# **Intelligent Transportation Systems in Reauthorization 2009: Positions of Transportation Stakeholders**

10 April 2009

### Introduction

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorizes surface transportation investments through September 30, 2009. As Congress and the Obama Administration consider options for reauthorization legislation, transportation stakeholder organizations are establishing their priorities and publishing policy statements and position papers. Many of these organizations have explicit or implicit views on Intelligent Transportation Systems (ITS) research and deployment programs.

## Scope

This paper contains a comparative analysis of the published ITS-related reauthorization positions of 35 leading transportation stakeholder groups and organizations divided into two different tiers based upon their historic focus on ITS. The results are presented in four tables organized by USDOT ITS Program goal areas: safety, mobility, energy and environment, and productivity. The first set of two tables (Table 1 and Table 2) provides a graphical comparison of the Tier I and Tier II stakeholder positions. The second set of two tables (Table 3 and Table 4) provides excerpts of the Tier I and Tier II organizations' stated positions in each area.

## **Approach**

A set of 40 transportation stakeholder groups (see Table 5) that may have reauthorization positions of interest to the USDOT ITS Program were identified. To keep the level-of-effort within conservative bounds, the groups were categorized into three tiers based on historic roles in ITS policy and programs and focused primarily on the first and second tiers. For example, a Tier I stakeholder such as the American Association of State Highway and Transportation Officials (AASHTO) has significant interest in the ITS components of proposed reauthorization bills as they could directly affect State DOT programs. A Tier III such as Amalgamated Transit Union may have an interest in proposed transportation reauthorizations bills, but might not be as directly concerned with the role of ITS.

For this version of the paper, only the positions of the 15 Tier I and 20 Tier II organizations were analyzed (the 5 Tier III organizations are not included). In Tables 3 and 4, the most pertinent information related to ITS is bolded for ease of identification. A comprehensive literature review was conducted of the documented reauthorization position statements of these transportation stakeholder groups and organizations as they relate to ITS legislation. These various documented position statements were categorized in terms of:

- The degree to which their position statement supports ITS in addressing the ITS program area goals in general; and
- How explicitly ITS options are cited as means to address these goals.

<sup>1</sup> A total of 40 transportation stakeholder groups were categorized into three tiers as follows: Tier I has 15 stakeholder groups; Tier II has 20 stakeholder groups; and Tier III has 5 stakeholder groups. For purposes of this analysis, only the 35 stakeholder groups in Tier I and Tier II are included. The 5 Tier III stakeholder groups are mentioned for information purposes only.

For example, the Institute of Transportation Engineers included significant language regarding the use of ITS to address the safety, mobility, and environment mission areas. In contrast, the National Governors Highway Safety Association has articulated a significant position on safety but makes no mention of ITS as being a critical component.

## **Preliminary Findings**

The following are the preliminary findings from an analysis of the 15 Tier I organizations:

- Each of the USDOT ITS goals is addressed by most of the transportation stakeholder groups and organizations, although some may be limited in scope. For example, the American Trucking Association has a significant position on productivity, but does not address the other three ITS program area goals.
- The challenge of financing transportation improvements is a common theme among the Tier 1 transportation stakeholder groups and organizations. Most see innovative funding solutions such as congestion pricing and vehicle-mileage taxes as viable options. These organizations, however, have widely varying views on how to implement these types of solutions.
- There is a general consensus that solutions to transportation challenges require a multimodal approach.
- Technologies such as ITS are recognized as viable solutions to transportation challenges today and in the future.

**Table 1: Tier I Surface Transportation Reauthorization Positions on ITS** 

2			Organization Overview			ITS Prog	gram Area	
Stakeholder	Tier	Mode*	Web Address	Position Statement Available	Safety	Mobility	Environment	Productivity
American Association of State Highway and Transportation Officials	1	All	www.transportation.org	Yes January 2009	•	•	•	•
American Public Transportation Association	1	Transit and Rail	www.apta.com	Yes October 2008	0	0	•	•
American Public Works Association	1	All	www.apwa.org	Yes September 2007	•	•	0	•
American Road and Transportation Builders Association	1	All	www.artba.org	Yes no publication date	0	•	•	•
American Trucking Association	1	Freight	www.truckline.com	Yes no publication date	n/a	n/a	n/a	•
Association of Metropolitan Planning Organizations	1	All	www.ampo.org	No	n/a	n/a	n/a	n/a
Center for Bipartisan Policy	1	All	www.bipartisanpolicy.org	Yes February 2008	•	•	•	n/a
I-95 Corridor Coalition	1	All	www.i95coalition.org	Yes no publication date	•	•	0	•

			Organization Overview			ITS Prog	gram Area	
Stakeholder	Tier	Mode*	Web Address	Position Statement Available	Safety	Mobility	Environment	Productivity
Institute of Transportation Engineers	1	All	www.ite.org	Yes (Draft) October 2008	•	•	•	•
International Association of Chiefs of Police	1	All	www.theiacp.org	In Development	tbd	tbd	tbd	tbd
ITS America	1	All	www.itsa.org	Yes March 2009	•	•	•	•
National Governors Association	1	All	www.nga.org	Yes February 2008	n/a	•	n/a	n/a
Governors Highway Safety Association	1	Highways	www.ghsa.org	Yes February 1, 2009	•	n/a	n/a	n/a
National Surface Transportation and Revenue Study Commission	1	All	transportationfortomorrow.org	Yes August 2008	•	•	•	•
Transportation Research Board	1	All	www.trb.org	No	n/a	n/a	n/a	n/a

\*Mode: Highways, Transit, Freight, Railroads, and/or All

#### Legend

#### **BLACK**

Degree to which position statement advocates for ITS within the category, ITS is specifically mentioned.

#### **GREY**

Degree to which position statement advocates for ITS within the category, <u>ITS</u> is implied.

Some

Significant

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n/a

Little not addressed

 Table 2: Tier II Surface Transportation Reauthorization Positions on ITS

2			Organization Overview		ITS Program Area			
Stakeholder	Tier	Mode*	Web Address	Position Statement Available	Safety	Mobility	Environment	Productivity
American Highway Users Alliance	2	Highways	www.highways.org	Yes no publication date	•		n/a	•
American Planning Association	2	All	www.planning.org	Yes no publication date	n/a	n/a	n/a	n/a
American Society of Civil Engineers	2	All	www.asce.org	Yes no publication date	•	•	•	•
American Traffic Safety Services Association	2	Highways	www.atssa.com	Yes 2008	•	•	n/a	n/a
Americans for Transportation Mobility	2	All	www.fasterbettersafer.org	No	n/a	n/a	n/a	n/a
Association for Commuter Transportation	2	All	www.actweb.org	Yes no publication date	n/a	n/a	n/a	n/a
Community Transportation Association of America	2	Transit	www.ctaa.org	No	n/a	n/a	n/a	n/a
Environmental Defense Fund	2	All	www.edf.org	Yes January 2009	n/a		•	•
Institute of Electrical and Electronics Engineers	2	All	www.ieee.org	No	n/a	n/a	n/a	n/a

