehabilitated and reconstructed, so that's clearly a very expensive but critical investment that we need to make.

I guess the one thing that I'd suggest is we have been, I think, very well served in northern Nevada by the investments of Federal funds in the transportation system, but the challenge that we have seen is the major funding source is the gas tax, and it has great attraction as a user fee, and that as you use that system more you contribute more. There's a direct relationship between the benefits received versus the taxes that you are paying as a user. But what seems to be a real challenge for us locally—and I think even federally—is that that funding source as a flat rate does not account for inflation, and we need to try to address that.

I guess the final point I wanted to make and what we found in developing our long-range plan is, in addition to the Federal contributions and assistance, we need to take on our burdens and shoulder our share at the local level, and we are proposing to the residents of Washoe County a ballot question this November that would do exactly what I've just talked about at the local level. We are proposing that our local gas taxes be indexed to inflation. We are proposing that the new development impact fees—and new development has made a major contribution, over \$100 million in the last 8 years through these impact fees—that they also go up as inflation occurs.

We are also asking for a 1/8 percent investment increase in the sales tax, and that's critical because that is the one fund source that we have available to improve public transportation. That sales tax increment will be a key to matching the Federal funds that we hope will be available for bus rapid transit and other public transportation investments.

The final thing that we have committed to and I think is critical is we need to become more efficient in the public sector. We have committed at the RTC and the other local governments \$50 million in efficiency savings in roadway maintenance management.

With approval of this funding question—and I hope I'm not being too optimistic—the State and local funding sources will generate 78 percent of the \$5.4 billion that we plan to spend on the transportation system in the next 3 years. The Federal share of 22 percent is smaller than most people realize, but it is critical to our success, nevertheless. We believe strongly in partnerships at the RTC, and we look forward to continued strong partnerships with transportation leaders at the local, State, and Federal level. I am convinced that we can, working together and proactively, bring our vision of 2030 to reality.

I want to thank you for this opportunity to address you, and I'll try to answer any questions you have.

Senator REID. I've been a little lenient here, but let's try to stick with the 5 minutes.

STATEMENT OF JUAN PALMA, EXECUTIVE DIRECTOR, TAHOE REGIONAL PLANNING AGENCY, ZEPHYR COVE, NEVADA

Mr. PALMA. Thank you, Senator Reid and Administrator Peters, for having me. My name is Juan Palma, executive director for the Tahoe Regional Planning Agency.

I'd like to introduce one of my deputies, Carl Hasty. I think some of you know Carl is just a tremendous asset to us here. Also, one of our board members, Coe Swoe, who some of you I think know. He's going to be a board member of TRPA. We're glad to have him with us.

Since 1997 when president Clinton and Vice President Gore and yourself, Senator Reid, were in Tahoe, you really reaffirmed the Federal commitment in helping to manage Lake Tahoe and really call it a national treasure by improving coordination at the Federal, the State, and the local level. The Administration at that time took bold steps on actions on water quality, transportation, forest health, and also on tourism and other areas, and also to protect the environment, the economy of Lake Tahoe

TEA-21 played an instrumental, key role in this effort. TEA-21 provided a consent to the Congress for the establishment of what we call the Tahoe Metropolitan Planning Organization, or TMPO, for short. Designated by Governor Miller from Nevada and Governor Wilson from California, TMPO is today emerging as an essential element in the planning and programming of transportation elements and projects in the Lake Tahoe region—

Senator REID. We had Tahoe declared a metropolitan planning organization agency, and that allowed them to get funding. Population-wise, it is the smallest in the country.

Mr. PALMA. Using population, we couldn't qualify for an MPO, so we have to go through this route to qualify as an MPO because our population is just not big enough. But that is critical, Administrator Peters, to be able to move forward.

Now, these projects are not just the result of the TMPO. The Nevada Department of Transportation with Tom Stephens, NDOT, the California Department of Transportation, Caltrans from California, these are major players in Lake Tahoe. And both agencies, Caltrans and NDOT, have prepared water quality master plans for retrofitting the road system in Lake Tahoe.

Tom spoke about some of the millions of dollars invested at Lake Tahoe. I'd like to invite you folks to come see Lake Tahoe so you can see the wonderful projects that are going on right now. You can actually see the work occurring today all along Lake Tahoe. It has tremendous progress. That's the result of the TMPO, and the result of the effort or the coordination of the local, Federal, and State agencies in Lake Tahoe.

The Tahoe Regional Planning Agency, or TRPA, we implemented an environmental improvement program about \$908 million. This approach is over 10 years, and it is to achieve and maintain our Lake Tahoe environmental thresholds for Lake Tahoe region. Many of these projects are transportation-related projects. Neither NDOT nor Caltrans can afford to complete the EIP projects with the usual

sources of funds. We suggest the Federal lands highway program is essential in providing additional funding for NDOT as well as Caltrans.

The Federal lands highway program is well suited for Lake Tahoe. Under this program, Lake Tahoe projects are eligible both under the Federal highway and discretionary sub-programs. We think the sub-programs was a good idea. NDOT has used or is using their forest highway allocation, along with the voter-approved State-wide bonds, to construct erosion control facilities along sections of State Route 28 and Highway 50. As you may be aware, sections of SR 28 in Nevada have been designated a national scenic byway.

NDOT is also using the funding for similar erosion control projects on U.S. 50, also to identify future projects like Kingsbury Grade as well as Mount Rose Highway.

Continuation of the Federal lands highway program in the reauthorization of TEA-21 will provide for more of these kinds of erosion center projects for both Nevada and California, and we support that among the TRPA.

TEA-21 also provided an additional money to the MPO that we have. Funds made available to the TMPO to not more than 1 percent in the legislation that occurred—in the legislation that occurred back in 1998, the legislation allocated 1 percent of the Federal highway funds to Lake Tahoe. We believe that that legislation needs to continue in the next TEA-21. The intent of this provision of the 1 percent has not been fully realized, however. The amount of funds provided in the definition of what is considered eligible, planning has been limited administratively. We ask that the TEA-21 reauthorization discussion proceeds that clearly the authority be provided for TRPA to use Tahoe's 1 percent provision to conduct specific project planning activities defined as concept development, site assessment, environmental studies, and preliminary project designs. We ask that this clear authority also be given to NDOT and Caltrans to use Tahoe's 1 percent to conduct similar activities.

The existing administrative interpretation of TEA-21 language does not provide either the TMPO, NDOT, or Caltrans the ability to utilize the Federal public lands highway program. This program, if not interpreted so narrowly, could easily serve as one of the most significant funding vehicles for meeting the Federal commitment for Lake Tahoe.

We ask that this Administration, as well as the help of TEA-21, can help us define this 1 percent a little more further.

The predecessor of TEA-21, the ISTEA, included numerous programs that benefit Lake Tahoe. I want to name some of those programs that we believe should continue, because they really served many, many positive things for Lake Tahoe. The transit capital and operations grants program—we think that ought to continue. The jobs excess and reserve commute grants ought to continue. Transportation enhancement activities should continue. The national scenic byways should continue. Congestion and mitigation air quality funds should continue. And intelligent transportation systems are just critical for Lake Tahoe, as well, as well as the clean fuels program, bicycle and pedestrian programs, and recreational trails programs. All of those are important pieces for

Lake Tahoe, and we ask whatever is approved, Senator, that those pieces not be forgotten along the way.

In conclusion, I would like to ask Congress and the Administration that there is some difficult choices to be made when it comes to transportation, and specifically the reauthorization of TEA-21. Transportation needs in this country are great, enormous throughout the country. We encourage you to take bold, assertive action within the context of our national priorities, and we support the reauthorization of TEA-21 and encourage you to consider the above recommendations regarding Lake Tahoe.

Thank you for this opportunity.

Senator REID. Gary?

**STATEMENT OF GARY CARANO, NEVADA RESORT
ASSOCIATION, RENO, NEVADA**

Mr. CARANO. Welcome back to northern Nevada. Administrator Peters and your staff, welcome also to northern Nevada.

I am Gary Carano, the general manager of the Silver Legacy in Reno, and I'm here today representing the Nevada Resort Association.

The transportation issues that I'd like to discuss today with you impact all of northern Nevada, and all of our colleagues for once are united in this effort to address these issues today.

The Reno/Sparks economy is very dependent on tourism. We receive over six million visitors a year to our fair city. These visitors come here to recreate in a variety of ways with entertainment, all the retail opportunities we have, the beautiful resorts we have to offer in northern Nevada. Lake Tahoe is a beautiful 35 minutes away. Roughly 35 percent of these only travel to northern Nevada by plane. The rest all come through our main arterial Interstate 80.

Senator REID. What about visitors traveling to Las Vegas? Is the traffic to Las Vegas mostly over the roads?

Mr. CARANO. I believe, Senator, that probably it is just opposite. The visitor count to Las Vegas airport is much greater than what we receive on the highways.

Northern and central Californians are this area's leading customers, and these guests come here by Interstate 80. Interstate 80 is truly the economic lifeline of this community, not only for our tourists, but also the major link of goods and services from San Francisco and also through the port of Oakland, which is undergoing a billion-dollar, multi-year expansion which will lead to many more trains, which you've graciously helped us on that, and also trucks traveling Interstate 80.

Driving Interstate 80 is truly a horrible experience currently, even with the work that is ongoing up there now, and together with the Senator and yourself, Administrator Peters, we hope that we can make a change in our future.

Now more than ever we must work together to improve the interstate. The construction of new casinos throughout northern California and the rest of the country is challenging the tourism-based economy which this community relies on heavily. The proliferation of gaming is in 48 States now. Vacationers have vast choices that didn't exist only a couple of years ago. Most notably, of course, Na-

tive American casinos are drawing customers who previously traveled to this fair city. Nevada's gaming industry is innovative, exciting, and dynamic. We have never shied away from competition. Instead, we have found innovative ways to continue offering world-class facilities that appeal to our guests. As always, we will find ways to draw customers to our exciting city. We will always compete, no matter what happens.

But we need your assistance to help ensure that the infrastructure necessary to bring these guests, these visitors to northern Nevada is healthy and an enjoyable experience on that highway. Right now Interstate 80 from Nevada's western border to Sacramento all the way to San Francisco, the bay area, is very much in deterioration. Much of this road is over 50 years old, and it is in great need of modernization. Interstate 80 is in such bad condition and design, it often dissuades people from making the trip to Reno, especially when they have the option of enjoying recreational or entertainment opportunities much closer to home. In addition to Native American gaming, there's much more demand for the recreational dollar today than there was years ago.

Motorists are forced to compete with dense traffic on a two-lane highway in both directions that has not increased capacity proportionate to major population growth in northern California and Nevada. Placer County, which is Auburn, is a short hour-and-a-half drive from here and is the fastest-growing county in California, probably the second-fastest growing population county in America, second only to Clark County.

Added to this grim situation is the fact that I-80 is the primary east-west trucking route through the northern part of the Nation. Slow-moving semis with insufficient truck climbing lanes are highly disruptive to traffic. Furthermore, the lack of adequate shoulders in most areas can halt traffic when there is an accident or a simple mechanical failure, or in the wintertime when the interstate closes because of snow. Thus, there are no significant alternative east-west routes when the road is congested or closed.

I know that you are aware of these problems and have been working on ways to improve I-80 for years. Northern Nevada businesses appreciate everything that you do and the committee has done. Through your leadership, portions of the decaying highway have improved and today still are under construction and are improving. Moreover, you played a pivotal role providing fundamental funding of an intelligent transportation system. This high-tech system posts accurate, up-to-the-minute traffic conditions on electronic billboards throughout the Interstate 80 corridor. Given the unpredictability of severe weather in the Sierra during the winter months, it is important to have an intelligent transportation system that allows motorists to make smart decisions about their trips across Donner Pass.

Finally, we would like to thank you for your help during this year's appropriation cycle. Despite all the work that you and Congress have accomplished to fix this important highway, much more needs to be done. The Nevada Resort Association supports the efforts of Sierra Gateway Coalition, which is a group consisting of northern Nevada and northern California businesses, which is a group consisting of local and regional governments that work with

the governments and public and private associations. The coalition has identified 11 essential projects on Interstate 80. These projects range from adding truck climbing lanes in the mountains to widening the shoulders for enhanced safety to adding vehicle lanes in the Sacramento Valley.

As you undertake this important task of passing a new transportation reauthorization bill, we believe the Sierra Gateway Coalition report will help you identify the projects that will bring the most relief to this old highway and to the northern Nevada economy.

I also must take the opportunity to speak of another transportation issue that you, Senator, have been very much a part of, and that's our air service. Highway traffic is not the only transportation concern of northern Nevada and our resort association. Air travel to the Reno/Tahoe Airport has decreased significantly since 1997. In an effort to increase profitability, major airlines have cut several flights from Reno. Prime markets in Canada and southern California are being choked off by airlines pulling out of this area. Customer counts have dropped spectacularly in the last 2 years. Passenger count for the first 6 months are down 17 percent. While much of this drop is due to the post-September 11th fear of flying, also the effects of Native American gaming, lack of a bowling convention in town this year, a poor California "dot-com" economy, and our national economy definitely leads to these decreases.

We understand you have been working hard to encourage airlines to increase flights to Washoe County and broaden our market base, and we are very thankful for you doing this.

The drop in air traffic underscores the need to modernize our highway infrastructure. If our customers are leery to fly, for whatever reason, we want to make sure that they don't have an excuse for not driving here.

We encourage you to focus on Interstate 80 as you write the next transportation authorization legislation. Northern Nevada's economy depends on this link to California, which is in desperate need of repair.

Thank you very much for giving me this opportunity.

Senator REID. Gary, I believe that we really haven't done nearly enough in northern Nevada. The I-80 problem has been a secret that has been kept. There have been some voices, but I don't think we've heard them nearly well enough. I think it is—I won't say a crisis stage, but it is at a point where we really need to focus on it.

The sad part about it is our entire Federal interstate highway system is old and needs work done on it, and this is no exception. As you know, we got a couple million dollars for intelligent transportation, which will be a big help, especially when it is snowing or when it starts to snow, but that, to my understanding, has not been implemented yet. Is that right, Tom, \$2 million worth of it?

Mr. STEPHENS. It's in Caltrans' hands. No, it hasn't been put into place yet. We share the concerns about Interstate 80. Caltrans has been doing a lot of work on Interstate 80, but it is time consuming and it is traffic delaying when they do it, and there's more that could be done.

Senator REID. One of the things we've learned, problems in Nevada affect California commerce. I-15 in southern Nevada, that

being jammed up, that doesn't—that just doesn't stop tourists from coming to Las Vegas, it stops commerce from traveling to and from southern California. The same applies to I-80. I think we need to do a better job of selling that. The problem is California is such a big, big State—\$35 million people with problems every place you go.

We have a Senate bill that is being passed out of—I'm sorry, it is out of committee now. The full committee has passed it. We have \$1 million to look at the Colfax problem, and that's for planning. That was really a big help. But we're talking about needs not for \$2 million or \$1 million, although I am very happy to have that, but it's going to take large chunks of money to do that.

I think one of the things we are going to have to look at, Tom, is working with California as we did with some of the major interchanges and stuff in California. I worked hard to get money appropriated for California because it helped Nevada, and people thought we were a little goofy doing that, but I have no regrets of doing that because it's good for Nevada. We may have to do the same up here. So anyway, that's my observations there.

Greg, we talked about highways here a lot. Your responsibilities are more than cars riding on streets and highways. Tell us how you feel mass transit—you've done that in an abbreviated form in your statement—mass transit will alleviate some of the problems you have experienced.

Mr. KRAUSE. I think that what we need to do is plan for mobility, and as the community grows we can't build enough roads. In the developed areas, I think mass transit, if it is convenient, if it's safe and efficient, it is going to be the mode of choice. We think we can get much higher percentages of travel on the mass transit if we can make investments like bus rapid transit. I think it only makes sense in those dense corridors. We don't think it is the solution that we want to have in the suburban areas and the lower-density areas, but it clearly makes sense in those key corridors. Certainly Las Vegas has the strip, the same sort of thing. So that's where I think we have great potential.

I guess if I can take just a moment, the other need that is an ongoing concern is serving the disabled. We have a requirement. It's a civil right to have access to that ADA service, and that's something that we also want to try to address. Again, we are trying to help ourselves locally with the funding measures that I talked about, but I think that's another area where we will continue to look for the Federal assistance as you have given us in both the capital funds and trying to make sure that we have operating assistance for that particular need for the disabled. That's just an even faster-growing portion of the community that needs to be served.

Senator REID. It's not a faster-growing part of the need, it's just that they're becoming aware of their rights, and, as a result of that, I think they're wanting to use the same facilities that are available to other people. I think that's part of the modern society I think we should feel good about. People no longer have to sit home until somebody can haul them around. That sometimes never occurred. So now we have rules, regulations, and laws that allow the dis-

abled to be treated like those that aren't disabled. It's expensive, but I think it is the right thing to do.

Juan, I have some questions and I want you to elaborate, especially with Mary Peters being here. Explain in more detail this Tahoe 1 percent provision of Federal lands highway program. Explain that in more detail to me, please.

Mr. PALMA. I'd be happy to, Senator. The Tahoe—when the TMPO was created, it was in that language of that bill that Tahoe was allowed 1 percent of the Federal lands highway program. That was the bill. When it was—

Senator REID. That's 1 percent of what?

Mr. PALMA. Of the national Federal lands highway program. As we began to proceed to interpret what the language was that was approved, the Administration interpreted that to be—various interpretations came about. To this day, we have various interpretations of that.

We still believe at Tahoe that 1 percent was meant to be of the national Federal lands highway program, and we need to clarify that. We believe it is 1 percent of the national, but we need to have that discussion with all the critical players. With reauthorization of TEA-21, we need to clarify that. Our clarity would be that it would be 1 percent of a national Federal lands highway problem.

Senator REID. And the reasoning being that then the Republican Governor of California and the Democratic Governor of Nevada and now the Republican Governor of California, there has been agreement between these two States that there has to be something done about Lake Tahoe.

Mr. PALMA. Yes.

Senator REID. And one of the funding sources they are looking to to meet this \$1 billion of requirements—we've done pretty good, especially compared to what we've done in the past, to get moneys for that. We have—Mary, an example. We have logging roads that are about 100 years old that have been polluting the lake for 100 years. We now have money to take care of some of that. We have, as Tom indicated, things we can do for more environmental clean-up. We can use mass transit. We can use all the other things we're doing. It's a huge, huge project, and it's all to save a very pristine lake that's losing its unique clarity.

We will follow up on that some time.

Mr. PALMA. May I follow up with that, Senator Reid, as I think Gary mentioned that Placer County, which borders Lake Tahoe, is one of the fastest-growing counties. El Dorado County just to the south is another huge-growing county. This county is growing. Douglas County is growing. The populations all around Lake Tahoe just continue to skyrocket on all sides.

So what we have, Administrator Peters, is that we have a big population that wants to go recreate Lake Tahoe on a daily basis. As the more population, the more want to go on Lake Tahoe. We have got to now begin to plan for the future growth of the highway system, but also for transportation, whether it is intelligent transportation systems.

We are the beneficiaries of many of those things in Lake Tahoe, and I'd just encourage to continue that, because we want to save that beautiful lake for generations to come, and it is going to take

all of us from the Federal Government, State government, local governments to do that.

Senator REID. Gary, let me just say this, also. When you talk about the lake, you know, that's a place. It's easier to get money for that than it is I-80, from my perspective. You know, it's something people understand now.

I am not one for pushing lobbyists, but I think one of the things that the northern Nevada resort community needs to do—and I mean hire people. You have to be more aggressive because, believe me, there's a lot of people who represent different parts of Nevada that are pushing very, very hard, and there's a limited amount of dollars to go around, and highway transportation dollars are no different than dollars for other programs. The squeaky wheel gets the grease. I think, frankly, the northern Nevada resort industry has been too silent on this.

Mr. CARANO. Senator, I appreciate your comments. It has been, as our good friend John Asquaga would say, the topic of discussion for quite a few years. I agree with you—we have not been aggressive enough, and I will take that back to the Resort Association and suggest that we get aggressive and get competitive and try to follow the model that you led in southern Nevada with Interstate 15, with your leadership of bringing two States together.

Senator REID. Gary, I would also say this. The burying of the tracks is extremely controversial. But in my personal opinion—and I know I should stay out of this, even though I can't, because I arranged a lot of the funding for that—I just think it's something that needed to be done in northern Nevada. That's 50 years past due. I just think that we need to be more aggressive in what we need here, even though there's going to be tremendous heartburn and heartache burying these tracks, especially in the short term. In the long term it will be wonderful. We need to, as I say, let people know some of the problems we're having here in northern Nevada with traffic. California will help us if we make our cases.

Mary, do you have anything?

Ms. PETERS. Just a few brief comments, if I might.

Senator REID. Yes.

Ms. PETERS. I would appreciate hearing from all of you. As the Department is finalizing our proposal for reauthorization, a couple of areas are important to us, and several of you have touched on those. One is the use of Intelligent Transportation Systems (ITS), both to relieve congestion and improve safety. If you have specific ideas as we look at the next generation of ITS, we would welcome those comments. I'll make sure my staff gets information to you on how to contact us before we leave today.

Gary, I really wanted to talk a little bit about bus rapid transit. I think you are exactly right. That's a good way to grow the transit system and I will, with your permission, carry those comments back to Jenna Dorn, my counterpart in the Federal Transit Administration. If there's anything we can do to help you, we will be pleased to do that.

Juan, I will ask our attorneys to again revisit this issue of the 1 percent, and I'll talk with them and see if we have any discretion. If not, we'll come back to you soon and let you know what we need to do there.

And I think, Tom, one thing perhaps—I really appreciate your sharing the Western Governors' views on reauthorization. I think that that was important. I had an opportunity to meet with the Western Governors when they were in Washington in February of last year and strongly encouraged this, so I was very pleased when I saw that you were following up on that. Those contacts will be very, very important as we compare the Administration's proposal, so I do thank you.

Senator REID. Thank you, gentlemen.

Mr. STEPHENS. May I add something?

Senator REID. Sure.

Mr. STEPHENS. I just wanted to add the point that you talked about what we did in California, but I just wanted to add a couple of figures for the record.

We put \$5 million into the Barstow Interchange of I-40 and I-15, and that was under ISTEA and appropriations there, and that went a long ways toward getting that project done. And, Senator Reid, as he alluded to, got \$16 million in Nevada appropriations for the Barstow-to-Victorville section. And even though that project is, like, a \$100 million project, that \$16 million went a long, long way.

We stand ready to work with the northern Nevada resort community on similar efforts as those. I think that there needs to be, you know, more attention from within the resort community, too, because we're there, we're ready, we're available to help you, and we have the experience in southern Nevada, and I think Senator Reid is indicating that he's there, too, but you have to come up with a plan and a schedule and how you're going to do it.

Senator REID. Thank you very much, gentlemen.

The next panel will address, as we've talked, the Federal lands highway program. This is important. For example, roads owned by the Bureau of Land Management don't count toward the funding formulas that we've talked about.

Mary Peters, let me just say this for the record. You're going to learn a little bit about Nevada today. we're going to have the director of the Oregon Department of Transportation, but we're also going to have two witnesses from rural Nevada. It reminds me of a story. When I first went to the State Legislature we had a Speaker of the Assembly who served in the Nevada State Legislature for many, many years. He was from a place in Nevada called Battle Mountain, and he went to a legislative meeting where all the speakers of the 50 States for the Lower House were in attendance, and they each introduced themselves. When it came to him, he said, "I'm Bill Swackhammer from Battle Mountain, Nevada," and somebody said, "Battle Mountain, Nevada? Where is that?" He said, "It's easy. It's right between Carlin and Valmy."

Today you're going to hear from one of the commissioners from Humboldt County, Nevada, from a place called Winnemucca. You're probably not familiar with the country-western singer Hank Snow. Have you ever heard of Hank Snow? Well, I went to the Grand Ole Opry once and had an opportunity to meet Hank Snow. Anyway, he has this great song where he sings, "I've been everywhere," and one of the places he mentions is Winnemucca. I guess that's a little insight in Nevada. You've heard Hank Snow sing that, haven't you?

We welcome you here. We're going to first hear from The Honorable Bruce Warner, director of the Oregon Department of Transportation. We're going to hear from John Milton, who is commissioner from Humboldt County, and Robyn Burdette, who is the chairwoman of the Summit Lake Paiute Tribe.

We'll first hear from Warner, Milton, and Burdette in that order.

**STATEMENT OF HON. BRUCE WARNER, DIRECTOR, OREGON
DEPARTMENT OF TRANSPORTATION, SALEM, OREGON**

Mr. WARNER. Thank you, Mr. Chairman. It is a pleasure to be here. Thank you for the hospitality I might extend to Nevada for letting me—

Senator REID. Ron Wyden, of course, serves on the committee. We're very happy to have him. He and I served in the House together. He's a wonderful man.

Mr. WARNER. Well, again, thank you for the opportunity to be here to talk about what I think is a very important reauthorization of TEA-21 and the Federal lands highway program. I believe you have written testimony from me, so I will just briefly—

Senator REID. We do.

Mr. WARNER [continuing]. Go through some of the highlights.

Senator REID. Your full statement will be part of the record.

Mr. WARNER. Thank you.

I think you all know there's a tremendous amount at stake as we near the end of one surface transportation bill and move forward in debating the next. From Oregon's perspective, we believe TEA-21 has been an indisputable success. I wanted to get on the record, for example, Oregon's highways are safer—traffic deaths now have fallen to a 40-year low. Our pavement conditions have improved slightly, although they are not yet where I want them to be. And thousands of highway-related jobs have been supported over the years. I think it is a success.

Reauthorization comes at a challenge time. We face new challenges, including the economic downturn and a new era of combating terrorism at home and abroad. And I think, Senator, you touched on it first, that the infrastructure built after World War II is entering old age at the same time. You have also heard quite a lot about rapid growth and congestion. I think they both threaten our liveability and economic opportunity.

You've heard it before. I'm going to be a broken record on this. We need additional resources from the Federal Government and additional revenues to strengthen our transportation system. We are trying to do our part, but we also believe additional Federal resources are needed. I think you are aware of many of the ideas that people are talking about to raise new revenue. You've heard about the eliminating ethanol tax exemptions and trying to retain the interest that's earned on the highway trust fund balance. But I also heard what I thought was very interesting. I would encourage your committee to take a look at indexing Federal fuels taxes. I believe that indexing taxes to deal with inflation is a critical issue. In Oregon we've done some analysis and we're finding out that people actually pay less in real terms than they did in 1970.

Senator REID. If I could interrupt, people in America pay less gas taxes than anywhere else.

Mr. WARNER. Well, increasing taxes is never popular, but I think the stakes are very high.

One of the things that Administrator Peters and I have talked about is the need to explore new methods of financing transportation in the future. The experts are saying we are overly reliant on fossil fuels, and as fuel efficiency continues to grow, revenues to the highway trust fund are going to go down.

I think all of us believe that vehicles, no matter how they are powered, should pay their fair share for improvements to the transportation system, because all vehicles cause congestion and wear and tear. In Oregon, we're looking at things like vehicle miles traveled taxes to tackle this problem. Our legislature charged us to look at new ways to ensure all vehicles pay their fair share. We're going to be exploring experimental ideas and reporting back to the Legislature next year.

I encourage you to look at creating a pilot study that would promote research and testing of new methods for financing transportation. It would be very helpful, I believe.

I did want to touch on the Federal lands highway program because I believe the continuation of a strong Federal lands highway program in the next surface transportation authorization is of national importance and a high priority for all of us western States. The State of Oregon has almost 32 million acres in Federal ownership, an area greater than the sum of 35 other States' Federal lands.

I wanted to also make the committee aware that, even while timber harvests in Oregon are declining, more people are still employed in the lumber and wood products industry than any other single manufacturing industry in the State.

Senator REID. I'm stunned by that.

Mr. WARNER. That's right. Recreational opportunities on publicly owned lands are another thing that's becoming vital for Oregon's travel and tourism industry.

TEA-21 continued the Federal lands highway program established by ISTEA. It added some additional categories dealing with transit and public lands, national parks, Indian reservations, and preservation and construction of roads in national wildlife refuges. Oregon supports these categories and the changes that were made in TEA-21.

In regards to the future, you are going to be deciding the overall authorization level for this program, the number of program categories, and how the funds are allocated. As you're aware, funding was increased dramatically from \$447 million in 1997 to about \$700 million in the current year, and obviously we would like to see some similar increases. I know you're going to hear about the demands that are there right now.

I did want to stress the point that the Western Governors Association and WASHTO—the Western State Highway and Transportation Officials—have adopted resolutions in support of increased funding, and they're also saying they don't want to see additional categories created within the Federal lands highway program.

You've already heard about the BLM issue. We're concerned about that issue as well. I'm very pleased to hear that Adminis-

trator Peters is talking with the BLM. I hope the western States will be involved in those conversations.

We were very concerned to learn that the U.S. Forest Service, for example, would like to add 60,000 miles of U.S. Forest Service roads to the Federal Highway Program. We support their need, but we don't think you can add a category of roads that's greater in size than the Interstate Highway System, and fund it from the Highway Trust Fund. We have encouraged the U.S. Forest Service to look for funds from the general fund or other sources.

Again, I think there are many other issues that we could probably talk about. I just wanted to quickly talk about the aging infrastructure in Oregon. We have a bridge problem in Oregon. Our bridges were built in the 1950's and 1960's utilizing a technology that we're now finding out was maybe deficient, and a number of them are going to be impacting the movement of freight as a result of load limiting. We're going to be our legislature next session for major funding, but the State cannot fix this problem alone.

I think there is a similar problem throughout the United States, and we probably need to look at making sure bridges are brought up to current standards on the interstate, because that is the primary backbone of our freight system.

You've seen in my testimony some recommendations for the national corridor planning and development program. We really support it, but we think that it's being diluted and funding is not really going to the purpose that it should. I think you need to look at making sure those moneys go to important freight corridors in the United States, especially those hubs where you have the various modes going together that are critical to the freight and the economy of the Nation. We have one in the Portland area, the I-5 Trade Corridor, we think is one that should be on that list.

Other things you've heard about include the transportation and community and system preservation program and environmental streamlining. We think that you need to look at these programs, to continue them, but also maybe refocus them. We'd be glad to have further conversations with you, your staff, or the Department on how that might be done.

So, in conclusion, Mr. Chairman, I wanted to state that a strong transportation system is vital to the future of the United States. Reauthorization is clearly an opportunity to strengthen the transportation system and build upon the successes of TEA-21 and ISTEA. To do this, we believe additional Federal resources are needed because States simply cannot overcome the many challenges we face alone. But I wanted to really stress that I don't think you need to recreate the wheel on this. I think the basic structure is sound. We have proven programs such as the Federal lands highway program that are generally working well.

Some changes need to be made to ensure that discretionary program funding is targeted to projects that really support the primary objectives of those programs, and funding guarantees and firewalls that were established in TEA-21 need to be protected. And I think you do need to look at new sources of revenue.

And, finally, it is crucial that the State highway apportionments increase substantially as they did under TEA-21. I think it bene-

fits Oregon, it benefits the western States, our cities, counties, metropolitan planning organizations, transit districts, and others.

Again, I am very pleased to be here and I again want to thank you for the opportunity to talk with you.

Senator REID. Mr. Milton?

**STATEMENT OF HON. JOHN H. MILTON, III, COMMISSIONER,
HUMBOLDT COUNTY, WINNEMUCCA, NEVADA**

Mr. MILTON. Senator Reid, Administrator Peters, thank you for allowing me to be here today. My name is John Milton. I'm a senior member of the Humboldt County Commission and a member of the board of directors of the Nevada Association of Counties.

Thank you for the opportunity to spend a few minutes discussing western transportation issues and the Federal lands highway program, in particular.

As you are aware, Senator Reid, over 87 percent of the land in our State is managed and controlled by the Federal Government. The majority of this land is accessed over county-maintained roads. Most of these roads are gravel, which require a high level of maintenance. In Humboldt County we have 941 miles of county-maintained roads in our system. Of that amount, 669 miles or 71 percent of our system serve Federal lands. These lands do not generate revenue which can be used for building new roads or maintaining existing roads.

In reviewing the Federal lands highway program I noticed that the majority of this money goes to the public lands highway category. In that category, 66 percent goes to forest highways, 33 percent goes to discretionary programs. In Humboldt County and the majority of Nevada, the Department of Interior is the manager of the Federal lands, and they receive no funding in this program.

In Nevada there are approximately 61.7 million acres of Federal land, of which 51.1 million acres are administered by the Department of Interior, primarily the BLM. I would recommend that in the reauthorization you consider a new category related to these lands which would be similar to the current categories for refuge roads, park roads, and parkways.

The Sheldon Antelope Refuge is the only wildlife refuge located in Humboldt County. Access to this refuge is via county roads. We believe we should be allowed to access refuge road category funds for improvements to these county roads. We currently receive 5,000 a year in revenue sharing from the U.S. Fish and Wildlife Service, but return \$2,500 for the maintenance of the Virgin Valley Campground. This does not leave much for maintenance of the roads leading to or within the refuge.

In April of 2000 I appeared before the Senate Subcommittee on Forest and Public Land Management to testify on the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area. That's a long name. In that time, one of my concerns I expressed was access to the NCA via our county roads system. That bill became law, and my concerns have not gone away. Most, if not all, the major access points are reached by county roads. Many of these are Humboldt County roads, including Cedarville Road, which provides access to the NCA and Sheldon Antelope Refuge,

and a 95-mile road from Winnemucca to Gerlach which provides access to the entire southern boundary of the NCA.

Senator REID. Are these paved or dirt roads?

Mr. MILTON. These are all gravel roads.

We expect use of these roads to increase dramatically. The cost of maintaining them will also increase. Improving these roads to handle increased traffic is beyond our means. For example, the estimate we obtained to upgrade the road from Winnemucca to Gerlach to an all-weather gravel road exceeds \$7 million. This does not include the \$480,000 cost for cultural clearance, right-of-way acquisition, gravel pit development, and water sources or the \$200,000 annual cost for maintenance. This road crosses three counties, none of which can afford to spend this type of money.

Although roads such as these serve Federal lands, Humboldt County maintains them with no assistance from the Federal Government.

The access to the Humboldt-Toiyabe National Forest in Humboldt County is also via our county road system. We maintain approximately 44.1 additional miles within the forest under agreement with the Forest Service. In exchange, the Forest Service maintenance crews undertake projects on county roads leading to the national forest to offset our costs incurred by the county.

In conclusion, I would ask that you give strong consideration in the reauthorization of the Transportation Equity Act of the 21st Century by addressing the concerns I have expressed today. In particular, I would ask that a category be created to address the vast holdings of the Department of Interior. Also, that public roads maintained by someone other than the U.S. Fish and Wildlife Service be allowed to utilize the money in the refuge roads category.

Thank you for allowing me to speak today.

Senator REID. Excellent statement.

Senator REID. Robyn?

**STATEMENT OF ROBYN BURDETTE, CHAIRWOMAN, SUMMIT
LAKE PAIUTE TRIBE, WINNEMUCCA, NEVADA**

Ms. BURDETTE. Thank you. I'm glad to be here, speaking here in Nevada. I think it is good that you came here. I appreciate that. I've also been enlightened a little bit about Mary Peters. I understand she comes from Arizona.

I'll try not to read my statement, because it is a long statement, however—

Senator REID. Your whole statement will be part of the record. If you would summarize in about 5 minutes, that would be appreciated.

Ms. BURDETTE. OK. Thank you.

The Summit Lake Tribe is located in the northwest portion of Nevada. As discussed, it is adjacent to the areas of Sheldon and Black Rock, and it is also open to very high-use recreational area. That's a big economy up there in our country in the rural areas.

In 1999 I was chosen to sit on the Transportation Equity Act Negotiated Rule-Making Committee for Indian Reservation Roads, and my tribe was placed with 54 other tribes in the western region who service Nevada, Utah, and Arizona.

One of the things I do want to mention, although I know it's not part of the IRR program, is road maintenance. Road maintenance. Road maintenance is a real need for Indian roads to maintain Indian reservation roads, and I know that the refuge road get funded, and I'm not suggesting that I'm in favor of putting an increase for road OM into our IRR program, but I think that it should be looked at because we're building new roads and we're not able to maintain roads that exist. However, the BIA OM budget should be targeted for an increase.

The Rule-Making Committee just finished—and I think the publication came out for procedures and a relative needs formula. However, this is the first time that nationally the tribes got to see and participate and develop this formula. Unfortunately, with minimal funding it is very difficult to come up with a formula that's going to service so many tribes with so much need.

We went back again to the population average daily traffic counts and cost to construct; however, a lot of what is needed to get to that point is planning dollars, and with low populations and rural areas, most of the tribes really don't benefit from this. I know my tribe has never received funding. And because we receive such low funding, we never, ever get a construction project. Sometimes my relative need portion will vary from \$19,000 to \$30,000, my estimated road project—this is without any new roads—is \$1.7 million. That's an estimate. So it's very doubtful that I'll ever get to that when the region has to service 54 other tribes and my tribe is on the low end because of the population count. So that's a very big concern of ours.

In the new proposed regulations there are some new categories that have potential, but they really need to be looked at further, and that is the high priority projects. This would allow for tribes who have never had a construction project and will only need one construction project to get serviced; however, there has been inclusion in this fund, this potential fund, of emergency and disaster. With Indian reservation roads, we have those on a daily basis. That really doesn't solve any problems. It just adds more funds to those types of categories.

Likewise, my tribe—and I've added some pictures in the back of my statement—in 1999, we experienced the flood that Nevada had back then, and we applied for funds through the ERFO project. We had to go through the BIA to apply for those funds, and we were—denied eventually, it took us a couple of years to do that just because of the process of getting everything. We really didn't receive that much technical assistance. I think, had we been able to go straight to the Federal Lands Office instead of going through the BIA it would have been a much better process.

Our road is the sole access from one point to the other, and I'm very glad to see John Milton here, because we share the same road problem. People cannot travel through this area unless they come through the reservation. So there's a lot of problems in this area that are going to need to be addressed. We have a lake, and the lake rises and the water comes in.

BIA, their hands are tied because they have so many tribes to service.

So, you know, I really don't want to be saying anything really bad. I just think that the Western Region Office needs to be looked at a little bit better. This affects us on a national level because, obviously, not only do we serve these roads public roads, but on the national level you have the Duck Valley Shoshone Tribe who has numerous accidents near or on their reservation, and yet they're targeted for transportation of nuclear receptacles. So tribal roads can potentially have a national effect, especially here in Nevada.

I think the tribes in Nevada are looking forward to partnering with the State of Nevada; however, they need to get some of the funds geared for that.

One of the other areas that's proposed in the negotiated rule-making for the IRR program is capacity-based funding, but, again, it is based on population, and I think that it's really not going to work the way it is proposed. I think that base funding should be based on getting a project concluded, not based on your population and sub-category. I think without that we're not going to be able to partner and solve some of the problems that affect all of us.

