DriveOhio

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Statement of Jim Barna

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Ohio Department of Transportation

Hearing on *"Innovation in Surface Transportation"*

Before the Subcommittee on Highways and Transit
Committee on the Transportation and Infrastructure
U.S. House of Representatives

September 5, 2018

Chairman Graves, Ranking Member Norton, and Members of the Subcommittee: My name is Jim Barna. I serve as the Executive Director of DriveOhio. I'm pleased to appear here today on behalf of Governor John Kasich and Ohio Director of Transportation Jerry Wray to talk with you about the important ways we are preparing Ohio for the future of smart mobility.

With autonomous and connected vehicles dominating both the automotive and infrastructure agendas of governments at every level, here and across the globe, DriveOhio was created by Governor Kasich as a one-stop shop for those looking to safely develop, test and deploy advanced mobility solutions in Ohio. We are establishing Ohio's leadership in this realm by providing a single point of contact and collaboration for the dozens of public and private entities in our state that are involved in the design, development, testing, use and regulation of autonomous and connected technologies – as well as as those responsible for the public policies and infrastructure needed by those technologies.

As the state's center for smart mobility, DriveOhio brings these agencies and organizations under one umbrella, serving as the single point of contact for all of Ohio's smart mobility initiatives and advancements. DriveOhio fosters cooperation, innovation and collaboration, offers faster access to resources by breaking down government barriers, and improves efficiencies for people and organizations that want to be part of this industry.

Our work is guided by four fundamental pillars: Transportation Safety – which is first and foremost – Reliability, Mobility and Workforce. We have nearly a dozen smart mobility projects either under construction or soon to be announced – projects aimed at testing advanced transportation technologies in a variety real-life smart mobility applications including improved access to work, education, healthcare and the essentials of a healthy, productive life.

One of the biggest things we are learning is the importance of using public/private partnerships to achieve our goals. Our public-sector partners, including nine state agencies and municipalities from across the state, are participating in working groups along with the automotive industry, academia, and Ohio's world-class research and development institutions. Together, they are working to ensure Ohio stays on the cutting edge of smart mobility technology, standardization, infrastructure and implementation.

One example I can point to, which is well underway, is our 33 Smart Mobility Corridor, a 35-mile stretch of U.S. 33 northwest of Columbus, which is being equipped with some of the highest concentrations of connected vehicle infrastructure in the country. Working with a collaborative team of local governments along the corridor that is overseeing the project, along with the Transportation Research Center , Honda, Bosch, Michael Baker International and others, we are equipping the four-lane, divided highway with fiber-optic cable and wireless roadside sensors.

Midway along this corridor, we are working with local officials and Honda on a project to install dedicated short-range communication units in **every traffic signal** in the City of Marysville. When fully operational, these connected signals will communicate with as many as 1,500 public and private vehicles we will be equipping with onboard units. This project will provide the largest concentration of connected vehicles and infrastructure in the country, with a saturation rate of daily traffic in the area reaching between 10 and 20 percent.

The 33 Smart Mobility Corridor and Marysville projects are funded in part through a U.S. Department of Transportation ATCMTD grant. This project was selected for the grant because it was the only demonstration project involving a rural-to-suburban-to-urban application of this technology. And it has been recognized as advancing more rapidly and more successfully than others that were awarded.

Ohio has a singular advantage in our work to advance these technologies, as we are home to the Transportation Research Center, a 4,500-acre automotive proving ground – the largest and most advanced in North America. It's strategically located at one end of the 33 Smart Mobility Corridor. Now, with a $45 million investment by the State of Ohio, JobsOhio, and The Ohio State University, the Transportation Research Center is building the SMARTCenter, the largest automated and connected vehicle testing facility **in the world**. Automakers and systems developers recognize the value in SMARTCenter's capabilities and are already buying "track time" reservations before construction is even completed.

Another project ramping up along the 33 Smart Mobility Corridor will gather vehicle data and monitor traffic from the air. We will soon be using unmanned aircraft that will interact with sensors and communication equipment along the corridor, feeding data into our Traffic Management Center in Columbus. The project will also use sensors and communication devices to ensure the unmanned aircraft will not interfere with one another or with manned aircraft, such as small planes and helicopters, which also use the lower altitude airspace.

We are also identifying innovative financing opportunities to support this research.