			Organization Overview			ITS Program Area			
Stakeholder	Tier	Mode*	Web Address	Position Statement Available	Safety	Mobility	Environment	Productivity	
International City/County Management Association	2	All	icma.org/main/sc.asp	No	n/a	n/a	n/a	n/a	
International Municipal Signal Association	2	All	www.imsasafety.org	No	n/a	n/a	n/a	n/a	
National Association of Counties	2	All	www.naco.org	Yes 2008-09	•	•	•	•	
National Association of County Engineers	2	Highways	www.countyengineers.org	Yes			n/a	n/a	
National Association of Development Organizations	2	All	www.nado.org	Yes no publication date	n/a	n/a	n/a	n/a	
National Association of Regional Councils	2	All	www.narc.org	Yes 2008	n/a	•	n/a		
National Conference of State Legislatures	2	All	www.ncsl.org	Yes no publication date		•		•	
National League of Cities	2	All	www.nlc.org	Yes 2009	•	•	n/a	•	
National Sheriffs' Association	2	Highways	www.sheriffs.org	Yes 2008	•	n/a	n/a	n/a	

	Organization Overview			ITS Program Area				
Stakeholder	Tier	Mode*	Web Address	Position Statement Available	Safety	Mobility	Environment	Productivity
Public Technology Institute	2	None	www.pti.org	No	n/a	n/a	n/a	n/a
U.S. Chamber of Commerce	2	All	www.uschamber.com	Yes no publication date	•	•	•	•

\*Mode: Highways, Transit, Freight, Railroads, and/or All

#### Legend

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Degree to which position statement advocates for ITS within the category, ITS is implied.

Significant

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Some

0

Little

n/a

not addressed

**Table 3: Tier I Surface Transportation Reauthorization Position Excerpts** 

Stakeholder		ITS Pr	ogram Area	
Stakenoider	Safety	Mobility	Environment	Productivity
American Association of State Highway and Transportation Officials	Funding for safety research should be increased as follows:Increase the overall NHTSA research program to \$20 million per yearIncrease the overall FMCSA research program to \$15 million per yearProvide \$1 million to FHWA to quantify and qualify the benefits of the safety aspects of other modes (transit, non-motorized)Provide \$1 million to NHTSA to study certain vehicle and behavioral safety issues.  Intelligent Transportation Systems (ITS) Research and Development - Grow the program to \$150 million per year; - Continue funding support for on-going initiatives such as the Vehicle Infrastructure Initiative (VII), a partnership between US DOT, states and the auto industry, the 511 Traveler Information System, and other key research efforts advancing safety and mobility;  Increase funding for safety research in the following areas: ITS R&D, FHWA research, SHRP2 Research, NHTSA research, and FMCSA research.	Operate the System More Efficiently—The program would fund investments Eligible activities would include incident management; emergency response; signal synchronization; and traveler information systems.  Operations and Management Program (\$3 billion)-Investments to improve system performance: real time system management, traveler information, emergency response, and incident management.  In order to accomplish these goals the federal highway program must be funded at an appropriate level, maintained and preserved in accordance with sound asset management and environmental principles, efficiently operated using the latest available technology, and expanded to meet demands.  Provide increased flexibility to use road pricing as a congestion management strategy.  Establish a new core Operations and Management Program funded at approximately \$3 billion per year to address needs including but not limited to: real time system management, traveler information, emergency response, improving travel reliability, reducing delay, implementing roadway operating condition technologies, signal timing and synchronization, intersection and street improvements, snow and ice monitoring and management technology, incident management, commercial vehicle operations, work zone and demand management and access management.  Increase investment in research and development programs that will enhance service delivery, promote "best practices" through technical standards and increase the operational efficiency of transportation systems.	Emissions are highest, on a per-mile basis, when vehicles are sitting in traffic congestion, or at stop-and-go speeds. Congress also should provide increased support for "intelligent vehicle" initiatives, which will complement efforts to communicate real-time traffic information directly to individual vehicles, and improve the flow of traffic.	Eligibilities include such freight system multimodal investments as the following: Fix bottlenecks;Improve access, including but not limited to intermodal access, to ports and distribution centers;Improve freight transportation to or from international and national gateways (ports, airport, and border crossings);Improve routes that provide for interregional, interstate, or international freight movement, including but not limited to trade corridors;Where appropriate, develop truck-only lanes or invest in freight rail.  fund research and development efforts to identify options for system design and technology; and fund a proof of concept test(s) of a VMT-based funding approach at \$50 million per year for 2010 through 2012 with a report to Congress by 2013.  Intelligent Transportation Systems (ITS) Research and Development  • Grow the program to \$150 million per year; • Expand the program to include new ITS technologies which reduce congestion, improve freight delivery and address global climate change; and

Ctakah aldar		ITS Pro	ogram Area	
Stakeholder	Safety	Mobility	Environment	Productivity
American Public Transportation Association	n/a	Congress should promote the development of revenue generated from innovative financing mechanisms, such as public private partnerships, tolling and congestion pricing to supplement current revenue streams.	develop and implement a new federal research and technology program to enable America's public transportation systems to become world leaders in innovation and sustainability.  Develop and implement incentives that will facilitate the adoption of new clean fuel technologies, and enhancements to existing technologies	Increase investment in research[that]increase the operational efficiency of transportation systems.
American Public Works Association	APWA supports increased investment through a strong core safety program aimed at improving road and bridge conditions and roadway operations on all public roads and publicly-owned bicycle and pedestrian trails and pathways in order to reduce motorist, pedestrian and bicyclist injuries and fatalities.	APWA supports federal and state legislation that provides solutions to the growing urban congestion problem. More funds are needed at the national and state level to address urban transportation facility shortfalls.	APWA supports continuation of programs that promote multimodal transportation such as the Congestion Mitigation and Air Quality Improvement Program and the Transportation Enhancements program (provided projects are strictly limited to those that are related to surface transportation).	The successor to SAFETEA-LU should reflect investments to ensure the effective functioning of a National Highway System that supports intercity, interstate and commercial goods movement corridors. Support of goods movement is critical to local, regional and national economic development and job creation.
American Road and Transportation Builders Association	Boost infrastructure investment to improve motorist and highway worker safety in pursuit of a zero traffic fatality goal. ARTBA is also recommending increased resources for SAFETEA-LU's High Risk Rural Road Safety Program to improve roadways that represent a documented safety threat.	ARTBA is calling for the creation of a bold new program—"Critical Commerce Corridors" (3C)—to provide new surface transportation system capacity and operational improvements exclusively focused on securing the safe and efficient movement of freight. 3C network would include among other things: New multi-modal trade corridorsNew capacity "truck only" lanes allowing increased productivity and improved safety through commercial/ personal vehicle separation;Bottleneck relief;Integrated telecommunications corridors.	ARTBA's 3C plan also calls for:Utilization of existing right-of-way to the greatest extent possible to minimize environmental footprint;Use of "best-of-class" environmental protection/mitigation design and construction techniques and environmental stewardship principles; andApplication of the world's most advanced materials, communications and safety technologies.	Creation of an integrated, national strategy—"Critical Commerce Corridors"—to facilitate the safe and efficient movement of freight and to reduce the impact of truck traffic on other highway users
American Trucking Association	n/a	n/a	n/a	The 2009 Highway Reauthorization bill should focus on improving the movement of the nation's freight in a safe, efficient, and environmentally-responsible manner and relies on a financing scheme that is fair, equitable and sufficient to meet industry objectives.
Association of Metropolitan Planning Organizations	n/a	n/a	n/a	n/a

