Traffic Congestion: Can New Technologies Provide Solutions?

Totem Report May 24, 2017
By John Hamer

President Cathy introduced Bryan Mistele, President of INRIX, whose company motto is "Intelligence That Moves the World." He's a former Microsoft and Ford executive, with degrees from the University of Michigan and Harvard. His father and grandfather were both longtime Rotarians.

He told the story of his son, who plays basketball, and always says "Oh, crap," when he hears the words, Seattle Rotary. Why? Because the Rotary basketball team is always top-ranked and other teams dread playing them. "So your brand recognition is sky high, but not in the way you think," Mistele joked.

Describing the state of transportation in this region today, he noted that traffic seems to be getting worse, public policy makes it even worse, and there's little hope for much improvement.

However, he said, our city and region is at the forefront of digital innovations including expanded use of GPS, Google Waze, and other data systems that INRIX provides. The company is now in 60 countries and is growing rapidly through four elements called ACES – Autonomous, Connected, Electric, Shared Vehicles.

Mistele said he grew up in Detroit, and for 100 years not much changed in the automobile industry, outside of designs. "Now we're seeing a complete sea change in this old line industry," with companies like Apple, Google and Uber investing in automobiles.

Electric cars including Tesla, Chevy Volt, and Nissan Leaf are growing as a percentage of the international fleet. More people are using ride-sharing services and do not own cars. Of his son's high-school graduating class, 30% do not have driver's licenses. "They don't feel a need to get a driver's license," he said.

Why are these changes happening now? "The car has become a mobile computing platform," he said. It's no different from mobile phones or laptop computers. It's part of the internet of things."

More cars are equipped with digital data devices, he noted. "Last year 25% of cars were connected, whether you know it or not." They provide route maps, traffic

information, real-time parking suggestions, and other data. Drivers get notices on tune-up and maintenance needs.

There are no more traffic helicopters flying in the U.S. today, Mistele said, because cars are transmitting and receiving real-time data. INRIX just announced a new service to give advance notice of ice on roads, he said.

He showed a video from Germany that showed rerouting cars in congested Cologne due to road ice that caused accidents. Cars were directed to other roads, and bar charts showed where parking was available.

The New Jersey Department of Transportation used data to optimize traffic patterns. Los Angeles re-timed its traffic signals and saw a 30% reduction in congestion. Seattle has just started using similar data to improve traffic flow, he said.

In a Seattle Times op-ed column, Mistele wrote that "Sound Transit will be obsolete before it's complete," he said. "Sound Transit will provide less than 1% of overall trips in 25 years. The trends happening in the private sector will completely overwhelm the public sector."

What can Seattle do? Autonomous vehicles are the best solution, he said. Google and Uber will operate as a network and deliver transportation services on demand. This will reduce the overall number of vehicles in the urban area, with dramatically fewer single-owner vehicles in the city. "People say: I want to own my car," Mistele said. "But half of you lease cars now. With autonomous vehicles, you can lease a car and have one on demand whenever you need it."

Today, he noted: "Every other block is a parking lot. What happens if you don't have to park anymore?" He noted that BMW now has a car that you can park, hit a button, and let other people use it during the day. "That has a dramatic impact on land-use around the city that no longer needs as many parking garages."

He said this would also help the disabled and elderly who can't drive. "They can summon a vehicle and within 5 minutes have a ride." He said that young people are now using Uber in growing numbers, as well.

"The world becomes a safer and more productive place," he concluded, noting that 1.25 million lives are lost every year in traffic accidents worldwide, mainly caused by human errors. And 4.3 years is the amount of time each of us spends driving during our lifetimes.

In the Q&A session:

John Hrabar said these new technologies seem well suited to urban environments, but what about rural areas? Mistele agreed the focus was on urban areas, because rural areas don't need congestion relief as much. However, he said that Paccar was now working on autonomous trucking, which would greatly affect rural areas. A downside: Trucks "don't have to stop at diners for the drivers to eat."

Mark Wright asked what was the "best traffic app" and what happens when everyone is directed to the same alternative routes. Mistele said Inrix was the best, adding that "every second, the data is changing, which makes the entire city equally worse, as compared to a couple areas that are horrendous."

Lauren Domino asked if public agencies could help subsidize these new ride-sharing programs. Mistele said yes, that made sense. "If you share with others, these trends will swamp anything else that's happening on the public sector side," he said, adding that we should encourage public-policy makers to adopt new approaches.

Jeff Pyatt asked how to keep real-time information out of insurance companies' hands: "Will they know I'm going too fast and increase my rates?" Mistele said privacy was an issue, but cars could also collects data on safe driving, and companies could reduce rates.

KC Herren asked if different cars (i.e., Porsche vs. Hyundai) would be treated differently. Mistele said: "In this state, if you're rich you can drive the toll lanes on 405 north; if you're poor, you can't." He noted that so-called "Lexus lanes" already mean that "Microsoft executives can get home quickly, while others can't."

Earlier in the program, **Cynthia Chirot** delivered an inspirational message. She had just returned from "the other Washington" where she visited the new National African-American History Museum. "At this challenging time in our nation and the world, it was an uplifting experience – reminding me of the power of human spirit in adversity, the resilience of our people and institutions, the importance of standing up for what you believe and the need for leaders of all political beliefs to find common ground for the good of our citizens and for the world," she said.

Trish Bostrom and **Burr Stewart** led us in "God Bless America," with Burr acting as a lively "conductor" while Trish played the banjo.

Carla Fowler introduced visiting Rotarians and **George Twiss** introduced prospective new members.

Kim Moore, Grace Chien and **Gerry Maurer** introduced new members **Gary Hartman, Sam Davidson** and **David Herrild**, respectively. **President Cathy** gave them all pins, even though they are all former Rotarians in other clubs.

She then announced upcoming Fellowship events and thanked our main online/video sponsors, **Ken Hamm** and **Bob Alexander.**

Trent Mummery introduced a "table talk" topic: memorable experiences you've had in a car. (Omit the "back-seat experiences," he added, to a big laugh.)

President Cathy ended the meeting with a moment of silence for Memorial Day, to remember all the veterans who

lost their lives in conflicts starting with the Civil War, when it was originally called "Decoration Day."