



## About TTI

**Since 1950**, experts at the Texas A&M Transportation Institute (TTI) have developed solutions to the problems and challenges facing all modes of transportation.

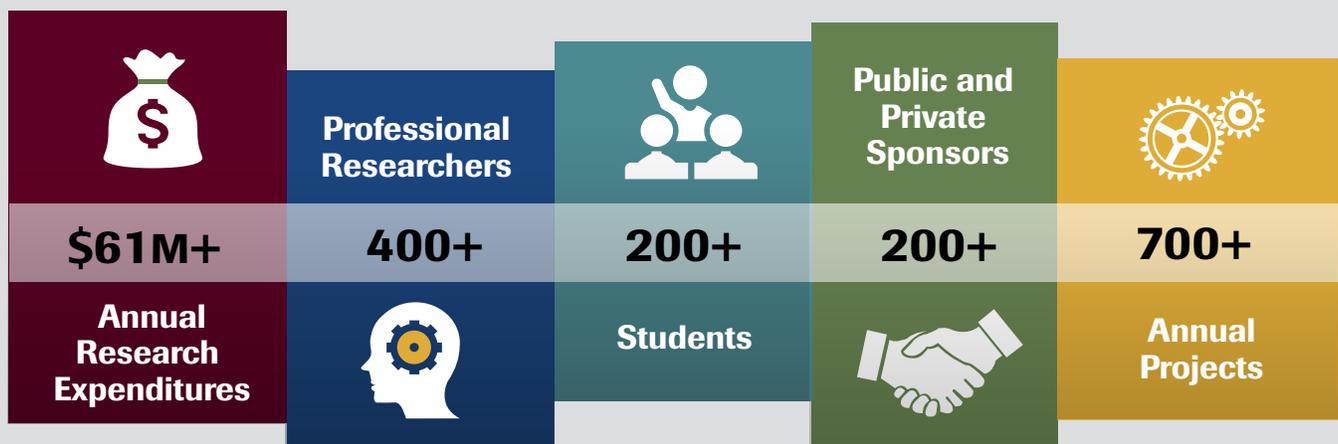
A member of The Texas A&M University System, TTI has a breadth and depth of programs, facilities and capabilities unsurpassed by any other higher-education-affiliated transportation research organization in the United States. The Institute's research and development program has resulted in significant breakthroughs across all facets of transportation.

TTI research is widely known as an excellent value with a proven impact of saving lives, time and resources. The Institute's innovative strategies and products have saved the state of Texas and the United States billions of dollars and thousands of lives.

TTI staff come from more than 50 different countries and are known for their credibility and technical expertise. Many are recognized national and international leaders in their fields. The Institute also plays a key role in educating the next generation of transportation professionals. Over 40 TTI researchers hold joint academic appointments at Texas A&M University.

With expertise in areas such as engineering, planning, economics, policy, public engagement, landscape architecture, environmental sciences, computer science and the social sciences, TTI researchers serve as objective transportation experts. They provide a resource to local, state and national agencies and groups, helping them solve transportation challenges and make informed decisions.

## TTI by the Numbers





### Mobility

Mobility analysts at TTI examine problems associated with congestion and access to transportation, develop innovative solutions, and measure the effectiveness of the outcomes. TTI prepares the definitive national study documenting congestion costs and trends in almost 500 U.S. urban areas. The Institute also provides expertise in metropolitan, urban, and rural bus and passenger-rail transit planning and operations.

### Infrastructure

TTI is finding innovative and cost-effective ways to maintain and rehabilitate roadway infrastructure. Researchers have assessed land-side improvements that may be needed to effectively serve additional port, rail and truck traffic generated by the expansion of the Panama Canal.

### Safety

The Institute's safety innovations can be found throughout Texas and around the world. Major advancements have occurred in the design of roadside safety devices such as guardrails, crash cushions and sign supports. TTI is leading other significant advancements in traffic signals and signs, distracted-driving and crash analysis, and bicycle and pedestrian safety, just to name a few.

### Freight Movement

TTI is exploring innovative solutions that support the use of multiple modes of transportation, facilitate freight transfer and operation, enhance freight mobility, improve air quality, and reduce border wait times. TTI has also developed an innovative technology called the Freight Shuttle System, which has the potential to revolutionize freight movement by improving safety, reducing emissions and decreasing shipping costs.

### Human and Behavioral Studies

Roadway users play a critical role in the safety of our nation's roadways. TTI's Human Factors Program examines human limitations and capabilities, and works to optimize the user-vehicle and user-roadway interfaces to improve safety. The Behavioral Research Program examines roadway user attitudes and actions to help identify methods to promote safer behavior.