Stakeholder		ITS Pro	ogram Area	
Stakenoider	Safety	Mobility	Environment	Productivity
Center for Bipartisan Policy	The federal government could play a more proactive role in encouraging states and localities to implement safety measures as an integrated component of their transportation plans.  All safety measures are not created equal; hence future efforts in this area should give special weight to the kinds of measures that have been shown to be most effective in reducing transportation-related deaths and injuries.	The Commission has correctly recognized this opportunity by proposing that selected barriers to congestion pricing be removed. Specifically, the Commission recommends removing restrictions on the imposition of road tolls on the Interstate Highway System—in all cases for new capacity and in all metropolitan areas with a population greater than one million for existing capacity.  Strategies such as dynamic HOV lanes, stop light management, and flow control based on real-time conditions are all potential technological innovations that could be effectively deployed towards the same end goal, and strategies for their widespread adoption need to be considered.	The time is ripe for substantial changes in the transportation sector with respect to climate change, and the Commission has missed an excellent opportunity to address this issue.  Any number of other transportation policy options that might provide incentives for reduced oil consumption—such as fuel taxes, congestion pricing, or VMT charges—are not explored in the Commission's report or are discussed only in the context of other policy objectives (such as meeting revenue needs).	n/a
I-95 Corridor Coalition	Facilitate multi-state partnerships/coalitions to improve transportation system performance and reliability: implementing interoperable advanced technology safety and mobility systems;	Facilitate multi-state partnerships/coalitions to improve transportation system performance and reliability: clearing incidents quickly;informing the public about significant incidents and events;conducting orderly evacuations;implementing interoperable advanced technology safety and mobility systems;improving the operation of passenger and freight systems and intermodal connectors.	The I-95 Corridor Coalition has developed a set of principles to support a sustainable transportation vision for the region. The principles cover economic, environmental, energy, and transportation sustainability.	Facilitate multi-state partnerships/coalitions to improve transportation system performance and reliability: implementing interoperable advanced technology safety and mobility systems;improving the operation of passenger and freight systems and intermodal connectors
Institute of Transportation Engineers	Support Incident Management Strategies in the National Unified Goal for Traffic Incident Management	Dedicate 1 Percent of Total Highway Expenditures to Traffic Signal Operations	This reduction [in GHG] can be accomplished through more efficient traffic operations to reduce congestion and better manage incidents; reduce vehicle miles of travel through pricing and other means;; and apply new power and lighting technologies.	ITE policy "encourages the use of planning, operational, administrative and technological measures to facilitate the safe, efficient and environmentally favorable movement of goods and to improve productivity of the intermodal transportation system."
International Association of Chiefs of Police	n/a	n/a	n/a	n/a

Stakeholder	
	Safety
ITS America	Preventing Accidents Before they Happen and Improving Emergency Response – Before the day is over 110 people will die on U.S. roads, the equivalent of a 737 airliner crashing every afternoon. In addition to the tragic human cost, the economic impact of these 40,000 annual fatalities and 2.5 million injuries exceeds \$230 billion each year. The public and private sectors have invested billions of dollars in measures to protect drivers and passengers from the impact of crashes and to influence driver behavior. The next giant leap in reducing fatalities and injuries is to jumpstart the widespread deployment of vehicle collision avoidance systems and other smart technologies that can help drivers and operators detect dangerous situations and avoid accidents before they happen. Mark Rosenker, Acting Chairman of the National Transportation Safety Board (NTSB), recently posed the question, "How many of you would be willing to take the plane home tomorrow if there were 40,000 aviation fatalities each year in the United States?" He continued, "Personally, I'm concerned, baffled, and shocked because there seems to be little outrage about the tens of thousands of people who die in roadway crashesit is time for us as a nation to stop accepting the costs of traffic accidents and instead put that money into making cars that can avoid potential accidents."  In addition, in-vehicle telematics and communications systems like Next Generation 9-1-1 and Emergency Vehicle Preemption are helping emergency personnel respond more effectively when accidents do occur, and ITS-enabled solutions are being used routinely to manage transportation systems more effectively during high-traffic situations such as hurricane evacuations, planned events including the Presidential Inauguration and major sporting activities, and catastrophic events like the September 11, 2001 terrorist attacks.

ITS Program Area

Reducing Traffic Gridlock - The average rushhour commuter spends nearly a full work week stuck in traffic each year, time that could be spent at a ballgame or around the dinner table with family, at a barbeque with friends, or volunteering in your community. Traffic congestion in major metropolitan areas alone costs our economy more than \$78 billion each year in lost travel time and fuel, not to mention its harmful impacts on economic productivity, the environment, and its contribution to dangerous and frustrating driving conditions. Allowing traffic to grind our cities to a halt every morning and afternoon is unacceptable when we have tools available to manage our transportation system and utilize our infrastructure more effectively. Active traffic management and incident response systems, intelligent traffic signals, smart transit systems, congestion pricing, weigh-in-motion truck inspections, electronic tolling, ramp metering, real-time traffic information and navigational systems, high-occupancy toll (HOT) lanes, and Bus Rapid Transit are among the technology-enabled solutions available to help reduce traffic gridlock, provide drivers and operators with more efficient highways and travel options, and improve the reliability of goods and services.

**Mobility** 

To ensure accountability for federal transportation funding, performance goals should be established in areas such as traffic-related fatalities, **traffic congestion**, travel times, and other appropriate measures to encourage state and local agencies to set aggressive, achievable performance targets.

Planning for Performance – To ensure costeffective investment decisions in the state and metropolitan planning process, a cost-benefit analysis of ITS solutions and operational strategies should be performed by state DOTs and MPOs as part of their annual and long-range statewide and regional plans. These plans should include an evaluation of technologies and strategies that could be adopted to reduce accidents and fatality rates, improve passenger and freight mobility, reduce congestion and

Preserving the Environment – The transportation sector is responsible for almost one third of all U.S. CO2 emissions, while also contributing significantly to our nation's oil dependence. In addition to alternative fuel solutions, technologies and strategies are available that can improve the fuel efficiency of vehicles, reduce traffic gridlock and other emissions-generating conditions such as poorly timed traffic signals, reduce unnecessary truck idling, facilitate shifts to transit and other transportation modes, and provide realtime information to commuters about the most fuel efficient routes and "green driving" strategies. Transportation has a significant impact on energy and the environment, but smart technologies and strategies can help save fuel, reduce emissions, and preserve our environment for future generations.

**Environment** 

Planning for Performance – To ensure costeffective investment decisions in the state and metropolitan planning process, a cost-benefit analysis of ITS solutions and operational strategies should be performed by state DOTs and MPOs as part of their annual and long-range statewide and regional plans. These plans should include an evaluation of technologies and strategies that could be adopted to reduce accidents and fatality rates, improve passenger and freight mobility, reduce congestion and emissions, and provide other system performance benefits. Where a cost/benefit analysis shows performance benefits that outweigh other alternatives, ITS technologies and strategies should be integrated into transportation plans and projects and, where appropriate, implemented as standalone solutions for optimizing system performance and return on investment.

Addressing Strategic Challenges – ITS and system operations and management solutions should be eligible for funding and encouraged as part of any congestion reduction, metropolitan mobility, air quality and climate change, highway safety, freight, transit, or other targeted

Financing the Future of Transportation – The estimated cost to modernize and maintain our nation's infrastructure and provide safe, efficient multimodal transportation services far exceeds the revenues generated by the fuel-tax based financing system. Innovative financing mechanisms including increased private sector investment are needed to maintain our current infrastructure and create a smart transportation system that will be safer, cleaner, more efficient, and more globally competitive. States should be empowered to employ innovative strategies and financing methods that will provide financial sustainability while improving system performance, including improved flexibility to pursue tolling and pricing systems, public-private partnerships, and potentially a vehicle miles traveled (VMT)-based user charge. Open road tolling and VMT user fees can be implemented effectively using ITS solutions including GPS-based systems, electronic toll tags, and real-time traffic data. In addition, a portion of any revenues generated from a cap and trade program should be used to finance efficient transportation projects including ITS and transit.

