Subcommittee on Commerce, Manufacturing, and Trade of the House Energy and Commerce Committee
Hearing: "Vehicle to Vehicle and Connected Roadways of the Future"
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2123 Rayburn House Office Building

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Thank you, Chairman Burgess, Ranking Member Schakowsky, and Members of the Subcommittee for the opportunity to testify this morning.

Our nation is on the cusp of the next great leap in automotive technology, one which will revolutionize how we get from place to place, and how we protect ourselves and our children from deadly harm.

The next great chapter represents the single greatest transformation since the advent of the assembly line.

Vehicles today are engineering marvels. But their capabilities are not being fully utilized. It's like using a smartphone in airplane mode. Amazing devices, but fulfilling just a fraction of their potential.

So how do we fulfill the potential of cars coming to the roads today?

We need to ensure that every single new car designed for the U.S. market is equipped with radio technology – known as Dedicated Short Range Communications, or DSRC.

This will take our cars out of "airplane mode" and open the door to a constant stream of vehicle-to-vehicle and vehicle-to-infrastructure communications that will save lives, reduce costs, improve traffic congestion, and eliminate tons of pollution.

In doing so, we will usher in a new era transportation safety, innovation, new business models and applications.

Why is Cisco involved in this transformation?

We are a $47 billion company, formed on the simple idea that computer systems should be able to talk to each other.

Cisco not only builds equipment and solutions that route data packets, but we provide data storage, cloud, wireless, security and many other products and solutions to customers around the globe.

Our business is focused on developing the Internet of Everything. That's the connection of people, process, data, and things to the Internet, the vast majority of which has never been connected before, including automobiles.

The scope of this transformation is enormous.

Cars, and eventually trucks and all vehicles, will be connected to each other, and to the roadside communications network, via the radio through a complex communications network.

This network needs interoperability, standards-based technology, as well as a tested architecture for delivering a highly secure, mobile, and high availability solution. That's what Cisco does.

We will layer on an advanced, secure IP network on top of the physical network that today consists of vehicles and roads. We'll use a combination of DSRC and wired technologies. Surface transportation will become a connected system, generating new data.

And what that data can do will amaze you.

Most importantly, data will have a dramatic impact on safety. Cars connected to each other will be able to help drivers avoid everything from a fender bender to a deadly crash. Cars will have the capability to warn motorists to brake immediately or even take evasive action when accidents are imminent. This will save countless lives and trillions of dollars in property damage and lost productivity.

Just as importantly, by sending crash data to first responders in real-time, we can direct police, fire and EMS personnel to the scene without delay.

We can improve traffic flow through real time control of traffic lights and ramp metering.

American commuters already spend five days per year stuck in traffic. This is a "congestion penalty" that costs Americans over $1,400 per year per household, an amount that is expected to rise to $3,000 per year by 2030.

And we'll improve our ability to manage road maintenance and infrastructure investments, by collecting and analyzing more specific data on use of our roadways.

But many of these benefits are today not available, or exist at much reduced levels, because most vehicles are not yet equipped with DSRC technology.

At the moment, the private sector is poised to deploy DSRC -- not just the radios in cars, but the corresponding IP network that will connect our roadways in ways never before possible.

Once vehicle-to-vehicle communications are widely installed in cars and light trucks as a safety measure, the private sector, and our public sector partners, will respond swiftly to bring the full set of DSRC's benefits to American consumers.

The potential of DSRC is not some far off dream. It's within our grasp.

This is a time where America should be leading, not be left behind. Other nations including Austria, The Netherlands, and Canada are adopting intelligent transportation systems, including DSRC.

These technologies should be on American roads.

The future of transportation, and safety in transportation, is bright.

We thank you for your attention to these important developments in road safety, and we look forward to NHTSA's future adoption of a final rule for DSRC installation in vehicles.

Thank you, and I'm happy to answer any questions.