VirginiaTech
TRANSPORTATION INSTITUTE

The Virginia Tech Transportation Institute

Background

Established in August 1988

- US DOT
- University Transportation Centers Program

Largest university-level research center at Virginia Tech

- Over 200 staff and students working on approximately 100 projects
- $80 Million Awarded
- $22 Million in Annual Expenditures
- Largest supporter of both undergraduate and graduate students

Unique Facilities

Instrumented Vehicles

The Virginia Smart Road

The Virginia Smart Road

The Virginia Smart Road is VTTI's most well-known facility built to federal & state specs with weather-making equipment to generate rain, snow & fog.

Research Areas

- Human Factors and Safety (naturalistic studies)
- Transportation Technology
- **Sustainable Transportation Infrastructure**
- Traffic and Mobility
- Transportation Policy
- Product Development

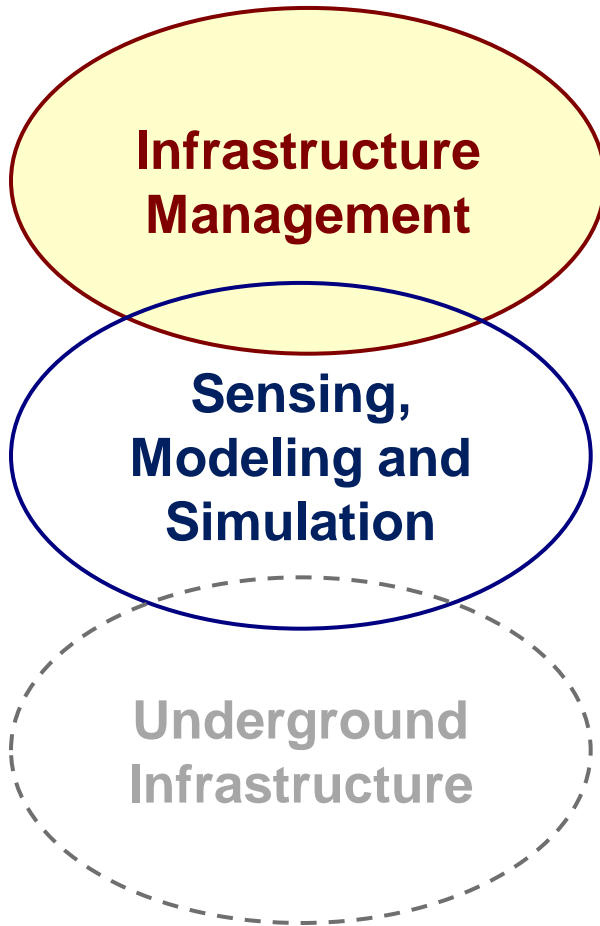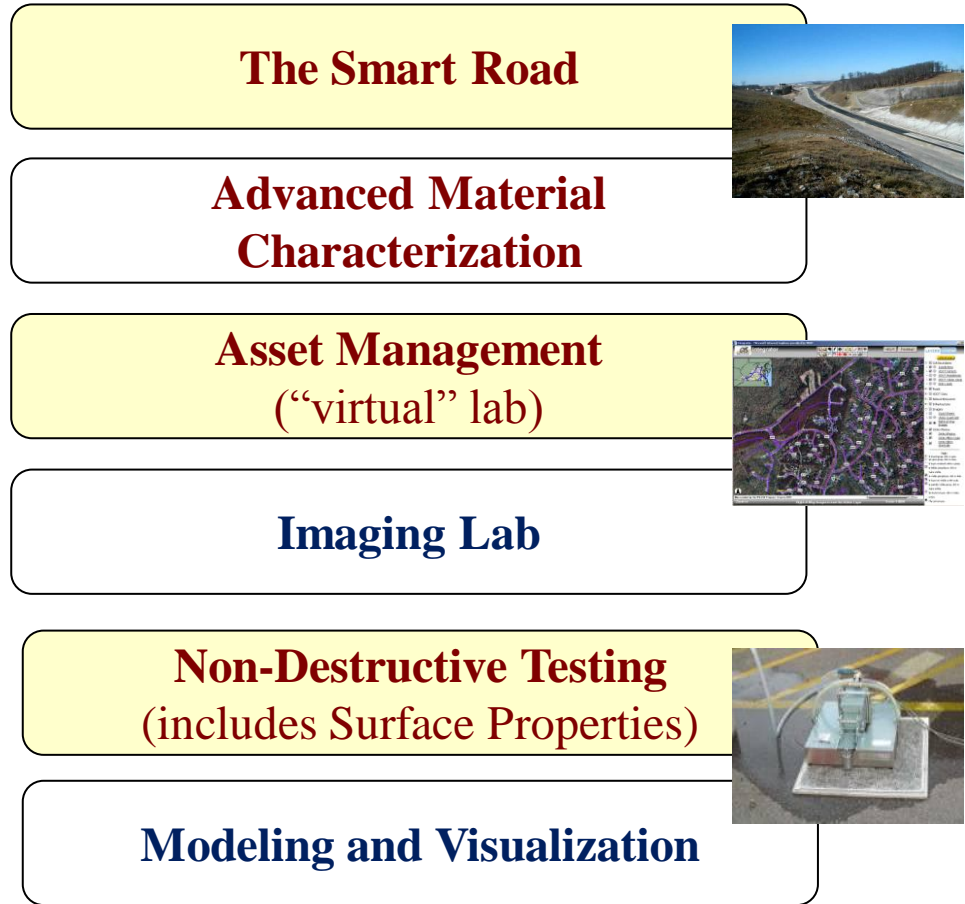# Center for Sustainable Transportation Infrastructure

Vision

- A worldwide leader in transportation infrastructure research and education
  - Conduct high-impact research for accelerating the renewal, increasing safety, reducing life-cycle costs, and ensuring sustainability of transportation infrastructure systems
  - Be a paradigm of collaboration among governments, academia, and industries
  - Provide excellent environment, resources, and instruction for students to learn fundamental concepts, acquire advanced knowledge, and gain practical experience

VTTI

Center for Sustainable Transportation Infrastructure

Center Structure

GROUPS

LABORATORIES & FACILITIES

Infrastructure Management

Sensing, Modeling and Simulation

Underground Infrastructure

The Smart Road

Advanced Material Characterization

Asset Management ("virtual" lab)

Imaging Lab

Non-Destructive Testing (includes Surface Properties)

Modeling and Visualization

Center for Sustainable Transportation Infrastructure

Virginia Sustainable Pavements Research Consortium (VA-SPRC)

- Collaboration to advance the state of pavement engineering in the commonwealth, the United States, and the World
  - Focus on strategically selected high-impact research projects on pavement materials, performance, design, maintenance and management
  - Excellent partnership to pursue national and international funding opportunities