**Productivity** 

To ensure accountability for federal transportation funding, performance goals should be established in areas such as traffic-related fatalities, traffic congestion, travel times, and other appropriate measures to encourage state and local agencies to set aggressive, achievable performance targets.

<u>Planning for Performance</u> – To ensure cost-effective investment decisions in the state and metropolitan planning process, a cost-benefit analysis of ITS solutions and operational strategies should be performed by state DOTs and MPOs as part of their annual and long-range statewide and regional plans. These plans should include an evaluation of technologies and strategies that could be adopted to reduce accidents and fatality rates, improve passenger and freight mobility, reduce congestion and emissions, and provide other system performance benefits. Where a cost/benefit analysis shows performance benefits that outweigh other alternatives, ITS technologies and strategies should be integrated into transportation plans and projects and, where appropriate, implemented as standalone solutions for

Reauthorization Summary 090410

To ensure accountability for federal transportation

funding, performance goals should be established

in areas such as traffic-related fatalities, traffic

**ITS Program Area** Stakeholder Mobility Safety **Productivity** Environment congestion, travel times, and other appropriate emissions, and provide other system performance programs or strategic initiatives funded under the optimizing system performance and return on benefits. Where a cost/benefit analysis shows measures to encourage state and local agencies new authorization in order to encourage rapid, investment. to set aggressive, achievable performance targets. performance benefits that outweigh other effective and low-cost performance alternatives, ITS technologies and strategies improvements. In addition, barriers to technology should be integrated into transportation plans and Planning for Performance – To ensure costand innovation should be removed within existing Addressing Strategic Challenges – ITS and system effective investment decisions in the state and projects and, where appropriate, implemented as programs such as the three-year time limitation on operations and management solutions should be

metropolitan planning process, a cost-benefit analysis of ITS solutions and operational strategies should be performed by state DOTs and MPOs as part of their annual and long-range statewide and regional plans. These plans should include an evaluation of technologies and strategies that could be adopted to reduce accidents and fatality rates, improve passenger and freight mobility, reduce congestion and emissions, and provide other system performance benefits. Where a cost/benefit analysis shows performance benefits that outweigh other alternatives, ITS technologies and strategies should be integrated into transportation plans and projects and, where appropriate, implemented as standalone solutions for optimizing system performance and return on investment.

Addressing Strategic Challenges - ITS and system operations and management solutions should be eligible for funding and encouraged as part of any congestion reduction, metropolitan mobility, air quality and climate change, highway safety, freight, transit, or other targeted programs or strategic initiatives funded under the new authorization in order to encourage rapid, effective and low-cost performance improvements. In addition, barriers to technology and innovation should be removed within existing programs such as the three-year time limitation on the use of funds under the Congestion Mitigation and Air Quality program, and procurement rules and contracting practices should be streamlined to encourage efficient deployment of technology solutions.

Technology, Operations and Systems Management Program – To provide public agencies and private sector partners with the tools standalone solutions for optimizing system performance and return on investment.

Addressing Strategic Challenges – ITS and system operations and management solutions should be eligible for funding and encouraged as part of any congestion reduction, metropolitan mobility, air quality and climate change, highway safety, freight, transit, or other targeted programs or strategic initiatives funded under the new authorization in order to encourage rapid, effective and low-cost performance improvements. In addition, barriers to technology and innovation should be removed within existing programs such as the three-year time limitation on the use of funds under the Congestion Mitigation and Air Quality program, and procurement rules and contracting practices should be streamlined to encourage efficient deployment of technology solutions.

Technology, Operations and Systems Management Program – To provide public agencies and private sector partners with the tools to effectively manage and improve the performance of their intermodal transportation systems, ITS America supports the \$3 billion per year Operations and Management program requested by the American Association of State Highway and Transportation Officials (AASHTO). From this amount, the authorization bill should provide at least \$1 billion per vear to support deployment of ITS technologies and intermodal integration. ITS and operational strategies should be funded at 100 percent federal share in order to encourage rapid, effective and low-cost performance improvements and to support highpriority multimodal initiatives in areas such as urban congestion, rural safety, climate change,

the use of funds under the Congestion Mitigation and Air Quality program, and procurement rules and contracting practices should be streamlined to encourage efficient deployment of technology solutions.

Smart Towns and City Streets Initiative IntelliDrive [SM], also referred to as Vehicle Infrastructure Integration (VII). Would enable the Smart Towns and City Streets Initiative and would provide \$1.2 billion over the 6-year authorization for the Secretary to make competitive awards to between 4 and 6 cities, towns or regions – to be designated as Smart Cities, Smart Towns, or other appropriate designations – to create model deployment sites for the implementation of a wireless communications network that will dramatically improve highway and vehicle safety, passenger and freight mobility, the environment, and traveler convenience. Each deployment site would be required to perform rigorous data collection and analysis and prepare an annual report to Congress with costs, benefits, lessons learned, and recommendations for future deployment strategies. Each award recipient should have maximum flexibility to adopt innovative financing strategies including publicprivate partnership arrangements to supplement federal funds, and should partner with automotive manufacturers, technology companies, and stakeholder organizations to design and deploy the most effective system to optimize the public benefit. In addition, the Secretary should establish and publish criteria by which towns, cities and regions can qualify for the "smart" designation on their own initiative.

Advancing Efficient Transportation Systems through Cap and Trade--At least 10 percent of the eligible for funding and encouraged as part of any congestion reduction, metropolitan mobility, air quality and climate change, highway safety, freight, transit, or other targeted programs or strategic initiatives funded under the new authorization in order to encourage rapid, effective and low-cost performance improvements. In addition, barriers to technology and innovation should be removed within existing programs such as the three-year time limitation on the use of funds under the Congestion Mitigation and Air Quality program, and procurement rules and contracting practices should be streamlined to encourage efficient deployment of technology solutions.

Technology, Operations and Systems Management Program – To provide public agencies and private sector partners with the tools to effectively manage and improve the performance of their intermodal transportation systems, ITS America supports the \$3 billion per year Operations and Management program requested by the American Association of State Highway and Transportation Officials (AASHTO). From this amount, the authorization bill should provide at least \$1 billion per year to support deployment of ITS technologies and intermodal integration. ITS and operational strategies should be funded at 100 percent federal share in order to encourage rapid, effective and low-cost performance improvements and to support high-priority multimodal initiatives in areas such as urban congestion, rural safety, climate change, improved transit operations, and more efficient freight corridors, border crossings, and intermodal connectors.

