Testimony Submitted for the Record Of Christopher A. McLean Vehicle Traffic Information Coalition (VTIC) National Surface Transportation Policy and Revenue Study Commission National Field Hearing Washington, D.C., March 19, 2007

Introduction

My name is Christopher A. McLean. I am pleased to appear today on behalf of the Vehicle Traffic Information Coalition (VTIC). We thank you for the opportunity to make recommendation to address the growing mobility needs of our nation.

Who We Are – the Value Chain

VTIC represents the traffic information delivery value chain. Our members include: automobile manufacturers; suppliers to the auto manufacturers; traffic data collectors; dynamic data companies; emergency communications system designers; and disseminators of real-time traffic data to the end-user, the driver.

VTIC Vision

The vision of the Vehicle Traffic Information Coalition (VTIC) is to have every road enabled to deliver real-time traffic data at high quality and low cost. Our purpose is to promote the creation, collection and availability of meaningful, real-time traffic data for travelers everywhere in the United States.

The foundation of intelligent highway planning and intelligent driving is robust, meaningful real-time traffic data. This fundamental need for traffic data profoundly affects government planning, policy development and the decisions made by the thousands of local and state government entities. Most importantly, it affects the intelligent decision making of millions of motorists. VTIC believes that empowering drivers to make intelligent decisions based on traffic data is one of the most important things that can be done to enhance the efficiency of the entire transportation system and help make drivers themselves part of congestion relief solutions.

VTIC Formed to Alleviate Driver Frustration with Congestion

VTIC formed in response to consumer complaints to auto manufacturers that there was insufficient quality and quantity of meaningful traffic data.

Real-time traffic technologies complement the good work of my co-panelists by enhancing the return on investment of our infrastructure projects. The Federal Highway Administration (FHWA) report, Traffic Congestion and Reliability: Trends and Advanced Strategies for Congestion Mitigation, shows that trends in congestion have increased for all city sizes over the past 20 years. As we all well know, in 2003 alone, drivers in America's 85 most congested urban areas experienced 3.7 billion hours of travel delay and wasted 2.3 billion gallons of fuel, costing a total of \$63 billion. The average driver is frustrated, as are the commercial vehicle operators who are the lifeblood of our economic system. The costs of this congestion include: productivity losses; increased driver risk; reduced ability of emergency service personnel to save lives; and increased fuel consumption and pollution emissions.

Real-Time Traffic Technologies Alleviate Traveler Frustration

There are an increasing number tools available to help drivers understand, cope with and route their way through traffic. The combination of GPS location technology, on-board GIS computing power, satellite, radio and wireless communications with real-time road, weather and traffic conditions give drivers the ability to know where they are going and what they face.

Knowledge improves the driving experience. There is nothing more frustrating than being stuck in traffic and not knowing why, how long or when you can resume your trip.

VTIC members believe in the intelligence of drivers. Individual drivers will make smart decisions if they are given timely, relevant and specific information. Empowered with technologies which also recommend efficient routing, drivers can avoid or minimize congestion and frustration.

Real-time traffic technologies provide a unique opportunity to improve transportation safety, security, fuel use and productivity. Real-time traffic data is the key to driver level and system level real-time traffic tools. If you think of the transportation system as a most complex improvisational orchestra, real-time traffic data provides the key changes and tempo cues that traffic managers and drivers need to achieve a harmonious result.

Driver empowerment tools, like GPS mapping with a traffic overlay and traffic management tools, like ramp management, congestion pricing and emergency response all need real-time traffic data to work effectively.

Our proposal is that federal, state, local and industry work together to make sure robust data is collected and made available to traffic managers *and* drivers.

Empowered drivers become active participants in congestion mitigation instead of passive targets of top-down decision-making. Rather than a series of dots on a screen to be managed by transportation officials, vehicles with real-time traffic technologies empower drivers to make logical, congestion-mitigating decisions. Drivers become part of the solution instead of the problem.

