



Mission Verde Center



TCAT employees pictured outside of SU CASA on the day of the grand opening.



San Antonio Mayor Julian Castro speaking at the grand opening of the Mission Verde Center.



The former Texas A&M College of Architecture Solar Decathlon House (SU CASA) is currently located at the Mission Verde Center.



A former San Antonio Independent School District campus (6 buildings - 103,000 sq.ft. on 7.5 acres) is now the Mission Verde Center.

TCAT, partnering with the City of San Antonio, Alamo Colleges, CPS Energy and San Antonio Water System, has created a multi-purpose sustainability and training center. It is located at a former inner city San Antonio Independent School District campus. The Center's objectives include the following: 1) the accelerated development and deployment of existing and new renewable energy and sustainable water technologies; 2) creation of new business and job opportunities centered on renewable energy and sustainability; and 3) facilitation of private/public investment to build new economic generators driving job growth. The center will house workforce training efforts led by Alamo Colleges and San Antonio Youth Center in weatherization, green construction and plumbing, and solar /smart grid installation. The learning prospects will be enhanced by CPS Energy and San Antonio Water System—the local municipal utilities—who will demonstrate and evaluate smart grid components, advanced electric and water meters, renewable generation sources, and water conservation techniques.

Additionally, TCAT has located the former Texas A&M College of Architecture Solar Decathlon House (SU CASA) at the Center. This asset along with others will create the premier regional Center for training; demonstration and validation in renewable and energy efficient technologies; smart grid and advanced metering technologies; efficient irrigation, distributed water collection and treatment technologies.

TCAT will evaluate, integrate, and promote novel infrastructure technologies using SU CASA. Examples of these technologies include low-energy building techniques and construction methods, alternative and distributive energy sources, Microgrids, energy efficiency practices, water treatment/reuse, and urban and locally optimized agricultural operations /infrastructure. Not only will we test and evaluate zero impact self sustaining systems on a technical basis, we will evaluate the systems for economic feasibility, transferability, and cultural and social acceptance in future self-sustaining communities. The key will be collaborative partnerships with businesses that want to develop, display, and demonstrate these technologies. Already we are looking at technologies such as enhanced absorption chiller preheating techniques with evacuated solar tubes and high efficiency battery storage.

TEXAS CENTER FOR APPLIED TECHNOLOGY

There are many problems that require the careful and proper integration of applied technologies to find solutions. The Texas Center for Applied Technology (TCAT) was created to focus on these specific problems and to develop effective and efficient solutions. TCAT's core competency is the innovative application of existing technologies and advanced research to solve complex real-world problems.

TCAT's primary objective is to apply and test technologies to address targeted problems and engage basic research as required. TCAT has employees in a variety of locations with the ability to perform research that cuts across multiple technologies, disciplines, and cultures. The Center's employees are knowledgeable regarding customers' requirements and are ready to respond effectively to provide the best value for the customers' needs including expertise in technology insertion, technology assessments, and test and evaluation.

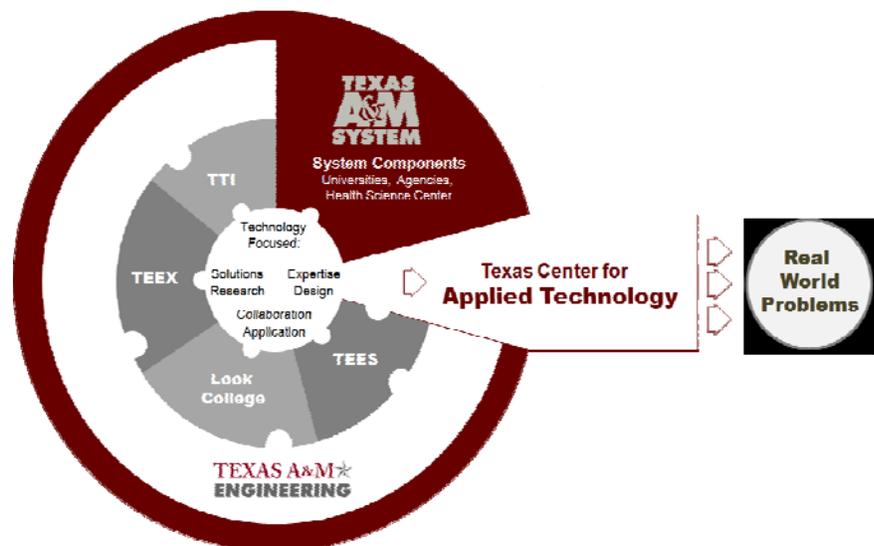
TCAT is part of the Texas A&M Engineering Experiment Station (TEES), a member of The Texas A&M University System. The A&M System is one of the largest and most comprehensive systems of higher education in the United States. Through a statewide network of eleven university campuses, seven state agencies, and a comprehensive health science center, the A&M System educates more than 120,000 students on its university campuses, conducts more than \$780 million in research, and reaches another 22 million people through service each year. TEES is an engineering research agency for the state of Texas and conducts over \$147 million in research annually. Because of the Center's position within the Texas A&M Engineering program, TCAT's expertise can easily be extended by rounding out its team with world class faculty researchers, as appropriate. TCAT is in an excellent position for collaboration not only with The Texas A&M University System components and their customers but with other universities, institutions, centers, and industry.

TCAT'S CORE COMPETENCIES

Energy Sustainability ★ Environmental Sustainability
Manufacturing & Systems Engineering ★ Information Technology ★ Modeling & Simulation
Technology Insertion ★ Test & Evaluation

TEXAS A&M ENGINEERING

Texas A&M Engineering consists of the Dwight Look College of Engineering, and three engineering agencies, including TEES: Texas A&M Transportation Institute (TTI) conducts research and professional education in all modes of transportation. The Texas A&M Engineering Extension Service (TEEX) works to develop a highly skilled and educated workforce and enhances public safety through training, continuing education, and technical assistance.



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