The combined Technology, Operations and Systems Management program will ensure that adequate funding is available to state and local agencies through existing formulas to actively manage the intermodal transportation network to improve public safety, reduce traffic congestion, minimize emissions and environmental impacts, improve economic productivity,

Stakeholder Safety to effectively manage and improve the performance of their intermodal transportation systems, ITS America supports the \$3 billion Operations and Management program requested by the American Association of State Highway and Transportation Officials (AASHTO). Additionally, the authorization bill should provide at least \$1 billion each year specifically to support deployment of ITS technologies and intermodal integration. ITS and operational strategies should be funded at 100 percent federal share in order to encourage rapid, effective and low-cost performance improvements and to support highpriority multimodal initiatives in areas such as urban congestion, rural safety, climate change, improved transit operations, and more efficient freight corridors, border crossings, and intermodal connectors. The combined Technology, Operations and Systems Management program will ensure that adequate funding is available to state and local agencies through existing formulas to actively manage the intermodal transportation network to improve public safety, reduce traffic congestion, minimize emissions and environmental impacts. improve economic productivity, reduce project costs, and optimize the capacity, energy efficiency, and performance of the transportation system. U.S. DOT should provide technical assistance, training and deployment support to agencies as they work to integrate ITS solutions

> Active traffic management and incident response systems;

into their planning and operations. Eligible

integration, training, and evaluation of the

operational strategies:

expenditures under the program would include

following intelligent transportation systems and

deployment, operation, systems management and

 Emergency management systems to improve evacuations and respond more effectively to natural disasters and other crisis situations such as the September 11, 2001 terrorist attacks;

ITS Program Area

Mobility

improved transit operations, and more efficient freight corridors, border crossings, and intermodal connectors.
 d The combined Technology, Operations and Systems Management program will ensure that adequate funding is available to state and local

Systems Management program will ensure that adequate funding is available to state and local agencies through existing formulas to actively manage the intermodal transportation network to improve public safety, reduce traffic congestion, minimize emissions and environmental impacts, improve economic productivity, reduce project costs, and optimize the capacity, energy efficiency, and performance of the transportation system. U.S. DOT should provide technical assistance, training and deployment support to agencies as they work to integrate ITS solutions into their planning and operations. Eligible expenditures under the program would include deployment, operation, systems management and integration, training, and evaluation of the following intelligent transportation systems and operational strategies:

- Traffic signal timing and optimization, including transit preferential signals and emergency vehicle preemption;
- Congestion pricing systems, HOT lanes and other variably-priced electronic tolling systems;
- Real-time data collection systems to support state and local performance measurement:
- Smart transit systems including automated vehicle location and computer-aided dispatch;
- GPS-based location and navigational technologies and operational systems to support Bus Rapid Transit and dedicated transit and truck-only lanes;
- Roadway monitoring and detection systems;
- Snow and ice monitoring and management technologies;
- Smart Parking Systems;
- Work Zone Management Systems;

cap and trade revenues should be invested in transportation technologies and strategies that are shown to reduce emissions including, but not limited to, traffic signal synchronization, smart transit systems, congestion pricing, electronic tolling systems, active traffic management operations, and real-time travel information and navigational technologies that facilitate shifts to transit and other modes of transportation.

Environment

Focused Federal Research Program - The Federal ITS research program should focus on advancing next generation solutions in areas including, but not limited to: vehicle and intersection collision avoidance technologies, congestion management and emergency response systems, a national VII or IntelliDrive [SM] network, ITS environmental solutions, and effective approaches for collecting and disseminating real-time traffic, transit, road and weather condition, and multimodal traveler information to the public and transportation managers. Other priorities should include performance evaluation; innovative financing systems including a VMT-based user fee; driver distraction and other human factors research; and continued architecture and standards development including harmonization of standards within the U.S., and between the U.S. and other countries, to promote interoperability of technologies and efficient data sharing between jurisdictions.

reduce project costs, and optimize the capacity, energy efficiency, and performance of the transportation system. U.S. DOT should provide technical assistance, training and deployment support to agencies as they work to integrate ITS solutions into their planning and operations. Eligible expenditures under the program would include deployment, operation, systems management and integration, training, and evaluation of the following intelligent transportation systems and operational strategies:

**Productivity** 

- Commercial vehicle operations and information systems;
- Electronic weigh-in-motion truck inspections;
- GPS-based location and navigational technologies and operational systems to support Bus Rapid Transit and dedicated transit and truck-only lanes:
- Electronic Border Crossing Systems;
- Work Zone Management Systems;
- Highway Ramp Metering;
- Road Weather Information Systems;
- Electronic, integrated reservation and payment systems for transportation services; and
- Real-time traveler information through dynamic message signs, cell phones and handheld devices, 511, and in-vehicle signage that provides the public and transportation managers with real-time information about traffic conditions, safety hazards, transit schedules, parking availability, roadway and weather conditions, and alternative travel routes.

Smart Towns and City Streets Initiative – IntelliDrive [SM], also referred to as Vehicle Infrastructure Integration (VII) system, would enable the Smart Towns and City Streets Initiative and would provide \$1.2 billion over the 6-year authorization for the Secretary to make competitive awards to between 4 and 6 cities, towns or regions – to be designated as Smart Cities, Smart Towns, or other appropriate designations – to create model deployment sites for the implementation of a wireless communications network that will dramatically improve highway and vehicle safety, passenger and freight mobility, the environment, and

**ITS Program Area** Stakeholder Mobility Safetv **Productivity** Environment Vehicle and intersection collision Highway Ramp Metering; traveler convenience. Each deployment site would be Road Weather Information Systems; required to perform rigorous data collection and analysis avoidance technologies; and prepare an annual report to Congress with costs, Technology to support Safety Service Electronic, integrated reservation and benefits, lessons learned, and recommendations for Patrols: payment systems for transportation services; and future deployment strategies. Each award recipient should have maximum flexibility to adopt innovative Smart Towns and City Streets Initiative -Real-time traveler information through IntelliDrive [SM], also referred to as Vehicle dynamic message signs, cell phones and financing strategies including public-private partnership Infrastructure Integration (VII) system, would handheld devices, 511, and in-vehicle arrangements to supplement federal funds, and should enable the Smart Towns and City Streets Initiative partner with automotive manufacturers, technology signage that provides the public and and would provide \$1.2 billion over the 6-year transportation managers with real-time companies, and stakeholder organizations to design and authorization for the Secretary to make deploy the most effective system to optimize the public information about traffic conditions, safety competitive awards to between 4 and 6 cities. hazards, transit schedules, parking benefit. In addition, the Secretary should establish and towns or regions – to be designated as Smart availability, roadway and weather publish criteria by which towns, cities and regions can Cities, Smart Towns, or other appropriate conditions, and alternative travel routes. qualify for the "smart" designation on their own initiative. designations – to create model deployment sites for the implementation of a wireless Operations and Management Program (\$3 Billion) VMT-Based User Fee Demonstrations – The Smart To assist state and local agencies in effectively Towns and Cities would provide ideal locations to communications network that will dramatically improve highway and vehicle safety, passenger managing their transportation systems and conduct real-world demonstrations and operational and freight mobility, the environment, and traveler utilizing performance-improving tools and testing of a vehicle miles traveled (VMT)-based user convenience. Each deployment site would be strategies, an Operations and Management charge demonstration program. required to perform rigorous data collection and program should be established that would make \$3 billion per year available through existing analysis and prepare an annual report to According to the National Surface Transportation Congress with costs, benefits, lessons learned, formulas for operation, management, training, Infrastructure Financing Commission, a VMT-based and recommendations for future deployment and maintenance of intelligent transportation system "should be designed to facilitate integration with strategies. Each award recipient should have systems and operational solutions. Eligible intelligent transportation systems, such as traveler maximum flexibility to adopt innovative financing activities would include real-time system information systems, and with emerging IT-based safety strategies including public-private partnership management, traveler information, emergency applications such as vehicle infrastructure integration arrangements to supplement federal funds, and response, incident management, traffic signal programs" and "existing vehicle GPS systems." The should partner with automotive manufacturers, synchronization, and other technologies and Commission further notes that "Pricing technology could technology companies, and stakeholder strategies designed to enhance travel reliability, be implemented in conjunction with a program such as organizations to design and deploy the most reduce delay and improve overall system IntelliDrive [SM]..." which, as envisioned, "will support effective system to optimize the public benefit. In performance. secure communication between the vehicle and addition, the Secretary should establish and roadside to support mobility, traffic management, and publish criteria by which towns, cities and regions traveler safety." The Commission concludes that using can qualify for the "smart" designation on their own Smart Towns and City Streets Initiative technological advances to improve how people pay for initiative. IntelliDrive [SM], also referred to as Vehicle their use of the transportation system "will enable the Infrastructure Integration (VII). Would enable the delivery of a host of other benefits, including real-time Smart Towns and City Streets Initiative and would Mainstreaming Vehicle Collision Avoidance information to vehicle drivers to help reduce congestion, Systems – Each year in the U.S. 40,000 people improve safety, and reduce emissions, to transit provide \$1.2 billion over the 6-vear authorization operators to improve the convenience and reliability of die and 2.5 million more are injured in traffic for the Secretary to make competitive awards to accidents, causing untold pain and suffering and between 4 and 6 cities, towns or regions – to be public transit, and to system managers to better monitor costing our economy at least \$230 billion each designated as Smart Cities, Smart Towns, or other and manage the system and improve the allocation of year. Many of these accidents could have been appropriate designations – to create model transportation infrastructure resources." prevented with vehicles collision avoidance deployment sites for the implementation of a wireless communications network that will systems and other advanced safety technologies Congress should provide towns and cities receiving that can help drivers and vehicles detect dramatically improve highway and vehicle funding under the Smart Towns and City Streets