In other areas for the IRR program that were important to us, overall, nationally, was that the IRR program is a construction program. Unfortunately, we have to address all our transportation needs with construction dollars, like transit. We also have take-downs that are taking away, decreasing those funds, such as the obligation limitation and the 62 percent transportation. They come off the top, which limits our funds at the bottom.

In closing, I would just ask that those areas be looked at again. I think that tribes can manage their programs if they're given the resources to do that, and I think we would love to be partnering with some of our county governments, also, to address these problems.

Senator REID. We thank all the witnesses in this panel very much.

I say to you, Mr. Warner, you understand that the budget the President gave us is \$8.6 billion short of just where we break even, and we've got huge money problems, and that's going to be a real hassle next year. As you know, every member of the Senate committee and every member of the House committee, Democrats and Republicans, signed on to a bill to increase that funding, but that's just up to current levels, and that's certainly not going to do the trick. So you need to understand your plaintive plea for money is one we've heard, but it's a difficult, difficult situation we have. I can't imagine going into this bill with the same amount of money we had 5 years ago. That will make things so much more difficult. I feel bad for the country. But we hope things will turn around and we can do something here.

One question I have for you, in TEA-21 Senator Wyden, with the support, we're told, of the Oregon Department of Transportation, championed creation of the transportation community system preservation pilot program. Tell us what that is and how it has worked.

Mr. WARNER. Mr. Chairman, Administrator Peters, obviously the program, at least from our perspective, we thought it was a program that was to encourage people doing the right things from a land use and transportation standpoint, to look at environment liveability and to come up with projects that could promote

liveability, alternative modes of transportation, could again promote compact communities, and allowing things to be done differently than they were being done now.

What we've seen in that program—it was well-intended. It's one of those programs that I described where I think the policy intent was pretty clear, but this is a program that, again, became earmarked 100 percent. I'm not sure that all the projects that were funded by that through that program really fit the overall policy intent, so anything the committee could do, if you feel that's still a program you want to continue—and I think we should continue that program—

Senator REID. You'd have some discretionary money.

Mr. WARNER. Exactly. Exactly. And I don't know whether it is a formula based or, again, given a discretionary program to the Federal Highway Administration to administer, but I think the intent was to have some sort of a competitive process where we could pit projects that really showcase things we wanted to maybe have occur throughout the United States and other places and use those as learning experiences, but I don't think the program has worked as well as originally intended, if I'm answering your question, Senator.

Senator REID. You're answering very directly. And I would hope that this program and others take into consideration what local governments and States have done to help themselves. If a State of local entity has done nothing but look for Federal largesse, then I think that in these discretionary programs, I think that the administrator and others should take into consideration what local government has done.

One last question I'd like to ask you. The border and corridor program, I'm told by everyone, has not worked very well. The purpose of it, of course, was to take care of bottlenecks in our trade corridors. What do you think we should do to improve this program so that it meets the critical freight needs of this country?

Mr. WARNER. Well, Mr. Chairman and Administrator Peters, I think obviously the language in the authorizing bill needs to be clear about the intent of those moneys, and we need to have, first off, oversight to make sure that those moneys that are going to projects that do what the program is designed to do, and I think we need to make sure that it is focused in the specific corridors that are of national significance in movement of freight, and maybe we even need to go as far as identifying some of those right up front so that here's the kind of corridors we're looking at and to make it clear that's what we want to do with this money.

I think if you put that clear direction in, give the Department some clear direction on how you want it administered, I think the program would work better, but right now what we're seeing is a lot of smaller projects not really addressing, as you point out, the great bottlenecks that are there in those corridors. So it has not worked out as we had planned.

Senator REID. I'd say to Mr. Milton and Chairwoman Burdette, you know, we talk all the time about unfunded mandates. The example that you gave where we've created this large new entity, Black Rock, that's an unfunded mandate as far as you are concerned because you have basically two choices—do something to try

to improve the roads or just do nothing, and in the process the roads become more dangerous and, of course, I would think that there are some business benefits from people traveling on these roads to people in the area. The roads are so bad, people simply won't want to come.

So I think we really do have to take a look at it, to help with non-freeway type roads, dirt roads. People come to me now and say, "What street did you live on?" We didn't have streets. You know, they're working on Main Street or—it's hard for people to comprehend what the west was like.

I've traveled through the Sheldon Antelope Range. It's a dirt road. It's a nice dirt road, one of the nicer ones that I've driven on, but I'm sure the need there is significant. No matter what you do on a dirt road, you can't save it from a cloudburst. These things happen and wash things away.

Your statements are very important.

Chairwoman Burdette, tell us a little bit about the Summit Lake Tribe. How many tribal members do you have?

Ms. BURDETTE. We have an enrollment population of 94, I believe.

Senator REID. That's a difficult problem you have. How many hundreds of thousands of Navajos? How many hundreds and hundreds of thousands. Even in Nevada, 94 when you compare it to Shoshone, which is about 4,000, I believe, so you're always fighting an uphill battle.

Ms. BURDETTE. We are always trying.

Senator REID. Tell us a little bit, for the record, the history of the Summit Lake Tribe. When did it start?

Ms. BURDETTE. Of course, the Summit Lake Tribe, Nevada if their aboriginal territory, of course. The tribe was organized—

Senator REID. Where you are now was?

Ms. BURDETTE. Yes. And it was organized or recognized by the IRR in 1913, I believe.

Senator REID. Was the membership in the beginning very small?

Ms. BURDETTE. Membership has remained small, and we—a lot of the impact on our reservation and something that I'm concerned about on a national area is that a lot of people assume that there aren't members there, and there are a lot of members and we all maintain our ties to the reservation. We are just starting to develop our land. We have a lot of impact because of the recreational high-use area. I mean, you cannot get from one side—we're right next to Oregon, we're right next to California, we're in a high recreational area. People love to hunt up there, so they impact the area.

Senator REID. What is the area of land?

Ms. BURDETTE. The reservation, itself, is about 12,000 acres.

Senator REID. Which is very small.

Ms. BURDETTE. Very small. It includes the lake.

Senator REID. Well, we appreciate your coming here very much.

Mr. Carano is still in the room. Gary, I would remind you what she's done at the Summit Lake Tribe is indicative of what the Northern Resort Association should do. Only 94 members, but, boy, I'll tell you they are loud. They maintain identity. For example,

she's here testifying today. A lot of other tribal governments didn't come. She's really done a good job.

Ms. BURDETTE. I thank you for the opportunity.

Senator REID. Mary, do you have anything you would like to say?

Ms. PETERS. Senator, just a few comments.

First of all, I want to thank all the witnesses, both this panel and the prior. It has been very enlightening for me to actually come out here to America and hear from the people about how you want America's money spent because, at the end of the day, this Administration certainly realizes the importance of this and we look forward to addressing some of the issues, most specifically the aging infrastructure and bridges. That's a topic that my staff and I spent hours talking about lately, and we'd like to consult with you some more about what we can do about that. Clearly, and especially in a State like this with so much growth, there are new needs, but there are also very important needs such as on I-80 to maintain existing infrastructure. I do appreciate such needs and we'd like to discuss them more.

Senator REID. Mary, let me just say, to complicate that, I had a conversation this morning with some people who are wanting to do some experiments, because one of the areas that the terrorists have targeted are our bridges, and that's a difficult problem. What can we do to protect our bridges. And, to indicate the nature, the aging of the bridges, very significant number of bridges where a school bus pulls up to it, lets the kids out, the kids walk across and the take the bus across the bridge.

Ms. PETERS. It is a concern, and Secretary Mineta especially shares your concern about the condition of the bridges in this country.

Mr. Milton from Humboldt County, I also appreciate your concerns. We'll go back and look at the issue again, and I think, as was said earlier, it is important to consult with all of you because we do know, especially in a State like this with so much public land, it is recreational, and tribal land, as well. It is land that people want to have access to and recreate on, so we do appreciate the significant challenges that we have.

Ms. Burdette, we do have a program that I'd like to have someone send information to you on called the "capacity building program." It helps with planning, building planning capacity and capability. I understand what you're saying about money, but that program may be of some assistance to you in the nearer term.

But again, Senator, I very much appreciate your giving me the opportunity to come out and hear from the people in America and here in Nevada. I very, very much appreciate it.

Senator REID. Let me just comment about this Sheldon Antelope Ranch. If I'm not mistaken, that was done during the era of Theodore Roosevelt. He got that started. It's a huge area, a huge area. It is a great recreation area. That part of the country, except for Alaska, is the most sparsely populated part of our country.

This committee stands in recess.

[Whereupon, at 4:45 p.m., the subcommittee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. MARY E. PETERS, ADMINISTRATOR, FEDERAL HIGHWAY
ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

Mr. Chairman, it is truly a pleasure to be here in Nevada today. This is an appropriate setting for discussing the Federal Lands Highway Program (FLHP). Federal and Tribal lands account for approximately 31 percent of the United States and the greater part of these lands is located in the 13 western-most States. As you know, federally owned lands constitute a greater percentage of total land area in Nevada than is the case in any other State.

Through FLHP funding, the Federal Highway Administration (FHWA) works in cooperation with the Federal land management agencies, Tribal governments, and State and local transportation agencies to provide access to and within Federal and Tribal lands. Our goal is to create the best transportation system possible in balance with the environmental and cultural values of Federal and Tribal lands. I appreciate this opportunity to report to you on some of the accomplishments of the FLHP under the Transportation Equity Act for the 21st Century (TEA-21).

BACKGROUND

Transportation is critical to the quality of life of Native Americans and other residents on Tribal and Federal lands. Moreover, Federal and Tribal lands have many uses, including grazing, timber harvesting, mineral extraction, energy production, and wilderness and wildlife protection; but tourism and recreation are the largest and fastest growing uses. The economies of many western States and local communities are dependent on tourists. Safe and sufficient transportation access to and within Federal and Tribal lands is essential to providing a positive experience and encouraging repeat visits.

The Federal lands highway system comprises 96,130 miles of public roads and almost 10,000 bridges and tunnels. A substantial number of the nation's All American Roads and National Scenic Byways are part of the Federal lands highway system. There are also approximately 510,000 miles of Federal public and non-public administrative and land access management roads and trails which connect to the Federal lands highway system, but which are owned by the Federal land management agencies and the Department of Defense and are not eligible for funding under the FLHP.

Congress created the FLHP as part of the 1982 Surface Transportation Assistance Act. The Act brought together for the first time a consolidated and coordinated long-range funded program for Federal lands highways. The Federal Lands Highway Office administers the program through memoranda of agreement with our Federal partners that define the roles and responsibilities of each agency.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), followed by TEA-21, expanded requirements of the FLHP; enhanced flexibility of the program, including eligibility of transit facilities for funding; and increased program funding levels. TEA-21 authorized a total of \$4.1 billion for the FLHP for FYs 1998-2003, to be distributed under five categories: Forest Highways, Public Lands Highways Discretionary (PLHD), Indian Reservation Roads (IRR), Park Roads and Parkways (PRP), and Refuge Roads. In FYs 1998-2002, about 66 percent of the FLHP funds were allocated to projects located in the 13 western States that contain the majority of Federal and Tribal lands, as shown in the following table.

State	FLH Program Funding in Mil- lions, Fiscal Year 1998-2002
Alaska	181
Arizona	362
California	193
Colorado	94
Hawaii	12
Idaho	81
Montana	165
Nevada	87
New Mexico	264
Oregon	131
Utah	74
Washington	106
Wyoming	127
Western State Total	1,877

State	FLH Program Funding in Mil- lions, Fiscal Year 1998–2002
Remaining 37 States	950

FOREST HIGHWAY PROGRAM

The Forest Highway program is the oldest funding category in the FLHP, originating in the Federal-Aid Road Act of 1916. The program serves 175 national Forests and Grasslands, and consists of 29,214 miles of road and 4,214 bridges. FHWA works through 41 tri-party agreements (FHWA, State, and Forest Service) to administer the Forest Highway program. TEA–21 made available \$129 million in 1998 and \$162 million per fiscal year for 1999–2003 for project funding under the Forest Highway Program.

Since TEA–21, a major emphasis of the Forest Service and FHWA has been in the transportation planning area. In fiscal year 2002, FHWA has co-sponsored a series of six conferences with the U.S. Forest Service on “Innovative Approaches to Transportation-Planning, Partnerships, and Programs,” designed to: (1) further increase awareness of Forest Service personnel of the resources available for their transportation needs; (2) increase awareness of the vital importance of building partnerships with gateway communities, State Departments of Transportation (DOTs), Metropolitan Planning Organizations (MPOs), rural regional planning agencies, and Tribal governments; (3) share good practices in the areas of transportation planning, project financing, public involvement, and environmental stewardship and streamlining; and (4) promote greater integration in transportation planning activities conducted by the States, local transportation officials, and the Forest Service. Reno was the site of one of the conferences.

There are well over 100 Forest Highway projects in some level of development or construction at any given time in the West. Under TEA–21, \$560 million have been allocated to these projects in the western States, which represents about 84 percent of the total expenditures under the program.

The major Forest Highway work in Nevada over the past few years has been road stabilization and erosion control on State Route 28 in the Lake Tahoe Basin and reconstruction of the Harrison Pass Road near Elko. Nevada receives about \$2 million annually from the Forest Highway program and it has been divided nearly equally between these two projects.

PUBLIC LANDS HIGHWAY DISCRETIONARY PROGRAM (PLHD)

PLHD provides funding for transportation projects that are eligible under title 23; that are in a State containing Federal lands, Federal reservations, or Tribal lands; and that provide or improve access to Federal lands or Tribal lands. Funds are to be allocated by the Federal Highway Administrator, who is directed to give preference to applications from States that have at least 3 percent of the nation’s total Federal lands.

There have been many successes under this program since its inception. Since enactment of ISTEA, we have provided about \$725 million (through fiscal year 2002) for over 400 projects. The 13 western States have received the majority of funds allocated under this program, with Nevada receiving the largest amount of funding from the program over the past 20 years—\$96.96 million out of \$1.113 billion allocated.

PLHD has provided over \$30 million since 1992 for major reconstruction of New Mexico Route 537 through the Jicarilla Indian Reservation, which has significantly improved access in this area, and enhanced economic development for the Reservation. We have also provided over \$28 million since 1990 for numerous roadway reconstruction and rehabilitation projects to improve access in and around the National Mall in Washington, DC.

To date under TEA–21, \$403 million have been made available for 246 PLHD projects. The Hoover Dam Bypass project, which is a joint project between Arizona and Nevada, has received \$18 million of PLHD funds since fiscal year 1999. Other PLHD projects in Nevada include \$10 million for the Pahrump Valley Road, \$10.5 million for US–50 and SR–28 in the Lake Tahoe area, \$8 million for US–95 near Searchlight, and \$4 million for the St. Rose Parkway in Clark County.

TEA–21 changes allow funding for administrative costs of Federal land management agencies in connection with public lands highways and costs of Federal land management agencies to conduct necessary transportation planning for Federal lands, where funding for the planning is not provided by other FLHP categories. Be-

tween \$4–6 million per year have been allocated to Federal agencies under these provisions.

INDIAN RESERVATION ROAD PROGRAM (IRR)

TEA–21 reaffirmed the Federal Government's commitment to providing safe and efficient access to and within Tribal lands by authorizing \$1.6 billion in IRR funding for fiscal years 1998–2003. Since the enactment of TEA–21, the IRR program has provided funding to construct or improve 2,000 miles of roads and 51 bridges. TEA–21 also strengthened the commitment of the Federal Government to increasing the involvement of Tribal governments in transportation programming and planning.

As part of the TEA–21 requirements to develop transportation planning procedures, the FHWA and the Bureau of Indian Affairs (BIA), in consultation with the Tribal governments, developed the AIndian Reservation Roads Program Transportation Planning Procedures and Guidelines,

which is now available as interim guidance for transportation planning. FHWA conducted training on these planning procedures in cooperation with the BIA and Tribal Technical Assistance Program Centers.

Other actions taken, as a part of our TEA–21 implementation efforts to improve transportation for Tribal lands while increasing Tribal involvement in the process, include FHWA's renewal of four Tribal Technical Assistance Program centers and establishment of three new ones to serve Tribes in Oklahoma, California, and Alaska. Also, the BIA established a self-governance pilot program wherein two self-governance Tribes receive IRR funds as part of their annual funding agreements.

One noteworthy project under the IRR program, also using PLHD funding, is the Walden Point Road Project for the Metlakatla Indian Community of Alaska. The project illustrates the diversity of the IRR program and successful program delivery through joint agency and Tribal efforts. The proposed 14-mile project will provide a safe and convenient transportation link between Metlakatla and the Ketchikan road system. The roadway will also tie into the Alaska DOT's marine highway system via a planned ferry terminal facility at Annette Bay, the northern terminus of the Walden Point Road. Upon completion, this project will be part of a multi-modal transportation system that will replace a restricted travel service with a regular and safer commuter service. The FHWA's Western Federal Lands Division has led delivery of this project with partners including the United States Pacific Command, the United States Alaskan Command, the Alaska Department of Transportation and Public Facilities, the Metlakatla Indian Community, the Alaska National Guard, and the BIA. The project has showcased the feasibility, benefits, and success of utilizing US-based training opportunities for the Department of Defense's Innovative Readiness Training Program. The project will also improve the quality of life for the Metlakatla Indian Community by providing safe, convenient, and efficient multi-modal transportation linkage between Metlakatla and the Ketchikan road system.

Negotiated Rulemaking

TEA–21 directed the Secretary of the Interior to develop an Indian Reservation Roads fund distribution formula and program procedures, using negotiated rulemaking with Tribal governments. We understand that final review and coordination of the Department of the Interior proposed rule has been completed and it will be published shortly in the Federal Register.

A committee consisting of 29 Tribal representatives, 10 Department of Interior representatives, and 3 FHWA representatives met between March 1999 and December 2001. Considerable time was spent in agreeing on one IRR funding distribution formula. Some major unresolved issues remain, and will be discussed in the preamble of the notice of proposed rulemaking. These include: use of IRR administrative funds; delegation of plans, specifications, and estimates (PS&E) approval to Tribes; process of obtaining IRR eligibility determinations; content of annual funding agreement; contract support costs; profits/savings; advance payments; and procedure for Tribes applying for emergency relief for federally owned roads (ERFO) funds and ERFO eligibility determinations.

Federal and Tribal committee members will be conducting 12 informational meetings on the proposed program procedures and fund distribution formula during the 60-day comment period. After the comment period, the committee plans to meet, evaluate comments, and draft the final program procedures and fund distribution formula.

Indian Reservation Roads Bridge Program (IRRBP)

TEA–21 directed the Secretary of Transportation, in cooperation with the Secretary of the Interior, to establish a nationwide Priority Program for improving or

replacing deficient Indian Reservation Road bridges, using a set-aside of not less than \$13 million of IRR funds per year.

After soliciting comments on project selection and fund allocation procedures, through meetings with Tribal representatives and a Federal Register Notice, the FHWA developed guidance for the Bridge Program that was published as an Interim Final Rule in July 1999. We followed up with training sessions on the Bridge Program and are working with the BIA and Tribal governments to maximize the number of bridges participating in the IRRBP.

To date, \$27.6 million has been obligated for 51 bridge projects. Based on BIA plans, we expect to obligate an additional \$18.3 million for another 40 bridge projects. Some of the supplemental IRR funds provided in fiscal years 2001 were allocated to Tribes and BIA regional offices to prepare plans for replacing deficient bridges. We anticipate that proposed projects for fiscal year 2003 will fully utilize the remaining IRR bridge funds set-aside by TEA-21.

Tribal Government Involvement in the Federal-Aid Highway Program

Additional opportunities exist for Tribal governments to participate in the Federal-aid highway program as well as the IRR program. Tribes can use IRR planning funds to participate in metropolitan and statewide planning procedures for the Federal-aid program. TEA-21 requires States to consult with Tribal governments in development of the long-range transportation plan and the State Transportation Improvement Program.

FHWA Federal-aid division offices have consulted with Tribal governments on overall FHWA programs, National Environmental Policy Act (NEPA), and historic preservation. In some States, Tribal/State Transportation summits and workshops have been held with the objective of improving intergovernmental relations and increasing Tribal governments' capacity to manage transportation projects and programs.

PARK ROAD AND PARKWAYS PROGRAM

The Park Roads and Parkways (PRP) program provides funding for the planning, design, construction, or reconstruction of designated public roads that provide access to or within national parks, recreation areas, historic areas, and other units of the National Park Service. TEA-21 made available \$115 million in 1998 and \$165 million per fiscal year for 1999-2003 for project funding under the PRP Program.

FHWA and the NPS jointly administer the program and share project development responsibilities. FHWA undertakes a majority of the design, construction, and oversight work, while the NPS develops a priority program of projects and is responsible for planning, environment, and protection of NPS values.

Projects funded under TEA-21 through 2002 include \$38 million at Lake Mead National Recreation Area, \$44.2 million in construction on Yellowstone National Park roads, and \$7 million on Glacier National Park roads.

Since the enactment of TEA-21, the NPS and FHWA have completed three out of six congressionally mandated parkway completion projects. The completed projects are the George Washington Memorial Parkway, Cumberland Gap National Historic Park Tunnel, and the Chickamauga-Chattanooga Route 27 Bypass in Georgia. In addition, the Baltimore-Washington Parkway is almost 99 percent complete.

The Alternative Transportation Program under the PRP program integrates all modes of travel within a park including transit, bicycle, pedestrian linkages, and automobiles. The PRP program has invested approximately \$22 million in five alternative transportation pilot projects in Acadia National Park, Golden Gate National Recreation Area, Grand Canyon National Park, Yosemite National Park, and Zion National Park.

The NPS and FHWA have also conducted Transportation Planning Seminars throughout the country and produced The National Park Service Transportation Planning Guidebook.

REFUGE ROADS PROGRAM

Refuge Roads is a new category established in the FLHP under TEA-21, with authorizations of \$20 million a year for fiscal years 1999 through 2003. The program funds maintenance and improvement of public roads that provide access to or within a unit of the National Wildlife Refuge System.

The program is co-administered by FHWA and the U.S. Department of Interior, Fish and Wildlife Service (FWS). FHWA and the FWS signed a memorandum of agreement, and together have developed program procedures and a fund distribution methodology, selected projects, and developed transportation improvement programs.

Funds are to be allocated according to the relative needs of the various refuges in the National Wildlife Refuge System. The formula for distributing the funding between the FWS Regions is based on four attributes of a Regional refuge road network: road inventory, roadway condition, traffic volumes, and traffic accident rates. In Nevada, projects are complete or underway in National Wildlife Refuges including Desert, Pahrnagat/Ash Meadows, Ruby Lake, and Stillwater, to improve public access and enjoyment at these sites.

During fiscal years 2000 and 2001, the FHWA conducted a condition inventory of all refuge roads. The FWS regions use the condition information during project selection and for assessing future funding needs.

ADDITIONAL TEA-21 FLHP PROVISIONS

Federal Management Systems Regulation. TEA-21 requires the Secretary of Transportation and the Secretary of each appropriate Federal land management agency to develop safety, bridge, pavement and congestion management systems for roads funded under the FLHP.

The FHWA issued four Advance Notices of Public Rulemaking (ANPRM) in September 1999, one for each of the four Federal land management agencies (NPS, FS, BIA, FWS). In each of these four ANPRMs, the FHWA and the appropriate agencies solicited public comment on developing a rule to meet both transportation planning and management system issues. However, FHWA has decided to issue an NPRM addressing only the management systems and will address the transportation planning procedures at a later date. The NPRM is being prepared for publication later this year. The resulting management systems will serve to guide the agencies and Indian Tribes in making project selection and resource allocation decisions.

Study of Alternative Transportation Needs in National Parks and Related Public Lands

In section 3039, TEA-21 directed the Secretary of Transportation, in coordination with the Secretary of the Interior, to undertake a comprehensive study of alternative transportation needs in national parks and related public lands managed by the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service. During the study, alternative transportation system needs were examined at 207 sites having likely transit needs over the next 20 years. Transit needs were identified at 118 of 169 NPS sites, 6 of 15 BLM sites, and 13 of 23 FWS sites. A summary report of the section 3039 Study was transmitted to Congress in November 2001.

After completion of the section 3039 study, the NPS, in consultation with its stakeholders, developed a 5-year Alternate Transportation Plan aimed at improving existing alternative transportation systems and increasing the number of parks that are served by such systems. FLHP is currently working with the other Federal land management agencies to address their similar needs.

The NPS, in cooperation with the gateway community of Springdale, Utah, has implemented a significant transit project at Zion National Park. Park patrons utilize a shuttle bus system from a number of stops in Springdale, or from various points of interest in the Park, as the only means of access on Canyon Scenic Drive during the peak season. Since the new system was implemented, wildlife has returned to the canyon and noise levels have been reduced.

Hoover Dam Bridge

TEA-21 made construction of a project to replace the Hoover Dam Bridge specifically eligible for FLHP funding and, since the enactment of TEA-21, \$86 million has been allocated toward the construction of this project.

The FHWA Central Federal Lands Highway Division is the lead agency for delivery of the Hoover Dam Bypass Project located on US 93 at the Nevada/Arizona border. U.S. Highway 93, a segment of the CANAMEX Corridor, is a designated NAFTA route between Mexico and Canada. The project addresses increases in traffic and the unsafe mix of pedestrians, cars, and trucks, that result in traffic gridlock, high accident rates, and potential for a catastrophic accident. The NEPA process was concluded in late March 2001 with selection of the Sugarloaf Mountain Alternative. This alternative will remove trucks and other through-traffic from the crest of Hoover Dam. This project is a model of cooperative effort between two States and multiple Federal agencies to solve a transportation safety and congestion problem at the Hoover Dam site.

The Sugarloaf Mountain Alternative includes a 2,000 foot-long bridge located 1,700 feet downstream and rising 250 feet above the Hoover Dam. This alternative also includes 3.5 miles of 4-lane roadway construction in extremely rugged terrain.

Construction is scheduled to begin in late 2002. At this time, four individual construction projects are planned in the following order: Arizona approach, Nevada approach, Colorado River Bridge, and final surfacing. The project delivery plan is flexible yet provides a structured approach to expenditure of sequential funds. Construction is anticipated to last 5 years with completion in 2007.

CONCLUSION

Overall, the Federal Lands Highway Program is working well in supporting our nation's economy and improving the quality of life for all of our citizens. But the Federal Lands Highway system faces increasing demands from tourist traffic and resource development. The challenges facing us are to maintain and improve our transportation systems serving Federal and Tribal lands, in order to provide safe and sufficient transportation for residents and access for visitor enjoyment, while protecting the environmentally sensitive lands and cultural resources. Innovative and creative solutions will be required to address these challenges and must involve all Federal, Tribal, State, and local stakeholders.

I look forward to continue working with Congress and our partners during the reauthorization of the surface transportation programs to find solutions for improved mobility and safety to and within Federal and Tribal lands. Mr. Chairman, I again thank you for the opportunity to testify today. I will be pleased to answer any questions you may have.

STATEMENT OF TOM STEPHENS, DIRECTOR, NEVADA DEPARTMENT OF TRANSPORTATION

Mr. Chairman and members of the committee, my name is Tom Stephens. For the past 7 years I have been the Director of the Nevada Department of Transportation and I am here to testify today on behalf of the State of Nevada. I just completed a term as the President of the Western Association of State Highway and Transportation Officials (WASHTO) and will testify on the Western Governor's Association (WGA) policy statement on reauthorization of TEA-21 which I helped coordinate. I am also on the Executive Committee of the American Association of State Highway and Transportation Officials and worked closely with them on the reauthorization of ISTEA as well as in formulation of their position on the reauthorization of TEA-21.

I want to thank you for this opportunity to testify to you again on a matter of great importance to the Nation and to the State of Nevada. I want to commend you for seeking a western perspective on the issues involved in the reauthorization of TEA-21. One size does not fit all and the west is considerably different than the rest of the country.

I especially want to thank Senator Reid for his leadership on highway issues. His work has not only benefited Nevada, but also the Nation as a whole.

While Nevada faces many of the same transportation issues as other States it is also unique in a number of ways. Nevada is and has been the nation's fastest growing State for many, many years. With a growth rate of 66 percent in the past decade it is far ahead of second place Arizona, which is at 40 percent, and Colorado, Utah and Idaho, which complete the top five growth States at around 30 percent. (See attached U.S. map showing percentage growth of the States from 1990-2000.) Like many of our neighbors in the west, Nevada has a high percentage of federally owned lands. In fact, with 87 percent of our State federally owned, Nevada has the highest percentage of Federal land ownership. These lands, which are not on the tax rolls, must be accessed and crossed with the highway system. (See attached maps of Federal Land Ownership in Nevada and the continental U. S.)

Nevadans recognize the tremendous national and State need for a good transportation system and the costs this need creates. The State Transportation Board is chaired by the Governor and has three other statewide elected officials (Lt. Governor, Attorney General and State Controller) as well as three appointed members. No other State has its Governor as a member of its transportation board. Local and State fuel taxes are high compared to most States, vehicle registration taxes are high, and there is menu of local taxes collected to support transportation projects (e.g. taxes on new homes and commercial development, hotel room taxes, vehicle registration taxes, sales taxes and jet fuel taxes). I doubt that any other State has the level of support that Nevada provides to transportation from in-state taxes. However, this is not enough to meet the increasing needs and we need an increase in the Federal funding to match the growth of the State.

Today my remarks will emphasize the highway needs in Northern Nevada. The issues are preservation, safety and congestion. We must maintain the system, which

is deteriorating with age and greatly increased truck loading at the same time we address the congestion issues in the urban areas created by the tremendous population increase. Most of the heavy trucking is on the interstate and most of the interstate mileage is in Northern Nevada. (i.e. 411 miles on I-80 versus 124 miles on I-15) Safety is a big issue that we address through better maintenance and reducing congestion as well as addressing high hazard areas. Highway fatalities are up 20 percent this year over last year and this will translate in 60 more deaths on Nevada highways this year as compared to last. Some do not consider that Northern Nevada is growing very fast compared to Southern Nevada and therefore congestion issues in the North should not receive any priority. If Nevada were divided into two States, one being Clark County in Southern Nevada (an area the size of the State of Massachusetts) and the rest of Nevada (an area larger than Wyoming with 25 percent more people), then Clark County would still be the fastest growing State at an 85 percent growth rate, Arizona would be second at 40 percent and Northern Nevada would be third at 35 percent. Obviously we cannot ignore the growth driven needs of Northern Nevada.

MAINTENANCE

Although congestion in the nation's fastest growing State seemingly gets most of our attention, we must still spend more than half of our construction dollars on preserving the existing State highway system. If allowed to deteriorate, it would cost much more to bring the State highway system back to good condition than it costs to keep it that way through timely projects identified by an excellent maintenance management system. The importance economically of a good transportation system cannot be emphasized enough.

Of special concern is the idea being floated in a few large States that the Federal fuel tax dollars collected in those States should be returned 100 percent to those States. This would seriously undermine the national highway system. For example, in Nevada the four-lane Interstate 80 across the northern part of the State has continued to meet the needs of rural growth without much expansion, but the tremendous increase in truck traffic due to the growth of California and the change in distribution of products from a regional warehousing to "just-in-time" delivery has created tremendous maintenance needs which have not been fully met by Federal funding. If the Federal funding is further reduced, "bridge" States like Nevada will not be able to maintain the interstate systems and national commerce will be severely adversely affected.

In 1996, I spoke to a group of local and State transportation officials in Sacramento who were advocating that California keep all the Federal revenue collected in their State. It happened to be the 150th anniversary of the Donner Party and I pointed out to this audience that the reason the Donner party got in trouble was because there were no good roads across Nevada and that the same thing would happen to California's economy today if they cutoff the funding for interstate maintenance across Nevada.

FREEWAY NEEDS IN THE RENO-CARSON URBAN AREA

In the past thirty years since Interstate 80 was finished through Reno, the population of the Reno-Carson area has tripled to more than 400,000 people. Over those years the primary NDOT freeway project has been to bring U.S. 395 up to freeway standards from the north California State line to the junction with U.S. 50 south of Carson City. When completed, Carson City will be one of the last State capitals to be put on the interstate system.

The 8.5 miles between the Mount Rose Road and the Bowers Mansion Road is the last remaining unfinished freeway segment between Reno and Carson City. The construction of the bridges for this challenging project is scheduled to go to out to bid early next year with the roadway to be constructed after the bridges are complete. The entire project is expected to take four to 5 years. The nine mile long freeway bypass around Carson City has had bridges constructed for the northern segment with the roadway work for Phase I scheduled to go out to bid late this year absent any delays due to right-of-way issues. The remaining five miles of the southern portion of this route just started design and is projected to be built by the end of the decade.

Meanwhile I-80 in Reno has aged and traffic has increased beyond original design capacity. We broke ground today for the \$53 million rejuvenation of the Reno Spaghetti Bowl (i.e. interchange of I-80 and U.S. 395), which will replace aging pavements, seismic retrofit the bridges to current standards, and widen some bridges and ramps to improve safety and smooth traffic flow.

However, the mainline freeways in Reno and Sparks are approaching maximum capacity and projects will have to be launched over the next 10 years to widen I-80 from McCarran east to Vista and from Keystone west to Robb Drive as well as to widen U.S. 395 north of McCarran to Lemmon Drive and sections south of the Spaghetti Bowl to Delmonico.

RURAL TWO LANE HIGHWAY WIDENING

Rural two-lane highways are an item of special concern in a growing State. Head-on accidents, which almost always have one vehicle with no fault, are especially troublesome.

In southern Nevada, NDOT has been able to add lanes to SR 163 between US 95 and Laughlin and on SR 160 between Las Vegas and Pahrump. We are currently out to bid on the first phase of widening US 95 to four lanes between US 93 and SR 163 with a bid opening date of August 15. These projects are not cheap. The 18 miles of the US 95 widening now out to bid are estimated to cost \$20.7 million or more than a million dollars a mile. With the growth of the State and the competition for funds from the urban areas, none of these rural two-lane highways could have been widened without additional Federal funding.

We have a similar need to widen two-lane highways in Northern Nevada. The two most pressing needs are to widen 21 miles of two-lane highway on US 50 Alternate between Fernley and Fallon and 21 miles of two-lane US 50 between Dayton and Silver Springs.

The traffic on the Fernley to Fallon highway has greatly increased as a result of expanded Federal operations at the Fallon Naval Air Station. In October and November of 2000 there were five fatalities on the Fernley to Fallon highway. There were ten fatalities on this road in the previous 4 years to make the average three a year over the 5-year period, a very high rate. Although we have taken interim measures, which held the death count to two in the last year and a half, the permanent solution is to widen the highway. The first four-mile phase of this highway widening is now out to bid with a construction cost estimate of \$12.2 million. However, the remaining 17 miles of needed widening, estimated to cost nearly \$20 million, remains unfunded. Widening the first 6 miles between Dayton and Silver Springs is in design with a project cost of \$7 million for construction in 2005. The remaining 15 miles of widening remains unfunded.

ENVIRONMENTAL PROTECTION OF LAKE TAHOE

Five years ago Senator Reid led the effort to bring national attention to the continuing degradation of water quality in Lake Tahoe. President Clinton and Vice President Gore as well as other high administration officials visited the Lake and commitments were made.

The runoff of both soil matter and road material from the highways around the lake contributes to the degradation of the water quality in Lake Tahoe. With over 39 miles of highway running along the west side of Lake Tahoe, erosion control and run-off treatment has been a major challenge for NDOT. Although we did an early project in 1996, our efforts to protect Lake Tahoe were energized by the conferences in 1997. Thus far, Nevada DOT has spent nearly \$36 million on 12 miles of road. This year \$4 million is being spent on a mile of road. This still leaves 26 miles of roadwork at a cost more than \$80 million. The roads around the California side of Lake Tahoe also have a lot of protection work yet to be done. Funding of this effort is a major issue in both States. Lake Tahoe is a national treasure and deserving of continuing national attention.

WESTERN GOVERNORS ASSOCIATION POSITION ON REAUTHORIZATION

As President of the 18-State Western Association of State Highway and Transportation Officials, I helped coordinate the drafting of the Governors' Policy Statement for the Western Governors Association entitled: "Policy Resolution 02-16: Reauthorization of the Transportation Equity Act for the 21st Century" passed at WGA's annual meeting in Phoenix, Arizona, on June 25, 2002. (Please see attached copy.) The Policy Statement makes recommendations in nine areas summarized as follows:

1. Continuation of TEA-21 Programs

- Although TEA-21 programs are meeting their legislative objectives, there needs to be refinement of the programs to better address specific issues, deficiencies and inequities.
- There is a need to increase revenues to assure dollars are available to meet legislative commitments.

- Ensure that all taxes paid by the users are deposited in the fund and especially address the gasohol issues.
- Retain the firewalls and address current flaws in the RABA mechanism so that revenues are predictable.
- Provide greater flexibility in transferring funds among program categories and do not create any new set-asides or sub allocations.

2. *Environmental Streamlining Process*

- The Governors urge Congress to look at examples of best practices various States have used to improve the TEA-21 environmental review process.
- Federal resource agencies should be directed to define timeframes necessary to conduct environmental reviews.
- There should be a one-stop permitting process for Section 4(f) and 106 reviews.
- There should be a defined dispute resolution process to resolve disputes between the States and Federal resource agencies.
- In the environmental review process the points where judicial challenges are appropriate should be clarified to reduce the continual use of such challenges as a measure to extend both the time and scope of the process.
- Level the playing field for the project environmental review process for projects that include multiple modes.
- While the Governors support the use of higher gas mileage cars, hybrid cars and other energy efficient and environmentally protective technologies, the impact on the transportation funding mechanism (e.g. fuel tax collections) should be studied to ensure TEA-21 programs are fully funded.
- While Governors support the sovereign status of tribes, there are concerns about the loss of revenues from the establishment of service stations on tribal lands and we request Federal assistance in developing a fair tax collection process through an equitable settlement negotiations process.

3. *State-MPO Planning Process*

While the Governor's support the cooperative process between the State transportation agency and the metropolitan planning organizations, they urge Congress to look at the excellent examples of how well the process is working to clarify any misconceptions.

4. *Security*

Congress is requested to provide guidance for performing critically and vulnerability assessments of the surface transportation system and guidance for identifying and protecting critical elements. Funding issues from non-transportation sources should also be addressed.

5. *Intelligent Transportation Systems*

The Governors are concerned that innovative ITS technologies developed by the Federal Government are not being deployed in a timely manner. They also urge Congress to identify selected multi-State highway corridors on which to deploy its systems.

6. *Federal Lands Roads*

Public Lands Highways Funds should be allocated to areas of greatest need and to States with the largest amount of public lands acreage.

7. *Discretionary Programs*

In relation to earmarking funds for projects, criteria should be established to address the ability of the project sponsors to meet program, design, timing and contracting standards.

8. *Border Crossings and Trade Corridor Programs*

- Congress is asked to restate its original objective for the trade corridor program in support of NAFTA and to give priority to multi-State projects that facilitate bi-national trade.
- A reformed trade corridor program should be adequately funded.
- Congress should urge the Departments of Transportation, Justice, and Commerce to coordinate their activities to improve the movement of commerce.