In another public/private partnership, DriveOhio and the Ohio Department of Transportation are working with the City of Columbus, the Columbus Partnership and The Ohio State University to soon deploy a low-speed, self-driving passenger shuttle service around city's downtown area with free rides for passengers during the first year. This pilot is the first step in a three-phase plan for Smart Columbus that will help develop guidelines that will inform future deployments of self-driving technology in Columbus and throughout Ohio.

To truly maximize our investments in this area, we need the ability to connect local and regional projects under a cohesive statewide framework. DriveOhio has begun work on a Smart Mobility plan to guide our future investments in connected and automated vehicle technology. The purpose of the project is to provide equipment and application specifications for smart mobility technologies that could be used by state and local governments. We are also looking at a master plan for statewide data storage, management and security for connected and autonomous vehicles.

By supporting projects like those I've described and others sure to follow, DriveOhio is committed to advancing smart mobility solutions and innovation that will benefit transportation safety, efficiency and economic impact not only in Ohio, but throughout the entire nation.

Thank you for your time and for letting me share the Ohio's smart mobility story. I will be happy to answer any questions the committee might have.

James Barna

DriveOhio Executive Director

DriveOhio

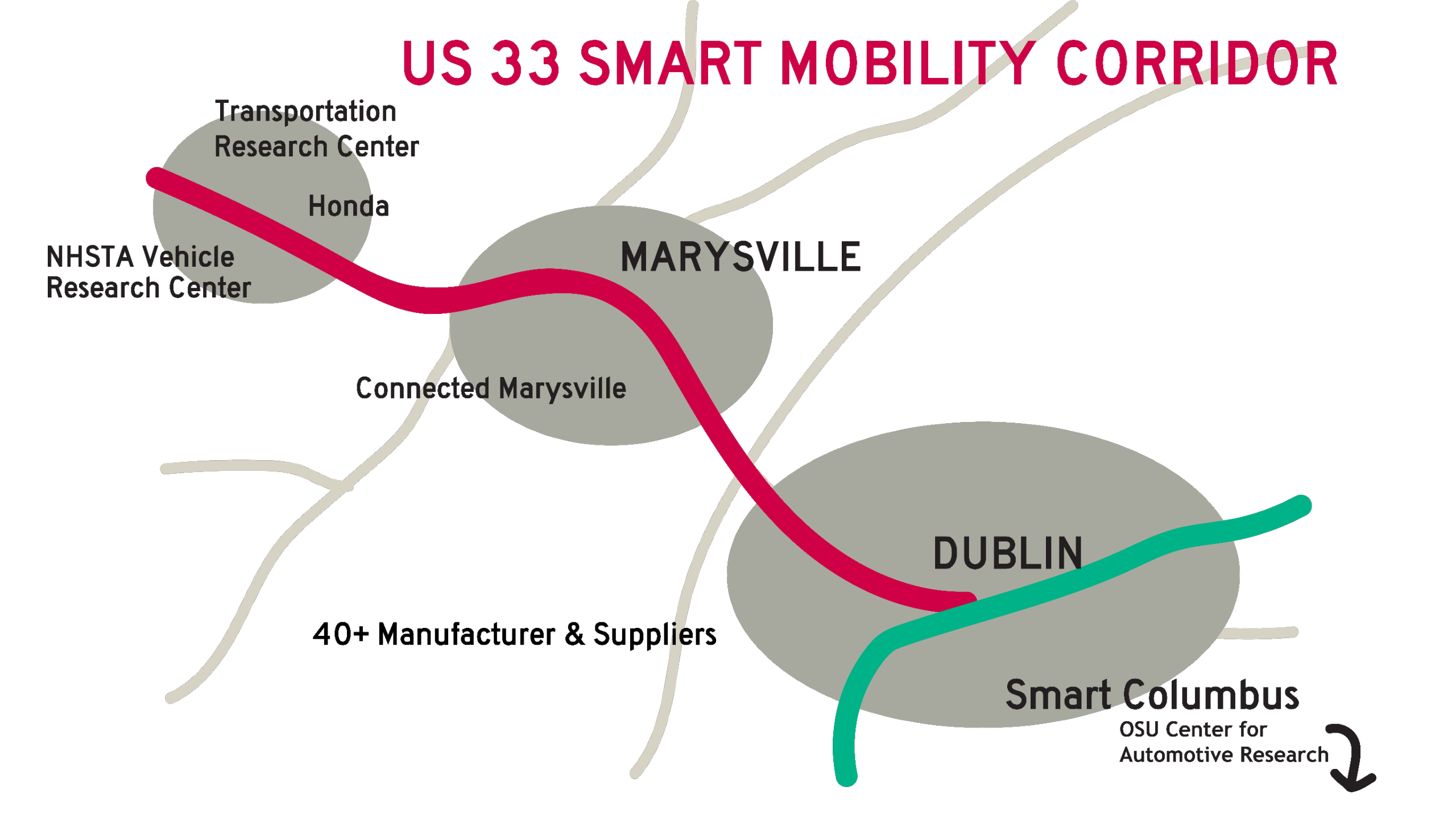
The Future of Smart Mobility

Safety

Reliability

Mobility

Workforce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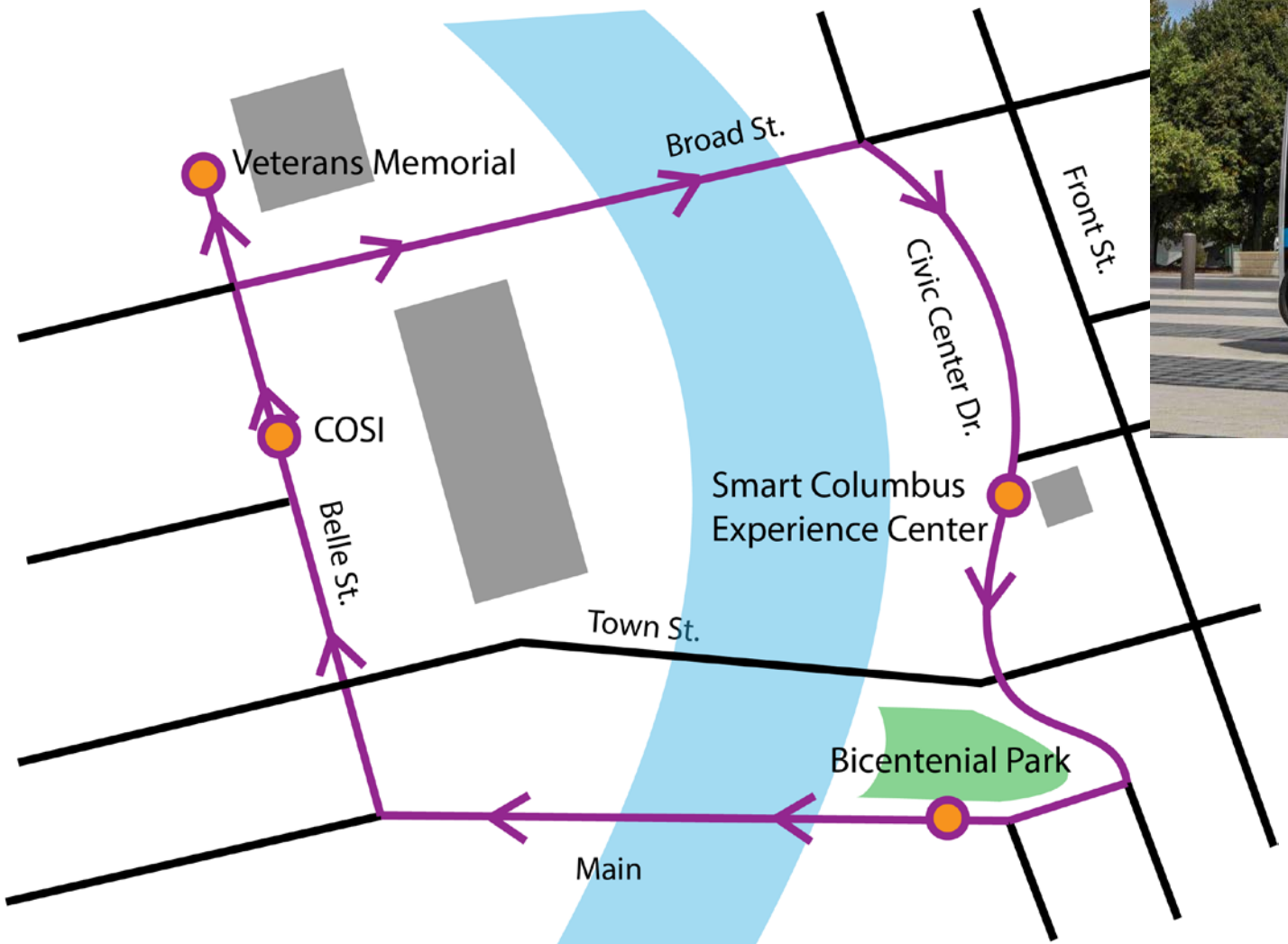
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The Future of Smart Mobility