**ITS Program Area** Stakeholder Safety **Productivity** Mobility Environment dangerous situations and avoid crashes before safety, passenger and freight mobility, the environment, and traveler convenience. Each they happen. deployment site would be required to perform rigorous data collection and analysis and prepare Acting NTSB Chairman Mark Rosenker told participants at the 15th World Congress on ITS in an annual report to Congress with costs, benefits, November, "It is our firm belief that advanced lessons learned, and recommendations for future technology is a major ingredient in reducing deployment strategies. Each award recipient accidents, saving lives, preventing injuries and should have maximum flexibility to adopt lessening the immense emotional and monetary innovative financing strategies including publicprivate partnership arrangements to supplement toll of these accidents. I am encouraged by the federal funds, and should partner with automotive rapid proliferation of new safety technologies over recent years and I would like to encourage both manufacturers, technology companies, and stakeholder organizations to design and deploy government and industry to work together to find innovative ways to get new technologies into the the most effective system to optimize the public public faster and at lower costs." benefit. In addition, the Secretary should establish and publish criteria by which towns, cities and To help realize the NTSB's vision, tax incentives regions can qualify for the "smart" designation on should be provided to mainstream the availability their own initiative. of life-saving collision avoidance systems and other advanced safety technologies in cars, trucks, Focused Federal Research Program – **The** transit vehicles and passenger rail systems. **Tax** Federal ITS research program should focus on credits should be provided for the adoption of advancing next generation solutions in areas a range of safety technologies including, but including, but not limited to: vehicle and not limited to: advance collision warnings, lane intersection collision avoidance technologies, and roadway departure warnings, blind spot congestion management and emergency detection, and IntelliDrive [SM]-enabled response systems, a national VII or IntelliDrive [SM] network, ITS environmental solutions, and systems that can detect dangerous conditions, provide real-time warnings, and even apply the effective approaches for collecting and brakes if necessary to avoid a crash.

> advancing next generation solutions in areas including, but not limited to: vehicle and intersection collision avoidance technologies, congestion management and emergency response systems, a national VII or IntelliDrive [SM] network, ITS environmental solutions, and effective approaches for collecting and disseminating real-time traffic, transit, road and weather condition, and multimodal traveler information to the public and transportation managers. Other priorities should include performance evaluation; innovative financing systems including a VMT-based user fee; driver

distraction and other human factors research:

Focused Federal Research Program - The

Federal ITS research program should focus on

disseminating real-time traffic, transit, road and weather condition, and multimodal traveler information to the public and transportation managers. Other priorities should include performance evaluation; innovative financing systems including a VMT-based user fee; driver distraction and other human factors research; and continued architecture and standards development including harmonization of standards within the U.S., and between the U.S. and other countries, to promote interoperability of technologies and efficient data sharing between jurisdictions.

Initiative with incentives to conduct broad-based demonstration programs of mileage-based user fees that could vary by time of day, pricing zone and other factors; be interoperable with other tolling, pricing, and intelligent transportation systems; and accommodate multiple forms of payment including cash, credit and debit cards, the Internet, and other integrated payment systems.

Focused Federal Research Program - The Federal ITS research program should focus on advancing next generation solutions in areas including, but not limited to: vehicle and intersection collision avoidance technologies, congestion management and emergency response systems, a national VII or IntelliDrive [SM] network, ITS environmental solutions, and effective approaches for collecting and disseminating realtime traffic, transit, road and weather condition, and multimodal traveler information to the public and transportation managers. Other priorities should include performance evaluation; innovative financing systems including a VMT-based user fee; driver distraction and other human factors research; and continued architecture and standards development including harmonization of standards within the U.S., and between the U.S. and other countries, to promote interoperability of technologies and efficient data sharing between jurisdictions.

ITS Costs, Benefits, and Deployment Strategies Report - The U.S. DOT should engage an ITS focused organization to undertake a comprehensive, datadriven study to determine the deployment and operational costs of various ITS applications: measure their quantifiable benefits; identify best deployment and operational practices, and identify data gaps that should be remedied to provide better **information.** The study should also provide recommendations to state and local agencies on the most effective ITS tools for addressing high-priority transportation challenges, and provide guidance on strategies for deploying and operating ITS solutions to yield optimal results. The U.S. DOT should contract with an organization within three months of enactment and the organization selected should issue a report within two years of contract award. This report should be updated annually and the information contained therein

Stakeholder		ITS Pr	ogram Area	
Stakenolder	Safety	Mobility	Environment	Productivity
	and continued architecture and standards development including harmonization of standards within the U.S., and between the U.S. and other countries, to promote interoperability of technologies and efficient data sharing between jurisdictions.  Completing IntelliDrive [SM] (part of Smart Towns and City Streets Initiative) – The ITS Joint Program Office should complete the technical and policy research necessary for the deployment of a nationwide VII or IntelliDrive [SM] network including identifying estimated deployment and operational costs, recommended business models and governance structure, privacy standards, potential liabilities, spectrum issues, potential private sector incentives, necessary enabling legislation or rulemakings, and any other barriers to deployment.			should be provided as part of an online, interactive webbased tool that will enable and encourage collaboration and sharing of research results and best practices between state and local agencies, private sector partners, university experts, and other transportation professionals. The study should be conducted by an ITS-focused organization that represents constituencies across the public sector, private sector and academia. Funding in the amount of \$1 million should be provided to conduct the study during each of the first two years, with ongoing annual funding in the amount of \$400,000 to be provided thereafter for continued research, data collection, publication of results, and management of the online collaboration resource.  Conducting a VMT User Fee Research, Development and Demonstration Program – The National Surface Transportation Infrastructure Financing Commission, in their recently released report, calls for an aggressive research, development and demonstration (RD&D) program to address critical technical and policy challenges associated with the possible deployment of a VMT-based user fee program as a potential future financing mechanism for our nation's transportation system.
National Governors Association	n/a	Governors support a strong federal role in funding public transportation programs. However, federal funding for public transportation systems must recognize that the needs of communities differ, and must not favor one particular public transportation alternative over any other.	n/a	n/a