9. *Modal Integration*

In planning and constructing multi and inter-modal projects, the procurement and management requirements imposed by Congress and USDOT must be more uniform.

In conclusion, while I am urging that Nevada's Federal funding be increased to meet our growth and that certain provisions of TEA-21 be refined as part of the

reauthorization, I would like to reiterate that TEA-21 has been very good for Nevada. Thank you again for the opportunity to testify on this important issue.

POLICY RESOLUTION 02-16 REAUTHORIZATION OF THE TRANSPORTATION EQUITY ACT
FOR THE 21ST CENTURY (TEA-21) ANNUAL MEETING JUNE 25, 2002 PHOENIX, ARIZONA

SPONSORS: GOVERNORS KEMPTHORNE AND HULL

A. Background

1. In 1998, Congress enacted Public Law 105-178, the Transportation Equity Act for the 21st Century (TEA-21) which authorized the Federal surface transportation programs for highways, highway safety, and transit for 6 years (1998-2003). The Act increased funding levels for highway and transit programs, provided more program flexibility, promised environmental review streamlining and heightened expectations for greater efficiencies in transportation program delivery.

2. Western transportation leaders met in Tempe, Arizona in April 2002 as a working group of the Western Governors' Association, charged to assist the Governors develop a Western position on the reauthorization of the Federal highway and transit programs. The participants agreed that the TEA-21 programs were working and require only minor changes to address specific issues. The working group's recommendations were transmitted to the Western Governors for their adoption and are presented in this policy resolution.

3. The Western Association of State Highway and Transportation Officials (WASHTO) and the American Association of State Highway and Transportation Officials (AASHTO) also recommend that Congress approach the reauthorization of TEA-21 as a continuation of the evolutionary process in surface transportation programming started by the ISTEA and TEA-21 acts.

4. The Western Governors lead the Nation in calling on Congress to restore fiscal year 2003 funding to the maximum amount that can be sustained by the Highway Trust Fund. Due to poor forecasting methods and revenue accounting, funding to the States for fiscal year 2003 would have been reduced by \$9 billion, even though the Highway Trust Fund has a cash balance of more than \$19 billion. The loss of these funds to States would cause major disruptions in transportation programs for the West and the Nation.

5. One strength of TEA-21 has been the predictability of funding levels for Federal and State surface transportation programs. This cornerstone of the Federal surface transportation program is being weakened by decreased revenue collections in the Highway Trust Fund due to the downturn in the economy and to greater use of alternative fuels that are taxed at a lower rate or not taxed at all.

The Federal Highway Administrator has requested a study of the effects these changes in national policy are having on the ability of the Nation to continue to pay for its transportation infrastructure. Additionally, the Administrator has requested that options be identified for both making changes in the current system of depositing some highway user fee revenues into the general fund, and for implementing new or more stable funding mechanisms.

6. Safety is a primary focus of all the surface transportation programs. The Governors continue to believe that the number of deaths, injuries, and property damage which occurring annually on the Western transportation systems is unacceptable and support improving safety through better engineering, enhanced enforcement and more education. The Governors do not believe in one size fits all and that Federal mandates enforced by funding sanctions is not in the best interest of achieving the safety objective, since they prevent States from addressing their highest priorities.

7. The growth in trade through our ports and bi-national border crossings has placed significant pressure on the surface transportation infrastructure supporting the movement of people and goods. This is true especially along north/south corridors between Canada and Mexico. As a result, Western States are increasingly forced to commit local funding to alleviate congestion, maintenance and safety issues that meet national needs. Meeting the needs of bi-national border infrastructure, international port access, and interstate goods movement corridors is complex process, requiring the involvement of multiple Federal, State and provincial authorities, including the U.S. Department of Justice, Treasury, Transportation and Commerce. However, States that are meeting these national needs are doing so by diverting funds from local mobility and safety concerns to meet these national needs.

8. Funding to maintain highways on Federal lands under the Federal Public Lands Highway program is not being targeted to the areas of highest need. Public

lands highways serve as the gateway to the nation's National Forests, National Parks and National Monuments. Although only 6 percent of all public lands are located outside of the West, for the past 4 years between 25–35 percent of the Public Lands Highway funding has been directed to projects in other regions. This is due in part to Congress earmarking funds to local projects, 66 percent in FY1999, 55 percent in FY2000 and 100 percent in FY2001. At the same time the condition of these highways and roads in the West continue to deteriorate, forcing Federal land agencies to close greater numbers of miles and recreation areas to the public each year.

9. Federal Highway Trust Fund revenues are being negatively impacted by the growth in the number of motor fuel and vehicle sales establishments on federally recognized tribal reservations. These establishments are exempt and in some States are prohibited from collecting State and Federal fuel and vehicle taxes. The Governors support the continued actions to improve the economic independence of Native Americans, but also find the potential of tax avoidance is hindering the funding of the transportation infrastructure necessary to support national, tribal and State economies.

B. Governors' Policy Statement

Continuation of TEA-21 Programs

1. The Governors find that TEA-21 programs are meeting their legislative objectives, but there needs to be refinement of the programs to better address specific issues, deficiencies and inequities. Therefore, Congress is urged to approach the reauthorization of the TEA-21 legislation as an evolutionary process and to build on the TEA-21 programs.

2. The Governors urge Congress to address both the need to increase revenues to the Highway Trust Fund and to make the process of distributing funds to the States from the Trust Fund more predictable. Congress is encouraged to:

a. Review the current sources of revenue to ensure that all the taxes paid by the users are deposited to the fund, such as retaining the taxes collected on gasoline which currently go into the General Fund, and holding the highway trust fund harmless from tax incentives for ethanol.

b. Increase the amount of revenues to the Highway Trust Fund to assure the dollars are available to meet the legislative commitments.

c. Retain the firewalls and funding guarantees for the highway and transit programs as established in TEA-21.

d. Refine the current Revenue Aligned Budget Authority (RABA) mechanism to address the current flaws that cause the funding to the States to fluctuate radically between fiscal years.

e. Address the need for greater flexibility in transferring funds among and between major program categories thereby allowing States to address their highest priorities.

f. Create no new set-asides or suballocations which prevent States from directing Federal Highway funds to their greatest needs

Environmental Process Streamlining

3. The Governors fully support the goal of protecting the environment, and the health and safety of the public. The Governors believe that the States have developed some exemplary practices in the area of environmental review and believe that Congress should look to these examples for best practices to improve the TEA-21 project environmental review process. The Western Governors have identified similar best practices for the natural resource programs through their Enlibra Program. The Governors recommend that a similar approach be used for transportation.

4. The Governors urge Congress to refine the current project environmental review process to reduce the delays, timeframe and unpredictability of the current process. Specifically, Congress is urged to:

a. Authorize the Secretary of Transportation to certify State project environmental review processes as being equivalent to that of the U.S. Department of Transportation. In doing such, the Secretary would delegate the review process to the certified States subject to oversight by the Department.

b. Charge the Secretary of Transportation to establish the tests and standards that must be met by the States in seeking the environmental review certification and delegation authority.

c. Direct the Secretary to work with the States and Federal resource agencies to define applicable guidance for the project environmental review process.

d. Direct the Federal resource agencies to define the timeframes necessary to conduct project environmental reviews and to refine the mitigation negotiation process to allow for accountability and predictability in the system. Congress is

urged to provide these agencies with the funding necessary to fully staff the environmental reviews in a timely manner.

e. Direct the Secretary to work with his counterpart agencies to establish a one-stop permitting process for Sections 4(f) and 106 processes or to combine the overlapping portions into one regulation.

f. Authorize the Secretary of Transportation to establish a defined dispute resolution process that may be led or chaired by the Secretary of US DOT to resolve disputes between the State transportation agencies and Federal resource agencies.

g. Clarify the points in the project environmental review process where judicial challenges are appropriate in order to bring predictability to the review process, rather than the continual use of such challenges as a measure to extend both the time and scope of the review process.

5. Congress is urged to level the playing field for the project environmental review processes for projects that include multiple modes. Currently, there are differing processes and criteria for conducting the environmental reviews for each mode of transportation, transit, highways and railroads. This creates both difficult and conflicting procedures for the reviews and offers additional points for challenging the decisions.

6. Governors support the use higher gas mileage cars, hybrid cars, and other technologies for improving energy efficiencies and protecting the environment. At the same time, there is an increasing demand for an efficient transportation system that requires that revenues collected from the system users be sufficient to fund the necessary improvements. The Secretary has requested that a study be conducted to examine the funding mechanisms to ensure that the transportation system and TEA-21 programs are fully funded.

7. Governors support the sovereign status of tribes and their ability to establish self-sustaining economies. One negative impact of the tribes establishing businesses, such as service stations, bulk fuel sales and vehicle sales agencies on federally recognized tribal lands has been the reduction in transportation revenues to the Federal and State highway trust funds. Both tribal members and State residents demand efficient transportation systems to support their economic needs. The Governors urge Congress to look to the best practices of the States and to the Federal Highway Administrator's study on revenue to assist in developing a fair tax collection process through an equitable settlement negotiations process, possibly using the Western water rights settlement process as a model.

State—MPO Planning Process

8. Governors support a cooperative process between the States' transportation agencies and the metropolitan planning organization (MPO). The Governor's also support the consultative planning process between the States' transportation agencies and its local governments. There are several excellent examples of how the State-MPO planning and review process can work effectively and Congress should request from the Secretary a summary of best practices in order to clarify the current misconceptions in the process.

Security

9. Congress is urged to provide guidance related to the roles and responsibilities of the Office of Homeland Security, Departments of Transportation, Justice, Commerce and Defense, and the States and local units of government in providing for the security of the nation's transportation systems. In providing such guidance Congress is requested to address the following:

a. Guidance for performing criticality and vulnerability assessments of the surface transportation systems. Such standards have been defined for the nation's aviation system.

b. Guidance for identifying and protecting critical elements of the surface transportation system which support interstate commerce, information exchange, and the movement of critical military and emergency response resources.

10. In defining the roles and responsibilities, Congress must address the issues related to funding for these activities and resulting improvements to the surface transportation systems. Security of the transportation system is such a broad and potentially costly issue that it is best funded from all appropriate resources, including non-transportation related sources. Congress also needs to make it clear that all agencies of the Federal Government must coordinate their activities in order for there to be an effective response to terrorism.

Intelligent Transportation Systems

11. The Governors recognize the important role that ITS can play in the operation and management of all surface transportation systems. The Federal Government has invested significant amounts of money into the development of innovative tech-

nologies, but they are not being deployed onto the highway system in a timely manner. The Governors urge Congress to adjust the program priorities to address the deployment of these systems and, where appropriate, integrating them across different components of the surface transportation system in order to achieve the maximum utilization of this investment.

12. Congress is urged to direct the U.S. Department of Transportation to work with the Western States and the Western Association of State Highway and Transportation Officials to identify selected multi-State highway corridors on which to deploy ITS systems in an effort refine the tools and institutional mechanisms needed to create a national network operations system.

Federal Lands Roads

13. The Governors urge Congress and the U.S. Department of Transportation to ensure that funds under the Public Lands Highway program are allocated to areas of greatest need and to States with the largest amounts of public land acreage. No new program categories or set-asides should be created within the Federal Lands Highways Program.

Discretionary Programs

14. The Congress has employed the earmarking privilege to fund specific transportation projects under the highway discretionary program. The value of these projects toward improving the transportation system, technology and system operation may be appropriate, but the use of this process has significantly reduced or consumed the entire funding available to some programs. Congress, in reauthorizing TEA-21, should review the process by which these projects are designated and criteria established for determining the ability of project sponsors to implement the projects. The criteria should address the ability of the project sponsors to meet program, design, timing and contracting standards. Second, Congress is encouraged to address the issue of excessive ear marking in certain programs, i.e. Public Lands Highways and the Trade Corridor programs.

Border Crossing and Trade Corridor Programs

15. The Governors believe that Congress must restate its original objective of establishing a trade corridor program in support of the North American Free Trade Agreement (NAFTA) and reform that program to facilitate the movement of goods, services and people between the United States, Mexico and Canada. Congress is encouraged to give priority to those multi-State projects that facilitate bi-national trade.

16. Congress must also address the need to adequately fund a reformed trade corridor program and directing funding to corridors that support NAFTA objectives and international trade.

17. Congress is urged to direct the U.S. Departments of Transportation, Justice, and Commerce to establish a process for coordinating their activities to improve the movement of commerce through the northern and southern ports-of-entry. The Co-ordinated Border Infrastructure Discretionary Program was established to fund border enhancement projects. But transportation infrastructure is not the only solution to capacity problems. With the increased emphases on national security Congress needs to provide guidance for coordinating the response to these needs and balance the sources of funding for improvements.

Modal Integration

18. In planning and constructing multi and inter-modal projects, the procurement and management requirements imposed by Congress and U.S. Department of Transportation must be made more uniform. The Governors urge both Congress and the Secretary of Transportation to work collaboratively with the States to identify where these processes can be made more simplified and uniform thereby reducing the cost and time to complete these projects. Examples of best practices should be used in defining these processes, i.e. the Alameda Corridor in California.

C. Governors' Management Directives

1. WGA is to transmit this resolution to the Secretary of Transportation, the Western congressional delegation, the transportation and appropriation committees of Congress, and to WASHTO and AASHTO.

2. The Governors request WASHTO to monitor the reauthorization of the Federal surface transportation programs and to report on congressional actions.

This resolution was originally adopted in 1999 as WGA Resolution 99-017.

Approval of a WGA resolution requires an affirmative vote of two-thirds of the Board of the Directors present at the meeting. Dissenting votes, if any, are indicated in the resolution. The Board of Directors is comprised of the Governors of

Alaska, American Samoa, Arizona, California, Colorado, Guam, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Northern Mariana Islands, Oregon, South Dakota, Texas, Utah, Washington and Wyoming.

All policy resolutions are posted on the WGA Web site (www.westgov.org) or you may request a copy by writing or calling:

STATEMENT OF GREG KRAUSE, EXECUTIVE DIRECTOR, WASHOE COUNTY, NEVADA, ON BEHALF OF THE REGIONAL TRANSPORTATION COMMISSION

My name is Greg Krause, Executive Director of the Regional Transportation Commission of Washoe County. I appreciate the opportunity to speak with you today regarding Western Transportation Issues and the reauthorization of the Transportation Equity Act of the 21st Century.

The RTC serves the cities of Reno and Sparks as well as the unincorporated area of Washoe County. Our agency has three main businesses: long range transportation planning as the designated Metropolitan Planning Organization, provision of public transportation services, and construction and repair of the regional roads. With this fairly unique combination of both planning and implementation of all modes of surface transportation for our community, I offer the follow comments regarding transportation needs in our community and reauthorization of the Transportation Equity Act for the 21st Century:

Before I address the future transportation needs of Washoe County, I would like to acknowledge the leadership that this committee has displayed in developing national transportation legislation, resulting in major improvements in the capacity, quality and efficiency of the system. I would also like to acknowledge Senator Reid for his leadership and commitment to helping Nevada meet the transportation needs of a growing population in Washoe County. He has specifically helped Washoe County obtain funding for an Intelligent Transportation System and 17 replacement vehicles for Citifare and CitiLift, and major funding for the new transit centers in Downtown Reno and Sparks, including over \$14 million in discretionary Federal transit funds in the last 3 years.

TRANSPORTATION NEEDS IN WASHOE COUNTY

2030 Transportation Plan

The RTC has completed a blueprint for the future, the 2030 Transportation Plan. Thousands of citizens, involved in hundreds of hours of meetings, helped formulate the 2030 Transportation Plan over a 2-year period. The 2030 Transportation Plan found that as our community grows from 320,000 people to over 540,000 in the next thirty years, we need to make major investments to repair our roads, increase their efficiency and capacity, and improve public transportation services. The 2030 Transportation Plan identified a funding shortfall of \$716 million in roadway needs and \$100 million in public transportation needs.

Funding Solution

We are proposing a local solution to this funding shortfall. The proposal will be presented to the public as a Washoe County advisory ballot question in November 2002. It includes indexing local gas taxes to go up with inflation, indexing the development impact fees to go up with inflation, a 1/8 percent increase in the local sales tax, and increased efficiencies in roadway maintenance programs that will generate \$50 million in savings over the next 30 years. The continuation of Federal transportation funding at least at levels provided under TEA-21 will also be critical to our success.

Key Transportation Needs

Public transportation will play a key and growing role in our future mobility. A priority will be to construct new transit centers in Downtown Reno and Sparks. With design and right of way funding already secured, funding for construction will be our next priority. These new transit centers will include child care, retail and other services that make public transportation more convenient and attractive. Another public transportation priority will be the development of a Bus Rapid Transit (BRT) corridor along South Virginia Street. We are currently preparing a preliminary feasibility study and cost estimate for this project so it may be considered for inclusion in the reauthorization legislation for TEA-21.

Streets and highways will also need major improvements. Several key projects include:

- I-580 from Mt. Rose Highway to Washoe Valley; this project will address one of the most critical safety hazards in the State as well as complete the freeway link between Carson City and Reno
- I-80 from Keystone Avenue to McCarran Blvd; this project will widen a congested section of I-80 and support new retail development planned for Northwest Reno
- I-580/Meadowood Way Intechange; this project will relieve congestion at South Virginia/McCarran and support office and retail development in the South Reno
- US 395/McCarran Blvd. to Lemmon Drive; this project will relieve congestion for travel to the North Valleys

These are some of the key near term projects that will need to be addressed and will require substantial Federal funds. The RTC has and will continue to partner with the Nevada DOT to ensure that these and other critical projects are implemented in a timely manner.

Initiatives for the Reauthorization of the Transportation Equity Act of the 21st Century

The following suggestions are offered to the committee as you consider the reauthorization of TEA-21.

Index the Federal Gas Tax to Inflation

Gas taxes are a major source of transportation funding, and have served the transportation system well at the Federal, State and local levels. The nexus between who pays the gas tax, how much they pay, and the benefits received has made this tax understandable and one of the more acceptable of taxes. The principal draw back of "flat" gas taxes is the steady erosion of their purchasing power over time due to inflation. The last significant increase in the Federal gas tax rate occurred in 1993, and since then, this revenue has lost 22 percent of its purchasing power due to construction cost inflation. We are pursuing a local initiative to allow the local gas tax to inflate, within limits, with the consumer price index on an annual basis. I would request consideration of a similar inflationary adjustment for the Federal gas tax.

Continue Congestion Mitigation Air Quality (CMAQ) Funding in Air Quality Maintenance Areas

The CMAQ program has been a critical funding source for public transportation and system efficiency investments that have a proven air quality benefit. For regions that are successful in achieving the National Ambient Air Quality Standards, CMAQ funding should continue so that we do not take a step backward in air quality.

Dedicated Funding for Bus Rapid Transit Start-Up

The success of Bus Rapid Transit (BRT) has been demonstrated both in the United States and abroad. BRT has provided the capacity and convenience of rail investments at a fraction of the cost. Where favorable conditions may develop for rail service in the future, BRT provides the opportunity for an evolutionary transition to rail by building ridership and a culture of transit use. BRT will not only provide a cost-effective solution for decades in Reno and other smaller communities, but will also protect the dedicated right of way today necessary to allow for rail investments, if that is the choice of future generations. In order for communities to have the chance to invest in BRT, it would be beneficial to create a dedicated funding source for this purpose.

Streamlined Federal Partnership/Stewardship Process

In the old days, only State DOTs were allowed to implement Federal projects. However, as resources have declined and workloads increased at the State level, partnering between State and local entities in implementing federally funded transportation projects has increased. Great successes have resulted from this innovative approach, with local entities sometimes taking the lead within the team. The immense benefits of this approach have been diminished when local entities have been forced to certify not only to the Federal Government, but also to the State DOT, that all Federal requirements have been met. It would be a fairly easy solution to simplify this duplicative process so that the local entity is only required to certify compliance with the Federal Government. Obviously, this authority should only be granted to local entities that have the capability to meet the Federal guidelines, but the RTC, among many other local entities will perform even more efficiently in the administration of federally funded projects if oversight can be streamlined, with certification provided directly to the Federal DOT.

Elimination of the Nevada Special Rule

The State of Nevada has had a special provision in ISTEA and TEA21 which has basically given the majority, approximately 65 percent, of the eligible Surface Transportation Program (STP) funding to the State DOT and the minority of funding, approximately 35 percent, to the urbanized areas. This is the reverse of the formula applied to virtually every other State in the Nation. Ironically, Nevada has one of the highest percentages of population that lives within the urbanized area. While the State DOT has done a very good job of making investment decisions within the current STP allocation formula, the RTC is convinced that the priority setting process will be even more effective as more of the STP funds are prioritized by the MPO in each urbanized area.

STATEMENT OF JUAN PALMA, EXECUTIVE DIRECTOR, TAHOE REGIONAL PLANNING COMMISSION

Good afternoon members of the Subcommittee, staff, ladies and gentlemen. My name is Juan Palma, Executive Director of the Tahoe Regional Planning Agency, an agency created to lead the cooperative effort to preserve, restore and enhance the unique natural and human environment of the Lake Tahoe Region.

In July 1997, then President Clinton and Vice President Gore reaffirmed their administration's role in helping to manage Lake Tahoe, a national treasure, by improving coordination among Federal, State, and local agencies. That administration took bold and aggressive actions on water quality, transportation, forest management, recreation and tourism to protect Lake Tahoe's environment, economy and quality of life.

TEA-21 played a major part in that effort. TEA-21 provided the consent of Congress for the establishment of the Tahoe Metropolitan Planning Organization (TMPO). Designated by Governor Miller of Nevada and Governor Wilson of California, the TMPO is emerging as an essential element in the planning and programming of transportation projects in the Lake Tahoe Region, projects that are today providing water and air quality benefits.

These projects are not just the result of the TMPO. The Nevada Department of Transportation (NDOT), as well as the California Department of Transportation (Caltrans), are major players in the Lake Tahoe Basin. Both agencies have prepared water quality and erosion control master plans that identify the where, when and how much for retrofitting the existing roadway network in the Lake Tahoe Region, providing needed Best Management Practices (BMP) to protect Lake Tahoe's water quality. NDOT in particular has been recognized for its partnership approach in the development and implementation of these BMPs.

The Tahoe Regional Planning Agency's (TRPA) Environmental Improvement Program (EIP) is a \$906 million integrated approach over 10 years to achieve and maintain all nine of the environmental thresholds for the Lake Tahoe Region. Many of the projects in the EIP are transportation related. Neither NDOT nor Caltrans can afford to complete their EIP projects with their usual source of funds. The Federal Lands Highway Program is essential in providing additional funding in support of these projects.

The Federal Lands Highway Program is well suited to the Lake Tahoe region's needs. Under this program, Lake Tahoe projects are eligible under both the Forest Highway and the Discretionary sub-programs. NDOT has used or is using their Forest Highway allocations, along with voter approved statewide bonds, to construct erosion control facilities along most sections of SR 28. As you may be aware, sections of SR 28 in Nevada have been designated as a National Scenic Byway. NDOT is also using their funding for similar erosion control purposes on US 50, and has identified future projects on Kingsbury Grade and Mt. Rose Highway. Continuation of the Federal Lands Highway Program in the reauthorization of TEA-21 will provide for more of these erosion control projects in both Nevada and California.

TEA-21 also provided that in addition to the typical MPO funds made available to the TMPO, that "not more than 1 percent of the funds allocated under Section 202 (Federal Lands Highway Program) may be used to carry out the transportation planning process for the Lake Tahoe region". It is important that the reauthorization of TEA-21 continue this eligibility.

The intent of this provision has not been fully realized, however. The amount of funds provided and the definition of what is considered eligible planning has been limited administratively. We ask that as the TEA-21 reauthorization discussion proceeds, that clear authority be provided for TRPA to use Tahoe's 1 percent provision to conduct specific project planning activities, defined as concept development, site assessment, environmental studies and preliminary project design. Similarly, we

ask that clear authority be provided for NDOT and Caltrans to use Tahoe's 1 percent provision to conduct these activities, and provide for project construction.

The existing administrative interpretation of the TEA-21 language does not provide either the TMPO, NDOT or Caltrans the ability to utilize the Federal Public Lands Highway Program as was originally envisioned. This program, if not interpreted so narrowly, could easily serve as one of the most significant funding vehicles for meeting the Federal commitment to Lake Tahoe directed by the Clinton Administration in 1997, and for meeting the mandates and responsibilities set for in PL 96-551, the Tahoe Regional Planning Compact.

Both TEA-21 and its predecessor the Intermodal Surface Transportation Efficiency Act (ISTEA) included numerous other programs of benefit to Lake Tahoe and Nevada. Lake Tahoe and Nevada continue to benefit from programs such as transit capital and operations grant programs, the Jobs Access and Reverse Commute Grant (JARC), Transportation Enhancement Activities (TEA), National Scenic Byways (NSB), Congestion Mitigation and Air Quality (CMAQ), Intelligent Transportation Systems (ITS), the Clean Fuels program, bicycle and pedestrian programs, and the Recreational Trails program. We urge you to continue these programs in the next transportation legislation.

As a member of the Association of Metropolitan Planning Organizations (AMPO), we concur with their objectives for reauthorization, in particular extending the sub-allocation of urbanized Surface Transportation Program (STP) funds to all MPOs, increasing to 2 percent the metropolitan planning takedown funds in order to account for increased planning responsibilities, and to use National Highway System (NHS), STP, and CMAQ funds for projects that manage and operate the transportation system. These changes would greatly enhance our ability to address transportation needs here at Lake Tahoe.

Congress and the Administration have many difficult choices to make for the reauthorization of TEA-21. The transportation needs of this country are enormous. We encourage you to take bold, assertive actions within the context of all our national priorities. We support the reauthorization of TEA-21, and encourage you to consider the above recommendations regarding Lake Tahoe. Thank you for this opportunity to help make those choices.

STATEMENT BY BRUCE WARNER, DIRECTOR, OREGON DEPARTMENT OF
TRANSPORTATION

Introduction

Thank you, Mr. Chairman and members of the subcommittee, for the opportunity to testify on the reauthorization of the Transportation Equity Act for the 21st Century (TEA-21) and the Federal Lands Highways Program.

The nation's transportation system is critical—it drives the economy, moves people and goods, strategically links our homeland defenses, and helps shape our communities. When our transportation system is strong, our economy, our safety and our quality of life are improved.

There is a tremendous amount at stake as we near the end of one surface transportation bill, and begin debating the next. TEA-21 has been an indisputable success. In Oregon for example, our highways are safer (traffic deaths have fallen to a 40-year low), the condition of roads statewide has improved, and thousands of highway-related jobs have been supported each year. Congress should continue TEA-21's funding guarantees, budgetary firewalls, and basic program structure in the next bill.

Reauthorization of TEA-21: Challenging Times

As Congress begins the process of reauthorizing TEA-21, the country faces new challenges, including a severe economic slowdown and a new era of combating terrorism at home and abroad. We also face:

- Aging infrastructure—The vast network of roads and bridges built after World War II is reaching old age all at once.
- Rapid growth—Growth threatens future economic prosperity and livability.
- Congestion—Bottlenecks on key freight routes hinder the movement of people and freight.

Need for New Revenue

To face these challenges, it is clear that additional Federal resources are needed to strengthen our transportation system. Transportation industry groups, States and some Members of Congress have proposed several ways to increase the size of the Highway Trust Fund (HTF).

- Regain the interest on the HTF balance. Prior to TEA-21 the HTF earned interest on its balance, which was paid by the General Fund. Treasury estimates a \$4 billion dollar loss to the HTF between September 1999 and February 2002.
- Raise the taxes on gasoline and heavy truck use.
- Transfer the 2.5 cents ethanol tax paid to the General Fund to the HTF.
- Require the General Fund to reimburse the HTF for the loss incurred by the ethanol tax exemption.
- Eliminate the ethanol tax exemption.
- Begin to index the tax on fuel so that the tax corresponds to fluctuations in the economy, i.e. The Consumer Price Index (CPI).

Financing Transportation

There is also a mounting need to explore new methods of financing transportation as many experts predict a declining yield from the current petroleum-based Federal tax structure as fuel efficiency rises and greater numbers of alternative fuel vehicles hit the roads. The impacts are not insignificant. For example, average fuel economy increased from 12.0 miles per gallon in 1970 to 16.9 miles per gallon in 2000, a 29.0 percent increase. This increase in fuel efficiency made it possible to have a 248 percent increase in vehicle-miles of travel with only a 176 percent increase in fuel use over the same period.

All vehicles should pay their fair share of the costs to maintain the nation's highways and bridges. Regardless of fuel type all vehicles add to congestion and cause wear and tear on roads. Some have suggested that new user fees based on miles traveled or vehicle registration could supplement existing Federal fuel taxes. These ideas need to be explored further and implemented, perhaps as a pilot program in the next authorization bill.

Federal Lands Highways Program (FLHP)

Additional funding is needed to increase authorizations for important transportation programs such as the Federal Lands Highways Program and increase annual highway apportionments to States in the next "TEA" bill.

The FLHP provides funding to improve roads that are within or provide access to federally owned lands. The continuation of a strong Federal Lands Highways Program in the next surface transportation authorization bill is of national importance and a high priority for western States.

In the State of Oregon, Federal lands are integral to the economy. The Federal Government owns one out of every two acres of land. The total area publicly owned approaches 32 million acres—more than the amount of 35 other States combined. While timber harvests have declined, more people are still employed in the lumber and wood products industry than any other single manufacturing industry in the State. Recreational opportunities on publicly owned land play a vital role in Oregon's travel and tourism industry. Oregon is second only to California in the volume of passenger vehicle traffic on roads within Federal lands.

TEA-21

TEA-21 continued the Federal Lands Highways Program established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The bill expanded eligible projects to include transit facilities within public lands, national parks and Indian Reservations. TEA-21 also added a new FLHP category for the preservation and improvement of roads within or providing access to National Wildlife Refuges. Currently under TEA-21 the FLHP is comprised of four categories: 1) Indian Reservation Roads, 2) Park Roads and Parkways, 3) Public Lands Highways and 4) Refuge Roads.

Each of the FLHP categories uses a different approach for allocating and distributing funding. Increased funding for the FLHP should be distributed proportionally among these categories.

Indian Reservation Roads

The Federal Highway Administration (FHWA) and Bureau of Indian Affairs jointly administer the Indian Reservation Roads (IRR) Program. Indian tribes select area projects. IRR funds used on State and county roads must be used as a supplement to and not in lieu of regular Federal highway funding.

Park Roads and Parkways

The National Park Service (NPS) and FHWA jointly administer the Park Roads and Parkway Program. The NPS selects area projects and program funds may only be used on roads under the jurisdiction of the NPS.

Refuge Roads

The Refuge Roads Program is administered by FHWA. Funds may only be used by the U.S. Fish and Wildlife Service and FHWA for the 3,260 miles of public roads that provide access to or are located within the national Wildlife Refuge System. Projects are selected from transportation improvement programs developed by the U.S. Fish and Wildlife Service.

Public Lands Highways

Two different processes are used by FHWA to administer the Public Lands Highways (PLH) Program. The Secretary of Transportation is directed to allocate 66 percent of authorizations for Public Lands Highways according to the administrative formula used to allocate previous Forest Highways funds and distribute 34 percent PLH funds on a “needs basis” (i.e. discretionary grants).

The Western Federal Lands Highway Division (Western Federal Lands) of FHWA has primary responsibility for managing the PLH funds allocated to western States in accordance with the Forest Highways administrative formula. In Oregon, projects are selected for funding by a committee with representatives from the U.S. Forest Service, Oregon Department of Transportation (ODOT), Oregon Counties and Western Federal Lands.

Under the discretionary component of the program, FHWA normally solicits grant applications from States each year. Increasingly, however, Congress is earmarking PLH funding in annual transportation appropriations bills—about 20 percent of PLH discretionary program funding in fiscal year 2000, 80 percent in fiscal year 2001, and 100 percent in fiscal year 2002.

The Future of the Federal Lands Highways Program

The next surface transportation bill will determine the future of the FLHP, including: 1) the overall authorization level, the number of program categories, and how funds are allocated.

Authorization Level

TEA-21 increased authorization levels for the FLHP by over 60 percent—from \$447 million in 1997, the last year of ISTEA, to over \$700 million a year. A similar size increase is needed in the next bill. The Western Governors Association and the Western Association of State Highway and Transportation Officials (WASHTO) have adopted resolutions in support of increased funding for the FLHP in the next authorization bill.

Funding Allocations

Public lands are not equally distributed around the Nation and thus States with larger amounts of publicly owned lands have greater needs than States with smaller amounts. FLHP funding should be allocated:

- Mainly to States with at least 3 percent of the nation’s total public land.
- The current formula used to allocate funding under the Forest Highways component of the Public Lands Highways Program should be maintained. It is based on the extent and use of public lands in each State—timberland areas, harvest volumes, recreational visitor days, traffic volumes, etc.
- To prevent earmarking of funds in annual appropriations bills, the discretionary component of the Public Lands Highways Program should either be rolled into the existing formula component or distributed directly to States by a new formula. The new formula could focus funding on a specific problem facing States with large public lands, such as funding culvert replacement or other transportation related work that is required to comply with the Endangered Species Act.

Program Categories

The American Association of State Highway and Transportation Officials (AASHTO) and Western Governors Association have taken the position that no new categories should be created within the Federal Lands Highways Program. This position was in part a response to a proposal that would establish a new national road system made up of 60,000 miles of U.S. Forest Service roads, funded from the Highway Trust Fund. If adopted, the proposal would create within the Federal Highway Program a new system of roads larger than the Interstate System. The States support additional funding for the U.S. Forest Service from the General Fund.

Other Reauthorization Issues

There are many other important issues that will be decided during reauthorization of TEA-21. The following are ODOT’s comments on a few of them.

Bridge Replacement

In Oregon we face a particularly pressing challenge—many of the State’s bridges built during the Interstate era are beginning to show signs of cracking. Over 300 bridges have been identified as needing repairs or replacement due to severe cracking at a cost of over \$600 million. If the problem is not addressed soon, there will be economic impacts as weight limits are imposed and freight is diverted off the Interstate System, often through small communities, detouring as many as 100 miles per trip. The State alone cannot fix a problem of this scale. Additional Federal bridge funding will be needed in the next authorization bill.

National Corridor Planning and Development Program (NCPD)

In the next bill, NCPD funding should be increased and focused on eliminating freight bottlenecks in key trade corridors, especially at regional hubs where many modes of freight converge. In Oregon, the I-5 Portland/Vancouver Trade Corridor is a prime example of a congested freight hub—where two Class I railroads, two Interstate highways, two ports, barge traffic, a high-speed rail corridor and an airport meet—that is a crossroads for regional and international trade. The current NCPD program is under funded and unfocused. With grants averaging \$4–5 million, and little oversight to ensure funds are going to true trade corridors, the program as currently authorized is not targeting critical freight bottlenecks as is needed.

Environmental Stewardship and Streamlining

In response to Section 1309 of TEA-21, ODOT has developed and implemented a coordinated review process for highway construction projects. This improved method for State and Federal permitting agencies to review highway projects is up and running in Oregon. Known as “CETAS” (Collaborative Environmental and Transportation Agreement on Streamlining), it establishes a working relationship between ODOT and ten State and Federal transportation, natural and cultural resource and land use planning agencies.

The next bill should support State-led efforts to both protect the environment and streamline the review process for transportation projects by encouraging agencies to participate in collaborative stewardship/streamlining efforts through:

- Incentives—to get resource protection agencies and transportation agencies at the Federal and State level working together. With limited resources, many agencies find it difficult or impossible to participate in collaborative stewardship/streamlining efforts because they must take staff away from their daily duties.
- Research and technology—can provide tools to make it easier for agencies to implement stewardship/streamlining initiatives. For example, GIS mapping of natural and cultural resources gives transportation departments information in a format that they can easily incorporate into their ongoing planning, operations, maintenance and construction methods.
- Innovative permitting—the permitting process can be improved through innovating permitting techniques. For example, resource agencies are beginning to approve programmatic permits for routine transportation activities, saving time and money that can be used for mitigation and projects. Federal agencies need to be encouraged to develop new programmatic approaches to permitting. Advanced wetland and conservation banking for transportation projects should be sanctioned.

Transportation and Community and System Preservation Pilot Program (TCSP)

The TCSP program has proven to be extremely popular among States, metropolitan planning organizations (MPOs) and other units of local governments. Demand for funding has far exceeded available funding. Like other discretionary programs, annual appropriations bills have earmarked increasing amounts of the program’s funding. This trend has undermined the purpose of discretionary programs—to implement Federal policy goals by awarding Federal grants to projects that demonstrate they support those goals, based on an objective and rigorous grant application process administered by the U.S. Department of Transportation.

The program should be restructured and its funding increased to: 1) better support program goals by providing incentives to States, and 2) prevent earmarking of the program in future annual appropriations bills. The TCSP program could be improved by:

- Establishing the TCSP as a permanent Federal-aid highway program.
- Re-establishing an effective discretionary program.
- Adding incentives to encourage States to implement the goals of the program.
- Increasing the annual authorization level for the new program to \$250 million.

Bureau of Land Management (BLM) Public Road Mileage

In 1999, BLM listed all of its 43,000 miles of roads as “administrative” and therefore no longer “public” road miles. This despite that fact that BLM roads are open to the public and many are paved. The classification of public road mileage is extremely important to western States because it is a formula factor for the allocation of motor carrier and highway safety program funding. The Western Governors Association and WASHTO have called on the U.S. Department of Transportation not to exclude BLM road miles from public road mileage certified by States until a study is undertaken to review the criteria and methods used to determine the classification of roads as “public”. The study should be done in cooperation with the western States.

Conclusion

Mr. Chairman, a strong transportation system is vital to the future of the United States. Reauthorization is an opportunity to strengthen the transportation system and build upon the successes of TEA-21 and ISTEA. To do this, additional Federal resources are needed. States simply will not be able to overcome the many challenges we face alone.

We do not need to re-create the wheel this reauthorization cycle. The basic program structure is sound and proven programs such as the Federal Lands Highways Program are generally working well. Some changes need to be made, such as ensuring discretionary program funding is targeted to projects that support the program’s objectives. The funding guarantees and firewall provisions established in TEA-21 will need to be protected. New revenue sources will have to be explored.

Finally, it is crucial that State highway apportionments increase substantially as they did under TEA-21. Oregon’s cities, counties, Metropolitan Planning Organizations, transit districts and many other jurisdictions benefit when the State’s annual apportionment increases.

Thank you again, Mr. Chairman. I would be happy to answer any questions.

STATEMENT OF GARY CARANO, NEVADA RESORT ASSOCIATION

Thank you Senator Reid and members of the subcommittee staff for the opportunity to talk with you today. My name is Gary Carano, and I am the General Manager of the Silver Legacy Resort Hotel, but I am here today representing the Nevada Resort Association. The transportation issues that I would like to discuss with you today impact all of my Northern Nevada colleagues, and the resort industry is united in its efforts to address these issues.

