SQUIRE PATTON BOGGS

Conversation on Converging Infrastructure

On May 15, 2019, along with Intelligent Transportation Society of America (ITS America), co-hosted an event as part of Infrastructure Week, titled, "A Conversation on Converging Infrastructure."

The event began with a welcome from David Kim, Vice President, Government Affairs, Hyundai Motor Company. He welcomed the participants to Hyundai's offices and noted that it is expected that the auto industry will see more change in the next five years than it has over the past 60 years.

Next, opening remarks were provided by partner and former Secretary of Transportation Rodney Slater, with comments provided by senior policy advisor and former Congressman Bill Shuster. Their remarks were followed by a distinguished panel discussion moderated by the firm's Communications Practice Group leader Robert Kelly.

Congressman Shuster noted that he was very excited about the development of technology that will make transportation safer and more efficient. The panel included insights from the participants regarding the state of technology and transportation and a lively debate about the technology and energy policy decisions that will be necessary going forward.

The panel featured Shailen Bhatt, President and CEO of ITS America; Dean Brenner, Senior Vice President, Spectrum Strategy and Technology Policy at Qualcomm; Mary Brown, Senior Director, Technology and Spectrum Policy at Cisco; Dr. Matteo Muratori, Ph.D., Engineer, Integrated Transportation and Energy Systems at the National Renewable Energy Laboratory; and Cordell Schachter, Chief Technology Officer at the New York City Department of Transportation. Some highlights of the panel's discussion were:

- As technology changes, it is necessary to include more stakeholders in the discussion so that disparate groups can understand how those changes will affect them. For example, labor groups should be involved to better understand how automation will affect workers, and the disability community must be consulted to ensure that their needs are met by changing technology. The public must be educated about changes in technology so that the US can have a robust debate about changing technology and the potential privacy and other implications associated with new systems. It will be necessary to bridge cultural differences between different industries as advances in technology require expertise from government agencies, telecommunications companies, electronics manufacturers and automakers. It was noted that state and local governments have a wide range of sophistication related to infrastructure operation. Some are capable of integrating new technology into their operations that will allow additional data streams to be used to improve driver experience, while others are primarily focused on paving roads and building bridges.
- Regulatory certainty is needed to "move the needle" on automotive safety and the deployment of new technology. It was noted that planning for new energy systems is a years-long process because new power plants or new power lines are expected to continue in operation for decades. It was noted that in the US, large-scale changes require social buy-in, while other countries can implement large-scale change by government fiat. Mr. Bhatt noted that in some cities in China, the local government sends a text message to drivers in automobile accidents within three minutes of the accident occurring and dispatches tow trucks to clear the roads. While this is incredibly efficient, it is unlikely that the US would embrace such a solution due to the significant privacy implications involved in tracking every car on the road. There is an ongoing debate regarding which technology, Dedicated Short Range Communication (DSRC) or Cellular Vehicle-to-Everything (C-V2X), should be used by the automotive industry and infrastructure operators for safety and traffic management. The panel debated the merits of the two systems and Mr. Schachter noted that, in conjunction with the US Department of Transportation, New York City will initiate a DSRC pilot program in 2019, which has a goal of connecting millions of vehicles with infrastructure. Interoperability was stressed as a potential hurdle to deployment – if two distinct technologies are deployed that do not operate together, then the public safety benefits will not be realized.
- The panelists discussed their "policy wish lists," which included a consensus whether specific spectrum for safety applications is important and whether the vehicle-to-everything technologies, such as DSRC and C-V2X, will help reduce traffic fatalities. It was noted that there is a one in 103 chance of dying in a car crash in the US, which is likely better odds than winning some casino games. Wide adoption of safety technology may be able to save lives.
- Cybersecurity is a concern for connected vehicles and infrastructure, although industry has improved over the last 10 years. Much work is still to be done, especially regarding the procurement of equipment for infrastructure. Transportation agencies have varying degrees of sophistication and they must be aware of what equipment their vendors are selling and what the cybersecurity vulnerabilities are.
- The deployment of new power generating systems is necessary to fully realize the potential of electric vehicles or alternative fuel-powered vehicles. Additional work is necessary to determine the effects on power grids of an increase in electric vehicles, as it is estimated that as much as 25% of electricity in the US will be generated for the transportation industry. Currently, only 0.2% of electricity is generated for use by the transportation industry. If deployed correctly, new resources may lead to cheaper prices for all consumers, but, if not deployed correctly, it may induce stress on both transportation systems and the electrical grid.