Testimony of

Leo McCloskey
Senior Vice President, Technical Programs
Intelligent Transportation Society of America (ITS America)

House Committee on Small Business

Hearing on

Building on the Wireless Revolution: Opportunities and Barriers for Small Firms

Tuesday, February 11, 2014

Chairman Graves, Ranking Member Velázquez, and members of the Committee, thank you for inviting me to testify about the rapid growth in innovative wireless technologies and services being developed and commercialized by small businesses in the transportation industry.

The Intelligent Transportation Society of America (ITS America) is the nation's largest association bringing together the transportation, technology and research communities to advance solutions to our nation's infrastructure, safety and mobility challenges. About half of our nearly 500 members are public agencies, universities and research labs. The other half are private sector companies, from the major automakers, high-tech, telecom, tolling and infrastructure firms to small businesses, start-ups and entrepreneurs who are increasingly taking the transportation world by storm.

Intelligent Transportation Systems (ITS) encompass a broad range of information and communications technologies that improve transportation safety, efficiency, convenience and system performance. When integrated into the nation's roadways, vehicles, and public transit

networks, ITS can help reduce congestion, improve mobility, save lives and optimize existing infrastructure. Examples of ITS include advanced traffic, freight, and incident management systems; synchronized and adaptive traffic signals; electronic tolling and payment systems; real-time traffic, transit, routing and parking information; collision avoidance and response technologies; high-occupancy toll (HOT) lanes; dynamic carsharing and ridesharing; infrastructure condition assessment technologies; and other high-tech solutions tailored to local or regional challenges.

ITS and Small Business

It is widely accepted that a transportation system which enables the efficient movement of goods and people is necessary for economic growth. Inventory deliveries, shipments to customers and a ready workforce all benefit from a predictable and free-flowing transportation system.

ITS builds upon these efficiencies using real-time traffic data to reduce congestion via integrated corridor management, real-time incident and emergency response systems, traveler information systems, traffic signal optimization, electronic truck inspections, and even simple things like ramp meters. In addition, this same real-time data is being used by private sector innovators to give today's commuters better information about current traffic conditions, more efficient routing alternatives, public transportation options and even available car and truck parking spaces.

Researchers from the Information Technology and Innovation Foundation (ITIF) and the London School of Economics have found that investing in ITS creates a network effect throughout the economy and stimulates job creation across multiple sectors, including the high-tech, automotive, information technology, consumer electronics, and related industries of which a large proportion are

Intelligent Transportation Society of America
1100 New Jersey Ave SE, Suite 850 ★ Washington, D.C. 20003 ★ 202.484.4847 ★ www.itsa.org

small businesses. In addition, an average of 50 percent of ITS project spending goes directly to wages and salaries according to U.S. DOT, as compared with 20 percent for new highway construction. Moreover, according to ITIF, the use of ITS technologies on average provides an estimated 9-to-1 benefit-cost ratio as compared to an estimated 2.7-to-1 benefit-cost ratio for the addition of conventional highway capacity.

You may have seen the U.S. Department of Transportation's recent announcement about the advancement of vehicle-to-vehicle communications technology, which is expected to prevent or reduce the impact of 80 percent of unimpaired crash scenarios. While a reduction in automobile crashes may not appear to be a job creation activity, mitigating congestion and improving throughput on our nation's transportation system is a foundation for a strong economy on which businesses of all sizes can better plan for growth.

Historically, the auto industry has focused much of its safety efforts on mitigating the impacts of a crash after it happens; but the next giant leap in reducing the number of fatalities and injuries on our nation's roads is to prevent crashes before they happen. This has a direct impact on congestion on our roadways. According to the Texas A&M Transportation Institute's latest Urban Mobility Report, the financial cost of congestion is more than $120 billion each year, wasting nearly 5.5 billion hours and $3 billion gallons of gasoline, causing the average commuter to spend almost a full work week stuck in traffic, and putting more than 56 billion additional pounds of emissions into our communities, towns and cities.