The Reno/Sparks economy depends on tourism. We receive over 5 million visitors to Washoe County each year. These people come here to enjoy the vast recreation, entertainment, and retail opportunities that this area has to offer (appendix 1). Roughly 35 percent of these visitors travel to Northern Nevada by plane, and nearly all of the rest come by highway. Northern and Central Californians are this area’s leading customers and these folks come to Reno on Interstate 80. I-80 is truly the economic lifeline of this community, not only for tourists, but also as a major link of goods and services from San Francisco through the Port of Oakland and on to the east coast (see bullets and graph below).

STATEMENT OF JOHN H. MILTON, III, COMMISSIONER, HUMBOLDT COUNTY, NEVADA

Senator Reid, members of the Committee, good afternoon. My name is John H. Milton, III and I am the senior member of the Humboldt County, Nevada, Commission and a member of the Board of Directors of the Nevada Association of Counties. Thank you for the opportunity to spend a few minutes discussing “Western Transportation Issues” and the Federal Lands Highway Program in particular.

As you are aware Senator Reid, over 87 percent of the land in our State is managed and controlled by the Federal Government. The majority of this land accessed over County maintained roads. Most of these roads are gravel which require a high level of maintenance. In Humboldt County, we have 941 miles of County maintained roads in our system. Of that amount 669 miles, or 71 percent of our system, serve Federal lands. These lands do not generate revenue, which can be used for the building new roads or the maintaining of existing roads.

In reviewing the Federal Lands Highway program, I noticed that the majority of this money goes into the Public Lands Highway category. In that category, 66 percent goes to Forest Highways and 33 percent goes to the discretionary program. In Humboldt County and the majority of Nevada, the Department of the Interior is the manager of the Federal Lands and they receive no funding in this program. In Ne-

vada, there are approximately 61.7 million acres of Federal land of which 51.1 million acres are administered by the Department of the Interior, primarily BLM. I would recommend that in the reauthorization you consider a new category related to these lands which similar to current categories for Refuge Roads, and Park Roads and Parkways.

The Sheldon Antelope Refuge is the only wildlife refuge located in Humboldt County. Access to this refuge is via a County Road. We believe we should be allowed to access the Refuge Road Category for improvements to this County Road. We currently receive \$5,000 a year in revenue sharing from the U. S. Fish and Wildlife Service, but return \$2,500 to the U.S. Fish and Wildlife Service for the maintenance of the Virgin Valley Campground. This does not leave much for maintenance of the roads leading to or within the refuge.

In April of 2000, I appeared before the Senate Subcommittee on Forest and Public Land Management to testify on the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area (NCA). At that time one of the concerns I expressed was access to the NCA via our county road system. That bill became law and my concerns have not gone away. Most, if not all, of the major access points are reached by County Roads. Many of these are Humboldt County Roads, including the Cedarville Road which provides access to the NCA and the Sheldon Antelope Range, and the 95-mile road from Winnemucca to Gerlach which provides access to the entire southern boundary of the NCA. We expect the use of these roads to increase dramatically; the cost to maintain them will also increase. Improving these roads to handle increased traffic is beyond our means. For example, the estimate we obtained to upgrade the road from Winnemucca to Gerlach to an all weather road exceeds seven million dollars. This does not include the \$480,000 cost for cultural clearance, right of way acquisition, gravel pit development, and water sources or the \$200,000.00 annual cost for maintenance. This road crosses three Counties, none of which can afford to spend this type of money. Although roads such as these serve Federal lands, Humboldt County maintains them with no assistance from the Federal Government.

The access to the Humboldt-Toiyabe National Forest in Humboldt County is also via our County Road system. We maintain approximately 44.1 additional miles within the Forest under agreement with the Forest Service. In exchange, the Forest Service maintenance crew undertakes projects on the County roads leading to the National Forest to offset our costs incurred by the County for the requested maintenance.

In conclusion, I would ask that you give strong consideration in the reauthorization of the Transportation Equity Act of the 21st Century (TEA-21) by addressing the concerns I have expressed today. In particular I would ask that a category be created to address the vast holdings of the Department of the Interior. Also that the public roads maintained by someone other than the U.S. Fish and Wildlife Service be allowed to utilize the money in Refuge Roads category.

Thank you for the opportunity to address you concerning the Federal Lands Highway Program today and I would be happy to answer any questions you may have at this time.

STATEMENT OF TRIBAL CHAIRWOMAN ROBYN BURDETTE, SUMMIT LAKE PAIUTE TRIBE,
NEVADA

Thank you, for the opportunity to speak on the issue of transportation in Indian Country and in Nevada.

The Summit Lake Paiute Tribe is a small geographically isolated tribe located in the extreme upper northwest portion of Nevada. Bureau of Land Management and Sheldon U.S. Fish and Wildlife Refuge surround the reservation, in addition to the Lahontan Cutthroat Trout Natural Area. The main road system on the reservation consists primarily of two BIA routes, which link to three county routes. The majority of the land adjacent to the reservation is generally used for activities such as hunting, fishing, hiking and camping. This area is a very high use recreational area. The Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area Act of 2000 gives national conservation area and wilderness designation to nearly 1.2 million acres of public lands in the vicinity and adjacent to the reservation.

In 1999, I was chosen to sit on the Transportation Equity Act for the Twenty First Century Negotiated Rulemaking Committee for the Indian Reservation Roads Program. My tribe is part of the Bureau of Indian Affairs Western Region located in Phoenix, Arizona with 54 other tribes from Utah, Nevada and Arizona. In Nevada there are 29 individual tribes, each responsible to provide for the self-governance

and safety of their communities. Well-constructed and maintained roads are essential for economic development of Indian communities, as businesses cannot occur without roads to provide access for customers and supplies. Well-maintained roads are essential for public safety of the local citizens and people traveling through the area. Indian children must travel—often for great distances—on Indian roads. Police and medical vehicles rely upon good roads to provide public safety and emergency medical services. Roads have been placed in the top ten budget priorities for the past two fiscal years by the BIA Western Region Tribes.

Road Maintenance—The maintenance account for the BIA WRO provides funds to tribal governments to maintain roads and bridges on Indian lands. The current level of funding provides approximately one-fifth of the total of funds needed. The budget would have to be quadrupled to provide adequate level of funding. As an example—the Summit Lake Paiute Tribe gets \$3,300.00 for road maintenance. With extreme snow conditions and heavy equipment costs this provides a fraction of the cost necessary to maintain our roads on a full time basis. A snow cat costs \$70,000.00. The tribe operates its maintenance program with a 1950 Huber grader which breaks down on a regular basis, parts, if found, cost between \$1,000.00—\$2,000.00. A replacement grader would be \$100,000.00. The road maintenance program is not in the IRR program, however, to build new roads with inadequate maintenance, creates a loss in capital improvement, and additional loss of precious dollars. The refuge roads program makes an allowance for maintenance costs, perhaps, and I say this cautiously, the IRR program should be evaluated to allow for an increase in funding for Road Operation & Maintenance. The BIA O & M corresponding budget should be targeted for an increase.

The rulemaking committee for IRR was established to provide procedures and a relative need allocation formula. The committee was comprised of small, medium and large tribes across the Nation, many with no prior experience and some with many years of experience and expertise in transportation.

This was the first time, nationally, that the tribes saw and participated in the development of a relative needs formula. The committee meetings provided an educational overview into the Indian Reservation Roads program that some of us have never had. The tribal representatives held true to their task of participating in the IRR Negotiated Rulemaking Committee on a government-to-government basis in recognition of Indian self-governance and self-determination. Although a monumental task, procedures and the development of a single formula, based on the inadequate funding allocated to the IRR program, was completed. What has yet to be demonstrated, but may be possible, is that problems in getting a project may not be entirely due to funding but the process of getting the funding/project.

Some of the inequities found within the IRR program for tribes are:

- lack of adequate funding
- concern that too many programs are being placed within the Indian Reservation

Roads Construction Program like:

- Indian Reservation Roads Bridge Program
- Transit
- Obligation Limitation
- 6 percent BIA takedown

The relative needs formula is based upon the total population; vehicle miles traveled, and cost to improve. Considering these factors, the Summit Lake Paiute Tribe is currently at a disadvantage because of poor qualifiers in the relative needs formula including a low population, low average daily traffic, and lack of transportation planning reports (identifying cost to improve estimates, roadway inventories, ADT, etc). As a result, funding for the tribe based on the relative need formula has proven inadequate, especially for routine maintenance, and improvement of the reservation roadway system. The Summit Lake Paiute Tribe has historically received no funding for road construction.

The proposed relative needs formula includes a capacity base funding and a high priority funding category, however, funding is based on population, this seems to create a pool where low population tribes only receive insufficient funding to operate a transportation program. It also creates a pool whereby the BIA can take from to supply funding for a “construction project” that may not be yours. Funding should be allocated based on the entire project to its completion.

The proposed high priority projects, well intended to address funding for tribes that have never received funding for a construction project, will likely struggle to receive an approved construction project due to the poor qualifiers mentioned above. The inclusion of the emergency/disaster projects will further exclude a tribe from meeting transportation needs. Because of insufficient funding the Bureau of Indian

Affairs currently prioritizes IRR funds to build roads with respect to those tribes who the BIA qualifies as having unsafe roads or bridges.

The Summit Lake Tribe has generated a relative needs share between \$19,000.00 to \$30,000.00 per year and has only twice received funding through 2 percent planning not through its relative needs portion.

In 1999, the Summit Lake Paiute Tribe's roadway system was flooded, all access was stopped. Many travelers were stranded or attempted to circumnavigate the flooded section, (which was the sole access from north to south), and began to cut new roadways into the surrounding areas, many of which consist of wetland habitat. This situation results in extreme environmental degradation and safety concerns. When the tribe sought assistance through the Emergency Relief for federally Owned Roads program, bureaucratic red tape and process stifled the tribe. For 2 years the effects of this flood impacted the tribe and the economy of the area. What was the bureaucratic red tape? The requirement to apply through the Bureau of Indian Affairs instead of the Federal Lands Office which administers ERFO funding.

Many reservations share this same story, it is common to have roads that are well beneath ground level or consist of narrow pavements with no shoulders or inadequate signage with sharp narrow passages or curves.

When the Summit Lake Paiute Tribe generates a relative needs fund totaling \$19,000.00—\$30,000.00 per year and it is estimated that \$1,781,635.00 is needed to rebuild existing roads, not including future roads, the Summit Lake Paiute Tribe will always remain at the bottom end of the priority list. When competing for funding at the national level for a construction project against tribes, who are in the same category, funding will remain unlikely with the poor qualifiers of low population, ADT, and cost to construct.

Tribes in Nevada receive little or no support from the BIA WRO and have requested many meetings to obtain information regarding assistance. Unfortunately, due to distance—we are geographically crippled from obtaining the training and technical assistance necessary for consideration under the IRR program. To get on the WRO TIP, a tribe must request BIA to approve funding for the tribal project. This process is passed over for the majority of tribes due to limited funding and the lack of technical assistance from the Western Region Office.

What are the effects on a national level? Several Tribes in Nevada have major highways traveling through their reservation. The Duck Valley Shoshone-Paiute Tribe may have nuclear receptacles traveling through their area on the very same roads numerous accidents occur. Tribes who do not have emergency response preparedness and have unsafe road conditions will be ill equipped to handle the proposed nuclear transportation.

Tribes in Nevada are capable of partnering with the State of Nevada to address transportation issues, however, there are distinct differences with Tribes. Not only is there a jurisdictional considerations but the fact that many tribes need to participate fully in research programs like safety and transit. Accesses to funds are dependent upon the inventory of tribes, it is critical that tribes are able to provide the State agencies accurate inventory information. Again, we cross the path of needing those base/planning dollars in order to report and compile the correct information.

The Tribal Technical Assistance Program serving Nevada Tribes is also critical to meeting the transportation need, however, this program has been non-existent for several years. Just recently, a provider has been selected in California where conditions are very different than those in Nevada. In addition, this displaces us from the other Tribes in the WRO office and further complicates matters when trying to pull together information and resources.

Suggestions to improve—Provide for equal partnership with tribes. Implement the procedures developed by the Negotiated Rulemaking committee and provide full funding for the IRR program. Remove the obligation limitation from the IRR program. Adjust the takedowns, the BIA 6 percent and re-evaluate the funding formula.

Although tribes have to agree on a single formula, there are areas for improvement. Population based formula do not work for anyone. The high priority programs can work if revolved around meeting the need of those tribes who do not get enough funds to construct a project in a set period of time but not if all tribes can access funds due to safety. The majority of Indian roads provide a safety risk.

Finally, tribal roads are given inequitable attention, we are overlooked because we lack the capacity and knowledge to manage our program, not because we can't but because we are not allowed to. Given the resources, and by partnering, we can provide for safe accessible transportation system and contribute to the local economy. Thank you.

STATEMENT OF THE NAVAJO NATION

Introduction

The Navajo Nation appreciates this opportunity to share its views about what is working within the Indian Reservation Roads (IRR) Program, what is not working, and what this Congress can do to improve transportation in Indian Country. We commend the Federal Highway Administration for its commitment to provide safe and efficient access to Tribal lands. Roads, bridges, and transit quite literally carry people across a network that connects communities, commerce and culture.

As former U.S. Secretary Rodney E. Slater said, "Transportation is the tie that binds us together as a Nation." The Indian Reservation Roads Program impacts all people, tribal and non-tribal alike. Tribal Lands provide vitally needed access within and between States, and support a multitude of economic interests, including tourism, agriculture, energy production, manufacturing, mineral extraction and timber harvesting.

But progress does not travel down dirt roads and broken bridges. Many people and places in Indian Country still have very poor access to opportunity. A few discreet changes to the Transportation Equity Act for the 21st Century could dramatically help efforts to lift First Americans out of Third World conditions, onto the same economic status as other communities throughout the United States. Background

Navajo Nation

The Navajo Reservation is located on 26,109 square miles, or 17.1 million acres within the exterior boundaries of New Mexico, Arizona, and Utah. It is roughly the geographic size of West Virginia. The Navajo Nation's land base also includes three Navajo satellite communities-Alamo, Tohajillee, and Ramah-located in western and central New Mexico.

With 280,000 members, the Navajo Nation is the largest federally recognized Indian Tribe. Limited availability of housing and employment on the reservation forces people to commute long distances everyday for work, school, health care and basic government services. Seventy-eight percent of the roads within Navajo are unpaved.

According to the 2000 BIA Road Inventory Data base, the Navajo IRR system consists of 9,826 miles of public roads. Of that, Navajo Nation must maintain 1,451 miles of paved road, 4,601 miles of gravel and dirt roads. Weather conditions often make many of those roads impassable.

The Navajo Reservation soils have high clay content with less forage. In the winter, snow and rain create Snow and Mud Emergencies that prohibit access even to rescue vehicles. This year, because of the prolonged drought, these roads have become nearly impassable due to sand dunes, rocky surfaces and deep holes. Not only are impassable roads a consistent problem within Navajo, so are impassable bridges. The Navajo must maintain 173 bridges. 51 bridges have been identified as being deficient, of which 27 bridges need complete replacement and 24 bridges need major rehabilitation.

For people who do not have access to a vehicle, The Navajo Transit System (NTS) currently operates a fleet of 14 buses and 3 vans that carry 6,250 passengers a month, or 75,000 passengers a year. NTS provides public transportation not only to people of Navajo, but also to people of Gallup and Farmington, New Mexico, and Flagstaff and Winslow, Arizona. NTS not only links tribal and non-tribal communities together, but also improves the area's environment, economy and overall quality of life.

Indian Country

The Navajo Nation, like every Tribe, has its own unique challenges. Yet Navajo consistently struggles with three problems that are nearly universal throughout Indian Country: 1) lack of adequate health care; 2) lack of public safety officers; and 3) lack of economic development opportunities. These problems are compounded by the lack of transportation infrastructure within tribal communities.

Health clinics on most reservations tend to be few and far between, where they exist at all. Tribal members, including the elderly, children, and disabled, often must travel hundreds of miles to receive specialized care. Dirt roads, deteriorating paved roads, and treacherous bridges make their long journeys that much more difficult.

Public Safety is also compromised by lack of decent roads and bridges within reservations. Automobile accidents are the No. 1 cause of death among young American Indians. The annual fatality rate on Indian Reservation Roads is more than four

times the national average. Bad roads make it very difficult for tribal police, few in numbers, to enforce traffic and other laws in Indian Country.

Lack of adequate vehicle access is also a disincentive for economic development in tribal communities. On a regular basis, several businesses explore the possibility of locating to the Navajo Nation before realizing obstacles including inadequate paved roads. Due to the lack of economic developments and supporting infrastructures, the following facts exist:

- According to 1990 census, which provides the most recent analysis, per capita income for American Indians living on reservations is about \$4,500 per year, compared to about \$14,500 nationally. In 1997, the per capita income of Navajo people was \$5,599.
- According to the 1990 census, 51 percent of American Indians living on reservations lived below the poverty level, as compared to 13 percent nationally. 56 percent of Navajo people live below the poverty level.
- Although unemployment in Indian Country fluctuates seasonally, it is greater than 50 percent annually, as compared to less than 10 percent nationally. The unemployment rate on the Navajo Nation is about 50 percent.

National Security As we all know, since September 11, 2001, Homeland Security has become the national priority. Indian reservation roads and bridges are vitally important to national safety. Tribal transportation infrastructure must be able to carry emergency services, as well as evacuation traffic.

Unfortunately, most tribal transportation infrastructures are not yet up to the task. For example, Arizona Department of Transportation developed an I-40 Emergency Interstate Closure Plan—which was created to anticipate such pre-September 11 catastrophes as earthquakes and hazardous or radioactive spills—that calls for detouring up to 8,000 trucks per day onto Navajo BIA routes. The Navajo bridges onto which traffic would be detoured can only safely accommodate one truck at a time, traveling no faster than 35 miles per hour.

In addition, State highways through Indian Reservation Roads regularly carry hazardous materials. The Navajo Nation serve as a shipment route for hazardous materials. Not all potential routes are paved.

Hazardous waste is carried across the Navajo Nation every day on five different routes:

- I-40 is a main route for hazardous waste;
- U.S. 89 is a main route for transport of organic waste, as well as propane and gasoline shipments;
- U.S. 160 is main route for transport of hazardous waste;
- U.S. 163 is main route for transport of hazardous shipments from Arizona to Utah and Colorado; and
- U.S. 666 is highly traveled by vehicles carrying hazardous waste.

Nuclear waste transportation also cuts across Indian Country. In Navajo, I-40 is the main route for high-level radioactive waste transported to or from New Mexico. U.S. 160 is the main route for transport of high-level radioactive waste. When Yucca Mountain Nuclear Waste Storage facility starts accepting waste, much of it will come right through the Navajo Nation. Tribal roads must be constructed, improved and maintained to safely handle such dangerous traffic.

TRANSPORTATION ACT FOR THE 21ST CENTURY

What is Working

Based on its own experience, the Navajo Nation believes that The Transportation Act for the 21st Century (TEA-21), through the Indian Reservation Roads Program, is providing critically needed funding and assistance for reservation and bridge projects in Indian Country. While the IRR Program has its problems, three specific aspects of the Program that are working well for the Navajo people:

1. Relative Needs Formula

- Current distribution is based on formula of “relative needs” of the various Indian Tribes as jointly identified by the Secretary of Transportation and the Secretary of the Interior.
- The Relative Needs Formula currently being used is measurable, verifiable, and equitable: 20 percent total Indian Population; 30 percent total vehicle miles traveled; 50 percent total cost of improvement
- Amount of roads Navajo has constructed or improved from 1992 to 2001 (ISTEA and TEA-21 authorizations) is 334 miles of road and 1,988 lineal feet of bridges.

2. *Cooperative Funding for School Bus Routes*

- Agreements entered into between Navajo Nation and counties of Arizona, New Mexico, and Utah have been very successful in fostering coordination and communication for the maintenance of school bus routes.
- TEA-21 funds have been used to improve several miles of school bus routes on or near the Navajo Nation that could not have been maintained without the funding.

3. *Tribal Technical Assistance Program*

- On September 11 and 12, 2002, the Navajo Nation Department of Transportation and the Colorado State University Tribal Technical Assistance Program will co-host the Navajo Nation Transportation Symposium in Flagstaff, Arizona. The Symposium will feature national keynote speakers and training workshops on critical national transportation initiatives.
- Such ongoing technical support benefits tribal and non-tribal community alike.

WHAT IS NOT WORKING

It is the experience of the Navajo Nation that five specific aspects of the IRR Program are currently undermining the Federal Government's commitment to provide safe and efficient access to tribal lands:

1. *Negotiated Rule Making Process*

TEA-21 provides that the Secretary of the Interior shall issue regulations governing the IRR Program and establish a funding distribution formula in accordance with the negotiated rulemaking committee. Of the four workgroups that make up the Negotiated Rulemaking Committee, the workgroup steeped in the most controversy is the Funding Formula Workgroup, which has been asked to review and develop possible alternative methods to the current Need Based Formula for distributing funds under the IRR Program.

The Negotiated Rulemaking Process attempt to develop an alternative distribution funding formula has undermined one of the central goals of TEA-21—to improve the transportation infrastructure of Indian Country. Alternative distribution efforts have 1) derailed meaningful progress by pitting small tribes against big tribes in a fight over an inadequate budget; 2) delayed disbursement of IRR funds 4 years straight, in 1999, 2000, 2001, and 2002; and 3) resulted in suspended Indian roads projects and roads employees.

Navajo Nation has long advocated Needs Based Formula for all tribal funding in the interest of fairness and accountability. The BIA Road Inventory miles used in computing the distribution formula must be true roadway miles, fair, accurate and verifiable. The alternative funding formula being sought by small tribes, which advocates “base level funding” and set-asides for non-existent road miles (ghost miles), is neither reasonable nor practicable.

2. *Bridge Funding*

The National Bridge Priority Program currently only provides funding for construction of bridges, not funding for such pre-construction activities as planning and design. Moneys for pre-construction bridge activities must be sought from regular IRR funds, where such requests are in direct competition with funding requests for road construction projects. The current process is not only cumbersome and unfair, but also risky where replacement and/or rehabilitation of a bridge is an immediate health and safety need.

Bridges within the Navajo Nation must be able to support the traffic of workers, patients, school children, commerce, and hazardous materials. As of November 10, 1999, 46 bridges within the Navajo Nation were identified as being deficient. The Navajo Nation needs at least \$5.2 million for planning and designing in order for bridges to advance to construction.

As Representative Sherwood Boehlert (R, NY) of the House Transportation and Infrastructure Committee stated, “You don’t fix a bridge with good intentions; it takes cold hard cash to pay for the rehabilitation or replacement.” The current Bridge Priority Program does not provide Tribes access to funds to plan for such rehabilitation and replacement.

3. *Obligation Limitation*

The current method of redistributing approximately 10 percent of Federal Lands Highways Program funds to States as Surface Transportation Program funds—commonly known as the “Obligation Limitation”—has a detrimental impact on Tribes and the IRR Program. Because the Indian Reservation Road Program is located within the Federal Lands Highway Program, the Obligation Limitation significantly

reduces the availability of critically needed construction funds for developments for all American Indian Tribes. Since Obligation Limitation became applicable on the Indian Reservation Roads Program, the redistribution of funds has accumulated to \$129.4 million, of which Navajo Nation could have received \$34 million for construction.

4. Maintenance Funding

Road maintenance is a statutory obligation under 23 U.S.C. Section 116, which is intended to protect investments made with Federal Highway Trust Funds. The scarcity of maintenance funding available to Tribes transforms this statutory obligation into an unfunded mandate that tribal governments cannot fulfill. The problem is that Indian Road maintenance is funded not through the IRR Program, but through the Department of Interior, which year after year lacks the necessary funding to maintain BIA roads built in Indian Country with IRR Program moneys.

The experience of the Navajo Nation is fairly typical. Each year, Navajo submits its annual request for maintenance funding to BIA. Each year, Navajo is only funded at 30 percent of need.

The Navajo Region Office/Branch of Roads Program is maintaining 6,000 miles of Navajo Region BIA road system but is funded at only \$6 million, or 1/5 of the \$31.66 million needed. The Interior appropriation is only marginal and is not enough to protect the Navajo Nation's investment in improving its road system by use of the Highway Trust Fund moneys paid by tax dollars.

5. Transit Funding

Currently, Tribal Transit Programs receive Federal transit funds through distribution from the States. Tribal transit programs are low priority to the States and must compete with State transit programs. In the absence of meaningful access to Federal transit dollars, Tribes must use precious Indian Reservation Road Program dollars for Tribal Transit.

RECOMMENDATIONS

1. Increase Annual Appropriation

- Increase the Annual Funding Level for the IRR Program from its present level of \$275 million to \$500 million. Past inadequate funding of IRR Program has created a crisis that can only be ignored at the risk of those travelers who drive 2 billion vehicle miles on the IRR system each year. In its 1999 study of the nation's highways and bridges, the Federal Highway Administration determined that "The annual fatality rate on Indian Reservation Roads is more than four times the national average . . . The estimated backlog of improvement needs for BIA and selected State and Local IRR roads exceeds \$6.8 billion." The Navajo Nation alone needs \$100 million per year for the next 20 years just to satisfy its unmet present and future transportation needs.

2. Remove Obligation Funding

- Exempt the Indian Reservation Roads Program from the Obligation Limitation Provision, 23 U.S.C. Section 1102 (f), which created an obligation to redistribute Federal Lands Highways Program funds to the States as Surface Transportation funds. Because the Indian Reservation Road Program is located within the Federal Lands Highway Program, the Obligation Limitation has significantly reduced the availability of construction funds for road developments for all American Indian Tribes. Since 1998, the Obligation Limitation has reduced funding for the Indian Reservation Roads program by about 10 percent each year.

3. End Bridge Set Aside and Begin Separate Bridge Fund

- Permit National Indian Reservation Bridge Priority Program funds be used for pre-construction activities, such as planning and design.
- Create a separate source of funding for the National Indian Reservation Bridge Priority Program from the Highway Trust Fund so that bridges do not have to compete with roads under TEA-21.
- Provide \$15 million yearly authorized funding level from Highway Trust Fund for fiscal years 2004 through 2009 for Indian Reservation bridge projects.
- Expand allowable uses of bridge funding to include inspection, planning, design, engineering and construction of projects to replace and improve bridges on Indian reservations.
- The National Bridge Priority Program funding should have a separate funding source rather than the current \$13 million take down from the IRR Program.

4. Increase Ability to Use Funds for Planning Roads

- Encourage administrative capacity building within Indian Country by increasing the amount of money Tribes are allowed to use for transportation planning from the current limit of 2 percent of allocated funds to a new limit of 4 percent. The Transportation Planning funds are essential for a Tribe to be able to compile necessary transportation data and forecast future transportation needs. Transportation planning on Indian reservations is needed more than ever because of the growing populations on Indian reservations and because of new national security concerns.

5. Create New Reservation Transit Program.

- Establish a new Indian reservation rural transit program with an annual funding level of \$20 million per year so that Tribes may apply direct to the Federal Transit Administration for competitive grants for rural transit programs on reservations. Currently, Tribes must apply for transit funding to the States within which they are located. This requirement not only puts Tribes at an extreme disadvantage by forcing Tribal transit projects to compete with State projects before a State grant maker, it also violates the government-to-government relationship that exists as a matter of law and policy between the Federal Government and Tribes. This relationship, rooted in the Federal Trust Doctrine, has been reaffirmed not only by Executive Order 13175, but also by the November 16, 1999 Order of the Department of Transportation, which requires agencies of the U.S. Department of Transportation to build more effective working relationships with Native American tribal governments by, among other things, “Work[ing] with federally recognized tribes and their designated representatives on a government-to-government basis respecting their rights to represent their interests.”

6. Provide Additional Funding to Maintain School Bus Routes

- Increase annual funding for maintenance of school bus routes on, or near, or adjacent to Indian reservations larger than 10,000,000 acres from current level of \$1.5 million per year so that miles and miles of seasonably unpassable dirt roads do not stand between an American Indian child and an education . Increase annual authorized funding level to \$3 million in fiscal years 2004 and 2005; \$4 million in fiscal years 2006 and 2007; and \$5 million in fiscal years 2008 and 2009.

7. Reaffirm Funding Distribution Formula

- Maintain the Relative Needs Formula that was being used during the ISTEA authorization years at 100 percent application with no minimum amount per Region. 23 U.S.C. Section 202 (d) requires the IRR Program to distribute program funding based on a negotiated rulemaking process, which has thus far produced only disagreement.

8. Prohibit the Funding of Ghost Miles

- Require both Secretary of Interior and Secretary of Transportation to verify the existence of roads that are part of the Indian Reservation Roads Program to ensure that the distribution of funds to an Indian Tribe is fair, equitable, and based on valid transportation needs.
- Distribute funds based on the existence of those roads.

CONCLUSION

Roads, bridges and transit are lifelines of any community. For tribes, they are crucial and vastly unmet needs, without which economic development is nearly impossible. The Navajo Nation respectfully urges the U.S. Congress to support the Reauthorization of the Transportation Equity Act of the 21st Century with the above recommendations. It is time for “equity” to mean something in Tribal transportation funding. It is time, in this 21st century, for opportunity to be able to travel safely down Indian Reservation Roads, to connect the commerce and culture of tribal and non-tribal communities.

TEA-21 REAUTHORIZATION

TUESDAY, AUGUST 20, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Montpelier, Vermont.

The committee met, pursuant to notice, at 10 o'clock a.m. in room 10, The State House, Montpelier, Vermont, Hon. James M. Jeffords [chairman of the committee] presiding.

TRANSPORTATION NEEDS OF SMALL TOWNS AND RURAL AMERICA

Present: Senator Jeffords.

OPENING STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Senator JEFFORDS. Well, I want to welcome you all here this morning to the Vermont field hearing of the Committee on Environment and Public Works. I especially want to thank Deputy Secretary Jackson from the United States Department of Transportation for being here. Pleasure to have you here, and I hope that you'll find it a very worthwhile morning.

Mr. JACKSON. I'm certain I will.

Senator JEFFORDS. Together, the united forces of our communications and transportation system are dynamic elements in the very name we bear: The United States. Without them, we would be a mere alliance of many separate parts.

With these words, President Eisenhower announced a massive effort in the 1950's to modernize America's highways, as necessary for our defense as it is to our national economy and personal safety.

The committee I chair will craft a national transportation bill next year, for the next generation of Americans. In 1819, the Congress created the Select Committee for Public Buildings, which became this Committee on the Environment and Public Works, with authority over major issues including the environment, roads, rivers, harbors, the Coast Guard, water and air pollution, and the transportation bill.

Past members of the committee include two presidents, Harry S. Truman and Andrew Jackson, and five vice presidents of the United States. Two of my best friends have served on the committee as chairmen: Vermont Senator Bob Stafford and Rhode Island Senator John Chafee, whose son now also serves on the Environment and Public Works Committee.

I am thrilled to be back in Vermont in this House. I have very fond memories of working in these rooms and for the State all these years. I'm here today to learn from Vermont.

While the next transportation bill will be national in scope, it will be driven by local impact. This transportation bill will not just be about paving new roads. Under my chairmanship, it will also be making America stronger, helping rural communities, protecting the environment, creating thousands of good jobs, making commerce flow, keeping families safer, and enhancing rural economic growth.

In the process, I will not forget the special needs of our senior citizens, nor will I forget our younger citizens. Parents should not have to worry whether the school bus will make it to school, and children should not have to worry whether their parents will make it home from work.

Three million highway injuries a year, including over 40,000 deaths, is unacceptable. The total economic cost of motor vehicle crashes in the year 2000 was \$230 billion, five times the cost of the whole Eisenhower project.

There are no complete guarantees in life, but I assure you that I will work toward passing the most safety-conscious and the most environmentally sensitive transportation bill ever. Much needs to be done in Vermont. We have 15,000 miles of public roads and over 2,000 bridges that must be properly maintained. We need to support commerce. Nationwide, the percentage of freight carried by trucks is projected to increase by at least 45 percent by the year 2010. An improved rail system in Vermont would help to prevent that truck congestion.

I will look to protect our New England heritage and communities. I want to do what is right for the Nation, but through local decisionmaking process. I am interested in harnessing new technologies and creative ideas to get Americans safely on the move.

The events of 9/11 have raised the ante as we work to better safeguard Americans in transit, whether it is families driving across bridges or fully loaded passenger trains. Worldwide, roughly one-third of terrorist attacks target transportation systems.

Another challenge will be our aging population. The population aged 85 and older will increase 20 percent in the next 6 years.

On a separate front, emissions from vehicles include lead, sulfur dioxide, carbon monoxide, and other harmful pollutants, and air particles which expose us to health problems, including cancer. This is hardly what parents want their children to inhale while playing in the backyard.

Scott Johnson, the head of Vermont's Agency of Natural Resources, testified down in Washington, DC, just a few weeks ago. He said that surface transportation remains the largest in-State source of air pollution in Vermont. Traffic pollution is also a major cause of greenhouse gas emissions, and we must act now to protect the whole planet.

One of my top priorities will be to spend wisely. A recent report showed that every dollar spent on road maintenance, while the roads were still in good condition, saved up to ten dollars in costs to repair the road once the road fell into poor condition.

While the transportation bill presents many challenges, some of which I have just mentioned, it also offers us good opportunities. For example, each \$1 billion spent in a transportation bill can create 44,000 full-time jobs.

My goals for this bill include a cleaner environment, a strong Vermont economy, safer families and healthier communities, creating good Vermont jobs, and a transportation system for Vermont, based upon Vermont's needs.

I am very pleased that we will be hearing from a number of witnesses today, including Secretary Jackson. I look forward to working with him on this major effort. Also, we will hear from Brian Searles, Secretary of the Vermont Agency of Transportation; Ray Burton, Executive Councilor from New Hampshire; Chairman Richard Pembroke of the Vermont House Committee on Transportation; Chairman Richard Mazza of the Vermont Senate Committee on Transportation; Dr. Thomas Adler of the Northeast Transportation Institute and Museum in White River Junction, Vermont; Debra Ricker, Associate General Contractors of Vermont; Paul Bruhn, Preservation Trust of Vermont; Matthew Sternberg, Executive Director of the Rutland Redevelopment Authority.

I also want to invite anyone from the audience to submit written testimony to me by sending it to the Committee on Environment and Public Works at Room 410, Dirksen Senate Office Building, Washington, DC, 20510. Please send your ideas to me, though, by September 5, so that we can make sure that we have input into this bill.

I now want to move forward to listen to our witnesses. Our first panel is the Honorable Michael Jackson, Deputy Secretary of the U.S. Department of Transportation, Washington, DC. Thank you, and I understand you have a prepared testimony.

STATEMENT OF HON. MICHAEL JACKSON, DEPUTY SECRETARY, U.S. DEPARTMENT OF TRANSPORTATION, WASHINGTON, DC

Mr. JACKSON. I do, Mr. Chairman, and thank you very much for the opportunity to speak today before you and also to listen and learn from the distinguished panels that you have brought forward to learn about the issue on the table today. I would like to introduce Emil Frankel. Emil comes by being in this part of the woods in a natural way. He was the former Commissioner in Connecticut, and has been brought by the Secretary of the Department, and his responsibilities has had a substantial amount of oversight for our work in developing these recommendations for you, sir, in our reauthorization to date, so he will work with you on this important task.

I just want to say that Vermont is lucky, sir, to have your chairmanship and your experience and your focus on this important national priority, and indeed the country is, to have someone with your focus and experience leading this important committee. And Secretary Mineta sends his regards and his pledge to work closely with you.

Senator JEFFORDS. Well, I've worked closely with him for many, many years. We came into Congress in the same year, back in that time when Republicans didn't do very well, but I think—in fact, I

think there were only a dozen or so of us Republicans out of the massive change, but anyway, Norm and I have been friends all these years, and look forward to working with him.

Mr. JACKSON. I will try, Mr. Chairman, with your forbearance, to summarize my prepared remarks and go about not only the rural transportation issues set within the context of the reauthorization task that we have before us. And the Secretary has, when he appeared before your committee, outlined six key principles that will guide our work in the Administration in working on this set of issues, and I'd like to just summarize those, and then talk about a little bit about how some of those apply to the rural transportation issues in particular, and then happy to answer any questions you might have.

The six principles that we start with, first is to ensure an adequate and stable source of funding. At the end of the day, of course, this issue of a stable and adequate source of funding is the touchstone issue in the transportation world. We have seen that the RABA mechanism for Revenue Aligned Budget Authority needs a new look. Your work in trying to help provide, in the Senate, some additional funds this year, above what the formula generated, has been embraced by the Administration, and we will look into reauthorization to try to stabilize the ups and downs of the funding sources that are available. And so that adequate, predictable funding is an important principle.

Second, preserving flexibility, and this is a cornerstone principle that will help us address fairly not only rural needs, but the whole spectrum of which is to allow States to spend their money the way they need to spend it, and that's been a cornerstone, and the Administration certainly anticipates strongly supporting the continued focus on flexibility in the new reauthorization.

Third, expanding and improving innovative financing. I want to talk about that in a few minutes ahead, but we need to figure out how to stretch our dollars and stretch our investments further, and this is something that we are very interested in working with you further on.

Fourth, accessibility. The rural community has very, very strong and pronounced needs to access transportation in this country. 21 percent of the population lives in rural communities, and 18 percent of the jobs, and many of those people don't have access to transportation to get to their jobs when they must leave their home.

Fifth, making substantial improvements in the safety of surface transportation projects is a cornerstone. That's really the beginning and the end of our work and our thinking, and finally, to wrap it up, we are committed and know that we can do this in an environmentally sensitive way, as your opening remarks indicated. There does not have to be a disjunction between moving forward, building strong, effective transportation networks, and doing it in an environmentally sound and effective fashion.

So those are our six touchstones, and when we begin to look at the transportation reauthorization and think about the rural needs in that context, it seems that those first two principles, of adequate funding and flexible financing, are the cornerstones, really, for us of dealing with rural needs.

If we have adequate funds and we give the States, who know best how to spend the money, the flexibility to do that, then we think that those two key principles that have been in the existing legislation will serve us well in the new legislation, so in many ways we want to come back through the discussion of how to restructure the reorganization and hit those two touchstones and figure out how to do it.

If we can adequately provide for the whole country, the rural issues will be addressed, but I would like to delve, then, into specific programs and focal points for us in rural needs. There are obviously core programs which will help address the rural communities' needs, but I think TEA-21 wisely created a series of programs which we at the Department have been aggressively supporting, and in fact innovating, to add to, to help focus needs on the rural communities. Also on urban communities with urban-targeted programs.

So to unpack the rural part of it, we have created a rural capacity building initiative at the Department which brings together FHWA and FTA and also brings in other safety agencies, such as NTSA, to take a look at how we are focusing on rural communities. And we start by saying that we're going to provide funds with rural focus and rural-specific programs, and Congress has done that, and we will support, in the reauthorization, the capacity to flow funds directly to people in rural communities in a meaningful way.

And so I'll just mention a few of these: The Federal Transit Rural Program, the so-called Section 5311 program. In fiscal year 1902, it's a \$226 million program for capital, administrative and operating needs. I think this is a terrifically important type of program, in that it floats funds to over 1,200 separate organizations, State organizations, nonprofit organizations, people who are able to bring to the table in the State a proposal to try to meet these transportation needs.

