Opening Statement of Chairman Jay Obernolte

Research and Technology Subcommittee Hearing
Accelerating Progress: U.S. Surface Transportation Research
February 11, 2026

The U.S. transportation system underpins the American economy and the movement of goods across our nation. Surface transportation, including our roadways, vehicles, and supporting infrastructure, plays a central role in that success. This infrastructure is critical to American prosperity and touches the daily lives of nearly everyone in this country. It's especially important for Congress to assess the state of research and development (R&D) in this area as we work to authorize key surface transportation programs.

Congress's surface transportation reauthorizations fund infrastructure projects and support R&D initiatives tied to our nation's transportation systems. This Subcommittee oversees the research and technology titles within these bills, which have helped drive meaningful transportation research at major American universities. We will hear more about this work today from Mr. Winfree and Dr. Liu.

As we look ahead, it is important to consider the full scope of ongoing surface transportation research. Understanding these efforts will help inform the Committee's work to strengthen infrastructure and advance innovation in America.

For example, Congress must examine vulnerabilities within our transportation system. We must ensure America's transportation systems are not susceptible to interference or attack from geopolitical competitors like the Chinese Communist Party (CCP).

Imagine a scenario in which Global Positioning System (GPS) capabilities commonly used in vehicles were disrupted and could not quickly be restored. Emergency services such as firefighting agencies could face delays reaching people in need. Beyond emergency response, a GPS disruption would ripple through freight and logistics networks that rely on real-time routing to move goods nationwide. Delivery schedules would falter, supply chains would slow, and costs would rise for businesses and consumers alike. Adversaries could also target other connected systems, such as traffic management networks or vehicle-to-infrastructure communications, to cause widespread disruption without ever physically damaging a road or bridge.

Artificial Intelligence will also play a critical role in transforming our transportation system. Having served as co-chair of the bipartisan House Artificial Intelligence (AI) Task Force last Congress, I have seen firsthand how swiftly American innovation in AI is advancing. These technologies have growing applications in transportation, from congestion analysis to intelligent vehicle systems. AI-powered traffic signals can adjust their operations in real time based on

actual traffic conditions, easing congestion and improving fuel efficiency. Predictive maintenance tools can analyze sensor data from bridges and roadways to identify problems before they become safety hazards. In the future, vehicle-to-infrastructure communication systems may use AI to coordinate between vehicles and traffic signals, leading to safer intersections and smoother traffic flow.

The Advanced Research Projects Agency-Infrastructure (ARPA-I) at the Department of Transportation, was authorized by Congress in 2021, to support high-risk, high-reward next-generation transportation technologies. Digital infrastructure, which enables sensitive computing, network, and communication systems, should be a major focus of future ARPA-I investments. Autonomously driven vehicles are one rapidly growing area of innovation, and companies like Tesla and Waymo are making significant advances. Congress should continue evaluating these emerging technologies to support transportation systems that are both cutting-edge and safe.

Surface transportation research and technology are vital to the strength of our economy. I thank our witnesses for being here today and appreciate their willingness to help the Subcommittee explore these crucial areas of U.S. surface transportation research.