Stakeholder		ITS Pro	ogram Area	
Stakenoider	Safety	Mobility	Environment	Productivity
Governors Highway Safety Association	If states are expected to collect performance data such as statewide citation data or more precise injury data, then they need the funding to automate data collection and make other improvements to the data systems that would yield the requisite performance data.  GHSA recommends a new speed management program be authorized to provide incentives to states that undertake speed enforcement, conduct speed management workshops in their states, implement automated speed enforcement programs, or conduct public information campaigns about speeding.  In addition, GHSA recommends Congress fund research into emerging technological applications for measuring and controlling speed.	n/a	n/a	n/a
National Surface Transportation and Revenue Study Commission	Because the users of every transportation mode are affected by injuries and fatalities, the solutions to improving the overall level of transportation safety must be broad and multifaceted.  The Commission believes the National Interest in quality transportation is best served whenSafety is Assured - Users of our surface transportation systems must not be at risk of death or injury due to unsafe facilities or operations.  The Commission recommends that the USDOT establish national safety standards, beginning with an ambitious but reachable goal to cut surface transportation fatalities in half from current levels by 2025.	The Commission believes the National Interest in quality transportation is best served when o Mobility Within and Between Metropolitan Areas is Reliable - Chokepoints that consistently impede national and regional movements of people and goods across the current passenger and freight systems are eliminated. Highway, transit, and rail systems are expanded and managed to meet future growth.  The Commission recommends that a distinct program be established to fund projects that reduce congestion in our largest metropolitan areas (of 1 million or more in population).  The Commission recognizes that road pricing has great potential to reduce congestion and improve system efficiency because of its ability to better utilize the Nation's existing infrastructure.	The Commission believes the National Interest in quality transportation is best served when o Transportation Decisions and Resource Impacts are Integrated it is essential that the surface transportation system be transitioned away from fossil fuels, and that planners incorporate transportation into thoughtfully planned, efficient, and environmentally sustainable communities.  The Commission believes that an Environmental Stewardship Program should be established and authorized at a level equivalent to 7 percent of the total funding for the Federal surface transportation program.	The Commission believes the National Interest in quality transportation is best served when o Modes are Balanced and Travel Options are Plentiful - Passengers and shippers should have options to travel within and between regions by road, rail, and water, helping to reduce congestion and accommodating future growth on the highways and in the air.  The Commission believes that the Federal government must return to its historic role of ensuring that the transportation needs of interstate commerce are met
Transportation Research Board	n/a	n/a	n/a	n/a

**Table 4: Tier II Surface Transportation Reauthorization Position Excerpts** 

Stakeholder		ITS Pro	ogram Area	
Stakerloider	Safety	Mobility	Environment	Productivity
American Highway Users Alliance	These [safety] technologies include brake sensors, lane departure warning systems, collision avoidance systems, and vehicle stability control devices.	Converting Underutilized HOV lanes to High Occupancy Toll (HOT) Lanes.  The Highway Users believes that congestion pricing has a very limited role to play in highway finance as long as the use of pricing is designed to improve traffic throughput rather than reduce demand.	n/a	The state Strategic Planwill reflect local solutions designed to achieve a shared national goal. A list of eligible projects and strategies includes: Intelligent Transportation Systems (ITS)Installation of enhanced intersection management technologies (Adaptive Intersections)Improved signalizationEnhanced pavement markings and traffic control devicesImproved ramp meteringReversible, contraflow, special and managed lanesImproved incident managementImproved driver real-time information
American Planning Association	n/a	n/a	n/a	n/a
American Society of Civil Engineers	Expanding the development and application of Intelligent Transportation Systems (ITS) programs to enhance highway traffic safety; Incorporating new technology, better management practices, and a better understanding of the effect of human factors into all levels of transportation systems;	An increased focus on transportation operations functions, and application of intelligent transportation systems, can enhance performance of the transportation system in terms of:  • Improved traffic and transit operations including reduced congestion and improved mobility;  • Improved safety and public safety responses;  • Incident management;  • Improved economic competitiveness, including interstate commerce;  • Network and facility management;  • Energy conservation and reduced environmental impact;  • Traveler and shipper information; and  • Bicycle and pedestrian mobility.	An increased focus on transportation operations functions, and application of intelligent transportation systems, can enhance performance of the transportation system in terms of:  •  • Energy conservation and reduced environmental impact;  •	The authorization of the surface transportation program must provide for a strong federal role in freight mobility and intermodal connectors. This should include the creation of a program funded with new dedicated revenue to provide new capacity and operational improvements focused on securing safe, efficient movement of freight.

Stakeholder	ITS Program Area				
Stakeriolder	Safety	Mobility	Environment	Productivity	
American Traffic Safety Services Association	fund the deployment of AASHTO's Technology Implementation Group's Seven "Identified Areas" of technology improvement at \$10 million each annuallySpeed ManagementWeather and Road ConditionsIncident Management  Provide \$20 million annually for the deployment of promising smart work zone solutions and technologies identified in the Smart Work Zone Deployment Initiative.	fund the deployment of AASHTO's Technology Implementation Group's Seven "Identified Areas" of technology improvement at \$10 million each annuallySpeed Management  Provide \$20 million annually for the deployment of promising smart work zone solutions and technologies identified in the Smart Work Zone Deployment Initiative.	n/a	n/a	
Americans for Transportation Mobility	n/a	n/a	n/a	n/a	
Association for Commuter Transportation	n/a	n/a	n/a	n/a	
Community Transportation Association of America	n/a	n/a	n/a	n/a	
Environmental Defense Fund	n/a	Policymakers should:Allow a transition to national road user fees to augment traditional fuel taxes. These user fees could include fees for vehicle miles traveled (VMT), local-option congestion pricing, and other similar approaches. These innovations raise important issues of privacy and equity, which federal law must address prior to implementation.	A focus on getting more value from existing infrastructure will improve transportation, put Americans to work now, and save money in the long run. It also can reduce health-threatening air pollution and greenhouse gas (GHG) emissions. Policymakers should:Yield better performance from existing infrastructure by using proven computer technologies and pricing strategies to control traffic flow on existing roadways.	Policymakers should adopt policies that:Support innovation zones at major port cities to develop clean ship, truck and rail technology for freight handlingOpen the door to innovations, such as expanded coastal shipping, that help reduce truck congestion on freight highwaysSupport investments in technology and operating efficiency that reduce pollution from vehicles along corridors of strategic significance.	
Institute of Electrical and Electronics Engineers	n/a	n/a	n/a	n/a	