A second program that we think is a very important and effective is Rural Transit Assistance. It's a smaller program, but it provides funding and R & D and planning money on a flexible basis to try to help organize the community in a way to present itself effectively to the larger capital and infrastructure grants that they might apply for.

The Federal Transit Administration Program on Elderly Persons with Disabilities is an \$85 million program which we think again takes money and flows it directly into rural communities to help people who have disabilities and need to get to a job, need to get to a doctor's appointment, the chance to do that.

The Job Access Revenue Program also provides the same service, but the former is an \$85 million program, the latter a \$125 million program, 21 percent of which is earmarked for rural communities. And Central Vermont Council on Aging, for example, has used this first program in a very effective way. They're growing. Their service base, the people that they are helping, is anticipated to grow strongly.

So this is the type of targeted resources that local communities are taking on board, opening their arms and opening their hearts and doing good things with.

On the Federal highway side, we've focused on safety, set aside money in rural communities, a billion and a half dollars in 1999 and 2000, on rail crossings, hazardous intersection mitigation, and other efforts.

45 percent of that program is focused on rural communities in our distributions. So without trying to unpack the big book of the Federal program, I think it is fair to say that as we come to you and come to the Congress broadly with recommendations, that will be an area where we'll want to focus specific programs on the rural community.

Finally, I would like to say that there are three ways that we think we can extend our highway investment and make better use of it. First is innovation in financing. We've talked about the TIFIA program before your committee before. We've talked about State bank moneys, and other tools like this. I think that as we operate in a constrained financial environment to try to meet our needs, that this will be an important set of things for us to focus on.

Second of the three ways to extend our dollars is technology. We have, not only in the ICS program, but in our R & D program, we have to use our money more effectively to stretch the dollars. Actually, this program at the department has focused a considerable number of programs on the rural committee. There are issues related to snowplows on urban roads that are very safety sensitive and appropriate things for us to put technology against to try to mitigate accidents, and there is a substantial body—and I'd be happy to share with the audience anyone who has an interest in these particular ICS planning tools that help us to focus technology on urban and rural communities.

And finally, I would like to lay on the table for us to talk about, in the coming months, a topic that extends our money and uses it more wisely, which is really how to use procurement tools that stretch our dollars to get Federal value from them. Those are oftentimes State laws and procurement laws that mandate and govern how to use these funds, but there is a set of issues that I think we can, with our State colleagues, unpack and understand a little bit better about how to use procurement tools that are innovative and that allow us to stretch our government dollars further.

There are two things that I would say in closing that I won't try to talk about in great detail, but which I will just lay on the table. First is you, sir, have mentioned the safety focus that we have and the security focus that we have after 9/11. It has changed the world, really, for transportation, and in looking at all of our programs, not just in urban areas, but around the country, we find in rural communities very important installations relative to national security that are somewhat remote and yet have specific needs. Whether it's a nuclear power plant, a military facility, a research center, there are specific needs that we will need to look through and understand better as we plan our security.

Obviously with the Congress' direction, we've undertaken a massive deployment on the aviation side to bring a Federal workforce and transportation security. I'm happy to report that today in Burlington we're bringing our Federal workforce team to Burlington and beginning the deployment of Federal workers there, but as we

go forward in this organization, it will have to be adjusted and addressed in our bill.

And that leads me to my concluding point, which was your beginning point and also our touchstone in life, which is safety.

We know that there are significant safety problems and needs that we must address in the world community as well as across the country. The 41,000 lives that you mentioned are just an unacceptably large toll, and we pledge to work that very, very strongly. I would like to ask your help in thinking how we can launch one very simple crusade—a moral crusade, really—on getting seatbelt use up. If we could raise the seatbelt usage rate to 90 percent, which is where it is in California and several other States, we could save 9,500 lives a year and we could save untold thousands of injuries and billions of dollars of cost to the economy.

So there's a simple, I think moral imperative, for us to work closely, and I'm not here today to propose a penalty for not doing this, I'm here to propose that we somehow build a crusade to do this and persuade people that it is the right thing to do and educate them well. So on the safety front, we'll have many, many areas to discuss. On the highway safety, you will hear us, I think, the Administration under Senator Mineta's direction, really trying to focus in the coming year.

Senator JEFFORDS. What is the average usage? You say 90 percent in California. How are the rest of us doing?

Mr. JACKSON. Well, it varies widely. I was in Texas this week, and they had moved from 76 percent to 81 percent. Around the country we have States as low as in the low 50's and mid 50's and as high as 90 percent, and the two keys that have made it so effective is first, a primary seatbelt law, and second, to enforce a partnership in the State. Tools like advertising and the like help, but there's that range, really, around the States, so you see, in a large State like Texas, there are literally thousands of lives that could be saved over a relatively short span if they could get that seatbelt usage up.

So., Mr. Chairman, with your permission, I would ask that my formal remarks be included in the record and conclude, with my thanks to you for allowing me to be here.

Senator JEFFORDS. Well, thank you very much. I was going to ask you to join me later, but I'm going to ask you some questions first.

Vermont has an interesting history, and it's an interesting history relative to railroads. That's why I have substantial interest in railroads, as well. In fact, Billings, Montana, you may not realize, was named after a Vermonter who started the Great Northern Railroads out there. And we had 44 operating railroads in this State at one point, so we love the railroads, and I am deeply concerned about Amtrak and the future of Amtrak, and can you bring me a status and update on where we are there? As all of us know, we've had some scares lately, in the inability to have confidence in whether it's going to operate.

Mr. JACKSON. Yes, sir, Mr. Chairman, I served on the board of Amtrak as the secretary designee—Secretary is appointed by the President, and I serve as his designee. Amtrak is a troubled institution, but inner-city passenger rail is—and I will tell you on the

issue about the Acela train, repairs are under way now. I spoke yesterday to the president of Amtrak, and he was able to report that they're actually making very good progress, better than they had anticipated, in repairing the suspension problem that had been identified a week ago. And they were able yesterday to get 60 percent of the Acela trains back in service.

The FIA, they had bolt cracks in an assembly that prevents a yaw going in the train and lateral movement, so they had a temporary fix with a stronger plate, and they're going to look at that in a going-forward way to engineer a sound solution for a longer-term fix, but they are expecting to get back to basic service here this week.

The larger problem, of course, is that Amtrak is a troubled institution. It has a significant financial set of problems that it faces. It's not just about throwing more money at Amtrak, I think, although this Administration will support more funds for any inner-city passenger rail. We've tried to lay out a vision of how competition and reform and financial discipline can be brought to Amtrak, and we think that in a reauthorization, that we'll have a good chance to talk with Congress in a very realistic way on how that can transform.

It won't be an overnight thing. They can't just transform it. We believe the States should have financial contribution to that future, but we know that the States cannot just be asked overnight to shift from no—a little funding to greater funding. We have to have a pathway over the entire period of the authorization to get us from a broken system to get us to a well sustained system by the end of the authorization.

Senator JEFFORDS. There seems to be, in your statement and in the policy, the expectation that somehow Amtrak could make money and live on its own. There's no country that has a railroad transportation system that is not supported by outside funds, and it seems to me, if we go forward on the presumption that somehow we're going to get it to break even or make money, that it just isn't going to work, and I think I want to work with the Administration to find out the ultimate solution where we have safe railroad transportation with the means to do it that won't require the expectation that is really not doable.

Mr. JACKSON. I think that you have pointed to a very important point. The last reauthorization set Amtrak on a course and said by the end of the 5-year authorization, December of this coming year, of this year, that they must be operationally self-sufficient, and it was a faulty program. It's easy, in retrospect, to understand that. It was perhaps hard to understand that at the beginning. They just were never going to get there. And they were leasing equipment, selling assets, doing short-term financial deals to take their assets and turn them into operating capital.

We recognize that there needs to be infrastructure investment and capital investment, but we do believe that a reformed Amtrak, with competition and with some strong financial control, run like a—with the best financial discipline of a well-oiled corporation, can bring greater discipline and cost-effectiveness into it.

So I think that it will be a spirited debate on how to get that done, but I don't say that we shouldn't invest, and the Administra-

tion is not holding that position, but it does say that we have to restructure so that our investment is well used, and we need our partners in the States to help us prioritize this.

Senator JEFFORDS. Well, are you looking for the States to do the subsidization, if it's necessary, rather than the Federal Government? Is that your point?

Mr. JACKSON. Well, I think that one of the things that we've looked at in Amtrak is to look at the Federal Transit Administration Program as a rough guide. The Federal Government puts very significant capital investment in infrastructure, and States provide operating subsidies, and so the Federal Government has invested many, many billions of dollars in keeping Amtrak going, but we still have a large capital backlog in the Amtrak system, so we recognize that investment in capital is an appropriate role. We want to figure out with the States what we can afford and how to do it. By having a stake in this game, the States right now just take whatever we give them, and it's hard politically to bring discipline to the right decisions, and we're trying to get the States to be partners in this, just like they are in the FDA process, where they have to put some money up front, they have to prioritize this as an expenditure that is meaningful to the State, and then the Federal Government is a partner in that.

Senator JEFFORDS. Well, thank you very much. Now, as you know, I sponsored the Highway Restoration Act to address the RABA problem for fiscal year 2003. In my view, we cannot saddle the States with the dramatic Federal funding cuts when States are under such financial stress themselves. My bill enjoys 74 cosponsors. Can I expect the Administration to support an increase in the highway program above the President's initial recommendation?

Mr. JACKSON. Yes, we have been working to try to find a really structured mechanism, and in principle we have indicated that we support funds above the level of the President's initial mark, which was \$4.4 billion off, as you know, the target. So we're prepared to do that. We'd like to make sure that it's an effectively structured mechanism, and we would certainly work with you in that.

Senator JEFFORDS. Well, that's good news. I appreciate hearing that. Vermont has a very active and extensive border with Canada.

Mr. JACKSON. Yes, sir.

Senator JEFFORDS. Thus, how will the Department balance efficiencies that we need for cross-border transportation, where our national interest is enhanced security? Can we combine the two objectives?

Mr. JACKSON. I think we can. It's one, to do a better job of integrating safety and customer service. We do a tremendous amount of trade across your border with Canada, and it's absolutely indispensable to the national economy, not just Vermont's economy, as you know, to make that work effectively. So I believe that we can balance world-class security and world-class customer service. We can use technology to make trucks and trains move more effectively across our land borders, we can bring tools to make our airports, where cargo and passengers move through on international arrivals, operate more effectively. As you know, I'm working with the Transportation Security Administration with these twin goals, as well.

We can do better and we should do better, and I think one of the things the President is focused on, in listening to him talk about this proposal, was trying to have one person doing multiple tasks rather than a serial set of different agency people dealing with the truckers trying to pass across a border. So there is that efficiency focus very much imbedded in the President's—

Senator JEFFORDS. Yes, because we get some terrible messes in our border here in New York and on our side. So that's a critical problem. Thank you, Mr. Secretary. Are there any matters that you would wish to address and to make us aware of at this time?

Mr. JACKSON. I think not. I'm just grateful to have a chance to get in and listen to the testimony, and so I just—but thanks for letting me be here, and Emil may want to join me in this process.

Mr. FRANKEL. I appreciate being here. It's nice to be back in New England on an official basis, and Vermont, I might say, is showing the way, particularly in terms of inner-city passenger rail in terms of what this State is willing to do, and I think is a model for the sort of thing the secretary has in mind when he was trying to articulate a vision for what the future of inner-city rail should be.

Senator JEFFORDS. Thank you, and Mr. Secretary if you would join me, I'd appreciate it.

Now, if I could have my good Vermonters come forward and take their seats, I'd appreciate it.

Secretary Brian Searles, if you would lead off for us, please.

**STATEMENT OF HON. BRIAN SEARLES, SECRETARY, VERMONT
AGENCY OF TRANSPORTATION, MONTPELIER, VERMONT**

Mr. SEARLES. I'd be happy to, Mr. Chairman. Good morning. For the record, my name's Brian Searles; I'm secretary of the Agency of Transportation here in Vermont. I will begin by thanking you for holding this hearing in Vermont. We very much appreciate the opportunity to talk about challenges and opportunities unique to rural transportation. Let me also extend a welcome to Secretary Jackson and Emil Frankel, very glad that you're here to listen to issues of rural States. I'd like to personally thank also you, Senator Jeffords and Senator Smith, for being here with us for your efforts in restoring funding related to the RABA issue this year.

Also like to welcome Mr. Ray Burton, on my left, a member of the Governor's Executive Council of New Hampshire, who will testify on behalf of that State. Welcome, Ray.

Mr. John Horsley, the Executive Director of the American Association of State Highway and Transportation Officials, was unable to attend today's hearing and asked me to make a few brief comments on behalf of AASHTO and its member States across the country.

Were he able to be here today, Mr. Horsley would say that rural two-lane safety is a concern for AASHTO members. The General Accounting Office recently reported that although 40 percent of all vehicle miles are traveled on rural roads, 60 percent of traffic fatalities in 1999 occurred on rural roads. Funding should be increased to improve safety of rural roads, both State and local. AASHTO urges that the highway program be increased over 6 years to \$41 billion annually. From this, an additional \$1 billion annually should be dedicated to safety.

On the issue of rural transit, AASHTO's Bottom Line Report documents the need to double the current investment in rural transit, especially to meet the needs of the growing number of elderly residents who can no longer drive, but still need access to health care and other services.

On the transportation enhancement program, AASHTO supports the continued dedication of 10 percent set-aside of STP funds to support transportation enhancements, which so far have benefited over 14,000 communities nationwide. We urge further simplification of the program to make it easier for local governments to apply and advance payment rather than cost reimbursement as the basis for conveying funds to local governments.

In terms of the diverse needs of the States, the needs of Vermont are important and special to us, but perhaps different than those in New Hampshire and other States. AASHTO believes that the national program should be crafted in a way that respects the diversity of various States and allow them to define proposes that best suit their needs.

And last, AASHTO believes we must grow program. To meet the nation's safety and capacity needs for highway and transit will require significant increase in resources. We urge the Senate to take a close look at the financing proposal AASHTO has made, which outlines a way of making it possible to fund a highway program which increases from 34 billion to 41 billion from fiscal year 2004 through 2009, and a transit program which increases from seven and a half billion to ten billion in that same period.

That concludes the remarks on behalf of Mr. Horsley. I'd refer to my own testimony now.

By many he shall measures, Vermont is the most rural State in the Nation, a collection of 251 cities, towns and unorganized gores that dot the hillsides and valleys of this mountainous State. We occupy an area larger than New Jersey with a population that is smaller than many mid-sized cities, about 608,000.

We have 15,262 miles of public roads, 57 percent of which are unpaved. And I mention these facts, because transportation management in rural States is different than in urban areas, and while we have a strong interest in all modes of transportation, our topography and population distribution often limit our opportunities.

Vermont and other rural areas across the northeast are heavily dependent on travel and tourism, and because Vermont is located within a few hours' drive of 50 million people, the region's highway system is an important conduit for what amounts to about 25 percent of the State's overall economy.

During the past few years, new information has emerged from several studies describing travel patterns and freight-flows to and from rural New England. These studies, and I will provide copies of them, Mr. Chairman—

Senator JEFFORDS. They'll be made part of the record, thank you.

Mr. SEARLES [continuing]. Show heavy flows of traffic between rural areas and adjacent metro areas and have provided us with a new understanding of the interdependence of rural and metropolitan areas in the northeast.

We know that rural travelers are much more dependent on highways than other modes of transportation, and as a result, transpor-

tation management is different. Where urban transportation issues generally relate to congestion management, short trips to work, shopping or amenities, in rural areas the percentage of long distance trips is higher, congestion is spotty, and providing accurate and timely traveler information is often more important than congestion management.

While it is true that we are a very rural State and much of our travel is by single-occupancy vehicle, we also have continuing needs for effective public transit. Admittedly, our public transit delivery systems look very different than those in more urban areas. We do have traditional fixed-route bus systems in our urban areas and even a commuter rail system in Chittenden County. However, our much of our public transit service is provided by less traditional means, such as deviated routes and demand-responsive operations. Indeed, a significant need for rural mobility is served in Vermont by a network of volunteer drivers providing these essential services to members of the community. The need for these services will likely explode in all areas as the baby boom generation ages. In my judgment, attention needs to be focused on the administrative operations surrounding the delivery of these programs, as well.

Safety considerations are different in rural areas than urban areas. You've heard this referenced in earlier testimony, and as Mr. Horsley noted, 60 percent of all fatal crashes occur in rural areas, where it is much more difficult to get crash victims emergency care within the golden hour due to sparse communication infrastructure and more dispersed emergency responders. A new source of funding is needed across the board to help address safety issues on rural roads. Weather sometimes has an increased significance in rural areas, because severe weather can close down rural routes or cause significant delays. Rural agencies must keep many miles of transportation infrastructure functioning with comparatively thin-spread resources.

Here in Vermont, the environment is an important aspect of the quality of our life. We must continue to work together—the States, the USDOT, and the Congress—to improve the stewardship of our environment. We must also look at ways to continue to speed up project work. I believe the environmental process can be made better with better results for our environment and for project schedules.

I mention these points because of the fact that the majority of land area in Vermont and in the northeast is rural. 72 percent of the land area in the northeast has no metropolitan population areas of more than 250,000 people. Yet 28 percent of the population in the northeast lives in rural areas.

As I said, Vermont is a small State with limited resources. The State owns and operates 10 small regional airports, and owns about half of the 740 miles of railroad that crisscrosses the State. We believe rail will play an increasing role in our transportation future, both in the movement of passengers and freight.

If we are to grow our rail program, we must deal with the problem of rail highway crossings. Grade separation is key in order to achieve higher-speed rail and safety. However, grade separation is costly, and here in Vermont, beyond our reach without Federal assistance.

Our ability to raise revenues for transportation projects is limited by our population and commercial base, and consequently we rely heavily on Federal funding sources.

Our total transportation budget for fiscal year 2003 is \$332.2 million, of which is \$156.3 million is Federal dollars. Consequently, flexibility is important to us, because it allows us to move funds to match our transportation needs.

Our mission is to maintain a transportation system that allows for the safe movement of people and goods in a cost-efficient, environmentally sensitive, and timely manner. Our ability to fulfill that mission is being impacted by several large projects. These large projects are necessary, but they are draining our resources, and in the process, forcing us to delay projects that are essential to that mission. The result is that we have \$109 million worth of projects that are permitted, ready for construction, but sitting on the shelf, because we have not been able to identify a source of funds. Now, while \$109 million may not seem like a lot of money at the national level, remember that our total transportation budget is just over \$330 million, and I might add that in Vermont, the definition of "large" or "mega" is not the Big Dig and it's not the Woodrow Wilson Bridge. We're talking about \$42 million for our largest bridge project between Alburg and Swanton, over the Missisquoi Bay, \$100 million for the Bennington bypass, and \$80 million for the next two phases of the Chittenden County Circumferential Highway.

Moving to our interstate system, parts of our interstate system are 40 years old and need repair. A recent needs assessment of Vermont's 320 miles of Eisenhower Interstate System showed that an investment of \$74 million was needed just to bring the system up to Federal standards. Simply put, we cannot afford that kind of investment and meet our other commitments/needs on our national highway systems and State highway systems.

And Vermont is not alone. Other States have similar interstate problems and needs. In my judgment, the time has come for the Congress to make another significant investment to repair and upgrade the interstate system, similar to the investment that was made in the 1950's, 1960's, and 1970's, to build those interstates.

As Congress works toward reauthorization of TEA-21, I hope you maintain the course set by ISTEA and sustained in TEA-21 by continuing to recognize that all States are different, that it is the diversity of the States viewed as a whole that makes our country great.

I urge you to retain the existing structure of TEA-21. Although improvements can be made, the fundamental structure is sound and should be preserved. Flexibility is important to us. As I said, Vermont's smallness provides us with some unique opportunities to do things that larger States might not be able to accomplish. Funding is still the key, and I would urge you to authorize the maximum level of Federal investment possible. Funding mechanisms should be continued to achieve congressional intent that all available funds be invested in transportation improvements.

Just as ISTEA and TEA-21 have made significant strides in growing this program, the next surface transportation bill must provide new sources of revenue, so that we can jointly meet the

challenges facing the State and the Nation. Thank you again for the opportunity to address you.

Senator JEFFORDS. Well, thank you for very, very helpful testimony. I now turn to Mr. Burton from New Hampshire. I just want to thank you for coming, and we have a great advantage in this situation right now, with Bob Smith being the ranking member and myself, so we look forward to working together, as we always do, in New Hampshire, and I'd appreciate hearing your views on the situation with respect to our sister State and how we can work together.

**STATEMENT OF RAYMOND S. BURTON, EXECUTIVE
COUNCILOR, WOODVILLE, NEW HAMPSHIRE**

Mr. BURTON. Thank you, Senator Jeffords, and pleasure to appear here this morning on behalf of my elected office in the State of New Hampshire. I represent the State of New Hampshire. And at the end of this term I will have been there 24 years, and hopefully a few more terms down the road, representing a whole wide variety of interests and concerns, and most of them are hitched to transportation.

The interstate literally opened up, if you will, northern New Hampshire and northern Vermont and New England, and has brought growth to places like Littleton, along with Plymouth, and again, our I-93 corridor. The Executive Council is five in number. The council has been developing what we call the 10-year highway plan, and I brought along a copy which I'd like to submit for the record.

Senator JEFFORDS. It will be made a part of the record.

Mr. BURTON. If you would be so kind, Senator. The Executive Council is very much like a Board of Directors. Governors come and go, but some of us stick around for a while. The Commissioner of Transportation, Carol Murray, also is aware of my appearance here today, although I'm speaking for myself. She obviously wanted to be noted, and appreciates the fine cooperation that she's had over the years with the State of Vermont, particularly Brian and the Secretary of Transportation in the State of Maine. Megan Stanley and Jeff Rogues are here from Senator Smith's office.

Senator JEFFORDS. Please stand and be acknowledged.

Mr. BURTON. Yes, I wish they would. They've helped me a lot, and both of them have worked very closely with Carol Murray and her staff in making sure that we address those needs in air, rail, highway and public transportation. Second point I'd make is that I would hope that the U.S. Congress would make sure that we keep the level of funding at the full level of \$31.8 billion. Our 10-year highway program cannot move forward unless that Federal—Senator Jeffords. If you got more, would that be all right? Mr. Burton. We always enjoy more. Speaking as an elected official, and an elected Republican official, I've never been embarrassed to put the Federal money at the local level for the people that some of us represent out there, and flexibility—got to have some wiggle room for this Federal money as it comes along—and would register that point.

We've got another situation developing, and that is keeping too many historic bridges. On Route 302, between Woodville and

Shelburne, New Hampshire, which is of course right across the top, we've got about five bridges. Two of them don't go anywhere anymore. They're not even on the snowmobile or ATV trail or even a foot path. Somehow or another, I would like to urge you and your committee to allow each State, after a hearing process, to determine which ones they want to keep for historic preservation, tourist attractions, future engineers to come look at and study. We're required to still keep them, keep them in repair.

Recently Carol Murray, Commissioner of Transportation, had to spend about \$30,000 on an abutment of a bridge in the town of Landaff on Route 302. The bridge does nothing. It just sits there. I would hope that that would be a part of your consideration, that you work with Senator Smith and others on your committee.

Demonstration projects have been extremely valuable, particularly to the rural areas. Sometimes for all kinds of reasons, those projects that are wanted by the local officials just never get into the State budget or the 10-year practice plan for all kinds of reasons, and I would hope that you and your committee members would never be embarrassed to, if the people want something back home, put it in as a demonstration project. Those are needed. Over the years, it's been my pleasure to work with Senator Rob Ide, where I work part-time at Springfield College, and working on river projects up and down the Connecticut River.

The final point I'd make is in support of the Northeast Border Corridor Comprehensive Study, and Secretary Mineta was sent a letter signed by Olympia Snowe, Hillary Clinton, and Mr. Schumer from New York, and Senator Bob Smith wrote last year in support of this same Northeast Corridor Study with our neighbors to the North, Canadian Provinces, and we encourage that study to move forward, particularly as we look at Route 2 and also Route 26.

That concludes my testimony, Mr. Senator, and would thank you again for the courtesy of being here to represent my State of New Hampshire, and as an American I'm very proud to do that.

Senator JEFFORDS. Well, thank you very much for very helpful testimony. I now turn to my good friends who I've worked with over the years and who I deeply respect for the contribution they've made to this state and this area, and I start first with Representative Richard Pembroke.

**STATEMENT OF HON. RICHARD PEMBROKE, CHAIRMAN,
VERMONT HOUSE COMMITTEE ON TRANSPORTATION,
BENNINGTON, VERMONT**

Mr. PEMBROKE. Thank you, Senator, for the opportunity to testify before your committee today, and especially you, Secretary Jackson, for traveling to Vermont to hear about the challenges that we face. My name is Dick Pembroke, and I am the Corporate Founder of Pembroke Landscaping Company in Bennington, Vermont.

For the past 16 years, I have also represented Bennington in the Vermont legislature from a district that comprises a constituency of two incorporated villages within the town of Bennington who have the same infrastructure needs. I have been a member of the House Transportation Committee through that time, serving as chairman since 1993, and at the request the leadership from both sides of the aisle.

The toughest part of my job as chairman is distributing dollars among the many competing transportation needs in Vermont. Looking back, I think that we have been able to do that in a fair and a productive way, and we have used the planning provisions of the Federal law to get the job done. The direction of the law to emphasize planning from the bottom up has definitely been the right decision.

Of course, there has never been enough money. Recognizing this, we set out early in my tenure to eliminate low-priority projects. This was a painful process. Every project has a champion. But we were able to these choices by working through Vermont's network of regional planning commissions and advisory committees. They were the key then, and they continue to be central to our efforts today.

Even with this pruning of low-priority projects, our needs still far exceed our available funding. As a result of the success of the project manager system which we directed the agency to institute, and taking advantage of the advanced construction provisions of the Federal law, I leave my chairmanship with enough shelf projects to consume a year's worth of Vermont Federal appropriation.

Each year we must decide on the allocation of transportation dollars, both Federal and State, among the various modes, and between maintenance operations, system preservation and expansion. I have used the agency's long-range transportation plan to guide this effort.

In my part of the State, the Bennington area in southwestern Vermont, we have nearly completed the first phase of what will become the Bennington bypass, rerouting two national highway system roads out of our city center, improving traffic flow, and relieving unbearable congestion from the downtown.

After many years of planning and design, we have also begun critical safety improvements on the main east-west highway through southern Vermont. This project will save lives and improve commerce. We have improved a key segment of rail line, linking the area to the highly active rail corridor serving Albany, New York, and the nation's rail network. We are now working with Amtrak and our New York neighbors to secure service to the Bennington and the Manchester area. Our long-term goal is to improve both the freight and the passenger rail up and down the western side of the State.

We have also used the generous provisions of the Federal highway bills to expand public transportation. In my tenure, we have established a seamless interconnecting route that goes from the Massachusetts line in Pownal to Rutland and points north. Several other routes statewide have been established or are about to be.

I would encourage you, as you prepare to put together the reauthorization bill, that you garner every possible dollar that is entitled to transportation in order that Vermont and its fellow States have the opportunity to attempt to bring our infrastructure up to par.

I do not have to tell you that our interstate system, as well as nationwide, is forty-plus years old and needs major attention. I ask you to refrain from ancillary programs and concentrate on making

it affordable and less restrictive as possible. Our local communities are in the same predicament and look for State help. More Federal authorization would accommodate our ability to offer them some assistance.

Ultimately, our goal in the legislature, and the agency's goal, is to get things done for Vermont, delivering projects that respect neighboring property owners, businesses, local communities and the environment. This has been a challenge. We've had success by bringing all of the players together and focusing on what's good for Vermont.

A few weeks ago, I announced my intent to retire from the Vermont legislature. I do so with a sense of accomplishment and in the knowledge that many important transportation improvements are under way. And I thank you, Senator Jeffords, for those kind words you entered into the congressional record on my behalf at the announcement.

New commuter air routes have been established not only at the Burlington International, but Rutland, as well, the State's second largest city, and major improvements in various other State airports that contribute to much-needed economic development.

My work on transportation has been among the most satisfying experiences I have ever had. Without the Federal partnership, we could not have made the progress that I have described.

I'm going to now, with your permission, Mr. Chairman, deviate from my prepared remarks to delve on a subject that I was elbow-to-elbow with Mr. Frankel in Buffalo, New York, a couple of weekends ago, and along with the Honorable Jack Quinn, who chairs the Subcommittee on Railroads in the house, and I was afforded testimony by a Dr. Anthony Pearl, visiting from CUNY Institute for Urban Systems in New York. I'd like at this time to just quote from his testimony. It's an item that is dear to my heart, rail.

A few States due to vote some plannings and efforts to inner-city passenger trains, but they get almost no credit for this in the funding formulas that drive Washington's transportation spending. No wonder that Amtrak is regarded as a charity case by many of the policy. Changing the funding arrangement for rail was long overdue.

He further goes on to say that back in 1970, America's freight railroads were provided with the option of acquiring stock in Amtrak in return for their startup contribution to the fledgling passenger operator. Four railroads actually did obtain stock and three took up seats on Amtrak's Board of Directors during its early years. The seeds of an innovative joint venture, public/private partnership in today's parlance, were thus sown in Amtrak's creation, but this potential for a new relationship was never realized. It was frustrated, at least in part, because Amtrak turned out to have little to offer these shareholders, or indeed any other partners interested in making money.

The conference that Mr. Frankel and I were at in Buffalo was the New England Conference of State Legislators, and I was on a panel with him, and I was encouraged to hear from his remarks that we need to consider our friends in the freight business on the rail.

So I believe all of the above might be the missing link. Mr. Senator, I am glad that you have been able to hear from Vermonters today about the challenges we face, and I do not envy your challenge as you fight for scarce dollars. In closing, I would emphasize that if you feel I can be of assistance at any time, do not hesitate to call me. Paraphrasing General MacArthur's comments, "Old soldiers never die, they just fade away"—I do not intend to die, and I surely am not going to fade away. Thank you again for giving me this opportunity.

Senator JEFFORDS. I have no fear. I am sure of that, and the time that we have spent together, both of you—perhaps Representative Mazza, as well—I know that you will continue to let us know, and we shall pay careful attention to them, because you've been right every time. Well, as far as I know. As far as I know.

STATEMENT OF HON. RICHARD MAZZA, CHAIRMAN, VERMONT SENATE COMMITTEE ON TRANSPORTATION, COLCHESTER, VERMONT

Mr. MAZZA. Thank you, Senator Jeffords, for inviting me to testify here today. And welcome to Vermont, Secretary Jackson. You have given us a wonderful opportunity to describe the challenge of providing transportation in a rural State.

My name is Dick Mazza. I own and operate Mazza's General Store, a market that has been in business in Colchester, Vermont, for 48 years. Since 1984, I have also represented Chittenden and Grand Isle County in the Vermont State Senate. I have been a member of the Senate Transportation Committee throughout that time, serving as chairman for the last 12 years.

As you know, Senator Jeffords, the State of Vermont has entered a difficult financial period. We are facing a budget deficit of some \$39 million. This is a significant amount for a State of our size. And I know that other States, and the Nation as a whole, are experiencing similar problems.

I raise this because it places our transportation issues in an important context. Vermont's revenues are directly tied to the strength of its economy. And our economy—our businesses, my business—is directly reliant on our transportation system. But when times are tough, and when human needs are greatest, it is tempting to cut back on transportation spending.

This year in the legislature, we reduced our paving program by half from last year's. Just this week, a joint legislative fiscal committee considered additional transportation cuts. Interstate rest areas, public transportation routes and town highway grants are all on the chopping block.

We all know that transportation investments create jobs. We can see the paving crews on our highways and the driver on the bus. But beyond these direct benefits, improved transportation moves the people and goods that power our economy. The State's leading private employer is IBM. Access to their facility in Chittenden County today leaves much to be desired. We have both highway and rail improvements programmed to improve the situation, but at great cost. Yet, this investment in our economic future is vital to our State.

Our economy relies heavily on interstate trade and travel. Interstate 89 and 91 are the lifeline for much of the State. We face enormous reconstruction and repair costs on our interstate. Vermont's northern border with Canada has felt the effects of NAFTA and its attendant growth in freight movement. International freight also moves through Vermont from neighboring New York. Replacement of the Missisquoi Bridge, at a staggering cost by Vermont standards, is essential to support our international trade.

Perhaps the most difficult investment challenge in these tight times is a renewal of Vermont's railroads. I like to think of the nation's great achievement, the Interstate Highway System, as our model for rail development. We built the Interstate in segments, but with a fully developed system as our ultimate goal. In Vermont, we have taken a similar approach with rail. And Senator Jeffords, you have been very helpful in our rail programs throughout the State.

But we need a Federal partner in this major undertaking. We need to see continued support for a national passenger rail network. Vermont will do its part, and we need the freedom to use our Federal transportation dollars to revitalize rail.

To Secretary Jackson, and through you to Secretary Norman Mineta, I appreciate your efforts to manage our nation's transportation program in the face of the financial and security problems that confront us all.

And finally, Senator Jeffords, let me thank you again for your years of service to our State. It gives me great confidence to know that you are at the helm in Washington.

Senator JEFFORDS. Well, thank you all. I appreciate those remarks. I'd like to give a little history of Vermont and New Hampshire. We're working together very well right now, but there was a period in time in ancient history where we wanted very much to give away part of our State to the State of New Hampshire, and we went to the United States Supreme Court to do that. And you might wonder why. Well, the question was, who's going to pay for the bridges? And by successfully giving away the river down to the low water mark—the other way around—but successfully giving away up to the high water mark, the State didn't have to build the bridges, and so from that point on, we've had somewhat of an unusual situation, but New Hampshire has accepted it over the years. I just wanted to publicly thank you for not raising the issue again.

All right, let us proceed with some questions, then. The theme of our hearing on authorization this year have been lessons learned from 10 years of ISTEA and the TEA-21 program. This panel has extensive experience. I wonder what lessons you think should guide us to in reviewing the program.

Mr. SEARLES. I'd be happy to offer one, Mr. Chairman, and that's the lesson that comes from the emphasis on local planning. Chairman Pembroke mentioned it. It is, in fact, the success we've had in Vermont in planning projects that has really done the most, I think, to get us where we are now, which is so many millions of dollars worth of projects on the shelf. So really one has led—one issue has led to what I hesitate to call a problem—it's really a success—of the local planning effort that we have so many very popular projects ready to go and the need for resources.

Senator JEFFORDS. Ray?

Mr. BURTON. All comes down to money. You know, in the executive branch, we've got to see how much does it cost, who does the voting, and can you get the votes? We on the executive branch in New Hampshire State government, we carry out the wishes of the lawmaking branch, the House and the Senate, and I'd say flexibility and more money.

Senator JEFFORDS. Dick?

Mr. PEMBROKE. I would echo that, Senator. I know it's nationwide, the increase on mobilization on the highways is just—I mean you see it every time you hit the road yourself, and the traffic is just getting unbelievable, so it's you've got to be able to maintain what we've got and we don't have the resources now to do that, even. And so this is—it all boils down to money. And I know it's an easy way out, but we have—in Vermont, we have the infrastructure, we have the strategy within the agency to get the projects out and get them done, but like Senator Mazza referred to with the budget-cutting that we're going through now, I get letters from these communities that have received letters from the agency saying we've had to postpone your project. Projects that have been on the drawing board for several, several years, and ones that the legislature has worked hard to get there.

A good example, Senator, is Route 2/302 out here. We just got notification that that one has been put back on hold again, and we really struggled hard, when we were deciding our pruning process, to keep that alive, because you know the traffic that that highway consumes out there, so it sounds like an easy solution, but all we need to do is to find the money, but the money isn't flowing.

Senator JEFFORDS. Dick?

Mr. MAZZA. Just a couple of quick things. One is the secretary mentioned something about our interstate system, and I think we need that shot of cash up front, because they're getting old and tired, and I think we need to put some major investment that we're trying to do now, but we had some extra finances for that, and the other thing I think is flexibility.

I think we know best where we can spend our money wisely, and it's also helpful. We've made a lot of progress on that issue, but I think there's a ways to go. Any time that we can redirect our funds, I think we can do it in a wise manner. So those are the two issues I would speak of. Thank you.

Senator JEFFORDS. Brian, you have a tough job, there's no question about that. Are there aspects of the program where greater flexibility would help you get more done for Vermont? Can you delineate some of those for us?

Mr. SEARLES. Well, there certainly are; particularly the flexibility of forged partnerships. And I would point to our programmatic agreement on historic preservation as an example of the sorts of things that ISTEA and TEA-21 have allowed us to do, and I know that you will hear phrases like environmental streamlining and environmental stewardship, and stewardship is the word that I prefer, and I think that if the—if the next reauthorization bill can emphasize the opportunity and perhaps provide, on both Federal and State level, an opportunity to partner around the environmental issues, we can, in fact, have a better result for the environment.

And the second piece of the environmental equation is transit. We are going to need more emphasis on public transportation if we're going to protect the environment.

Senator JEFFORDS. Dick, I wanted—yes, go ahead, please.

Mr. PEMBROKE. I'd like to ask Mike Jackson, Mike, how much would one cent in the Federal gas tax, an increase in one cent Federal gas tax, yield to satisfy some of these needs? In New Hampshire, if we—and I have always advocated user fees, if we would raise one cent on the gas tax in New Hampshire, brings about five to six million dollars every month. Is there anything on a national basis?

Mr. JACKSON. If I give it to you, it's going to be wrong. I'll send it to you.

Mr. PEMBROKE. It would be in the billions.

Mr. JACKSON. It's a large number, yes, sir.

Mr. PEMBROKE. Well, I'd like to be on the record as suggesting, Senator Jeffords, that the committee think about it.

Senator JEFFORDS. Don't worry, we will. And I know you and Bob will make sure we do, anyway. But no, and I enjoy working with New Hampshire. That's one of the benefits we have in the present situation is being able to work together.

Well, I want to thank all of you for your help and testimony. I think I may have a—if I have any other questions, I should—I think that pretty much does it. I just want to thank you again. I can't tell you how important an issue it's—

Mr. PEMBROKE. I'm not going anywhere.

Senator JEFFORDS. It's been a wonderful time, and I know you'll be there anyway, whether or not you're there in the present capacity and it's been an opportunity to—and also for you, Senator Mazza—we've got some things to do, and I can assure you we're going to be working very closely with you.

Well, thank you very much. I want to thank our next panel, and I'll introduce each of them. Dr. Thomas Adler, Northeast Transportation Institute and Museum; Deborah Ricker, Associated General Contractors of Vermont; and Paul Bruhn, Preservation Trust of Vermont. Good to see you here. I missed you in Shrewsbury I think, whenever it was, yesterday.

Mr. BRUHN. Were you there Sunday for the event?

Senator JEFFORDS. I had to miss it. My wife was there, though. And Matthew Sternberg, Executive Director of the Rutland Redevelopment Authority. Nice to have you all here. And we will start with Dr. Adler.