VTIC estimates that there are about 22 cities where a start has been made in providing data for the private sector to provide drivers with high quality real-time traffic navigation services. The response from consumers in those markets has been extremely positive. There is a real hunger among drivers for real-time traffic data devices. As demand grows

and products are available in more markets, the cost of hardware and services can also be expected to come down.

Even in those cities where real-time traffic products and services work well, the driver experience would be further improved if more data were available on more roads.

Means of Collection Less Important than Fact of Collection

There are many ways to collect real-time traffic data. For example, data can be collected through the use of roadside sensors, radar, data probes, cameras, cellular RF patterns, and remote observation. While VTIC includes companies which make some of the finest traffic data collection technology, as a coalition, our group is agnostic on the method of collection and focused on the need for data to be collected and distributed.

Just as robust real-time traffic information improves the driving experience, real-time data makes the job of government easier. Real-time traffic data is an integral part of virtually all intelligent transportation systems (ITS). Further, real-time traffic data improves ITS performance when the kind of data held in Transportation Operations Centers are disseminated to the individual drivers.

Government data also needs to be liberated and standardized. VTIC believes that there are sources of data held by agencies or public entities that do not fully understand its value. For example, in any given community, there is probably someone who knows where road crews are working or will be working at any given time. If that information is shared, drivers and traffic managers can take action to mitigate construction related congestion.

Real-time traffic is also very important to emergency response. Not only do first responders need to find efficient ways through and around traffic, but their 911 call centers are often among the first to know of the very incidents which can cause significant traffic congestion. Too often, emergency response and traffic management operate in entirely different worlds. Sharing traffic and incident data with each other and the public could be an excellent way to foster a more integrated approach to traffic.

Broader Impacts of Robust Real-Time Traffic Information

The NHTSA has found that 50% of all congestion is caused by non-recurring events such as auto crashes, construction, or weather. These are real-time events.

The alleviation of congestion impacts society beyond the immediate easing of driver frustration. The upside of broadly available real-time traffic technology includes: cleaner air; increased energy sustainability; quicker emergency response to accidents; faster evacuation of communities during public safety emergencies; as well as enhanced productivity.

Environmental Impacts:

Every gallon of fuel saved by empowering drivers to take shorter, quicker trips benefits the nation. The broad use of real-time traffic technologies can decrease fuel use and air pollution. With traffic delays burning up 2.3 billion gallons of additional fuel per year, it is imperative that we take the available steps to reduce this harmful waste. In one year, this wasted fuel accounts for more than 20 million metric tons of carbon dioxide emissions. A robust real-time traffic information system will help our nation's fuel costs go down and air quality improve.

Emergency Response:

An integrated approach to real-time traffic data is also an example of how a technology can provide both day to day benefits and homeland security insurance. We have seen potentially dangerous situations arise when there is limited and imprecise traffic information.

How different would the experience have been had drivers fleeing Hurricane Rita known where the clear routes were? How many drivers would have chosen an alternate route or to delay a trip had they known that weather events caused a massive traffic jam earlier this year on an icy, hilly section of Interstate 78 in eastern Pennsylvania? Citizens would have been better prepared had sufficient real-time traffic data – with available information on secondary arterials – been made available. Real-time traffic data is absolutely critical in properly managing a response to a significant public safety event be it a weather event or God forbid a terrorist event.

Real-time traffic should be an important component of the Department of Transportation's Next Generation 911 initiative.

Snapshot: Activities to Date

Private Sector Development

Private sector entities have invested over \$100 million in testing and evaluating the next generation of real-time traffic data technology. The technologies needed to greatly improve the congestion-related issues before the Commission exist today. They are flexible, scalable and adaptable. While these technologies continue to evolve, it would be a mistake to forever wait for the next big thing.

The improved transportation system we seek is available today. With your leadership, investments can be facilitated to provide a safer, more efficient system, which will be immediately noticed by drivers and communities.

Further, it is hard to imagine an ITS, VII or congestion pricing system which is not enhanced or dependent on a robust source of real-time traffic data. The future begins with widely available real-time traffic data.