Stakeholder	ITS Program Area			
	Safety	Mobility	Environment	Productivity
International City/County Management Association	n/a	n/a	n/a	n/a
International Municipal Signal Association	n/a	n/a	n/a	n/a
National Association of Counties	Additional technology should be used to improve transportation safety  Incident management must be considered a priority. An incentive grant program should be created that funds counties/metropolitan region that implement a comprehensive incident management plan.	Congestion pricing should be examined as way to reduce congestion and raise additional revenue.  Tolling of new interstate capacity should be permitted, including new capacity on existing interstates, such as HOV lanes. Proceeds from tolling should be used for capital costs but not for operations. County governments should be reimbursed for any diversion of traffic due to tolling.	The transit program should include the goals of improving metropolitan and rural mobility, reducing congestion, conserving energy resources, reducing greenhouse gases and serving the needs of underserved populations.	Intermodal facilities should be developed to facilitate movement of freight by rail to the extent possible.
National Association of County Engineers	Support greater use of automated traffic law enforcement.  Support the use of motorcycle safety programs.	Recommend support for the principals contained in H.R. 3611, the Metropolitan Congestion Relief Act.	n/a	n/a
National Association of Development Organizations	n/a	n/a	n/a	n/a

Stakeholder	ITS Program Area				
	Safety	Mobility	Environment	Productivity	
National Association of Regional Councils	n/a	Establish an incident management bill to help balance regional congestion.  Conduct extensive research into a combination of innovative transportation financing solutions - raising and indexing gas tax; regional transportation taxes; pricing; tolling; user-based fees; and, public private partnerships (PPPs), etc.	n/a	Establish national proactive transportation policies that efficiently move goods to improve regional, state and local economies.	
National Conference of State Legislatures	<ul> <li>Current state transportation safety standards should be preserved at the highest degree of safety. Decisions that are reached on motor carrier configuration must be based on equipment that can be operated safely and efficiently in all countries.</li> <li>Enforcement of motor carrier safety requirements is primarily a state function and practical responsibility. State enforcement of equipment standards, size and weight allowances, insurance documentation, operator requirements, financial responsibility and liability, hazardous materials transport, and vehicle emissions standards must be protected.</li> </ul>	<ul> <li>U.S. federal government priority financing should be forthcoming for any recognized, designated corridors for purposes of upgrading capacity and reducing congestion.</li> <li>NCSL calls upon the federal government to address fairly and equally the needs of all Americans. Specifically, NCSL calls upon the federal government to take the lead in fostering a national interconnected mass transit network. An integrated national network of urban transit, intercity passenger rail and bus systems is a necessary part of an intermodal system.</li> <li>NCSL calls on Congress to retain and expand innovative financing tools that are available to states to fund transportation projects.</li> <li>The use of tolls for financing or supporting certain segments of highway is an acceptable alternative when funding for construction or maintenance would be otherwise unavailable.</li> </ul>	States should be allowed to utilize CMAQ funds for intercity passenger rail service provided to relieve traffic congestion.	The federal government should take a lead in deployment of intelligent transportation systems (ITS). Additionally, the federal government should continue to support research and deployment of ITS to improve safety, increase efficiency, promote clean air containment, reduce emissions, and promote economic development for the entire surface transportation system.	

Ctakah aldar	ITS Program Area				
Stakeholder	Safety	Mobility	Environment	Productivity	
National League of Cities	The federal and state governments should identify and develop new technologies and innovative strategies, which will enhance and improve commercial motor carrier safety, protect the driving public from commercial motor carriers that do not pass safety inspections, and promote and enforce much stricter safety standards for commercial motor carriers, such as adequately securing truck loads and imposing penalties for missing treads.	Vehicle miles traveled (VMT) and other experimental ideas hold promise and should be encouraged.  To maintain economic viability, congestion mitigation programs must be available to all cities Eligible projects could include Intelligent Transportation Systems, projects to increase vehicle occupancy, demand management strategies, traffic flow improvement projects, congestion pricing, innovative transportation technologies such as Personal Rapid Transit, and other projects	n/a	It is essential that the nation's transportation system be seamless. Federal policy should encourage "closing the gap" of independent modal elements of the transportation system, with the goal of ensuring that efficient connections between modes are available for the movement of people and goods.  Federal policy must encourage integrated management and operation of all transportation systems at regional and local levels, maximizing the use of information technology.	
National Sheriff's Association	NSA supports the use of technologies to prevent impaired drivers from operating vehicles, including the use of alcohol ignition interlocks, transdermal alcohol recognition systems, infra-red alcohol detection devices and other technologies  Reliable communication networks that are interoperable between emergency responders can contribute to the more effective and efficient management of traffic incidents;  NSA will advocate for safety improvements to be the highest purpose for automated speed enforcement, and to achieve durable safety benefits, the NSA urges a strong focus on gaining and maintaining the support of the public and the judiciary; and, be it  Automated speed enforcement must be deployed in high-collision locations and without regard to fine revenues; must be free from undue vendor influence; must be extraordinarily accurate; and used only in conjunction with traditional traffic enforcement.	n/a	n/a	n/a	
Public Technology Institute	n/a	n/a	n/a	n/a	

Stakeholder	ITS Program Area			
	Safety	Mobility	Environment	Productivity
U.S. Chamber of Commerce	The U.S. Chamber supports a continued federal role in ensuring a comprehensive, results-oriented approach to safety through national safety goals, performance metrics, and complementary plans to guide investment.  Incentives should be provided for applying best practices and advanced safety technologies and equipment.	Federal policy and programs should support congestion mitigation and improved mobility in urban areas byproviding incentives for the adoption of strategies and use of technology that maximize the use of existing facilities,supporting public transportation capacity, availability and ridership strategies where appropriate, andsupporting increased highway capacity where appropriate.  incorporate technology and safety upgrades, including open standards-based information technology, into modernization, maintenance and preservation activities to the greatest extent possible.	Any and all climate change policy decisions mustpromote accelerated development and deployment of greenhouse gas reduction technology,	A national freight transportation plan should incorporate the development of new capacity, access routes to major water ports and airports, access routes to border crossings and international gateways, operational strategies to improve utilization of existing assets, and strategic intermodal investments to expedite freight movement.

Table 5: Transportation Stakeholders, Characterized Relative to Historic ITS Involvement

Tier	Stakeholder Organization
Tier 1	<ul> <li>American Association of State Highway and Transportation Officials</li> <li>American Public Transportation Association</li> <li>American Public Works Association</li> <li>American Road and Transportation Builders Association</li> <li>American Trucking Association</li> <li>Association of Metropolitan Planning Organizations</li> <li>Center for Bipartisan Policy</li> <li>I-95 Corridor Coalition</li> <li>Institute of Transportation Engineers</li> <li>International Association of Chiefs of Police</li> <li>ITS America</li> <li>National Governors Association</li> <li>Governors Highway Safety Association</li> <li>National Surface Transportation and Revenue Study Commission</li> <li>Transportation Research Board</li> </ul>
Tier 2	<ul> <li>American Highway Users Alliance</li> <li>American Planning Association</li> <li>American Society of Civil Engineers</li> <li>American Traffic Safety Services Association</li> <li>Americans for Transportation Mobility</li> <li>Association for Commuter Transportation</li> <li>Community Transportation Association of America</li> <li>Environmental Defense Fund</li> <li>Institute of Electrical and Electronics Engineers</li> <li>International City/County Management Association</li> <li>International Municipal Signal Association</li> <li>National Association of Counties</li> <li>National Association of County Engineers</li> <li>National Association of Development Organizations</li> <li>National Association of Regional Councils</li> <li>National Conference of State Legislatures</li> <li>National League of Cities</li> <li>National Sheriffs' Association</li> <li>Public Technology Institute</li> <li>U.S. Chamber of Commerce</li> </ul>
Tier 3	<ul> <li>Amalgamated Transit Union</li> <li>American Council of Engineering Companies</li> <li>Association of American Railroads</li> <li>California State Association of Counties</li> <li>Salt Institute</li> </ul>