STATEMENT OF THOMAS ADLER, NORTHEAST TRANSPORTATION INSTITUTE AND MUSEUM, WHITE RIVER JUNCTION, VERMONT

Mr. ADLER. Thank you very much. Good morning, and thank you for the opportunity to testify about rural transportation issues. My name is Thomas Adler. I've lived in Norwich, Vermont, for 25 years, and am currently President of Resource Systems Group, a transportation and environmental consulting firm with a national practice headquartered in White River Junction, Vermont. For 10 years I was a professor at Dartmouth College, director of its grad-

uate program in transportation and its research program, which included projects addressing the transportation needs of rural areas.

I am testifying today as a board member of the New England Transportation Institute and Museum and as acting director of the institute's programs, which include the Rural Transportation Learning Center. This morning I would like to describe why, from a national perspective, rural transportation issues and priorities are, in many important ways, different from the transportation issues that face major metropolitan areas.

As a Nation, we simply haven't examined the needs of our rural citizens as extensively as we have the needs of the citizens of the major metropolitan areas. But we do know some basic facts about transportation problems in the rural areas of this country. In the 13 northeastern States, we see that our rural citizens have significantly lower levels of household income than in those in the more urbanized regions. But, at the same time, we observe that the rate of auto ownership is significantly higher in the rural areas.

We know also that our rural citizens have to make longer trips, and in fact, travel about 30 percent more miles than their urban counterparts. This translates into the fact that our rural citizens spend a far greater proportion of their total income on basic transportation, and it means they have less money to spend on other necessities such as housing, food, or education. On the other hand, we also know that work-commuting distances are shorter than the national average among residents of the small towns within rural regions, and that focusing rural development around those traditional town centers reduces dependence on automobile travel.

And there's so much we don't know. We haven't properly examined the problems of limited mobility among important segments of the rural population, particularly as experienced by older citizens, and those who do not have access to a car. As the population ages, this will become an even more pressing issue for the rural regions. Just as railroads and automobiles have had profound impacts on the shape of rural communities, new information and communication technologies will also significantly affect the ways in which these communities develop in the future. We have already seen new types of economic clusters forming in rural New England around information-oriented businesses. These businesses in turn have new and very different transportation needs. Our region is fortunate to have intercity rail, bus and air services that connect our rural areas to the major metropolitan areas. But planning a trip by a combination of bus, rail and even air simply cannot be accomplished at any one location.

One important strategy to deal with rural mobility is to help travelers understand just what combinations of services are currently available. Every major nation in Europe has a program to help its citizens plan rural trips by modes other than the private auto. From a technical point of view, it would be easy to apply this technology to our rural areas. In general, complementary investments in a multimodal transportation network and in technologies to provide information to the users of that network will greatly facilitate new economic activities as well as tourism and the other traditional parts of northern New England's rural economy. These

are just a few of the issues that affect rural areas to a greater degree than metropolitan areas.

The primary goal of the Rural Transportation Learning Center is to heighten the level of policy, technical, and cultural learning relating to these and other transportation issues and their impact on communities. This center is a program for the New England Transportation Institute and Museum, which is located in historic downtown White River Junction, Vermont. Our focus is both regional and national, as we aim to explore our region's past, present, and future as a means to inform the national understanding on rural transportation and its relationship to the nation's economic, social and environmental goals.

Our organization has grown rapidly into a bi-State project that has involved the unusually large population of transportation professionals from New Hampshire and Vermont. With the interest and commitment of nationally known professionals, such as Thomas Horan and Matthew Coogan who participated in the preparation of this testimony, it is now growing into a national resource. We have attached to our written testimony a more detailed description of the Learning Center and its research agenda.

I'll close by thanking you for holding this hearing in Vermont and for focusing attention on the Federal Government's policy opportunity to address the unique needs of the country's rural regions. The coming surface transportation reauthorization represents a unique opportunity to ensure that transportation policy enhances rural communities, and the committee's interest in this topic is most appreciated. We look forward to working with you, the others here today, and the community of national transportation professionals to ensure that transportation issues in rural areas are more fully understood and addressed.

Senator JEFFORDS. Thank you.

Deborah?

STATEMENT OF DEBRA RICKER, ASSOCIATED GENERAL CONTRACTORS OF VERMONT, BARRE, VERMONT

Ms. RICKER. My name's Debbie Ricker, and I'd like to start by thanking you, Senator, for inviting us to participate. I am one of the owners and founders of L & D Safety Marking and Worksafe Traffic Control Industries. Our company provides pavement markings and highway sign services. We employ 35–45 people. Our corporate office is located here in Berlin, Vermont and we have divisions in Berlin, Vermont; Bow, New Hampshire; and Augusta, Maine. We are a small, family owned business, and some of us are in our second and third generation, so we have a very strong commitment and deep roots in this beautiful State.

While accounting practices for private corporations may be the topic of concern in Congress today, the accounting practices for State and local governments will inevitably be the focus in the future as governmental accounting standards require more accountability in the condition of, and the maintenance of, roads, bridges, and other public assets that taxpayers have invested billions of dollars in over the years.

I specifically refer to the Government Accounting Standards Board, Rule 34, that defines generally accepted accounting prin-

ciples for State and local governments. GASB 34 requires governments to include long-lived infrastructure assets in their annual financial statements starting with fiscal year 2002.

To properly account for infrastructure assets, governments must develop an asset management plan which at a minimum should identify the condition of pavements, structures, and facilities. That plan should include deterioration rates for those assets so that a determination can be made for the annual funds necessary to maintain those assets at a recommended level of performance. This whole issue of asset management is important to getting the optimum level of results from our expenditures while maintaining our infrastructure. In short, getting the biggest bang for the buck.

This has been a critical issue in government, more so than business, because of the tendency to balance the budget by deferring essential maintenance, since State and local governments are very infrastructure-intensive. Here in Vermont, because we are a small State with limited resources, we have relied very heavily on Federal funds to meet our needs. However, because we are a State with an aging infrastructure in a cold climate, our needs are greater than both existing Federal and State resources are available, so asset management is really critical to us in getting the dollars applied properly to our infrastructure. But more dollars, both State and Federal, are needed to keep up with this.

As for our aging infrastructure, former Governor Madeline Kunin initiated Bridge 2000 in 1988 to repair and replace 454 structurally deficient bridges. We have approximately 2,700 bridges in Vermont. In 1988 the Vermont Agency of Transportation estimated that it would cost 1.6 billion dollars over a 10-year period to repair those 454 bridges.

Today, we have more than 550 structurally deficient bridges in Vermont. The cost, including inflation, will more than double in that area alone.

In addition, the Interstate Highway System in Vermont which is well over 30 years old is now in need of rebuilding in many sections. Bridge replacements need to be constructed and over \$100 million in culvert repairs necessary on the Interstate alone. That's not including the estimated eight to ten thousand or more culverts on the State and local systems that will eventually need replacement.

A report authored by the FHWA and VT AOT recently cited the need to spend \$74 million annually on the interstate in Vermont. Vermont is only funding \$20 million on those repairs, clearly one fourth of what is required. It has gotten so bad on the Interstate that one of our AGC member companies doing a basic culvert repair recently discovered a seven-cubic-yard void directly under the travel pavement of Interstate 89 in Williston. This area of the interstate is a heavily traveled thoroughfare, and a pavement collapse would have caused serious injury and perhaps even death, which brings me to the issue of safety on our roadways.

Tragically, more than 41,000 Americans die and 3.5 million are injured in motor vehicle accidents on our highways each year. If the average U.S. crash rate remains unchanged, one child out of every 84 born today will die violently in a motor vehicle crash. As more people travel more miles on the highways and as the aging

demographics of our driving populations change, significant improvements in safe roads are essential to continue our progress in reducing highway fatality rates and injuries.

In July of this year, the GAO released a report that showed that although 40 percent of all vehicle miles are traveled on rural roads, about 60 percent of the accidents occur on those rural roads. When adjusted for vehicle miles traveled, the fatalities from accidents on rural roads is nearly 2.5 times greater than the fatalities from accidents on urban roads.

Vermont faces a major decision: Invest in repairs and rehabilitation of the existing infrastructure on an annual basis or replace major parts of the system at a much greater cost in years to come. So a properly planned asset management program will help set priorities. Adequate funding of Vermont infrastructure will do much to improve safety for our traveling public and will have a positive effect on Vermont's economy as well.

Senator JEFFORDS. Thank you very much.

**STATEMENT OF PAUL BRUHN, PRESERVATION TRUST OF
VERMONT, BURLINGTON, VERMONT**

Mr. BRUHN. It's a great privilege and pleasure to be here today, especially because Federal and State transportation policy has made great progress in terms of its recognition of the impact our transportation dollars have on the vitality of our communities. This new approach has meant that many new voices are included in the decisionmaking process.

Before discussing some specific thoughts, I'd like to emphasize how important the enactment of ISTEA has been in encouraging a real transformation within State agencies of transportation nationwide. There's been a broadening of their admission from the important one of building roads for safe and efficient movement of cars and trucks to acknowledging the significant impact that transportation projects have on people and communities. This culture shift was due in no small part to the enhancements program. It is important that the enhancements program be continued and strengthened in Vermont and can still remain one of the primary focuses of the agency, but it is now balanced with the knowledge of the critical role transportation projects play in defining where we live and work and what the Vermont landscape looks like.

I'm going to chat about several specific subjects. The first is the new design standards which were enabled by this new policy within the new Federal policy that allowed the States to develop new design standards. We've done that here in Vermont; it's been very successful. It hasn't solved all of our problems or all of the concerns, but it's provided a vehicle for a flexible system for providing transportation, meeting community needs, and not overwhelming some of our communities.

The enhancements program I mentioned earlier. It's been one of ISTEA's truly outstanding success stories. To make use of the program's 12 activities to improve the esthetics and amenities associated with travel on the highways and also to build new and better partnerships with State transportation agencies.

Vermont and several other States have excelled in taking advantage of these 12 activities, especially the ones that relate to historic

preservation and the revitalization of streetscapes and downtowns. Traffic and big trucks on the national highway system are a big problem here in Vermont, and we've had very tough debates, sometimes pitting one community against another community. I think that there's an understanding that we need truck transportation in this State to maintain our commerce and vitality. On the other hand, we do need a balance. One thing I think we probably will agree on is that we don't need bigger trucks, and would encourage the committee to think about supporting H.R. 3122, the Safe Highways and Infrastructure Preservation Act, which would limit the size of truck length and weight on the national highway system with the same standards that exist on the interstate system.

We are struggling with sprawl in this State, as you know. It's been a big interest of yours, and lots of our people. The enhancements program could be a real asset in this process of protecting development around interstate interchanges. There are some glitches and difficulties within the enhancement program that make it a little bit difficult to use the enhancement program for land acquisition and easement acquisition. It has to do with the timing of appraisals and making firm offers on the property, and my testimony written testimony includes some information about that, and would respectfully ask that you have a look at that.

Senator JEFFORDS. It will be made a part of the record and we'll read it.

Mr. BRUHN. Yes, great. We are dead set against removing the protection process, because we think that it's worked. We think the values that the 46789F are used in the process are important ones, and important ones to take into consideration as transportation projects move forward. There's a section here on highway bridges which I'll leave for the written testimony. I also want to say that I realize I'm going over my minute, I'm sorry.

Senator JEFFORDS. Go right ahead.

Mr. BRUHN. I'm serve on the Vermont transportation authority and we have some responsibility for overseeing working with passenger rail, developing passenger rail in the State, and we believe that 25 to 50 years from now we're going to really need a strong passenger rail system in this State and we're not going to build our roads to meet the demands of increased traffic, and both from a freight standpoint and from passengers' standpoint, having a strong rail system will be very important to us in the future, and we hope that the Federal Government will continue to be a real ally that process.

One specific challenge that we have that we would love some help with is the insurance problem. We pay, as Chairman Pembroke knows, we pay a lot of money every year, about \$700,000 this year for insurance on the Charlotte Commuter line. It's a big problem. It's over 25 percent of our budget. Crazy. And some help in the insurance area would be enormously useful to us as we go forward and try to provide increased passenger rail service here in this State. And I'll stop there.

Senator JEFFORDS. Thank you.

STATEMENT OF MATTHEW STERNBERG, EXECUTIVE DIRECTOR, RUTLAND REDEVELOPMENT AUTHORITY, RUTLAND, VERMONT

Mr. STERNBERG. I want to thank Senator Jeffords and Senator Smith for coming to Vermont to hear about rural transportation issues. Particularly, I want to thank Senator Jeffords for his ongoing support of rail improvements that affect our economic development and quality of life.

My name is Matthew Sternberg, and I am Executive Director of the Rutland Redevelopment Authority in Rutland, Vermont. Rutland is the second-largest incorporated city in Vermont and the commercial hub of the western side of the State. Our city has undertaken significant downtown revitalization, but now faces limits to economic growth, due, in part, to transportation access problems.

Rutland City developed in the 19th Century around railroads that played a major role in regional freight and passenger service. As is the case in cities across the Nation, our rail infrastructure fell into disuse, being replaced by highways, except we didn't get the new highways. Truck traffic grew dramatically along U.S. Route 7, now a highway of the National Highway System, but in many places still a narrow, winding country road, complete with cattle crossings, ill-suited to the task of interstate commerce.

We have a choice: Build new highways or redevelop the infrastructure we already have in place, including the rail line. A new interstate highway is not in the cards. If we don't improve rail, allowing the older industrial districts served by rail to be redeveloped, we only encourage greenfield development that must be served by Route 7. If we're going to apply Smart Growth principles in Vermont, we must acknowledge the role of rail.

I would like to highlight three issues that have been central to our discussions of rail here in Vermont. First, the rail line and U.S. Route 7 need a lot of work along the whole length of the State. This suggests a corridor strategy, what we would label a National Highway System/Railway Corridor, running from Bennington to Burlington. Looking at the highway and the rail as integral elements of a unified corridor, we better understand how to allocate resources.

Rutland is working on a major plan to relocate our switching yard, a project that will have profound effects on the capacity of the entire State rail system. Looking at the Rutland yard as part of a corridor helps us understand this dynamic.

Second, we must recognize that the corridor concept addresses both passenger and freight traffic. Historically we have been reluctant to invest public funds in railroads owned by private interests. The fact that the improvement would help the commercial concern was interpreted as a private benefit instead of a public benefit. In considering the objectives of smart growth, we must look beyond traditional definitions of benefit.

A striking example is found along our corridor, where stone quarried in Middlebury is trucked to a processing plant in Florence. Because the trucks carrying the stone pass through downtown Brandon, the State has limited the number of trucks that can pass through that downtown each day. As a result, the company has an artificially imposed cap on its production capacity, and more than

a hundred million dollars in capital investment that would have created jobs in Vermont has gone to plants in other States and Canada.

An initiative is under way through a public/private partnership to build a siding from the quarry to the rail line, enabling the rock to be shipped by rail. This will reduce truck traffic in Brandon, while allowing the company to grow at its natural pace, creating jobs as it does so. Providing the transportation alternative for the company improves the quality of life in Brandon, and this constitutes a bona fide community benefit.

In Rural areas, the NHS/Railway Corridor concept responds to the local needs of communities along the route. We need a model that will enable smaller scale, local improvements that, in the aggregate, will add up to a system that works. The NHS/Railway Corridor will do this, defining the big picture for the region while allowing each community to pursue the individual projects that are right for their situation.

In their position on Smart Growth adopted in 2000, the American Economic Development Council states, "Although smart growth is a national movement, in practice its implementation occurs only in local communities and jurisdictions. Local communities not only consist of a single jurisdiction, but include regions, as well."

Our corridor concept for western Vermont demonstrates the wisdom of this view. Our region's needs are best addressed by strengthening the National Highway System and the Railway Corridor together. I thank you for inviting me to address these issues today, and thank you again for coming to Vermont.

Senator JEFFORDS. Well, thank you, and that's an excellent ending statement. I agree with you, and I can assure you that that's one of my top priorities, is to work along the way you discussed, and I also want to thank the others for their excellent statements. I agree with all of you. Michael?

Mr. JACKSON. I have to say that I, too, very much am grateful to have a chance to hear on a detailed level, rather than the wholesale level that I usually get, what people really need out of the reauthorization, so I'm grateful for the opportunity to visit and hear these comments. Thanks very much.

Senator JEFFORDS. Well, I thank all of you. It's been a wonderful morning, and it's always good to see you anyway. Thank you, and with that, the hearing is adjourned.

[Whereupon, at 11:50 a.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. MICHAEL JACKSON, DEPUTY SECRETARY, U.S. DEPARTMENT OF TRANSPORTATION

Mr. Chairman and Senator Smith, thank you for the opportunity to appear before the Committee to address the renewal of the Transportation Equity Act for the 21st Century (TEA-21) and rural transportation issues. Your leadership in the reauthorization process has been and will continue to be crucial.

Very few things have as great an impact on our economic development, growth patterns, and quality of life as transportation. Although the challenges are different, this is as true in rural areas as it is in urban areas. A safe and efficient transportation system is crucial to promoting community prosperity.

With the enactment of TEA-21's predecessor, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), we established new principles in the implementation of the nation's surface transportation programs—building partnerships with local and State officials to advance the strategic goals for transportation capital investment.

Those principles include: flexibility in the use of funds; a commitment to strengthening the intermodal connections of the nation's transportation system; expanded investment in, and deployment of, new information technologies for transportation services; and a heightened sensitivity to the impacts transportation has on our quality of life and on the shape and character of America's communities.

TEA-21 built upon the programmatic initiatives of ISTEA and, through its financial provisions, provided State and local governments and other transportation providers with greater certainty and predictability in transportation funding. It achieved this by reforming the treatment of the Highway Trust Fund to ensure that, for the first time, spending from the Highway Trust Fund for infrastructure improvements would be linked to tax revenues.

The programmatic and financial initiatives of these two historic surface transportation acts provide us with a solid and balanced structure around which we can shape this reauthorization legislation.

In crafting a surface transportation reauthorization bill, we must maximize the safety and security of all Americans, even as we enhance their mobility, reduce congestion, and grow the economy. These are not incompatible goals; indeed, the lessons of TEA-21 demonstrate that these values reinforce each other: it is possible to have a transportation system that is safe and secure, efficient and productive.

These are only a few of the issues that we must work together to address as we develop a successor to TEA-21. The Department of Transportation looks forward to working with both Houses of Congress, State and local officials, tribal governments, and stakeholders in shaping the surface transportation reauthorization legislation.

In a hearing in front of this Committee in Washington earlier this year, Secretary Mineta set forth certain core principles and values that will inform the Department's reauthorization efforts:

- Assuring adequate and predictable funding for investment in the nation's transportation system.
- Preserving funding flexibility to allow the broadest application of funds to transportation solutions, as identified by State and local governments.
- Expanding and improving innovative financing programs to more effectively leverage Federal dollars and support intermodal investments.
- Increasing the accessibility of the transportation system so that all Americans can enjoy its benefits.
- Making substantial improvements in the safety of the Nation's surface transportation system.
- Ensuring an efficient infrastructure while retaining environmental protections that enhance our quality of life.

My testimony today will focus on these core principles, all of which will benefit rural communities.

Adequate and Predictable Funding

The financial mechanisms of TEA-21—firewalls, Revenue Aligned Budget Authority (RABA), and minimum guarantees—provided greater equity among States in Federal funding and record levels of transportation investment. Although we will be proposing technical fixes to smooth out the wide RABA fluctuations we saw in TEA-21, the linking of highway spending to tax receipts is a sound principle and should be maintained.

Funding Flexibility

Equally important is funding flexibility, first allowed in ISTEA and continued in TEA-21. Flexible funding allows States and communities to tailor their transportation choices to meet their unique needs and has enabled State and local decision-makers to consider all transportation options and their impacts on traffic congestion, air pollution, land use patterns, economic development, and quality of life. We will continue to support vigorously broad transferability of Federal funds within core program categories. As certain States and metropolitan areas have begun to focus more on the operations and management of their transportation systems, this flexibility has proven extremely valuable to them.

Innovative Finance and Intermodalism

ISTEA and TEA-21 were both landmark accomplishments in the history of American transportation. We should not forget, however, that the explosive growth in revenues into the Highway Trust Fund over the last 6 years that yielded overall

program growth of approximately 40 percent was not only caused by a growing economy. Two early 1990's gasoline tax increases that were re-directed from the General Fund into the Highway Trust Fund contributed significantly, as well. In today's constrained budget environment, therefore, we must look to innovative financing programs to play a much larger role.

We can and must make the Federal dollar go farther by expanding infrastructure financing options and engaging the private sector. The United States lags behind many of its international counterparts in the implementation of successful public-private partnerships, especially with respect to large-scale intermodal projects. This reauthorization is an excellent opportunity to change that. We envision more projects like the recently completed Alameda Corridor in California that dramatically improves access in and out of the busy ports of Long Beach and Los Angeles. Rapidly developing freight bottlenecks will impact the entire country and must be addressed in reauthorization. A more efficient system of goods movement will benefit rural consumers and business as well as urban ones.

One success story in the innovative finance arena is the Transportation Infrastructure Finance and Innovation Act (TIFIA) program created under TEA-21. TIFIA has already served an important role in the development of intermodal facilities, border crossing infrastructure, highway trade corridors, and transit and passenger rail. To date, 11 projects have been selected for TIFIA assistance. The Federal Government has provided \$3.7 billion in credit assistance supporting transportation investments worth \$15.7 billion. Expanding the eligibility of the TIFIA program to cover an even broader range of transportation infrastructure projects should increase its impact even more.

Other financing tools such as State Infrastructure Banks (SIBs), GARVEE Bonds and traditional tax exempt financing will hopefully continue to grow in importance. We need to begin knocking down some of the barriers that currently diminish the willingness of States and the private sector to heavily invest in our country's infrastructure.

Accessibility

One of the great legacies of ISTEA that was continued in TEA-21 was to provide for an open, transparent and inclusive transportation planning process at both the State and metropolitan levels. Here in Vermont, State and metropolitan planners have done an excellent job in addressing the diverse transportation needs of its citizens, including rural residents.

In the Hartford, Vermont, Hanover/Lebanon New Hampshire area, where the local economy is one of the most robust in New England, and growing traffic congestion and parking shortages are threatening to slow economic growth, the Advance Transit program has partnered with local communities and employers to provide free bus service on all of its routes and park and ride shuttles to encourage alternatives to single occupant vehicle use. The program has been a tremendous success. Ridership for 2002 is expected to exceed a half million passenger trips, nearly double what it was just 3 years ago. The benefits to low income riders have been recognized as well.

TEA-21 also helped improve transportation for the rural elderly population. The Central Vermont Council on Aging (CVCOA) receives funding through a grant agreement with the Vermont Agency of Transportation. Funds were used to purchase three lift-equipped vehicles. Despite serving a geographically dispersed population, CVCOA experienced a 15 percent increase in unduplicated clients between State fiscal years 2001 and 2002, and is expecting a 34 percent increase between fiscal years 2002 and 2003.

Initiatives such as these will prove increasingly important as our population ages and its health care needs increase. Today, the number of people age 85 and older is growing nearly four times faster than the general population. The disabled population is also growing at a rate nearly double that of the population as a whole. Without adequate transportation services, more and more rural elderly and disabled will be forced to lead restricted lives, without access to needed medical, work or recreational opportunities.

To encourage States to address rural needs, the Department created the Rural Capacity Building Initiative (RCBI) as part of its three-pronged Institutional Capacity Building Program. The other elements are Metropolitan Capacity Building and statewide Capacity Building. The Initiative is providing training, technical assistance and outreach for rural transportation planners. In 1998 and 1999, the Federal Highway Administration (FHWA) initiated a series of 10 rural planning workshops, including one here in Vermont. The workshops gave State transportation officials the opportunity to swap success stories and lessons with their counterparts from other States, as well as borrow from the vast experience of our FHWA staff.

Over the past year, the Department has significantly increased its focus on rural planning, with FTA and FHWA jointly sponsoring and distributing the July 2001 publication, "Planning for Transportation in Rural Areas." In addition, in May 2002, FTA joined FHWA in holding a workshop focused on rural transportation issues and the benefits of participating in statewide planning processes. Today, I am proud to say that FTA and FHWA are engaging in a stronger partnership in advancing other statewide and Rural Capacity-Building initiatives, building upon successes achieved in the metropolitan arena.

Technology

Other rural initiatives include the Rural Intelligent Transportation Systems (ITS) Program established by the Department. This program focused on rural crash prevention, emergency services, tourism/traveler information, rural transit, rural traffic management, weather and operations and maintenance. For example, efforts underway have yielded significant benefits from the use of ITS for rural transit such as reductions in pickup times; reductions in passenger wait times; improved contractor monitoring and improved driver and passenger security.

A coalition of eight States—including New Hampshire, Vermont and Maine—plan to have a 511 Traveler Information Telephone Number in operation by the end of 2002. The 511 number will allow the public to have easy access to information about travel conditions and options. In rural areas, this information will include weather-related roadway conditions, as well as major travel disruptions from work zones and traffic incidents.

Weather and road information is critical to surface transportation operations, especially in northern States and rural areas. Technologies such as collision warning systems, sensors, GIS mapping, 360-degree radar obstacle detection devices, auditory warnings, and external light warning systems can significantly benefit drivers in low-visibility situations.

Safety

More than a quarter of a million people have been killed on America's roadways in the past 6 years, 41,000 deaths each year. There are also more than 3 million police-reported injuries annually. Fifty-eight percent of traffic fatalities occur on rural roads. The fatality rate per 100 million vehicles miles of travel in rural areas is more than twice that of urban areas. Adding to the rural safety problem, emergency response times in rural areas are 1.5 times those in urban areas.

TEA-21 introduced new programs, greater flexibility and increased funding to meet these challenges. States were able to make badly needed safety improvements to their infrastructure using their Surface Transportation Program (STP), Interstate Maintenance, and National Highway System (NHS) funds. Safety concerns are now built into every interchange upgrade, intersection redesign, signing project and pavement improvement.

In addition, since TEA-21's enactment, the Department has awarded a total of \$729 million in State and community formula highway safety grants to encourage proper use of occupant protection devices; reduce alcohol and drug-impaired driving; reduce crashes between motorcycles and other vehicles; reduce school bus crashes; improve police traffic services; improve emergency medical services and trauma care systems; increase pedestrian and bicyclist safety; improve traffic record systems; and improve roadway safety.

Quality of Life

TEA-21 has given States and communities across America additional tools and opportunities to enhance the environment and quality of life for their residents. The Congestion Mitigation and Air Quality Improvement Program focuses on improving air quality. Under TEA-21, it provided more than \$8 billion in funding for use by State and local partners to support traffic flow projects, cleaner fuels, improved transit services, and bicycle and pedestrian programs that reduce congestion and emissions and improve the quality of life.

The National Park Service has purchased buses to reduce congestion in several major National Parks. The Federal Lands Highway Divisions are using context sensitive design techniques and new technology to reconstruct or improve roads through environmentally sensitive areas within National Parks, National Forests, and wildlife refuges.

The National Scenic Byways program and the Transportation Enhancements program have helped States and communities improve the environment. Since the enactment of TEA-21, more than \$1.4 billion in Transportation Enhancement funds have been obligated to local communities to implement community-focused, non-motorized activities that enhance transportation. Many more activities have been programmed and are awaiting implementation.

TEA-21 directed the Department to streamline environmental reviews. It is a major priority for the Department to assist States and communities build infrastructure more efficiently, while retaining critical environmental protections. Successful environmental streamlining requires fostering good working relationships across a number of organizational lines. These relationships allow for the development and establishment of reasonable and realistic schedules for advancing major projects. Working together in partnerships, combining a full range of Federal, State, and local officials and interest groups, will lead to reasonable ways to meet the Nation's transportation needs, while being good stewards of the environment.

Exemplary streamlining initiatives are well underway here in New England. Vermont has led the Nation in demonstrating the hallmark of flexibility in historic preservation compliance without compromising safeguards. Senator Smith's efforts initiated a successful partnering model in New Hampshire that has fostered the examination and exploration of improved and more efficient approaches to mitigation while adhering to deadlines.

Conclusion

This is a moment of great opportunity. As was true when Congress considered the landmark ISTEA and TEA-21 legislation, we have an opportunity to create our own legacy and to serve the needs of the American people in all regions. I am confident that, working together, the Department and Congress can preserve, enhance and establish surface transportation programs that will provide not only for a safer and more secure system, but one that is more efficient and productive and enhances the quality of life for every American.

One other thing that I am pleased to announce is that we have launched a website to take public comments about the reauthorization bill at www.dot.gov. We encourage private citizens to share their thoughts about this important legislation with us.

Again, thank you both for the opportunity to testify before you today. I look forward to responding to any questions you may have.

TESTIMONY OF BRIAN R. SEARLES, SECRETARY OF TRANSPORTATION STATE OF VERMONT

Good morning and welcome to Vermont.

My name is Brian R. Searles and I am the Secretary of the Agency of Transportation for the State of Vermont. Let me begin by thanking; Sen. Jeffords for holding this committee hearing in Vermont and for the chance to talk about the challenges and opportunities that are unique to rural transportation.

Let me also welcome Sen. Bob Smith, our neighbor from New Hampshire, and U.S. Department of Transportation Deputy Secretary Michael Jackson to our fine State, and thank them for their willingness to come to Vermont.

I would like to personally thank both Sen. Jeffords and Sen. Smith for their efforts restoring BABA funding in the current budget process.

I would also like to welcome Mr. Ray Burton, a member of the Governor's Executive Council, who will testify on behalf of the State of New Hampshire.

Mr. John Horsley, the Executive Director of the American Association of State Highway and Transportation Officials (AASHTO), was unable to attend today's hearing, and asked me to make a few brief comments on behalf of AASHTO and its member States across the country.

Were he able to be here Mr. Horsley would say that rural two-lane safety is a concern for AASHTO members. The General Accounting Office recently reported that although 40 percent of all vehicle miles are traveled on rural roads, 60 per cent of traffic fatalities in 1999 occurred on rural roads. Funding should be increased to improve safety of rural roads for both State and local roads. AASHTO urges that the highway program be increased over 6 years to \$41 billion annually. From this an additional \$1 billion annually should be dedicated to safety.

Rural transit. AASHTO's Bottom Line Report documents the need to double the current investment in rural transit, especially to meet the needs of the growing number of elderly residents, who can no longer drive, but still need access to health care and other services.

Transportation Enhancements. AASHTO supports the continued dedication of a 10 percent setaside of STP funds to support transportation enhancements, which so far have benefited over 14,000 communities nationwide. We urge further simplification of the program to make it easier for local governments to apply and advance payment rather than cost reimbursement as the basis for conveying funds to local governments.

Diversity. The needs of Vermont are important and special, but different from those in New Hampshire and those in other States. AASHTO believes the national program should be crafted in a way that respects the diversity of the various States and allows them to define approaches which best meet their needs.

And last, AASHTO believes we must grow the program. To meet the nation's safety, security, preservation and capacity needs for highway and transit will require a significant increase in resources. We urge the Senate to take a close look at the financing proposal of AASHTO, which outlines a way making it possible to fund a highway program which increases from \$34 billion to \$41 billion from fiscal year 2004 to fiscal year 2009, and a transit program which increases from \$7.5 billion to \$10 billion.

That concludes the remarks on behalf of Mr. Horsley.

Let me return to my own testimony.

By many measures Vermont is the most rural State in the Nation, a collection of 251 cities, towns and unorganized gores that dot the hillsides and valleys of this mountainous State. We occupy an area larger than New Jersey with a population (608,827) that is smaller than many mid-sized cities across the Nation. We have about 15,262 miles of public roads, 57-percent of which are unpaved. I mention these facts because transportation management is different in rural areas than urban areas, and while we have a strong interest in all modes of transportation, our topography and population distribution often limit our opportunities.

Vermont and other rural areas across the Northeast are heavily dependent on travel and tourism. Because Vermont is located within a few hours drive of about 50 million people, the regions highway system is an important conduit for what amounts to about 25 percent of the State's overall economy.

During the past few years new information has emerged from several studies describing travel patterns and freight flow to and from rural New England. (These studies include the Vermont statewide Freight Study prepared by VTrans; Passenger Travel in the I-95 Corridor Coalition Region prepared by the Intermodal Program Track Committee of the I-95 Coalition; Rural Mobility Issues—Understanding the I-95 Coalition Region by Matt Coogan; and Truck Freight Crossing the Canada-U.S. Border, prepared by the Eastern Border Transportation Coalition.) The studies show heavy flows of traffic between rural areas and adjacent metro areas, and have provided us with a new understanding of the interdependence of rural and metropolitan areas in the northeast.

We know that rural travelers are much more dependent on highways than other modes of transportation and as a result transportation management is different in rural areas than in urban areas. Where urban transportation issues generally relate to congestion management, short trips to work, shopping or amenities, in rural areas the percentage of long distance trips is higher, congestion is spotty, and providing accurate and timely traveler information is more important than congestion management.

While it is true we are a very rural State and much of our travel is by single occupancy vehicle, we also have continuing needs for effective public transit. Admittedly, our public transit delivery systems look very different than those in more urban areas. We do have traditional fixed route bus systems in our "urban" areas and even a commuter rail system in Chittenden County. However, much of our public transit service is provided by less traditional means such as deviated route and demand responsive operations. Indeed, a significant need for rural mobility is served in Vermont by a network of volunteer drivers providing these essential services to members of the community. The need for these services will likely explode in all areas as the baby boom generation ages. In my judgment, attention needs to be focused on the administrative operations surrounding the delivery of these programs.

Safety considerations are different in rural areas than urban areas. As John Horsley noted, about 60 percent of all fatal crashes occur in rural areas, where it is much more difficult to get crash victims to emergency care within the "golden hour" due to sparse communication infrastructure and a more dispersed emergency responders. A new source of funding is needed across the board to help address safety issues on rural roads. Weather sometimes has an increased significance in rural areas because severe weather can close down rural routes or cause significant delays. Rural agencies must keep many miles of transportation infrastructure functioning with comparatively thin-spread resources.

Here in Vermont the environment is an important aspect of our quality of life. We must continue to work together—the States, the U.S. DOT, and the Congress—to improve the stewardship of our environment. We must continue to look at ways to continue to speed up projects. I believe the environmental process can be made better with better results for our environment and project schedules.

I mention these points because the majority of the land area in Vermont and the northeast is rural—72 percent of the land area in the northeast has no metropolitan population areas of 250,000 or above. Yet 28 percent of the population in the northeast live in rural areas.

As I said earlier, Vermont is a small State with limited resources. The State owns and operates 10 small, regional airports, and owns about half of the 740 miles of railroad tracks that crisscross the State. We believe rail will play an increasing role in our transportation future, both in the movement of passengers and freight. If we are to grow our rail program we must deal with rail-highway crossings. Grade separation is key in order to achieve higher speed rail and safety. However, grade separation is costly and here in Vermont beyond our reach without Federal assistance.

Our ability to raise revenues for transportation projects is limited by our population and commercial base, and consequently we rely heavily on Federal funding sources. Our total transportation budget for fiscal 2003 is \$332.2 million, of which \$156.3 million is in Federal dollars. Consequently, flexibility is important to us because it allows us to move funds to match our transportation needs.

Our mission is: to maintain a transportation system that allows for the safe movement of people and goods in a cost-efficient, environmentally sensitive, and timely manner. Our ability to fulfill that mission is being impacted by several large projects. These “large” projects are necessary, but they are draining our resources and in the process forcing us to delay projects essential to our mission. As a result, we have about \$109 million worth of projects that are permitted and ready for construction but are sitting on the “shelf” because we have not been able to identify a source of funds. While \$109 million may not seem like a lot of money at the national level, remember our total transportation budget for fiscal 2003 is \$332.3 million. And I might add that here in Vermont a large or “mega” project is NOT the Big Dig in Boston or the Woodrow Wilson Bridge. We are talking about \$42 million for the Alburtz-Swanton Bridge over Mississquoi Bay; \$100 million for the Bennington by-pass; or \$80 million for the next two phases of the Chittenden County Circumferential Highway (Route 289).

Parts of our Interstate system are over 40 years old and in need of repair. A recent needs assessment of Vermont’s 320 miles of the Eisenhower Interstate System showed an investment of \$74 million was needed just to bring the system up to Federal standards. Simply put, we cannot afford that kind of investment and meet our other commitments/needs on our NHS and State highway systems. Vermont is not alone. Other States have similar interstate problems and needs. In my judgment, the time has come for the Congress to make another significant investment; to repair and upgrade the Interstate system, similar to the investment that was made in the 50’s, 60’s, and 70’s to build the Interstates.

As the Congress works toward reauthorization of TEA-21, I hope you will maintain the course set by ISTEA and sustained in TEA-21 by continuing to recognize that all States are different, that it is the diversity of the States viewed as a whole that makes our country so great. I urge you to retain the existing structure of TEA-21. Improvements can be made, but the fundamental structure is sound and should be preserved. Flexibility is important to us. Vermont’s smallness provides us with some unique opportunities to do things that larger States might not be able to accomplish. Funding is still the key, and I would urge you to authorize the maximum level of Federal investment possible. Funding mechanisms, including guaranteed funding levels and annual adjustments to those levels, should be continued to achieve congressional intent that all available funds be invested in transportation improvements. Just as ISTEA and TEA-21 made significant strides in growing the program, the next surface transportation bill must provide new sources of revenues so we can jointly meet the challenges facing the States and the Nation as a whole.

STATEMENT OF RICHARD PEMBROKE, CHAIRMAN, COMMITTEE ON TRANSPORTATION,
VERMONT LEGISLATURE

Thank you, Senator Jeffords, for this opportunity to testify before your committee. And thank you, Secretary Jackson, for traveling to Vermont to hear about the challenges we face.

My name is Dick Pembroke and I am the corporate founder of the Pembroke Landscaping Company in Bennington, Vermont. For the past 16 years, I have also represented Bennington in the Vermont Legislature, from a district that comprises a constituency of two incorporated villages within the Town of Bennington who have the same infrastructure needs. I have been a member of the House Transportation Committee throughout that time, serving as chairman since 1993, and at the request of leadership from both sides of the aisle.

The toughest part of my job as chairman is distributing dollars among the many competing transportation needs in Vermont. Looking back, I think that we have been able to do that in a fair and productive way, and we have used the planning provisions of the Federal law to get the job done. The direction of that law—to emphasizing planning from the bottom up—was definitely the right decision.

Of course, there was never enough money. Recognizing this, we set out early in my tenure to eliminate low priority projects. This was a painful process. Every project has a champion. But we were able to make these choices by working through Vermont's network of regional planning commissions and advisory committees. They were the key then and they continue to be central to our efforts today.

Even with this "pruning" of low priority projects our needs' still far exceed our available funding. As a result of this success of the project manager system which we directed the agency to institute, and taking advantage of the advanced construction provisions of the Federal law, I leave my chairmanship with enough "shelf projects" to consume a year's worth of Vermont Federal appropriation. Each year, we must decide on the allocation of transportation dollars—both Federal and State—among the various modes. Between maintenance operations, system preservation and expansion, I have used the agency's long-range Transportation Plan to guide this effort.

