



# Facility Assessment Database / Tool

The screenshot displays the Facility Assessment Database / Tool interface. At the top, there are several data fields for building information: Bldg. Name (BASE ENGINEER ADMINISTRATION), Installation (MPLS), Interest Code (1), CAT NBR (610127), Bldg. Area (42428 SF), Bldg. Use (Partial-Adm), Bldg. Nbr (555), Condition Code (1), Last Inventory (3/5/2009), Priority Code (1), Year (1995), Construction Type (P), Next Inventory (3/5/2014), Hrs. Daily Use (8 hrs), RPUIID (463492), and MDI (59). Below these fields are tabs for Summary, FCA (AMPS), FCA-Contractor, Energy, Space, S-Files, and Energy Profile. The main content area is titled "Energy Estimated Consumption Per Audit 2010" and contains a table with columns for Building Name, Square Footage, Building Type, Annual Electric (Mbtus), Annual Cooling Energy (Mbtus), Annual NG Energy (Mbtus), Annual Heating Energy (Mbtus), Annual Elec/SqFT (Mbtus), and Annual NG/SqFT (Mbtus). The table shows data for "General Administrative Bldg" with values: 42,428, Office, 2,221, 1,009, 1,324.18, 1,171.58, 5,544.86, 0.052, and 0.031. Below the table are links for Checklist and Questionnaire. The bottom section is titled "Actual Consumption (Meter Readings FY11)" and includes a table with columns for 2010 Reading (KWh), 2011 Reading (KWh), Annual Consumption (KWh), Annual Consumption (Mbtus), and Electric/SqFT (Mbtus). The table shows two rows of data and a Totals row with values: 344,519, 563,507, 218,988, 747, 0.018; 682,205, 1,140,762, 458,557, 1,565, 0.037; and Totals: 677,545, 0.055.

## EVALUATE BUILDINGS BASED ON CONDITION, ENERGY USE, SPACE UTILIZATION AND COST

Our Multi-module MS Access database provides a single location to evaluate buildings based on their physical condition, energy use, space utilization and cost. Our Facility Assessment Database/Tool (FAD) links, summarizes and displays data from different systems and studies. The FAD allows for the integration of distributed information sources into a common tool allowing users to make decisions based on different sources of information.

The tool is capable of tracking hundreds of buildings and can be used to support operations, inspections and analysis-based missions. User-defined reports and additional modules can be created providing customized views and/or data analysis and display. Our FAD, originally designed to manage inventory at federal installations, include seven modules that can be customized to the customer needs.

It links Real Property Inventory items with their respective actual condition, energy use, S-File data, and provides expected energy consumption based on United States (US) Energy Information Administration (EIA) Commercial Building Energy Consumption Survey (CBECS) tables.

There are two modules dedicated to gather and analyze data associated with the *Facility Condition* of a specific installation. The FCA modules extract data from legacy system and provide a ten year view of cost associated with maintaining a specific facility. The *Energy and Energy Profile Modules* are designed to gather real-time data from smart meters and calculate costs. Then it compares the annual readings against forecasted energy usage. The *Space and S-File Modules* display facility managers contact information, number of occupants, space type, usable space, and rentable space, among other parameters used to determine building utilization efficiency.

## FEATURES:

### GENERIC FRAMEWORK

Provides a robust framework for developing customizable modules supporting the full decision-making process.

### DATA INTEGRATION

Allows for the integration of distributed information into a common, user-defined, user-friendly tool.

### FACILITY TRACKING

Ability to track inventory inspections, assessments and demolition status.

### CUSTOM MODULES

Allows for the development of customized components and user-defined information profiles.

### POTENTIAL WEB-BASED TOOL

Could be converted into a web-based tool accessible from any computer with a stable Internet connection, and will run on most current computers.

### CUSTOM APPLICATIONS

Utilized to develop a variety of applications supporting different underlying requirements for a diverse range of customers.

## 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.

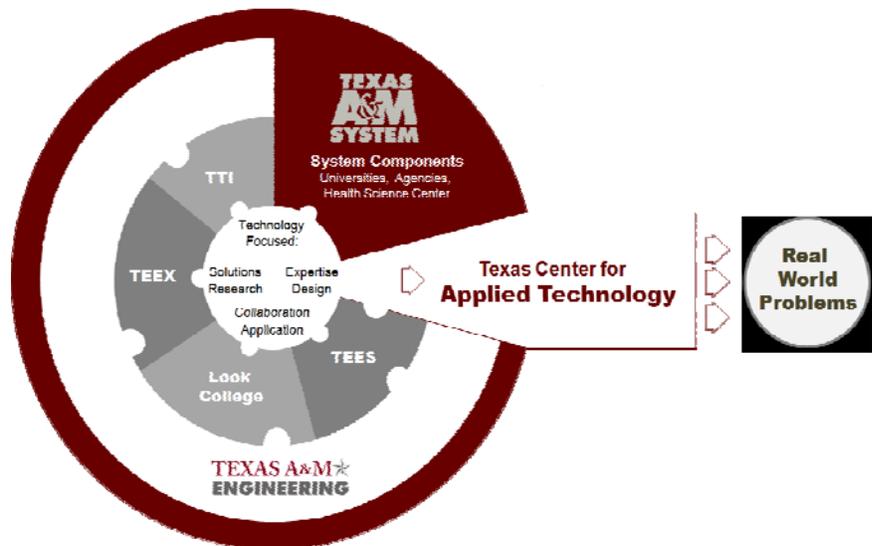
TCAT is part of the Texas A&M Engineering Experiment Station (TEES), a member of The Texas A&M University System. The A&M System is one of the largest and most comprehensive systems of higher education in the United States. Through a statewide network of eleven university campuses, seven state agencies, 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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