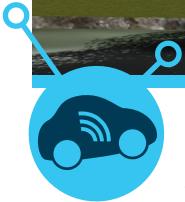


# CENTER FOR INFRASTRUCTURE RENEWAL



## About the Center

Texas and the United States have significant infrastructure needs. Our roads, highways, bridges and transit systems are aging at a rate that exceeds the ability to repair them; the power grid system that the U.S. depends upon is 130 years old; and the stability of our pipeline systems for energy, water and wastewater need strengthening.

Recognizing the need for modern solutions, the Texas Legislature appropriated funding in 2015 for the construction of a world-class facility, the Center for Infrastructure Renewal (CIR). The CIR will be a facility in which experts from the Texas A&M Engineering Experiment Station (TEES) and Texas A&M Transportation Institute (TTI) will partner with government, industry and academia to study, develop and solve the infrastructure challenges of the 21st century and better prepare our growing population and economy for the future.



## Facility Features

The CIR will serve as a research and training hub for federal, state and local governments, universities and private industry. This unique, integrated facility will close the loop from education, research and scholarship to training and implementation of new technologies, methods and best practices.

The state-of-the-art facility will feature laboratories and testing facilities equipped to address the infrastructure challenges of the 21st century.

The facility will be located in the Texas A&M University Riverside Campus. The 140,000-square-foot testing facility will be one of the best in the world, connecting researchers and industry experts from the field so they can work together to find solutions to challenging infrastructure issues and problems.



THE TEXAS A&M  
UNIVERSITY SYSTEM





## Benefits

This collaboration among the State of Texas, TEES and TTI will establish the foundation for the advancement of innovative technologies to position Texas to become a global leader in the field of infrastructure renewal and to develop an essential skilled workforce for the state and nation.

Technology and new materials developed in the CIR will lower infrastructure construction costs, increase the lifespan of these materials, and allow repairs to be performed in a shorter time-frame across the state and nation. Researchers, faculty, students and industry partners will collaborate to find best practices and approaches to rehabilitate our present infrastructure and define the future state of the practice.



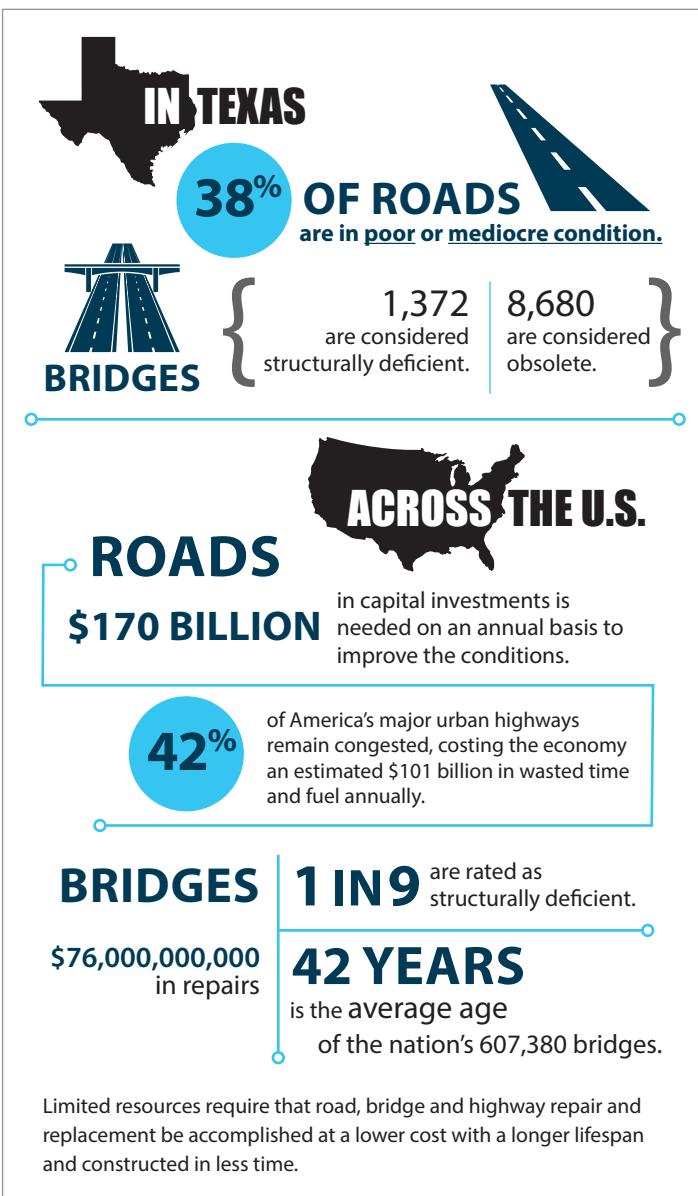
## Innovative Solutions

Experts associated with the CIR will solve infrastructure problems by developing advanced and sustainable materials, structural systems and repair processes that will reduce cost, extend infrastructure life, and improve safety, resiliency and durability.

- Texas spends more than \$1 billion annually on asphalt-surfaced roadways. TTI estimates a savings of \$75 million annually by increasing the amount of recycled asphalt used in road construction. The CIR will bring experts together to evaluate how this higher percentage of recycled asphalt performs under real-world conditions.
- The development of accelerated construction methods can reduce infrastructure reconstruction and repair time by 70 percent. These methods will help reduce traffic congestion and disruption to the public. Development and testing of materials that gain strength faster will be critical to meet this goal and will be developed in the CIR.
- The CIR will construct and test large pipes using new materials to reduce leaks from our strained and aging pipeline system. This will increase the safety and stability of pipelines for petroleum, gas and water distribution.

## Partnership Opportunities

Opportunities are available for industry and the public sector to join TEES and TTI to help equip and enhance this world-class facility. Together we can ensure better, safer and more cost-effective infrastructure to grow the economy and enhance quality of life.



## Next Steps

A nationwide search is underway for a director of the CIR, chaired by Dr. Robin Autenrieth, department head of the Zachry Department of Civil Engineering at Texas A&M University. Development of the CIR is under way and the center is expected to be completed and operational in 2018.



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