In my part of the State, the Bennington area in Southwestern Vermont, we have nearly completed the first phase of what will become the Bennington Bypass. Re-routing two national highway system roads out of our City Center, improving traffic flow and relieving unbearable congestion from the downtown.

After many years of planning and design, we have also begun critical safety improvements on the main east-west highway through Southern Vermont. This project will save lives and improve commerce.

We have improved a key segment of rail line, linking the area to the highly active rail corridor serving Albany, New York and the nation's rail network. We are now working with Amtrack and our New York neighbors to secure service to the Bennington and Manchester area. Our long-term goal is to improve both freight and passenger rail up and down the west side of the State.

We have also used the generous provisions of the Federal Highway bills to expand public transportation. In my tenure we have established seamless interconnecting routes that go from the Massachusetts Line in Pownal to Rutland and points north. Several other routes statewide have been established or are about to be.

I would encourage you as you prepare to put together the re-authorization bill that you garner every possible dollar that is entitled to transportation in order that Vermont and its fellow States have the opportunity to attempt to bring our infrastructure up to par. I do not have to tell you that our interstate system as well as nationwide is 40-plus years old and needs major attention. I ask you to refrain from ancillary programs and concentrate on making it affordable and less restrictive as possible. Our local communities are in the same predicament and look for State help. More Federal authorization would accommodate our ability to offer them assistance.

Ultimately, our goal in the Legislature, and the agency's goal, is to get things done for Vermont, delivering projects that respect neighboring property owners, businesses, local communities and the environment. This has been a challenge. We have had success by bringing all of the players together and focusing on what's good for Vermont.

A few weeks ago, I announced my intent to retire from the Vermont Legislature. I do so with a sense of accomplishment and in the knowledge that many important transportation improvements are under way. I thank you Senator Jeffords for those kind words you entered into the congressional Record on my behalf on my announcement.

New commuter air routes have been established not only at the Burlington International, but Rutland as well, the State's second largest city, and major improvements in various other State airports that contribute to much-needed economic development.

My work on transportation has been among the most satisfying experiences I have ever had. Without the Federal partnership, we could not have made the progress that I have described. As for the future, we will need an increase in resources, from all sources, if we are able to meet our responsibilities to the traveling public.

Senator Jeffords, you have been a great friend of transportation in this State. I am very encouraged to have you chairing the Environment and Public Works Committee for the reauthorization process. I know that you will advance Vermont's interests.

Mr. Secretary, I am glad that you have been able to hear from Vermonters today about the challenges we face, and I do not envy your challenge as you fight for scarce dollars.

In closing, I would emphasize that if you feel I can be of assistance at any time as you seek the prize, please do not hesitate to call. Paraphrasing General MacArthur's comments, "Old soldiers never die; they just fade away," I do not intend to die and I surely am not going to fade away.

Thank you for this opportunity to testify.

STATEMENT OF RICHARD MAZZA, VERMONT STATE SENATOR

Thank you, Senator Jeffords, for inviting me to testify here today.

And, welcome to Vermont, Senator Smith and Secretary Jackson. You have given us a wonderful opportunity to describe the challenge of providing transportation services in a rural State.

My name is Dick Mazza. I own and operate Mazza's General Store, a market that has been in business in Colchester, Vermont for 48 years.

Since 1984, I have also represented Chittenden and Grand Isle County in the Vermont State Senate. I have been a member of the Senate Transportation Committee throughout that time, serving as Chairman for the last 12 years.

As you know, Senator Jeffords, the State of Vermont has entered a difficult financial period. We are facing a budget deficit of some \$39 Million. This is a significant amount for a State of our size. And I know that other States, and the Nation as a whole, are experiencing similar problems.

I raise this because it places our transportation issues in an important context. Vermont's revenues are directly tied to the strength of its economy. And our economy—our businesses, my business—is directly reliant on our transportation system.

But when times are tough, and when human needs are greatest, it is tempting to cut back on transportation spending.

This year in the legislature, we reduced our paving program by half from last year's. Just this week, a joint legislative fiscal committee considered additional transportation cuts. Interstate rest areas, public transit routes and town highway grants are all on the chopping block.

We all know that a transportation investments create jobs. We can see the paving crews on our highways and the driver on the bus. But beyond these direct benefits, improved transportation moves the people and goods that power our economy.

The State's leading private employer is IBM. Access to their facility in Chittenden County today leaves much to be desired. We have both highway and rail improvements programmed to improve the situation, but at great cost. Yet, this investment in our economic future is vital to our State.

Our economy relies heavily on interstate trade and travel. Interstate 89 and 91 are the lifeline for much of the State. We face enormous reconstruction and repair costs on the Interstate.

Vermont's northern border with Canada has felt the effects of NAFTA and its attendant growth in freight movement. International freight also moves through Vermont from neighboring New York. Replacement of the Mississquoi Bay Bridge, at a staggering cost by Vermont standards, is essential to support our international trade.

Perhaps the most difficult investment challenge in these tight times is our renewal of Vermont's railroads.

I like to think of the nation's great achievement—the Interstate Highway System—as our model for rail redevelopment. We built the Interstate in segments, but with a fully developed system as our ultimate goal. In Vermont, we have taken a similar approach with rail.

But we need a Federal partner in this major undertaking. We need to see continued support for a national passenger rail network. Vermont will do its part. And we need the freedom to use our Federal transportation dollars to revitalize rail.

Let me close by again thanking you, Senator Smith for taking time out of your campaign to join us here today. Vermont and New Hampshire really do have much in common.

To Secretary Jackson, and through you to Secretary Norman Mineta, I appreciate your efforts to manage our nation's transportation program in the face of the financial and security problems that confront us all.

And finally, Senator Jeffords, let me thank you again for your years of service to our State. It gives me great confidence to know that you are at the helm in Washington.

STATEMENT OF THOMAS ADLER, MATTHEW COOGAN, AND THOMAS HORAN, ON BEHALF
OF NEW ENGLAND TRANSPORTATION INSTITUTE AND MUSEUM'S RURAL TRANSPORTATION
LEARNING CENTER

Background

Beginning around 1850, rail transportation emerged as a dominant mode for both personal and freight transportation in rural New England. Railroads shaped rural centers such as White River Junction, Vermont, Lebanon, New Hampshire and many other communities throughout the region. Just as the railroads affected the development of rural communities, so too have automobiles and trucks. Trails and paths were widened and resurfaced to accommodate these new vehicles and a tremendous investment was made to construct new highways. As a result of that investment, Vermont and nine other rural States now comprise the top ten in paved roadway miles per capita. For many residents of these rural States, the roadways have provided increased mobility and that increased mobility has in turn caused profound changes in the physical and economic structure of rural communities.

While this mobility created new economic opportunities for rural regions, it also resulted in growth and development spreading away from the compact town centers that had grown up around rail stations and, instead, along highways into the rural lands. And, our investment in highways and resulting shifts in development patterns has indirectly resulted in a significant reduction in the amount of public transportation service provided within rural regions and between those regions and the major metropolitan centers. For example, passenger rail service is now available to only a small fraction of the many train stations that once served rural communities.

The landmark ISTEA and TEA-21 transportation authorizations recognized the need to develop and maintain transportation alternatives to the private automobile and rural regions have actively pursued these alternatives. Vermont has both maintained AMTRAK service in the State and has initiated a regional rail service in the Burlington area. New Hampshire and Maine have successfully restored Boston to Portland rail service. And, there are numerous rural transit services that provide both safety-net and general public transportation. ISTEA and TEA-21 both funded the development of Intelligent Transportation Systems and rural areas have benefited from these technologies.

Current Rural Transportation Issues

While ISTEA and TEA-21 have brought benefits to many rural areas, it is fair to say that the majority of national research and policy-discussion about transportation and community development has focused on metropolitan areas. At one level, this is understandable given the high concentration of the nation's population in urban areas. At another level, however, it is an unfortunate oversight as rural areas play an important role in the overall economic, cultural, and environmental value of regions and our Nation. As a Nation, we simply have not examined the needs of our rural citizens as extensively as we have the needs of the citizens of the major metropolitan areas.

But we do know some basic facts about transportation problems in the rural areas of this country. In the 13 Northeastern States, we see that our rural citizens have significantly lower levels of household income than in those in the more urbanized regions. But, at the same time we observe that the rate of auto ownership is significantly higher in the rural areas. We know also that our rural citizens have to make longer trips and in fact travel about 30 percent more miles than their urban counterparts. This translates into the fact that our rural citizens spend a far greater proportion of their total income on basic transportation and it means that they have less money to spend on other necessities such as housing, food, or education. On the other hand, we also know that work commuting distances are shorter than the national average among residents of the small towns within rural regions and that focusing rural development around these traditional town centers reduces dependence on automobile travel.

And, there so much we do not know. We have not properly examined the problems of limited mobility among important segments of the rural population, particularly as experienced by older citizens, and those who do not have access to a car. As the population ages, this will become an even more pressing issue for the rural regions.

Just as railroads and automobiles have had profound impacts on the shape of rural communities, new information and communication technologies will also significantly affect the ways in which these communities develop in the future. We have already seen new types of economic clusters forming in rural New England around information-oriented businesses. These businesses in turn have new and very different transportation needs.

Our region is fortunate to have intercity rail, bus and air services that connect our rural areas to the major metropolitan areas. But, planning a trip by combinations of bus, rail, and even air simply cannot be accomplished at any one location. One important strategy to deal with rural mobility is to help travelers understand just what combinations of services are available. Every major Nation in Europe has a program to help its citizens plan rural trips by modes other than the private auto; from a technical point of view, it would be easy to apply this technology to our rural areas. In general, complementary investments in a multimodal transportation network and in technologies to provide information to the users of that network will greatly facilitate new economic activities as well as tourism and the other traditional parts of northern New England's rural economy.

The Rural Transportation Learning Center

The primary goal of the Rural Transportation Learning Center is heighten the level of policy, technical, and cultural learning relating to rural transportation and its impact on communities and regions. Its focus is both regional and national, aiming to explore our regional, past, present and future as a means to inform the national understanding on rural transportation and its relationship to national economic, social and environmental goals.

The Center is achieving this vision through three spheres of activities that are organized around programs of the New England Transportation Institute and Museum (NETIM): first, the Museum, uses historical resources and scholarly study to understand how transportation has affected rural regions; second, the Institute conducts research to identify emerging trends and technologies and to explore ways of using transportation to facilitate the economic, cultural and environmental quality of rural communities, and, finally, the larger public is brought into the learning process through the Museum's many outreach programs and by its excursion railroad.

Woven throughout these activities is the philosophy that history and research can inform our future. We can go "back to the future", by exploiting the best of our contemporary knowledge, technologies, and processes to create a rural transportation system that embodies the best of rural community history and character. As an example, the Center is especially interested in researching ways of using the new information infrastructure to enhance the use of our intermodal facilities as well as help grow local economies. In this research program, it will be working with several prominent researchers (including Thomas Horan, Lee Munnich and Mathew Coogan) to develop a national model for how information technologies can assist in making regional intermodal travel to and from our towns and recreational areas a seamless and safe experience. Moreover, it will be looking at extending this use of technology to encourage "rural knowledge clusters" of workers in rural areas through teleworking and other "smart travel" means. The Center will complement this research with reviews of how demographic and economic trends may affect future rural transportation programs.

While the Center's research extends into the future, it continues down an aggressive path to preserve the past through plans to purchase historic transportation facilities in White River Junction. Our objective is to preserve the historical character of these facilities and environs, so that visitors can have a grounded experience on the vital role that transportation plays in communities. We expect NETIM to be visited by Vermonsters, New Englanders, and national and international research guests. Our program encompasses exhibitions, seminar series and, in the future, summer institutes. This program is detailed in Attachment A.

CONCLUSIONS

The transportation needs of rural areas are different from those of urban areas and, in general, have not been studied to the same extent. The coming surface transportation re-authorization represents a unique opportunity to ensure that rural transportation needs are analyzed and addressed in ways that enhance the economic vitality, environmental quality and quality of life in rural communities.

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ATTACHMENT A

Summary

The Rural Transportation Learning Center (RTLCL) provides a comprehensive set of regional and national programs to examine past, current, and future trends in rural transportation especially as relates to improving community economic vitality. The demonstration component of the learning center includes establishment of an interactive and excursion center in White River Junction and surrounding Vermont and New Hampshire communities. The learning program includes seminars, summer institutes and outreach activities about rural transportation and community needs to learners of all ages. The research program examines demographic, economic and technological dimensions to rural travel and strategies for community development. RTLCL is managed by the New England Transportation Institute and Museum (NETIM), a non-profit corporation.

Mission

The mission of the Rural Transportation Learning Center (RTLCL) is to enhance regional and national understanding of the role of transportation in creating economically vibrant rural communities. RTLCL aims to fill a critical void in national transportation policy by identifying major demographic, economic, and technology influences on transportation and rural communities. The center informs students, citizens, scholars, and policymakers through a range of learning programs, seminars, excursions, and research initiatives.

Themes

The mission of RTLCL's is pursued through three programmatic themes: Learning From the Past, Understanding the Present, and Contributing to the Future.

Learning from the Past: Befitting RTLCL's location at the NETIM museum, a key feature of the learning center is to enhance the museum to provide a comprehensive, interactive set of exhibits, excursions and seminars on the historic role of transportation in the development of rural regions. A range of historical essays and multimedia projects will document historical elements for use in educational settings, from k-12 through universities.

Understanding the Present: The changing economic and demographic landscape of rural regions has profound implications on the nature, form, possibility for rural transportation system to improve community and economic vitality. Recent U.S. Census (2000) and National Household Travel Survey (2002) data provide a timely opportunity to develop a comprehensive understanding of changes in rural-inter-regional travel, lifestyle trends, and economic developments. Changing demands and financing of various modal options (rail, transit, freight) provide a concurrent oppor-

tunity to analyze new forms of rural and interregional travel, including environmentally responsive developments. Community surveys provide telling insight to isolation concerns in rural areas and the importance of transportation services (e.g. for employment, health-care) in reducing a sense of isolation, especially among elderly residents.

Contributing to the Future

Recent small business and knowledge worker migrations provide new opportunities for “rural economic clusters” of firms and workers who want to engage in knowledge work while enjoying the quality of life in rural regions. Technologies such as wireless communication systems and intelligent transportation systems can enhance mobility and safety services if properly implemented and supported through community outreach. Research is needed to create innovative technological and community systems that can support rural access and viability within the unique fiscal constraints of rural regions. Similarly, new Advanced Traveler Information System technology, now commonly applied to urban areas, can be adapted to and applied to the needs of citizens of rural areas.

Program Organization

The mission and themes of RTLC will be accomplished through a series of high priority programs. These programs encompass new demonstrations, learning experiences, and research programs.

- **Demonstration Program:** The demonstration site will be located in the historic railroad and commercial properties in the towns of White River Junction, Vermont and neighboring New Hampshire communities in the Upper Connecticut River Valley. This demonstration site will be restored to host a museum and excursion program that will promote community development in these historic towns in a way that: 1) preserves the historic integrity and character of these adjacent towns that have served together as a transportation and commercial center since the construction of the railroad in 1848, 2) takes advantage of the Upper Valley’s rich educational environment and outstanding local museums and transportation experts, 3) provides an impetus for community and economic development by both using and learning about rural transportation and community challenges.

- **Learning Program:** The learning program will examine the history, contemporary and future trends of rural transportation using a variety of educational approaches targeted at a range of learners. Interactive exhibits will be established both at the demonstration project and online to support education on regional and natural transportation issues. A key element of the learning program will be seminars and summer institutes to bring together educators, policymakers and practitioners to discuss major transportation issues related to issues such as the environment, economics, and community development.

- **Research Program:** Underlying the demonstration and learning activities will be a dynamic research program. This national research program will investigate how community, economic, and technology trends are affecting rural communities. Research priorities will include a comprehensive assessment of how various transportation users (e.g. inter-regional traveler, transit-dependent worker, aging traveler) are creating new demands on the rural transportation systems; a integrative analysis of “rural economic clusters” and the role of transportation and telecommunications systems in encouraging this economic development; a comparative analysis of how innovative intermodal systems could provide seamless linkages between rail, bus and auto travel especially for inter-regional travel (including pre-trip planning capability), and a infrastructure analysis on the digital wireless and wireline infrastructure needed to support ubiquitous telework and mobile safety mayday services to residents in rural regions. The research program will include an early analysis of the results of the USDOT’s new National Household Survey (2002) to provide a “first cut” review of differences between rural, and non-rural transportation behavior, emphasizing information newly available from the national survey, such as the interrelationship between walking patterns and household VMT consumption, particularly in small towns and rural areas. A web resource will be established to provide the research and policy community with data on rural transportation and related economic trends. Research seminar and summer institutes will be conducted to share findings of the center with other researchers from rural regions in the United States and abroad.

Management

RTLC is managed by the New England Transportation Institute and Museum (NETIM). NETIM is the successor to the Vermont Railroad Museum, which was founded in White River Junction in 1980 for the purpose of identifying, collecting, and archiving regional railroading artifacts and memorabilia. The Museum obtained

and has preserved an historic steam engine and organized the annual Glory Days of the Railroad festival that draws over 12,000 visitors to White River Junction. Three years ago, several professionals in the Upper Valley region of Vermont and New Hampshire developed a new vision for the Museum and it was re-incorporated as the New England Transportation Institute and Museum (NETIM). NETIM's vision includes three components: a transportation museum, a transportation institute and a scenic excursion railroad.

The Museum. The Museum celebrates the region's rich storehouse of river, rail, and road history. Its programs include exhibits illustrating more than 400 years of transportation history and perspectives on the importance of transportation to the region's future; displays of transportation memorabilia, artifacts art and restored equipment; and educational activities.

The Institute. The Institute complements the museum's retrospective focus with an equally important prospective one, serving as a center to bring together the region's many nationally and internationally known experts on transportation policy and planning to promote awareness and discussion of contemporary transportation issues and influence public policy and debate through conferences, exhibits, publications, collaborative research and workshops.

Excursion: The Scenic Excursion Railroad is an opportunity for educational experiences as well as a powerful tourist attraction-with views of New England's most beautiful river valley opened up to rail passengers again after nearly half a century. Its operations will give a vital impetus to, and enable public educational programs about, the restoration and maintenance of historic railroad engines and rolling stock.

With support from a Fairchild Foundation grant, the Museum was opened about a year ago in the historic White River Junction train station, between the new Vermont Welcome Center and the AMTRAK terminal. Under the leadership of Dr. Norman Miller, an internationally renowned anthropologist, the museum has rapidly built its collection, has attracted over several thousand visitors and has conducted scores of educational programs.

The Institute sponsors a series of seminars featuring nationally known transportation planning professionals. The seminars are attended by many of the 70 transportation consultants in this region as well as other professionals from throughout New Hampshire and Vermont. One of the first seminars was given by Prof. Thomas Horan from Claremont, California, a national expert on the effects of transportation and telecommunications on rural travel and development. In the roundtable discussion following his seminar, the unique transportation issues facing rural areas were discussed and the Rural Transportation Learning Center was launched as a formal program to address some of those issues.

STATEMENT OF DEBBIE RICKER, L&D SAFETY MARKING AND WORKSAFE TRAFFIC CONTROL INDUSTRIES

I'm Debbie Ricker and I am one of the owners and founders of L&D Safety Marking and Worksafe Traffic Control Industries with my sister and husband. We have been in the highway safety business since 1985. Our companies provide pavement markings and highway sign installation services as well as manufacture and sell signs, traffic safety equipment and supplies. We employ 35-45 people and pay livable wages with an extensive benefit package. Our corporate office is located in Berlin, Vermont and we have divisions in Bow, NH and Hallowell Maine. Our company like many other AGC member companies are small family owned business some in second and third generation so we have a very strong interest and roots in the wonderful State. I would like to start by thanking you Chairman Jeffords and the Committee for bringing their hearing to Vermont.

While accounting practices for private corporations may be the topic of concern in Congress today, the accounting practices for State and local governments will inevitably be the focus in the future as Governmental Accounting Standards require more accountability for the condition of, and the maintenance of roads, bridges and other public assets that taxpayers have invested billions of dollars in over the years. I specifically refer to the Government Accounting Standards Board, Rule 34 that defines "generally accepted accounting principles" for State and local governments. GASB 34 requires governments to include long-lived infrastructure assets in their annual financial statements starting with fiscal year 2002.

To properly account for infrastructure assets, governments must develop an asset management plan which at a minimum should identify the condition of pavements, structures, and facilities. That plan should include deterioration rates for those as-

sets so that a determination can be made for the annual funds necessary to maintain those assets at a recommended level of performance.

This whole issue of asset management is important to getting the optimum level of results from the expenditures we make in maintaining our infrastructure. In short "Getting the Biggest Bang For The Buck". This has been a critical issue in government, more so than business, because of the tendency to balance the budget by deferring essential maintenance since State and local governments are very infrastructure-intensive.

Here in Vermont, because we are a small State with limited resources we have relied heavily on Federal funds to meet our infrastructure needs. However, because we are a State with an aging infrastructure in a cold climate our needs are greater than both existing Federal and State resources can satisfy, so asset management is all the more critical to us in getting the dollars applied properly to our infrastructure. But more dollars both State and Federal are needed to catch up to basic needs.

As for our aging infrastructure: Former Governor Madeline Kunin initiated "Bridge 2000" in 1988 to repair and replace 454 structurally deficient bridges identified at that time. We have approximately 2,700 bridge structures in Vermont. In 1988 The Vermont Agency of Transportation estimated that it would cost 1.6 billion dollars over a 10-year period to repair those 454 structurally deficient bridges. Today with more than 550 structurally deficient bridges in Vermont the cost (including inflation) will more than double in that area alone. In addition the Interstate Highway System in Vermont which is well over 30 years old is now in need of rebuilding in many sections. Bridge replacements need to be constructed and over 100 million dollars in culvert work is required on the Interstate alone. That's not including the estimated eight to ten thousand or more culverts on the State and local systems that will eventually need replacement. A report jointly authored by the FHWA and VT AOT recently cited the need to spend 74 million dollars annually on maintenance and repair of the 320 mile interstate in VT. Vermont is only funding 20 million dollars on those repairs, clearly one fourth of what is required. It has gotten so bad on the Interstate that one of our AGC member companies doing a basic culvert repair recently discovered a 7 cubic yard void directly under the travel pavement of Interstate 89 in Williston. This area of the Interstate is a heavily traveled thoroughfare and a pavement collapse would have caused serious injury and perhaps death, which brings me to the issue of safety on our roadways.

Tragically more than 41,000 Americans die and 3.5 million are injured in motor vehicle accidents on our highways each year. If the average U.S.-crash rate remains unchanged, one child out of every 84 born today will die violently in a motor vehicle crash. 6 out of every 10 children will be injured in a highway crash over a lifetime, many of them more than once.

As more people travel more miles on the highways and as the aging demographics of our driving population change, significant improvements in safe roads are essential to continue our progress in reducing highway fatalities and injuries.

In July of this year the GAO released a report that showed that although 40 percent of all vehicle miles are traveled on rural roads, about 60 percent of the traffic accident fatalities that occurred from 1999-2001 took place on rural roads.

When adjusted for vehicles miles traveled, the fatality form accidents on rural roads is nearly 2.5 times greater than the fatalities from accidents on urban roads.

Some of the factors contributing to these statistics are driver impaired issues such as drivers under the influence, tourists or drivers not familiar with the area, parents with active children in the car, drivers on medication, fatigued drivers, emotionally stressed drivers, and the growing number of older drivers. In addition to these hazards Vermont has additional issues. Being a rural State Vermont has winding and narrow roadways with many seasonal and weather related hazards. In the winter we travel more night hours with reduced visibility from fog, rain, snow, and ice. These elements are very hard on our infrastructure and require higher cost maintenance.

While national statistics show that the overall number of traffic fatalities has dropped by 9 percent overall due to safer cars, air bags and various other devices there are two areas showing increased fatalities. Those increases occurred in the over 65 aged population and in work zones. The number of fatalities in people over 70 has increased by 39 percent over the last 10 years. Nearly one in five drivers by 2020 will be age 65 or older.

In Vermont, The Road Information sites the following statistics:

TRIP Shows Vermont	1989	1999
Drivers 70 and above killed in traffic accidents	6	8
Drivers 70 and above involved in traffic accidents	8	11

Work zone Fatalities Statistics

Total of 21 Vermont fatalities in the last 8 years

2001	3
2000	2
1999	3
1998	1
1997	6
1996	1
1995	4
1994	1

As our nations population continues to age in the years ahead it will be increasingly important that we make the kind of roadway safety improvements that can help reduce accidents and save lives. While improved transit service has a role to play, it is important to focus on roadway safety improvements because 92 percent of all surface travel by older citizens takes place in motor vehicles. Highway travel by persons 70 and over is increasing at a faster rate than travel by other Americans.

Other important points to note include:

- Fatalities in workzones have increased over 50 percent in recent years to reach an all time high of 1093 deaths in year 2000.
- 77 percent of all fatalities occur on 2 lane roads. Poor roadway infrastructure is a factor in 30 percent of these fatalities.

Which gets me back to the issue of funding and asset management.

In a State with limited resources Vermont must make some tough decision when it comes to capital spending. The need to fix or repair what already exists in Vermont's infrastructure inventory is mind-boggling. With 1,000 dams statewide, over 324 public school buildings, 15 technical centers, 2700 long bridges, 14,000 miles of roadway, 320 miles of Interstate, 2,370 miles of State highway, 11,210 miles of municipal roads and 16 public use airports, it is easy to understand the extent of maintenance and repair required. Add to that list new initiatives of recent years in public transportation, recreation paths, rail freight and commuter rail and the enormity of the up-keep problem is compounded.

Vermont faces a major decision: invest in repairs and rehabilitation of the existing infrastructure on an annual basis or replace major parts of the system at a much greater cost in the years to come. A properly planned "Asset Management Program" will help set priorities.

Adequate annual funding of Vermont infrastructure will do much to improve safety for our traveling public and will have a positive effect on Vermont's economy as well.

Transportation represents 11 percent of the American economy. As a share of the Gross Domestic Product, transportation has held steady at just under 11 percent since 1989. Transportation construction is a \$160 billion a year industry that employs more than 1.6 million people. Every \$1 billion invested in the nation's transportation infrastructure creates approximately 35,000 jobs. Public investment spurs private investment and in Vermont where we've lost over 8,000 jobs in the last year we will need all the help we can get.

The U.S. Dept of Labor contends for every dollar spent on construction activity there will be a \$2.75 return to the economy. The Council of State Governments states that every dollar invested in the highway system yields \$2.60 in economic benefits with every billion invested producing 42,000 jobs. In short this means we can maintain what we have and fuel the economy so that resources are available for other non-construction related programs to benefit the society. Franklin Roosevelt recognized this economic reality when in the depth of the depression he created the WPA (Works Project Administration) and the CCC (Civilian Conservation Corp.) putting millions of unemployed Americans to work on public projects nationwide. He knew that construction drives the economy. And whether it is new construction in the fastest growing States of America or reconstruction and rehabilita-

tion in less populated States like Vermont the result is the same. People are put to work, construction businesses are able to stay in business and both are able to pay their taxes necessary for government to provide for other needs in society. Jobs, safety, economic development are all a by-product of funding infrastructure improvements. Its an investment we need to continue .

STATEMENT OF PAUL BRUHN, EXECUTIVE DIRECTOR, PRESERVATION TRUST OF VERMONT

It's a great privilege and pleasure to be here today, especially because Federal and State transportation policy has made great progress in terms of its recognition of the impact our transportation dollars have on the vitality of our communities. This new approach has meant that new voices are included in the decisionmaking process.

I represent the Preservation Trust of Vermont, one of those new voices. Let me explain a bit about who we are and what we do.

At the beginning of 2000, National Geographic's Traveler Magazine published a special Millennium issue . . . The World's 50 Greatest Destinations. It recognized the Grand Canyon, the Great Wall in China, Venice, and the Lake District in England as places of a lifetime . . . special places you wouldn't want to miss if you had the choice. In North America just nine places were designated . . . and Vermont was one of them.

Living and working in one of the world's 50 best places is a great thing. We now have the challenge of making sure Vermont is still on the list 50 and 100 years from now. In sum, that's the work of the Preservation Trust. It's not about pickling the State. It is about growing and changing in ways that do not undermine the essential character of Vermont, our communities, and our landscape. We're passionate about building strong downtowns and community centers, and putting our rich collection of historic resources to good use. We appreciate the small-scale nature of Vermont, and understand that mega-sized solutions are often like fingernails scratching a chalkboard. We work collaboratively with community groups, local officials, other statewide organizations, State government, and national organizations like the National Trust for Historic Preservation.

Before discussing some specific thoughts and suggestions, let me go back to my initial comments.

The enactment of ISTEA in 1991 and TEA-21 in 1998 has encouraged an important transformation within State agencies of transportation nationwide. There has been a broadening of their mission from the important one of building roads for safe and efficient movement of cars and trucks to acknowledging the significant impact that transportation projects have on people and communities. This culture shift was due in no small part to the enhancements program and it is important that the enhancements program be continued and strengthened.

In Vermont, building efficient and safe roads and highways still rightly remains the primary focus of the Vermont Agency of Transportation, but that is now balanced with an acknowledgement of the critical role transportation projects play in defining where we live and work and what the Vermont landscape looks like. Historically communities were built where the roads, navigable rivers or railroads went. And they have declined just as quickly when circumstances changed and that transportation mode or route was bypassed or discontinued. The link between how we build or modify our transportation infrastructure and the economic and social viability of our village centers and downtowns is just as strong today. ISTEA provided the opportunity for us to develop design standards that more closely relate to Vermont's needs and scale. The Enhancement Program has supported community-created projects that have improved our special places for residents and visitors alike. Continued progress in transportation policy and implementation will help us ensure that Vermont is still on the 50 Greatest Destinations list 50 years from now. And, it will help rural places and small communities in every State continue to be the special places they are.

New Design Standards

New transportation policy made it possible for us to develop our own design standards which help ensure that highway projects are compatible with their surroundings. The "Vermont State Standards for the Design of Transportation Construction, Reconstruction, and Rehabilitation of Freeways, Roads, and Streets" were developed in a partnership process by a committee of government transportation, environmental, and economic representatives and private design professionals. The Standards were adopted and made effective in November 1997.

These State Standards encourage engineers to take more into consideration than just mobility and safety (which are the sole considerations in the AASHTO standards). There is substantial guidance in the Standards on what environmental, historic, and community factors to take into consideration in designing roads and improvements.

The Standards make significant departures from the AASHTO Standards in the recommended design characteristics for all classes of highway without need of a design exception from FHWA. This has freed designers to deal more sensitively with historic buildings and environmentally sensitive areas. The Design Speed for a road may be the Posted Speed so that a road is not required to be designed much "faster" than the legal speed (AASHTO roads are regularly designed 10–20 miles per hour faster than posted speeds, encouraging traffic to greatly exceed posted speeds). Recommended roadway and bridge typicals are reduced for all roadway classes except freeways and principal arterials, allowing roads, shoulders, and clear zones to be smaller on all but the most traveled roads. Roads through Vermont's rural villages are allowed to be treated with "Urban" treatments, so that rather than dividing a village in two, a highway can be "slower," more pedestrian friendly, and less disruptive of community life. On the least traveled roads (Collectors and Local Roads) historic bridges can be retained and rehabilitated or similarly scaled replacements built without substantial rebuilding and widening of the roadway and approaches.

Although the new Standards have not eliminated all controversy about highway design, the majority of controversies now are about taking a tree rather than filling a wetland or demolishing a historic building, or are about new demands for environmental protection made since the Standards were adopted, such as increasing buffers near streams from 50' to 100'.

Enhancements

The transportation enhancements program has been one of ISTEA's truly outstanding success stories—one that has encouraged communities throughout America to make use of the program's 12 activities to improve the aesthetics and amenities associated with travel and with highways, and also to build new and better partnerships with State transportation agencies.

We're eager to have the program reauthorized, essentially in its present form and strengthened. Vermont is one of those States that has done a truly outstanding job of making the most of its transportation enhancements dollars. Vermont has won accolades from the National Trust for Historic Preservation and a coveted award of excellence from the American Association of State Highway and Transportation Officials.

Vermont and several other States have particularly excelled in taking advantage of the 12 activities, especially the ones that relate to historic preservation and the revitalization of streetscapes and other transportation aspects of towns and villages. Unfortunately, many States still do not seem to appreciate the enormous good that it is possible to do for historic resources that are related to travel and transportation. I hope that the Environment and Public Works Committee can find ways to encourage these reluctant States to do more preservation work with their enhancement funds and to task the Federal Highway Administration to take steps to bring this about.

Here's some specific information about the program's impact in Vermont. First and foremost, you should the fact that enhancements have been VERY popular in VT, both under ISTEA and now TEA-21. Initially all Enhancement funding was used for Bicycle Paths, but beginning in 1995 a selection process of applications from Municipalities and Non-Profits for all eligible categories was instituted. Since then over \$23,000,000 has been allocated to 172 local Enhancement projects. Included in this amount, the Vermont Legislature in 1999 mandated that an additional \$2,000,000 in Federal funds (beyond the federally mandated 10 percent set aside for Enhancements) be awarded to projects, and in 2000 the Legislature mandated that an additional \$1,000,000 in wholly State funds be dedicated to such projects.

In Vermont Enhancement funds have been used to construct bike paths and new sidewalks, rehabilitate sidewalks and add pedestrian amenities in historic downtowns, purchase scenic farm easements, rehabilitate historic railroad stations, establish a historic bridge adaptive re-use program, rehabilitate covered bridges, conduct archeological studies, build visitors centers in small villages and at historic sites, plant street trees, erect roadside historic markers, and many other projects.

The program also leverages greater investment by communities and organizations in these types of projects. Enhancement funds require a 20 percent local match, but match rates overall are about 27 percent, and this figure does not include other Federal contributions to many of these projects.

Big Trucks

Traffic and Trucks on the National Highway system are a big issue for many of our communities that are working hard to revitalize their downtowns and town centers. Expanding truck traffic often adds to the difficult challenges they already face. This is not to say that we do not understand the need to move goods and services about. It's really about balance. We can't pit community against community in this debate. One key step Congress can take is to pass H.R. 3132, the Safe Highways and Infrastructure Preservation Act.

This legislation will freeze truck length and weight on the National Highway System, and close loopholes in the law that allow overweight trucks. This is a safety issue, and it's about maintaining our highway system in a sound fiscal way. In rural places like Vermont, we can't afford to rebuild our existing system to accommodate larger and larger, and heavier and heavier trucks.

Interstate Interchanges

Vermont, like the rest of this country, has been struggling to minimize sprawl development that undermines the strength and vitality of our downtowns and community centers. Where sprawl has occurred, we need to address the impacts of sprawl development attracted to interstate exits. We have classic examples occurring outside the Burlington area; Williston and Colchester are two examples, where traffic regularly backs up on the interstate at those exits. In order to protect the integrity of the interstate transportation corridor, Vermont has been implementing a unique interstate interchange program and policy to both assist towns with resources to manage the growth attracted there (such as through access permits, design guidelines and local zoning techniques) but also to gain scenic or conservation easements on key parcels where development will be problematic.

The Enhancements Programs need to be an important source of funding to achieve the goals of this interchange program, but there are impediments in applying the funds for the acquisition of easements which make it virtually unworkable. For example: Prior to making application to the program, we are permitted only to negotiate an option to purchase at a value contingent on a State transportation agency-approved appraisal. We cannot negotiate a purchase price or conduct the appraisal prior to making application, but must wait until being awarded the Enhancements grant. This creates an awkward "Catch 22" in the middle of high stakes real estate negotiation, with high values and highly experienced land investors. I hope you will consider providing a new approach in the reauthorization bill.

I wish to close by urging you to strongly oppose any proposal to weaken the invaluable protections that section 4(f) of the Department of Transportation Act of 1966 provides. Section 4(f) protects historic sites from harmful road projects unless there is no prudent and feasible way to avoid the harm. Despite what you might hear from opponents of section 4(f), it works well in many States and has plenty of flexibility. The notion that historic preservation reviews of proposed road projects are major causes of delay is ludicrous. The Federal Highway Administration can take responsibility for a fair, unbiased and thorough review of the workings of historic preservation reviews, and all of the other environmental reviews as well, in an open and inclusive forum with a view toward discovering a consensus approach. Historic preservationists are dead set against going back to the days before section 4(f) when the twin terrors of unbridled urban renewal and road construction combined to destroy so much of the country's historic resources, especially in America's cities.

Historic Bridges

The Federal Highway Administration's Historic Bridge Program (Section 144(o)) has been on the books since 1987 and is greatly in need of revision and strengthening. First, the provision requiring States to do inventories of their historic bridges should also require that workable management plans for saving those bridges be adopted as well. The National Trust for Historic Preservation is estimating that half, perhaps more, of the inventoried historic bridges in America have already been destroyed. Regular maintenance can extend the useful life of many historic bridges and continue them in vehicular service, and flexibility with respect to weight, width and other geometric features can help as well, without any compromises with safety.

I'd like to suggest two other specific ideas for the Historic Bridge Program. One, make retired historic bridges more readily available for pedestrians, hikers and bicyclists by doubling the estimated demolition costs that States can now contribute to new owners of these bridges and make it clear that the new owners may always be able to apply for transportation enhancements support. Two, I suggest that the Environment and Public Works Committee build on the popularity and success of the Jeffords' Historic Covered Bridge Program by creating a well-funded research

and demonstration effort to find ways to save more of the nation's historic metal truss bridges that are being lost at an alarming rate.

Passenger Rail

One final subject I would like to mention is the development of passenger rail in Vermont. I serve on the Vermont Transportation Authority which increasingly has a role in building a passenger rail system. We believe that 25 to 50 years from now, Vermonters are going to need and want a cost-efficient and usable passenger rail system. Without such a system, we will be faced with too much highway congestion from the driver's perspective, and communities that are overwhelmed by too many trucks and cars. Building passenger rail will be a long process with many small steps, and we will need your support as we go along. We hope it will be a good partnership.

Thanks very much for providing me with this opportunity to be with you today.

STATEMENT OF MATTHEW T. STERNBERG, EXECUTIVE DIRECTOR, RUTLAND
REDEVELOPMENT AUTHORITY, RUTLAND, VERMONT

I. Introduction

Tucked in the mountainous terrain of northern New England, Vermont has traditionally been home to rugged family farms, quarrying and manufacturing. And railroads. A principal corridor connecting Boston, Montreal and Chicago, the western side of Vermont saw significant freight and passenger service from the mid-19th to mid-20th century. This traffic was channeled through major switching yards in the cities of Rutland and Burlington.

Vermont has seen its manufacturing base gradually replaced by service businesses, notably in tourism. This is logical but risky; tourism can fall prey to economic shifts, changes in customer preferences and, in the case of ski resorts, even the weather. The regional economy is healthier and more stable if it is not overly dependent on any single business sector, especially one as volatile as tourism. It is good policy to balance tourism jobs with industrial and commercial jobs.

