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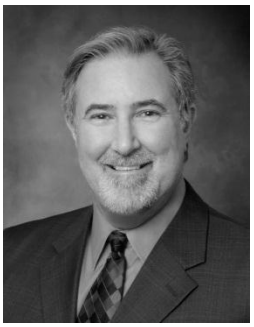

EXPERTS | 2014

HNTB expert:
Jim Barbaresso

National Practice Leader, Intelligent Transportation Systems
HNTB Corporation

"Society is just beginning to witness transformative changes in transportation as we enter an age of automation and connectivity between vehicles, infrastructure, organizations and people. This transformation will not only impact how transportation systems are designed and managed, but also how transportation services are funded and delivered."

Jim Barbaresso is HNTB national practice leader for intelligent transportation systems.

The firm's ITS capabilities include the development of advanced and active traffic management systems; design and operation of transportation, toll and emergency management centers; and the latest advancements in connected and automated transportation technologies.

Since 2005, Barbaresso and HNTB have been involved in a growing number of projects related to the national Connected Vehicle initiative, including designing and building one of the first live test beds with the Michigan Department of Transportation.

Barbaresso, who is based in HNTB's Detroit office, has more than three decades of industry experience. Having worked with major transportation clients across the country, he has successfully planned, implemented and managed everything from small ITS feasibility studies to some of the largest and most visible ITS programs in the United States.

In recognition of his achievements, ITS America has selected Barbaresso to chair the 2014 ITS World Congress, which will be held in Detroit this September.

Barbaresso can address the future of surface transportation and ITS trends, including:

- **What to expect from the car of the future** – Traffic tie-ups and fender benders may one day be a thing of the past. Cars are being equipped with advanced sensors, computer processors and on-board displays. Soon their communications systems will talk to each other and the road, warning drivers about congested and unsafe conditions, imminent collisions, and alternate routes. Automation will be introduced gradually into vehicles, offering new features to improve safety and mobility. For transportation planners, critical changes lie ahead that will impact how our transportation systems are designed, operated and funded.

- **What the future holds for transportation infrastructure** – Soon new managed lanes concepts will emerge where automated vehicles will operate in platoons and electric vehicles will be charged wirelessly as they drive. Corridor management will take place through connectivity of vehicles and infrastructure, and active traffic management functions, like speed harmonization, will be automated. Smart phones will become toll tags, but also will be used to pay for parking and transit fares. It's possible that the roads, intersections, freeways, and transit systems of tomorrow will look and operate quite differently from today's.

- **Moving toward zero traffic fatalities** – It can be easy to overlook the evolution America has experienced as its transportation priorities have shifted to a more safety-oriented culture.

Technology holds the promise of further reducing – and perhaps someday eliminating – motor vehicle deaths. Connectivity and automation will play a huge role in reducing crashes, but engineering, enforcement and education will continue to be necessary components of the evolving safety culture.

- **Improving the environment** — Technological advances in transportation will have a positive impact on the environment. Air quality will be improved with new connected vehicle applications and eco-driving capabilities. Carbon-based fuel consumption will decrease as our "smart cities" look toward new energy and mobility options.
- **Keeping the economy moving** — Goods movement has been a focal point for economic growth. Intermodal connectivity, greater automation of vehicles and infrastructure and improved information systems allow goods to move more efficiently by land, air, pipeline and sea. Technology holds the key to the economic competitiveness of our nation through more efficient movement of goods.
- **Making mileage-based user fees part of the transportation revenue stream** — The enabling technology for implementing MBUF will be in cars and trucks – including electric and alternative fuel vehicles – this decade. As the gas tax continues its long-term decline, charging drivers who use the roadway by the mile versus the gallon will gain traction. That means achieving a balanced approach with connected vehicle technology implementation – sooner rather than later – and establishing enabling legislation and regulatory oversight at municipal, state and federal levels. The general public also needs to know privacy concerns will be adequately addressed.

Education:

- Master of Science in transportation planning, 1978, University of Iowa
- Bachelor of Science in sociology, 1975, University of Iowa

Professional affiliations:

- Chair – 2014 ITS World Congress Organizing Committee
- Chair – ITS World Congress Board of Directors (2013-2014)
- Member and past president – Intelligent Transportation Society of Michigan board of directors (1996-present)
- Member –Traffic Improvement Association of Michigan board of directors (2004–present)
- Member – Traffic Improvement Association of Michigan Executive Committee (2004–present)
- Member – ITS America
- Associate – Transportation Research Board
- Member – Institute of Transportation Engineers

Select media and appearances:

- ITS World Congress blog, May 28, 2014 — **Posted entry, "Smart phones help stimulate the start of smart roads"**
- *Tampa Bay Times*, Feb. 17, 2014 — **Quoted in story, "Bottom line with driverless cars: Will people buy them?"**
- North Carolina Section Institute of Transportation Engineers Annual Meeting, Raleigh, N.C., Nov. 21, 2013 – **presented keynote address, "Reinventing Transportation in our Connected World"**
- Global Symposium on Connected Vehicles and Infrastructure, Ann Arbor, Mich., May 16, 2013 – **presented "V2X recipe for growth"**
- Conference of Minority Transportation Officials, Training Webinar, May 15, 2013 – **presented "Managing high-technology projects in transportation"**
- Global Trade and Transportation Symposium, Jacksonville, Fla., Oct. 16, 2012 – **presented "Connected Vehicles and Beyond ..."**
- 18th World Congress on Intelligent Transportation Systems, Orlando, Fla., Oct. 18, 2011 – **presented "Connected Vehicle technology: driving for change in the way transportation systems are funded and delivered"**

To schedule an interview with Jim Barbaresso and for more information, contact:

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