HIGHWAY ⚠ SAFETY

Cars Of The Future: What To Expect

by Jim Barbaresso

(NAPSA)—Traffic tie-ups and fender benders may one day be a thing of the past thanks to Intelligent Transportation Systems.

ITS is intended to make us a more mobile nation and a safer one. Like the creation of our Interstate Highway System more than 50 years ago, ITS will have a dramatic impact on our country's transportation challenges and opportunities.

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Today, traffic congestion and highway safety are serious problems that affect our quality of life and our economy. The average motorist spends nearly a week stuck in traffic each year. That's time that could be spent with family and friends or being more productive at work. More than 42,000 people are killed in traffic accidents and hundreds of thousands more are injured each year. The impacts on our society are staggering.

In the future, cars will be equipped with all kinds of advanced sensors, computer processors, on-board displays and communications systems. In essence, the car will become part of an integrated network of connected vehicles and roadways.

Features we might expect:

• Cars that warn drivers about unsafe conditions, imminent collisions and excessive curve speeds.

• Dashboard screens with preloaded debit cards to pay tolls electronically, order meals at the next restaurant or download a movie for the kids to watch in the backseat.

• Vibrating seats alerting you that you're veering onto the shoulder or falling asleep.

Imagine approaching an intersection and getting a warning when someone is about to run a red light. Or if there is an accident up ahead, getting real-time information alerting you to the incident and providing alternate routes.

This technology is being developed and tested across the country, in places like California, Florida, New York, Michigan and a number of other states.

Some advanced applications, such as navigation systems, lane departure warnings and backup cameras, are already deployed on higher-end automobiles. Within the next decade, these technologies and others will be installed in most vehicles.

Unfortunately, this timeline could be lengthened by rising fuel costs. Most of the revenue for transportation improvements comes from the gas tax. As fuel consumption decreases, revenue for roads also decreases.

Yet the adoption of these technologies will allow us to move away from reliance on the gas tax and toward a more equitable mileage-based user fee. Ultimately, this can help us restore our economy and global competitiveness.

In the next federal highway funding bill, due in 2009, we must look at ways to reinvent how we fund and deliver transportation projects and services. ITS certainly can be part of the solution.

Jim Barbaresso is national director of intelligent transportation systems for HNTB Corporation, which works with many state departments of transportation as well as the USDOT to design, develop and deploy technology to reduce congestion and improve safety on America's roads, bridges, tunnels and highways.