Industrial development requires good transportation infrastructure. As is the case in many rural States, Vermont faces the challenges of access and mobility. A key issue for western Vermont is lack of an interstate highway. Truck traffic is forced to use small State and NHS highways, which in Vermont still have cattle crossings. Small towns along the way—the very towns so important to tourism—suffer the congestion. Travel times and permit restrictions discourage many shippers from serving the State. As these problems grow, the State is rethinking the role of rail in the transportation mix.

Western Vermont will never have an interstate highway. Instead, the economic future of the region depends on the creative enhancement of two existing transportation modes: the National Highway System (U.S. Route 7) and rail. The two run parallel for 150 miles from Bennington in the south to the Canadian border in the north. The rights-of-way for both rail and highway have existed for many generations. Towns and cities along the routes have developed in response to this infrastructure, so enhancement of the corridor for redevelopment purposes will naturally focus economic activity in these traditional business centers. This forms the basis for an effective smart growth strategy.

II. Statement of Objective

This testimony considers designation of National Highway System (NHS)/Railway Corridors as a tool to address transportation access and smart growth in rural areas not served by interstate highways.

NHS/Railway Corridors are a cost effective, environmentally and socially responsible alternative to new highway construction in areas where such construction is not feasible.

III. Rationale

In rural areas, the NHS/Railway Corridor concept provides a model that accommodates smaller scale, local improvements that, in the aggregate, will add up to a system that works. The NHS/Railway Corridor helps define the big picture for a region while allowing each community to pursue the individual projects that are right for their situation.

In their position on smart growth adopted in 2000¹, the American Economic Development Council states:

“Although Smart Growth is a national movement, in practice its implementation occurs only in local communities and jurisdictions. Local communities not only consist of a single jurisdiction, but include regions as well.”

The transportation needs in western Vermont demonstrate the wisdom of this view.

IV. The Western Vermont Corridor

The U.S. Route 7 highway/ rail corridor in western Vermont traverses Bennington, Rutland, Addison, Chittenden, Franklin and Grand Isle Counties, serving 334,257 Vermonters, 55 percent of the State’s population². Both of the State’s largest incorporated cities—Burlington and Rutland—are situated along the route.

Initially, the Western Corridor is configured around several key projects:

- Amtrak service from Albany, NY to Burlington via Bennington and Rutland.
- Relocation of the Rutland and Burlington switching yards to allow expanded downtown development.
- A series of highway improvements along U.S. Rt. 7, including major projects in Brandon and Pittsford, and in Rutland City and Rutland Town.
- Construction of a rail siding in Middlebury to serve the calcium carbonate quarry and reduce truck traffic in Brandon and Pittsford.

While these were initially pursued as individual projects, all share common themes and serve each other’s purposes. Specifically, all are located along the corridor defined by U.S. Rt. 7 and the Vermont Railway line. All seek to improve existing infrastructure to offset the lack of interstate highway access. All seek to maximize creative redevelopment of traditional town centers and established industrial districts, serving the objectives of smart growth.

By treating these projects as part of an integrated corridor instead of as competing “stand alone” improvements, we can better understand the contributions of each to the whole and more efficiently allocate resources.

IV. Transportation Goals: Access and Mobility

The corridor strategy encompasses two transportation modes with different but overlapping issues.

Highways

- Roadway alignments that do not support the volume of traffic.
- Heavy traffic in pedestrian-oriented downtowns.
- Commercial access that is not competitive with other markets in the region.

Railways

- Haz-mats shipped through and switched near population centers.
- Grade crossings.
- Old bridges with insufficient weight capacity and underpasses with insufficient clearance.
- Difficulty in limiting pedestrian and vehicular flow near switching operations located in population centers.
- Difficulty in guaranteeing speedy, reliable delivery times because of poor track conditions and inefficient switching.

The following sections discuss how a corridor strategy could improve these conditions.

Highways

The course followed by U.S. Rt. 7 has been the main north-south highway corridor for the west side of the State since the area was first settled in the 18th century. Running along the valley floor west of the Green Mountains, the highway was the natural site for towns where mills could be established or east-west highways could cross through mountain passes.

These towns remain the heart of Vermont’s communities, and they are at risk from the increased use of the highway. The size of trucks passing through has become a contentious subject for smaller towns whose stock in trade is selling tourists a piece of Old Vermont.

¹“Economic Development and “Smart” Growth; The AEDC Perspective on Smart Growth and Economic Development”, by the American Economic Development Council; Economic Development Review, Vol. 17, Issue 4, Fall 2001.

²U.S. Census 2000 figures reported on FedStats’ online statistics clearinghouse, MapStats; www.fedstats.gov

Local trucking is not the only concern. Interstate and international trucking from New York and Quebec place a heavy burden on Vermont highways while contributing little to the region's economy. As crossing the border has become more time consuming since the September 11 terrorist attacks, Canadian trucks are detouring through Vermont's smaller border crossings and traveling south on U.S. Rts. 7 and 22. These interstate trucks are damaging foundations of historic buildings along the route and putting more wear on the highways that the State can afford to repair.

Highway issues addressed by NHS/Railway Corridors include:

- Decreasing volumes of freight traffic through small towns and villages by transferring capacity to rail.
- Establishing convenient, cost effective opportunities to transfer freight from truck to rail by developing localized intermodal facilities.
- Improving safety by reducing congestion.
- Reducing the levels of nitrogen oxide, carbon monoxide, volatile organic compounds and diesel particulates emitted during the transport of commercial goods.

Railways

The railways of western Vermont operate on rights-of-way established in the mid-19th century and have been used continuously since. While the routes exist, maintenance was deferred for decades as society debated whether or not it was worth investing in the future of rail. Today, concerns ranging from the cost of construction to containing sprawl lend new credence to the use of rail.

Vermont showed an early commitment to this potential by purchasing the main rail line when the original private operator went out of business. With both the NHS highway and the rail line under State ownership, there is a clear channel for an integrated transportation plan.

Rail issues addressed by the NHS/Railway Corridor include:

- Deteriorated rail beds and substandard rail will be upgraded.
- Bridges, some more than 100 years old, will be improved to bear the weight of modern freight cars.
- Low clearances on a handful of bridges and tunnels will be raised to accommodate double-stacked rail cars.
- Commercial and industrial customers along the line will build sidings.
- Obsolete switching facilities such as the Burlington and Rutland railyards will be moved and expanded to increase capacity and operating efficiencies.
- Inferior rail to truck intermodal facilities must be improved.

V. Environmental Benefits and Energy Conservation

The preceding sections have described the commercial benefits of nimbleness in the transportation system. However, there are also significant environmental and energy benefits to be drawn from increased use of rail. A report by Worldwatch Institute of Washington, DC cites two advantages of particular interest:³

- An intercity passenger train is three times as energy-efficient as commercial air and six times as efficient as a car with one occupant.
- For every ton of goods moved one kilometer, freight rail emits one-third the nitrogen oxide and carbon monoxide, and one-tenth the volatile organic compounds and diesel particulates emitted by heavy trucks.

This proposal does not suggest that all freight can or should be moved to rail; that is not a realistic proposition. However, we do have multiple instances—individual localized needs—that point to an enhanced role for rail.

In the near-term there will be no big multimodal facilities in this rural area of Vermont, just individual businesses and groups of businesses making localized use of the system. However, with the infrastructure available, the potential exists for future intermodal development. Improved switching yards in Burlington and Rutland will ensure that the corridor has sufficient capacity for growth.

As a practical matter, policymakers must recognize that investing in rail infrastructure complements investments made in highways. Where no interstate highway exists, the combined improvement of both railways and highways in NHS/Railway Corridors is required to serve many rural areas with a competitive transportation system. This policy also emphasizes maximum use of the existing infrastructure in a way that generates significant environmental and energy conservation benefits.

³“Back on Track: The Global Rail Revival”, by Marcia D. Lowe; Worldwatch Paper 118, April 1994; Worldwatch Institute, Washington, DC.

VI. *Economic Development Goals*

A central mission of the transportation system is to facilitate trade. Tourism will certainly benefit from better accessibility by passenger rail, but the greatest potential for rail is in manufacturing and distribution. Many of Vermont's towns and cities grew up along rail lines, and their traditional commercial districts are oriented toward the tracks. Many of these parcels went fallow when rail declined in the mid 20th century, and are prime candidates for redevelopment as the NHS/Railway Corridors improve their access.

Rail improvements serve two important statewide economic development objectives: industrial clustering and downtown revitalization. The rail lines provide an opportunity to tie together businesses located in traditional business districts while moderating the growth of traffic on the highway system. Since many of the region's commodities move by rail, it is practical to cluster related businesses along the same rail corridor. This is not intended to replace trucks but rather to reduce their impact by balancing the load between multiple modes.

In the case of the quarry operation discussed above, purchasers of their product—crushed calcium carbonate—will be able to locate close to the source of the raw material, reducing shipping costs and highway congestion. Without proper transportation infrastructure, the value added benefit of the resource will be lost when the product leaves the State for further processing.

In order to succeed in capturing the inherent value of native resources, economic developers must revitalize an infrastructure that has become materially obsolete. But it is not functionally obsolete. With proper upgrades and enhancements it can continue to serve the districts it was originally designed to serve.

Public Benefit

We must recognize that the corridor concept addresses both passenger and freight traffic. Historically we have been reluctant to invest public funds in freight railroads owned by private interests. The fact that the improvement would help the commercial concern was interpreted as a private benefit and not a public benefit. In considering the objectives of smart growth, we must look beyond traditional definitions of benefit.

A striking example is found along our corridor, where stone quarried in Middlebury is trucked to a processing plant in Florence. Because trucks carrying the stone pass through downtown Brandon, the State has limited the number of trucks that can pass through that downtown each day. As a result, the company has an artificially imposed cap on its production capacity, and more than a hundred million dollars in capital investment that would have created jobs in Vermont has gone to plants in other States and Canada.

An initiative is under way through a public/private partnership to build a siding from the quarry to the rail line, enabling the rock to be shipped by rail. This will reduce truck traffic in Brandon while allowing the company to grow at its natural pace, creating jobs as it does so. Providing the transportation alternative for the company improves the quality of life in Brandon. This constitutes a bona fide community benefit.

VIII. *Cost Benefits of NHS/Railway Corridors*

Transportation is expensive. Drawing exact comparisons between projects is difficult because unit costs vary greatly according to engineering requirements, acquisition and relocation costs, and a host of other factors.

In Western Vermont figures do exist for two projects in the Bennington to Rutland NHS/Railway Corridor that indicate a significant cost benefit to upgrading the existing NHS and rail lines. A 1997 DEIS (Draft Environmental Impact Statement) evaluating the cost of building a bypass around Rutland City studied several alternate routes⁴. These ranged in cost from \$49 million to \$183.5 million. The alternative preferred by the City cost \$61.5 million to construct 8.1 miles of highway for an average cost of \$7.59 million per mile, exclusive of right-of-way acquisition and relocation costs.

The recent Amtrak analysis of upgrading the rail line from Glenville Jct., NY to Winooski, VT estimated the cost at \$76.5 million dollars for approximately 166 miles of track, an average cost of \$460,000 per mile⁵. As the rail right-of-way is already

⁴See "Rutland DEIS Summary" FHWA-VT-EIS-97-01-D, Rutland FEGC 419-3(44)-EIS, Vermont Agency of Transportation, December 1997.

⁵"Vermont Western Corridor Study, Final Report" National Railroad Passenger Corporation, December 1, 2001

assembled, the cost estimates may be compared with the bypass estimates that do not include right-of-way acquisition.

Additional corridor costs will be incurred for the Rutland railyard relocation and Middlebury spur (estimated \$120 million) and other upgrades to U.S. Rt. 7 (say \$50 million over time). Even with these added to the Amtrak estimate the corridor improvements would average \$1.49 million per mile, compared with \$7.59 million per mile to bypass a single community.

While the DEIS indicated a high number of automobiles to be served by the bypass, it says nothing of how that traffic would get to the bypass—i.e. using the existing NHS highways. The improvement would reduce travel times in one segment of the corridor but would not serve to balance traffic between locations along the length of the corridor. It would not improve intermodal connectivity.

IX. Examples of Corridor Projects in Action

Rutland Railyard Relocation

A 1999 study by the Vermont Agency of Transportation assessed possible relocation sites for both the Burlington and Rutland switching yards. In both cities, prime downtown properties are occupied by tracks, impeding development in the traditional growth centers. Also, the projected growth in freight traffic will soon surpass the capacity of the existing yards. A suitable site was identified in Rutland.

Since 2000, conceptual design work and environmental assessments have been under way in Rutland. The new site promises many benefits: switching capacity will increase, the switching function will be removed from an older mixed use neighborhood near downtown, a new access road will reduce congestion on U.S. Route 7, a major gateway corridor into downtown Rutland will be improved, and multiple redevelopment sites will become available in the traditional business districts adjacent to downtown. Relocating the railyard will eliminate a major grade crossing that would limit Amtrak service. All in all, this is smart growth at its best.

Passenger Rail Service

While the interstate highways serve the eastern side of Vermont, most of the population centers are located in the west. Amtrak recently completed a study of the western corridor⁶ and recommended a route from Schenectady, NY serving Bennington, Manchester, Rutland, Middlebury and Burlington.

The population centers and tourist destinations in Western Vermont are particularly vulnerable to competitive challenges from areas served by interstate highways. As the State's economy becomes increasingly dependent on tourism, ease of access becomes even more important. A skier in New York City can board an airplane and be in Utah in 5 hours. Unless that customer can reach Vermont resorts in a comparable timeframe, the business will go to Utah. As the State works to attract high tech, communication-driven businesses, travel time to the major regional markets becomes a key competitive issue.

Amtrak service to New York will serve both purposes. With its potential for further connections into Canada, Vermont is, in actuality, a logical northern anchor for the northeast rail corridor.

Highway Improvements

The increased flow of interstate truck traffic is exacerbating already congested conditions in several smaller towns along the Rt. 7 corridor, most notably Brandon, Pittsford and Middlebury. Accident—and fatality—rates are high in this area. A coalition of citizens, local elected officials, State legislators and the State transportation agency has proposed a program to upgrade selected sections of the highway and study the feasibility of local bypasses.

Further south, Rutland City and Rutland Town have teamed up with the State to propose a series of upgrades to the Route 4 and 7 corridors in the Rutland area. This project was undertaken when the State canceled a bypass proposal for cost and environmental considerations.

In both projects the emphasis is on improving the existing highway in an area not served by an interstate. In Rutland the proposal highlights the relationship between the highway project and the rail improvement: the access road proposed to serve the new railyard will also divert significant truck traffic from the most congested segment of U.S. Rt. 7.

⁶See "Vermont Western Corridor Study, Final Report" prepared by National Railroad Passenger Corporation (AMTRAK), December 1, 2001.

Middlebury Spur

This project clearly illustrates the intermodal potential of the corridor. In Middlebury, a major commercial shipper is stymied in achieving full production capacity because stone quarried at a site north of Brandon must be moved through the town by truck to reach the plant that processes it into calcium carbonate slurry. Citing aesthetics, State permits limit the shipper to 116 trucks per day on U.S. Rt. 7 through the town; the company's capacity is 175 trucks. Thus a significant amount of production—and the investment and jobs that go along with it—are lost to the community because of the condition of the highway.

As a condition of the land use permit the parties formed a task force to work out a solution. Vermont Railway, the Vermont Agencies of Transportation and Natural Resources, the private corporation, and the Conservation Law Foundation, a leading environmental assess a proposed rail siding to be built by Vermont Railway (VTR) from the quarry to the main rail line that runs parallel to Rt. 7. This will allow VTR to accept shipments of stone for transfer to the processing plant while reducing the need to move 25,000 to 30,000 trucks per year through Brandon. Intermodal facilities installed at the processing plant will complete the connection. The private company has pledged to pay for intermodal facilities required to handle their project by rail. This is estimated at about one third of the total project cost.

The success of this interdisciplinary planning effort illustrates the caliber of problem solving possible if the transportation system is viewed as a unified corridor.

MEMORANDUM

To: Senator James Jeffords, Chairman, Committee on Environment & Public Works, U.S. Senate

From: Patricia Crocker, Executive Director, Vermont Public Transportation Association

Date: August 19, 2002

Subject: Testimony on Transportation Funding

Attached is testimony that I would like to present on Wednesday, August 21, 2002 at the hearing in Vermont. Unfortunately, I received a copy of a letter to Rep. Pembroke third hand late on Thursday and did not receive any direct notice of the meeting; therefore, my testimony is of necessity brief.

Thanks for the opportunity to present this information.

We are very grateful for the interest and the other members of your committee have taken in rural public transportation.

Across the Nation, the low level of Federal budgetary support for rural public transportation is an ongoing problem. Population-based Federal 5311 formula funds are minimal in Vermont. The lack of financial support is particularly acute in its impact on the disabled, low-wage workers (often single parents) who must not only seek job related transportation, but also work out the logistics of getting children to and from childcare, and our elder population who can no longer drive their own vehicles. Many of our citizens most in need of services and economic opportunities are dispersed into communities where housing costs are more affordable. Thus, the need for adequate transportation that provides mobility and access to goods and services is more acute in our rural areas yet this need is overlooked in favor of a strategy that is focused primary on alleviating congestion.

In Vermont, the Job Access and Reverse Commute funding has provided the first opportunity for expansion of services in nearly 4 years. The funding that you have provided in an annual earmark has been central to providing community bus service to areas previously underserved and in some cases forms the locus of service for an entire community, i.e. Middlebury. Although this initiative has targeted a need for transportation for low wagedworkers, it has provided additional and expanded service that has been of benefit to the entire community, including disabled and the independent elderly who choose not to be involved in "programmatic services." The program has been successful in meeting these broad community needs.

Vermont's Federal formula appropriation 5310 funding for transportation for the disabled and elderly persons is also minimal. The program, essentially a capital program is used in Vermont for both vehicle purchases and for the purchase of services through public transportation operations. Although the State Agency of Transportation has flexed a significant amount of funds to enhance the 5310 program, many needs continue to be unmet. And the opportunity to use funds for vehicle purchases is often passed over because neither human service nor non-profit transit organization can meet the requirement for 10 percent match.

Because the Federal formula provides so little funding, much of our additional revenue is obtained through the use of Federal STP funds. This puts all public transportation services in direct competition for the same funds that are used for roadway projects. The State public bus transportation budget for fiscal year 2003 is about \$13 MM dollars. This represents just 4 percent of the entire State transportation budget.

Solving the problem of inadequate public transportation in rural areas will require new funding and new rules that will enhance coordination of services to benefit the entire community and that will eliminate rules that arbitrarily restrict services by groups such as the elderly, the disabled or welfare-to-work clients, and school children. A funding program that offered the opportunity to serve a variety of community needs rather than discrete groups has the greatest potential for efficiently and effectively meeting the broad demand and to further the public policy objective of maximizing public investments in transportation systems.

We understand that Senator Baucus has or will introduce a bill to provide a \$5 million dollar State minimum for all 5311 programs, a \$5 million dollar minimum for small urban systems (50,000—200,000 population) and a \$1 million dollar minimum for the 5310 program and provisions that would allow the 5310 program funds to be used for operating expenses. This initiative holds the promise of some much needed Federal support for the initiatives in rural States like Vermont and will greatly improve our situation as long as they are not used to supplant the limited State funding already committed to this activity.

Finally, I want to thank you and the members of your committee for this opportunity and look forward to working with you as you proceed in the reauthorization process.

Respectfully submitted,

PATRICIA C. CROCKER.

STATEMENT OF STEPHANIE CARTER, ACTING COMMISSIONER OF THE VERMONT
DEPARTMENT OF TOURISM AND MARKETING

Mr. Chairman, Members of the Committee, thank you for holding this hearing in Vermont, especially with regard to the unique transportation needs of small towns and rural America.

My name is Stephanie Carter and I am the Acting Commissioner of Tourism and Marketing for the State of Vermont.

Vermont's rural landscape, steeped in history, rich with scenic beauty and alive with recreational activities, is also challenged in its ability to parlay information to the traveling public in a way that does not compromise these characteristics. Domestic visitors to Vermont spent \$2.6 million in Vermont in 2000 and left an impact of \$4.2 billion on the Vermont economy. Tourist expenditures annually contribute 75,241 jobs and generate \$1.4 billion in personal income for Vermonters.

Vermont led the Nation in 1968 to address the proliferation of roadside billboards with the passage of a comprehensive travel information program, the twin goals of which were to preserve scenic beauty and to provide meaningful information to the traveling public. Many aspects of this program relied upon the construction of travel plazas and upon the erection of official business directory signs.

As the end of the century approached, aspects of this program began to show signs of a need to renew the 30-year-old program. With the assistance of the Federal Highway Administration, we embarked on a comprehensive study of solutions. In the end, we largely concluded the solutions to effective travel information lie in new technology rather than the continued proliferation of road signs and travel plazas.

It was by this process that Vermont entered the Rural ITS Program. With funding provided by the Federal Government, matched with State and local funding, the State of Vermont has implemented a comprehensive business registry data base consisting of the products and services offered by Vermont businesses; developed a website known as the Vermont Travel Planner; has developed electronic kiosks at a number of Vermont Welcome Centers; and has developed technology for en-route navigation. Within the development process, we have worked with transportation and tourism partners from New Hampshire and Maine to develop a regional tri-State system known as TRIO and have worked within Vermont to integrate the needs of our statewide and regional marketing partners. In other words, we have had much experience with the Rural ITS Program and we have been very happy with what we have been able to accomplish for the people of Vermont as well as our visitors, to date.

I am here to today to suggest changes, based on our experience, to enhance the Rural ITS Program.

1. Reconsider the 50/50 match requirement. In our experience as a small rural State with a relatively small budget, the 50/50 match requirement is becoming increasingly prohibitive as State budgetary pressures intensify. Progress on ITS will slow if the ratio is not brought in line with other federally funded projects. Frankly, this project competes within a budget against projects that receive 80/20 funding and 90/10 funding, with predictable results. ITS can also represent significant cost savings through collaboration and sharing of best practices. We recommend that Federal funding of ITS projects be 100 percent (based upon the cost saving potentials) or at least 90/10 to enhance their competitive advantage with other programs.

2. Continue and encourage regional control of ITS. Rural ITS is a regional solution, uniquely designed for the landscape in which it is to operate. We have a complex but excellently functioning regional project among three States that is working very well. Local Federal Highway Administrative support has been excellent, but it has often been hampered with delays and misunderstandings when headquarters becomes involved at the detail level. We recommend that project oversight remain with the District Offices and that there be less hands-on control by headquarters.

3. Maintain the autonomy of the ITS program within FHWA. Civil engineering principles do not always translate to technology projects. ITS projects are, by definition, information technology rather than traditional technology used for transportation project construction. Due to the speed of technological change, with an average generation lifespan of 18 months, change, fast response, and agility are the rule. The ITS program needs to enhance its pool of technology experts within FHWA and to encourage training of ITS staff to insure that the program can remain contemporary.

4. Remove the barrier to Metropolitan Planning Organization (MPO) integration into a Rural ITS Project. When planning, designing and implementing comprehensive regional ITS solutions, the current rule that disallows Rural ITS implementation in an MPO jurisdiction leads to inefficiency. The MPO boundaries, particularly in rural States such as northern New England, are sometimes arbitrary and in fact include large amounts of essentially rural landscape. Rural ITS projects must often interrupt corridor-long deployment because of intervening MPOs, even when the lowest-cost option would be to pursue the deployment through the MPO region. Relief from this programmatic encumbrance would streamline project implementation and avoid artificial gaps that "leapfrog" MPO geography in primarily rural regions. We recommend, with appropriate review and approval, Rural ITS project deployment in an MPO when it can be demonstrated that a truly regional rural approach will suffer from MPO "blackout".

Thank you for your consideration.

STATEMENT OF MARY TRACY, EXECUTIVE DIRECTOR, SOCIETY CREATED TO REDUCE URBAN BLIGHT

Mr. Chairman, I am Mary Tracy, executive director of SCRUB, Society Created to Reduce Urban Blight, a Philadelphia based non-profit organization dedicated to preserving Philadelphia's scenic environment. On behalf of our Board and members we appreciate the opportunity to present written testimony on the re-authorization of TEA-21. We thank Congress for having the foresight to establish TEA-21, which has benefited travelers, residents of communities large and small, and local businesses and ask that you re-authorize TEA 21.

We urge Congress to preserve all categories of enhancement funding including funding of billboard removal and acquisition of scenic easements. SCRUB has worked with civic associations throughout the Philadelphia region and we know that municipalities are interested in improving important gateway areas in an effort to attract new business and residents to the region. Unfortunately, many of these areas lack a pleasing visual appearance sometimes as a result of the intrusion of billboards. This category of enhancement funding provides important resources for communities to visually enhance these gateway areas. We ask that you continue to provide funding for this need. We also ask that you resist any efforts by the billboard industry in TEA-21 re-authorization to further tamper with the Highway Beautification Act of 1965 or the Bonus Act. These laws badly need to be overhauled, but they require a level of attention not possible or desirable in such a complex bill as TEA-21. We recommend a thorough congressional inquiry in 2004.

ISTEA and TEA-21 have led to stronger communities; transportation systems that work with the land and a reawakening of a sense of place throughout both rural and urban America. As the chair of the Overbrook Train Station's Restoration Committee, I saw first-hand the positive effect of ISTEA enhancement funding. Residents welcomed the opportunity provided by the 1991 ISTEA to restore an im-

portant neighborhood landmark, which, though well used by commuters, had become an eyesore and a dismal reminder of the once glorious days of the railroad. ISTEA funding provided the seed money to launch the station's restoration and at the same time restored our community's pride in place.

ISTEA and its successor, TEA-21 have enabled citizens to participate in local and regional transportation priorities on an important level and has improved the quality of life in communities throughout the country. We urge Congress to take steps to improve TEA-21 for the future and to continue to fully fund this vital, pro-citizen program.

Thank you for your consideration,

STATEMENT OF MEG MAGUIRE, PRESIDENT, SCENIC AMERICA

Mr. Chairman, I am Meg Maguire, President of Scenic America. On behalf of our Board and members we appreciate the opportunity to present written testimony on the re-authorization of TEA-21. We are proud to have been associated with this legislation for the past 13 years. Scenic America is a founding member of the Surface Transportation Policy Project, the coalition that helped gain new transportation solutions to benefit communities including the National Scenic Byways Program; Transportation Enhancements; and programs affecting air quality, land use planning, and much more. We thank Congress for these far-reaching programs which have benefited travelers, residents of communities large and small, and local businesses.

Scenic America is a national, nonprofit organization that helps communities nationwide protect their scenic beauty and distinctive community character. We have 10 State affiliates and 15 associate organizations throughout the country. We are dedicated to the proposition that change is inevitable; ugliness is not.

In re-authorization of TEA-21, Scenic America urges Congress to take the following steps:

- Increase and make entirely merit-based the funding for the National Scenic Byways Program; and continue eligibility for State scenic byways programs.
- Mandate that all federally funded highway projects be planned according to the simple and well-established principles of context-sensitive highway design (CSD) and that they promote physically active communities;
- Preserve all categories of enhancements funding including funding for billboard removal and acquisition of scenic easements;
- Approach environmental streamlining as an administrative issue rather than a legislative issue that would weaken the key environmental laws that now ensure citizen participation and expert study of proposed transportation projects; and
- Resist any efforts by the billboard industry in TEA-21 re-authorization to further tamper with the Highway Beautification Act of 1965 or the Bonus Act. These laws badly need to be overhauled, but they require a level of attention not possible or desirable in such a complex bill as TEA-21. We recommend a thorough congressional inquiry in 2004.

Scenic Byways

The National Scenic Byways program works. The Program now boasts 75 National Scenic Byways and 20 All American Roads. Communities come together to develop a corridor management plan to protect outstanding natural, historic, cultural and scenic resources; and to strengthen local businesses by promoting tourism. The Byways program is highly popular with the 46 participating States plus the District of Columbia—an ideal partnership between Federal, State and local governments, non-profit organizations, and the business community.

Last December, at the 10th Anniversary Celebration of the National Scenic Byways Program the byways community, primarily but not exclusively people from small towns and rural America, came together to share successes and plan for the future. The meeting affirmed the high performance we have witnessed in the program:

1. Byways produce profits. Many small businesses have begun and flourished along scenic byways. In rural Arkansas along Crowley's Ridge, there are 17 new tourist-oriented businesses plus a new Hemingway-Pfeiffer Museum. In Vermont, the proprietor of the Strong House Inn testified to her direct profit from working with other business owners in New York and Vermont to promote the full length of the Lake Champlain Byway.

2. Byway grants leverage significant funds from other sources. The San Juan Skyway in Colorado received a \$6,800 scenic byways grant and additional funding to complete a \$39,000 plan. To implement the plan, the participating counties, a col-

lege, several nonprofit organizations, the U.S. Forest Service, and the State of Colorado raised over \$6 million to preserve mining and railroad sites. And in Wisconsin, along the Great River Road, byways grants are helping leverage funds for 33 interpretive kiosks and the Great River Road Scenic Byway Learning Center.

3. Byways protect, market, and interpret six irreplaceable resources—scenic, historic, cultural, archaeological, natural, and recreational. Scenic easements and billboard removal funding has helped maintain beautiful views along a number of corridors. Byways communities are recognizing and restoring natural resources along byway corridors; and interpreting local history and culture along these regional corridors. Cyclists and hikers are finding new opportunities to enjoy recreation along the byways too.

4. The National Scenic Byways Program is a bottom-up program in which designated roads are recognized and put forward by the States. The foundation of the national program is at the State level. All national scenic byways must first be part of a State scenic byways system (46 States participate including those represented by most members of this committee). That means that in States like Alaska, Wisconsin, Minnesota, and West Virginia significant resource protection and economic development are occurring as a direct result of the State initiated scenic byways. Therefore, in TEA-21 re-authorization, it is important that States continue to be eligible for grant support to build the programs within their States.

I also want to commend the FHWA and America's Scenic Byways Resource Center in Duluth, MN for providing strong technical support and a fair process in running this program. We believe that the current administrative and assistance arrangement should continue and be strengthened in the years ahead. If all Federal programs could show beneficial results comparable to the National Scenic Byways Program, the American people would have much greater confidence in the use of their tax dollars.

The National Scenic Byways Program merits substantially increased funding as it grows and continues to yield community benefits. Scenic America fully recognizes the tight financial constraints Congress faces in funding this bill. Our research included information from FHWA and several States to develop what we believe to be a conservative and defensible estimate of the increases in program re-authorization.

Under ISTEA the program received a total authorization of \$80 million over 6 years. Under TEA-21, funding has been approximately \$25 million/year for a total \$148 million over 6 years. Each year the FHWA rejects an average of 60 percent of total funding requests. According to officials in the FHWA and several States, there is an extensive screening program at the State level, so FHWA is truly picking the best of the best. Virtually all of the proposals should and would receive grants if funds were available. Our recommendations on funding levels take into account the following:

- current unmet demand;
- the recent addition of Mississippi to the prog;
- the increase of nationally designated byways to 95 in June 2002; and
- growing political pressure for State byways programs in Texas and Pennsylvania.

Based on our research we believe that there is ample justification for an increase in funding beginning at \$57 million in fiscal year 2004, increasing by \$2 million each year to account for inflation and modest new additions to the system up to \$67 million in fiscal year 2009. Over the 6 years of the bill the total authorization level would be \$372 million.

Finally, we must comment on an effort last year to transform the National Scenic Byways grant program from a purely merit-based program to an earmarked program, with all the funds going to congressionally selected projects in particular States. Cries of distress went up from many grant applicants who have played by the rules and were under consideration for funding. Was all of their painstaking work on corridor plans, leveraging of resources, and grant applications for naught? How was it possible for Congress to snatch away a merit-based program with such a fine record of achievement? Scenic America, the American Recreation Coalition and the National Trust for Historic Preservation vigorously opposed that effort. In the end, with \$8.5 million of the approximately \$25 million in byways funding falling to earmarking, about \$16.5 million was awarded to merit-based programs.

We urge Congress to ensure that grants under the program, at whatever level of funding, remain based entirely on merit.

Context-Sensitive Highway Design

Context Sensitive Highway Design (CSD) should be required in planning all federally funded projects. CSD is a significant breakthrough in transportation policy and

we thank Congress for its past wisdom in recognizing that roads need not destroy vital resources.

Section 1016 (a) of ISTEA permitted the Secretary of DOT to approve projects designed to standards that allowed for the preservation of historic or scenic values. The National Highway System (NHS) Act of 1995 strengthened this emphasis on context-sensitive highway design with a provision in Section 304 that states:

A design for new construction, reconstruction, resurfacing . . . restoration or rehabilitation of a highway on the National Highway System (other than a highway also on the Interstate System) may take into account . . . (A) the constructed and natural environment of the area; (B) the environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity; and (C) access for other modes of transportation.

To take advantage of this progressive and visionary Federal language, five pilot States—Connecticut, Maryland, Kentucky, Minnesota and Utah—have adopted context-sensitive design, retrained their project managers and engineers, and sponsored region-wide training for other States. Vermont and New Jersey have legislation that sets new standards and criteria; California has issued administrative guidelines and several other States are seriously considering doing so. Some highway engineers are getting the message that people have a deep love of the places where they live and want road building to respect the assets of their communities. Federal legislation has helped immeasurably to bridge this understanding.

The results are exciting. For example, in Maryland, local public officials report that the State Highway Administration is working with communities as never before to achieve new solutions that respect both needs for sound community transportation and resource conservation.

In addition, CSD promotes active communities. The Centers for Disease Control have identified obesity as one of the greatest threats to public health. Conventional transportation design, with its emphasis on the automobile and diminished regard for bicycle and pedestrian safety, promotes a lack of physical activity and thereby contributes to obesity, while designing transportation systems to promote physical activity does the opposite. For example, surveys have shown that more than 60 percent of all adults say they would start walking or walk more often if they had access to safe and secure pedestrian pathways. CSD would provide that access.

Today we request that you make two small changes to the language in the NHS:

1. Change the words “. . . may take into account . . .” to “. . . shall take into account.” In drafting the National Highway System Act, the original context-sensitive design language under consideration by former Congressman Bud Shuster and this committee used the word “shall,” but this was changed at the last minute to “may.” Based on the evidence of the last 10 years showing greatly improved project results using context-sensitive design, we are convinced that no road should be built with Federal funding that does not incorporate context-sensitive design principles and standards. In TEA-21 re-authorization, we strongly urge Congress to go with its original instinct and require States to incorporate context-sensitive highway design into all federally funded projects.

2. Amend Section (C) to read “access for other modes of transportation including those that promote physically active communities.” We also strongly urge Congress to respond to the intense national concerns voiced by the Centers for Disease Control on the need to create active communities to fight obesity and heart disease by requiring federally funded transportation projects to promote “access for other modes of transportation, including those that promote physically active communities.” We believe that this addition will encourage the integration of national public health objectives into transportation planning without being prescriptive about how that is done.

Transportation Enhancements

TEA-21's enormously popular Transportation Enhancements program has yielded benefits for thousands of communities, from small towns and rural counties to our nation's largest cities. Scenic America works with the Rails to Trails Conservancy, the American Recreation Coalition, and dozens of other groups to monitor and promote the program. Let me reinforce several recommendations from our coalition. We believe that Congress should:

Protect the current funding level and allocation formula:

- I. Improve obligation rates in the States so that there is more timely expenditure of funds;

- II. Keep the current time-tested funding eligibility categories, including billboard removal and control and acquisition of scenic easements; and

- III. Do not open up this program to a variety of other uses not in line with the original intent of the program.

Environmental Streamlining

Recently there has been much blame for project delay placed on our environmental laws—the National Environmental Policy Act of 1969; the National Historic Preservation Act, particularly Section 106; and the Department of Transportation Act of 1966, particularly Section 4(f). These laws have ensured citizen participation and thorough study of projects before they take place. Further, independent study of project delay finds many other factors that contribute including lack of funds for personnel to conduct reviews and to build projects. We urge you in the strongest terms to approach the issue of environmental streamlining as an administrative and appropriations issue, not as a legislative issue in TEA–21. We offer to work with you to examine the kinds of projects now subject to intensive environmental review that might receive less intensive review; and to make funding available to the States so that they have adequate personnel to review complex projects. Through this process, we can achieve economies for the taxpayer, timely benefits for communities, opportunities for all stakeholders to participate in the planning and design process, and insurance that the study process preceding public investment is thorough and based on expert evaluation. Let's achieve all we can through administrative streamlining before we consider amending laws that have served our country well.

Billboard Control

Finally, we urge you to resist any efforts by the billboard industry or others to tamper with any aspects of current Federal billboard laws within TEA–21 re-authorization.

This is not because we support current Federal law and administration of billboard control through the misnamed Highway Beautification Act (HBA) or the unfunded Bonus Act. The HBA is so bad and so distorted from Lady Bird Johnson's original intent that it needs its own studies, hearings, congressional review and new legislation. The billboard industry has made a joke of this law by thwarting communities from cleaning up their visual environment, eroding rural visual quality on our Federal highways, permitting cutting of public trees on public lands for private billboard visibility, and much more. I will submit for the record our 1997 report, *The Highway Beautification Act: A Broken Law* that documents the problems to which I have referred.

Senator Jeffords introduced the last effort to reform the HBA in 1997 and we are grateful for his interest in this issue. Vermont, one of four billboard free States, has been well-served by not having to deal with the billboard industry since 1978. We believe that the TEA–21 re-authorization process is not the venue for making any changes to current billboard law. Instead, we hope that Congress will consider undertaking a thorough, fair, and open reexamination of Federal billboard control measures after TEA–21 re-authorization.

Conclusion

ISTEA and TEA–21 have led to stronger communities; transportation systems that work with the land, not against it; and a reawakening of a sense of place throughout both rural and urban America. We urge Congress to take those steps outlined at the beginning of this testimony as you improve TEA–21 for the future.

I thank you for the opportunity to share Scenic America's views.

STATEMENT OF DEBBIE ROHE, PRESIDENT, SCENIC MICHIGAN

Mr. Chairman, I am Debbie Rohe, President of Scenic Michigan. On behalf of our Board and members we appreciate the opportunity to present written testimony on the re-authorization of TEA–21. Scenic Michigan is a nonprofit organization that helps communities in the State of Michigan protect their scenic beauty and distinctive community character. We have 700 members statewide. We are dedicated to the proposition from Scenic America that change is inevitable; ugliness is not.

I want to share with you a story from one of our members, and one that we often hear.

An elderly couple moves into a condominium complex in St. Clair Shores, Michigan and enjoy a view of the golf course and the night sky over their community. The couple lives in a seven-story condominium building. Over the next 3 years, 3 large billboards with high intensity lights are constructed facing their building. "Who knows how many more are planned. Now we have to pull our drapes at night because the billboard lights are so intense. This is no way to live."

Communities don't have the deep pockets to fight the billboard companies in court, which leaves the community and it's residents with little power to fight this kind of blight. We know that property values go down when billboards go up.

Help communities, counties and cities control the blight and the stray lighting that comes from billboards, with some tough legislation that we can use.

Thank you.