### Security

The Institute has successfully developed and evaluated new technologies resulting in the cost-effective implementation of devices and standards to help keep our country safe from terrorists. In the area of homeland security, TTI conducts testing of antiterrorist safety barriers for the U.S. Department of State, Bureau of Diplomatic Security, U.S. Army Corps of Engineers and private-sector companies.

# our focus areas



## Environment

As the U.S. Environmental Protection Agency's standards evolve, the sophistication of the environmental research methods necessary to test for these standards also changes. TTI is focusing on transportation-related air quality, sustainability, energy and climate change, and sediment and erosion control through its environmental research programs and facilities.

## Workforce Development

TTI employs more than 200 students in its research laboratories and offices. Over 40 Texas A&M University faculty regularly work on TTI research projects. TTI experts also provide training on transportation topics. Many of TTI's researchers are recognized national and international leaders in their fields, including about 80 who lead or serve on Transportation Research Board committees.

## Economics

TTI has extensive expertise in transportation economics and finance research, working closely with public agencies and private-sector companies to evaluate the economic impacts of the transportation network and explore options for financing our transportation system. TTI-developed tools allow decision makers to prioritize projects based on robust benefit-cost analyses.

## Policy

TTI provides information critical to state and national decision makers in the areas of transportation policy. Institute researchers are often asked to offer objective and credible testimony on a wide range of transportation topics and emerging issues. With the addition of the Transportation Policy Research Center in 2013, TTI continues to serve as a valuable resource to the Texas Legislature.

## Connected Transportation

TTI researchers are developing and testing innovative applications for advancing connected transportation. Along with the Accelerate Texas Center, TTI's connected transportation initiative includes an automated and connected transportation system testing facility in development at TTI's Proving Ground and a variety of urban test beds.

## Planning and Operations

Researchers at TTI continue to be at the forefront of using data collected from Bluetooth® devices, cell phones, GPS, web surveys and virtual open houses to engage the public and other stakeholders. The information collected includes trip purposes, origins and destinations; travel times and speeds; and needed improvements. This input helps determine a desirable combination of multimodal transportation projects.

## Facility Highlights

**TTI researchers** have access to more than 300 full-scale laboratories and field-testing devices.



**Bridge Performance Test Bed**



**Proving Ground**



**Visibility Research Laboratory**



**McNew Pavements and Materials Laboratory**



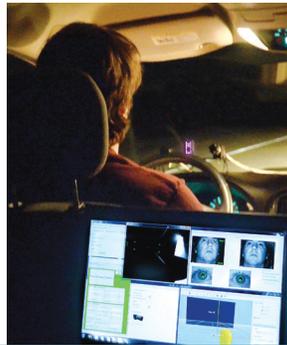
**Driving Simulator**



**Sediment and Erosion Control Laboratory**



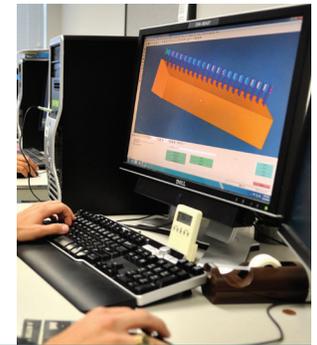
**Environmental and Emissions Research Facility**



**Eye-Tracking Equipment**



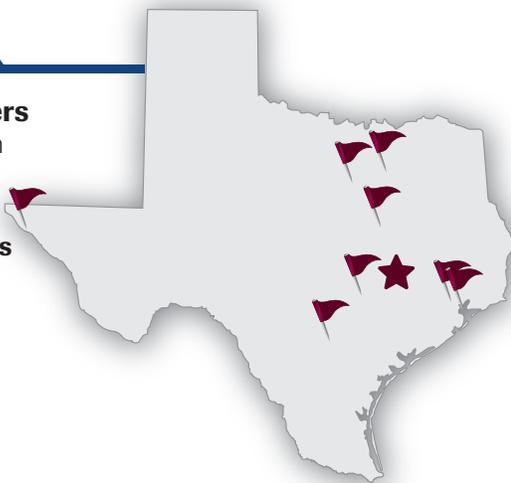
**High-Bay Structural Testing Facility**



**Computer Modeling and Scanning Facility**

## Locations

- ★ **Headquarters**  
College Station  
Bryan
- ▼ **Urban Offices**  
Arlington  
Austin  
Dallas  
El Paso  
Galveston  
Houston  
San Antonio  
Waco  
Washington, D.C.
- 📍 **International**  
Mexico City, Mexico  
Doha, Qatar



TTI has conducted **research** in all **50 states** and more than **40 countries**



## Contact

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## TTI's Mission

To identify and solve transportation problems through research, to transfer technology and knowledge, and to develop diverse human resources to meet the transportation challenges of tomorrow.