Saxton Transportation Operations Laboratory
at the
Turner Fairbank Highway Research Center

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Three Integrated Testbeds
Indoor Facilities

- **Lab Workstations:**
  - State-of-the-Art Simulation and Analysis Tools
  - High-Bandwidth Internet2 Connectivity
  - High-Capacity Data Servers
  - Test Bench/Conference Table

- **Vehicle Preparation Bay**
  - Storage and Maintenance
  - OBE installation/testing
Outdoor Facilities

- **Intelligent Intersection:**
  - State-of-the-art traffic signal controller and cabinet (both NEMA and 2070)
  - Roadside Communications and Information Processing (RSE and SPaT processor)
  - Instrumented Vehicles (OBE)
  - Advanced Positioning Equipment
  - Digital Mapping of Intersection
  - Remote Monitoring Capabilities
STOL Research Activities

- Evaluation of Roadside Equipment (RSE) for the research Qualified Product List (rQPL)
- Development of the Signal Phase and Timing (SPaT) Interface and processor
- Validation of the Security Credential Management System (SCMS)
- Development and Testing of AERIS Environmental Performance Application
Role of STOL in Affiliated Testbed Concept

- Support bench testing of new connected vehicle devices, standards and applications
  - RSE and SPaT
  - OBE
  - SCMS
  - AERIS, DMA and other V2I applications (including V2I safety)
- Serve as a controlled environment for testing new concepts and applications prior to testing on real roads
  - Analysis, Modeling and Simulation
  - Intelligent Intersection (closed track)
- Common Data Repository (Research Data Exchange)
For More Information.....

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