Government Progress

We applaud Secretary Peters for taking a strong lead on speeding the availability of realtime traffic data. The real-time traffic component of the Administration's congestion initiative revealed in the President's budget is an excellent starting point for near term action.

VTIC applauds the Secretary and the Department of Transportation for its commitment to the greater availability of congestion relief solutions such as real-time traffic technologies.

We urge the Congress and the Administration to not only fund the real-time traffic elements of the \$175 million Highway Congestion Initiative but to leverage that investment with State and local partners to ensure that real-time traffic data is as much part of roadway construction and planning as curbs and shoulders are to roads.

Opportunities

State and local governments need to be encouraged to speed their investment in real-time traffic infrastructure. In order to provide a real solution to the growing transportation needs of our society, real-time traffic information must be available on virtually all roads. The federal government must motivate state and local governments to spend available monies on either instrumentation or collection.

The SAFETEA-LU law makes real-time traffic investment an eligible expenditure in a number of categories of the highway program. State and local governments need to understand that they have tremendous resources available to them for this purpose. The Transportation Technology Innovation and Demonstration Program that SAFETEA-LU created has a Part 2 component that is specifically directed at real-time traffic. We urge the Commission to recommend increased funding for this program.

The value of real-time traffic data extends well beyond the large cities. Traffic is a problem in Brooklyn, Boise, Billings, Biloxi and the border between North Dakota and Canada.

In the longer term, Vehicle Infrastructure Integration (VII) presents an appealing vision of the future. A transportation system of intelligent vehicles avoiding impediments and each other is promising, however it is not a substitute for an empowered driver avoiding those same hazards. We need both.

VTIC members will do their part. There is a synergy between the public and private sector investment in real-time traffic data collection and dissemination. The public has responded positively to real-time traffic products. The private-sector now sees the profit-making potential of real-time traffic technologies. However, private-sector investment and confidence depends on sound government policy and investment. Various levels of government are the primary sources of raw traffic data. Governments own rights of way

and government must respond to the facts on the ground in the event of an individual or mass emergency.

VTIC members want to work with all levels of government to address an issue of daily frustration for drivers and to improve safety, air quality, fuel use, productivity and the general quality of our lives behind the wheel.

Recommendations

Our recommendations to the Commission are:

Short Term

- 1) Enthusiastic support for the real-time traffic elements of the Administration's \$175 million Highway Congestion Initiative.
- 2) Leverage federal investments with state and local commitments to provide realtime traffic data and increase TTID funding.
- Review the success of real-time traffic technologies both domestically and internationally. In some communities, Japan and Europe are ahead of the United States in real-time traffic data generation and distribution.
- 4) Convene a series of workshops with State and local governments on the value of real-time traffic data. VTIC would welcome the opportunity to assist.
- 5) Research to quantify the benefits of real-time traffic technologies.
- 6) Make recommendations on standards for state and local reporting to FHWA.

Longer Term

- 1) Real-time traffic data must be part of the planning and construction of transportation and transit infrastructure.
- 2) Accelerate VII probe projects to focus on dynamic traffic and road conditions.
- 3) Full integration of information.
- 4) Liberation of data to empower drivers.

Conclusion

Investments in real-time traffic data are investments in America's drivers. They are the most intelligent component of any intelligent transportation system. Driver empowerment equals better mobility, convenience, fuel savings, economic competitiveness, safety and quality of life for all Americans.

Future transportation systems will be data driven. Real-time traffic information forms the foundation of future transportation technology.

VTIC is encouraged by the growing number of consumer-oriented services and products which are incorporating location, navigation and traffic data. These services and products meet the public's desire for more efficient mobility and should be made widely

available throughout the nation. This will only happen with a concerted effort to improve the quality and availability of real-time traffic data.

Empowering individual drivers to take efficient routes contributes to happier citizens, cleaner air, lower fuel consumption, safer highways and enhanced productivity.

I thank the Commission for the opportunity to testify and respectfully ask that the Commission embrace the value of real-time traffic data to get the nation to its destination more quickly and safely.