The Division of Technology Development & Deployment specializes in developing, manufacturing, implementing, & maintaining innovative solutions for transportation research. Our division collaborates with other research groups at VTTI to support innovative research, including:

**Developing** highly integrated data acquisition systems (DAS) to accelerate research

**Maintaining** the reliability of VTTI’s DAS as vehicle electrical and electronic systems become more complex, and increasing capabilities to keep pace with new technologies and research demands

**Capturing,** storing, and processing large volumes of data in a secure, research computing environment

**Designing,** developing, and testing advanced driver systems, including higher levels of automation

**Maintaining** and expanding the capabilities of VTTI and the Virginia Smart Roads

**Programs**

- Automated Driving Systems
- Data Retrieval Support
- Electronic Systems & Technology Innovation
- Testing Facilities Operations
- High-Performance Computing
- Mechanical & Electrical Systems
- Research Data Storage & Processing
- System Design & Architecture
- Innovative Vehicle Systems Integration
- Advanced Test Fixture Development
- Cybersecurity
- Vehicle Support
Information Technology - Our division provides technology infrastructure & expertise to support VTTI’s scientific research and petabytes of data in a performant, scalable, & secure environment.

The Virginia Smart Roads - This state-of-the-art facility is managed by VTTI in cooperation with the Virginia Department of Transportation. Features include weather-making & lighting capabilities, advanced sensors, traffic intersections, varying pavement types, & a comprehensive system including highway, surface, rural, and unimproved roadways.

Naturalistic Driving Data - We collect, maintain, & manage petabytes of naturalistic driving data and other transportation research data housed at VTTI.

Other Facilities - We manage a large fleet of instrumented experimental vehicles as well as a machine shop & fully staffed garages.

About VTTI

For 35 years, VTTI has been conducting research to save lives, time, and money and protect the environment. In our world-class facilities, we investigate, invent, design, develop, refine and test transportation systems of the future. As one of seven premier research institutes created by Virginia Tech to answer national challenges, VTTI is continually advancing transportation through innovation and has affected public policy on national and international levels.

To learn more about our work and get more involved, please contact us at:

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