Intelligent Transportation Society of America
1100 New Jersey Ave SE, Suite 850 ★ Washington, D.C. 20003 ★ 202.484.4847 ★ www.itsa.org

Connected vehicle technologies would not be here today without the innovation of small businesses and entrepreneurs who were willing to take a risk in order to provide the public with better products and services. While U.S. DOT and the automakers have received much of the coverage for these technological advancements , it would not be happening without small businesses like Santa Clara, California-based Savari Networks serving as the leading supplier of on board and road side units for the connected vehicle market in the United States. While still a small company, Savari just opened an R&D center in Detroit and expects to double its employee strength by end of the year. And they are one of many small businesses who are working to transform our transportation future.

Other companies are working to integrate transportation services based on connected vehicle technology into smart phones and other aftermarket devices so these groundbreaking safety benefits can be extended all throughout the nation's infrastructure as well as to pedestrians, motorcyclists and bicyclists. This promises to significantly reduce the number of deaths and injuries on our nation's roads while unleashing a new wave of innovation, from advanced traffic management systems and on-demand services to real-time traffic, transit and parking information and countless new transportation applications that we haven't even thought of yet.

Even before we reach a fully-deployed connected vehicle network, the explosion of real-time transportation information, location data, wireless billing and smart phone platforms have transformed mobility, providing commuters with a plethora of new options from car-sharing, ride-sharing and on-demand services to smart parking and navigation apps. Small businesses like Uber, Lyft, WAZE, RideScout, Car2Go, Streetline, ParkMobile, Parkopedia, Getaround, and many other

Intelligent Transportation Society of America
1100 New Jersey Ave SE, Suite 850 ★ Washington, D.C. 20003 ★ 202.484.4847 ★ www.itsa.org

companies which didn't exist five years ago are fast becoming household names, using wireless technology and transportation data to provide more efficient and convenient services to the public.

These small businesses are creating good jobs, thousands of jobs, with technologies that enable smarter use of the nation's transportation system and services.

Removing Barriers for Small Business

Today's market is enchanted by driverless vehicles, which is creating even greater excitement around the ITS industry. However, autonomous and connected transportation produces incredible amounts of data which needs to be collected, analyzed, secured and in some cases made available. While this provides tremendous opportunity for innovation, our future transportation network is challenged by a patchwork of data policies that undermines connectivity and creates an uncertain environment for entrepreneurs.

Absent leadership and clear policy direction from Congress and governmental agencies, businesses that could provide valuable services in the market and generate jobs are unable to find firm footing. And our awareness of transportation system performance is much worse because of inconsistent or incomplete policies from the hundreds of agencies that operate the nation's transportation network. A common policy that makes transportation data available and secure, while maintaining complete anonymity for individual and commercial users, is both possible and necessary.

Intelligent Transportation Society of America
1100 New Jersey Ave SE, Suite 850 ★ Washington, D.C. 20003 ★ 202.484.4847 ★ www.itsa.org

Another challenge is the need to preserve dedicated spectrum in the 5.9 GHz band which was set aside by the Federal Communications Commission (FCC) to ensure high-speed, accurate, secure and reliable communications which are critical for connected vehicle safety systems. It is essential that the availability and performance of this spectrum is protected for safety purposes, while also freeing up additional spectrum where it makes sense and where it can be done without jeopardizing safety for expanded WiFi applications.

These innovations described here will be showcased from September 7 – 11, 2014 at the 21st World Congress on Intelligent Transportation Systems which will be held in the birthplace of America's auto industry in Detroit, Michigan. I invite each of you to visit Detroit and ride in a connected or automated vehicle or check out the latest transportation innovations on display. You will learn firsthand how dedicated men and women from innovative businesses large and small are working to improve our nation's transportation system and provide new services while creating good jobs and strengthening our nation's economic future.

I thank you for the opportunity to testify, and look forward to answering your questions.

-###-

Intelligent Transportation Society of America
1100 New Jersey Ave SE, Suite 850 ★ Washington, D.C. 20003 ★ 202.484.4847 ★ www.itsa.org