

LIFE-CYCLE COST ANALYSIS OVERVIEW

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG

Life-Cycle Cost Analysis has been a legally mandated requirement of Federal building projects for many years. LCCA requirements are significant design activities that must be performed for building design to achieve high performance and sustainable facilities that comply with legislative mandates including the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007, Executive Order 13423, Executive Order 13514 and the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles). All new "buildings" are required to be High Performance Sustainable Buildings.

LCCA is a method for assessing the total cost of facility ownership. It takes into account all costs of acquiring, owning and disposing of a building or building system. LCCA is especially useful when project alternatives that fulfill the same performance requirements, but differ with respect to initial costs and operating costs, have to be compared in order to select the one that maximizes net savings.

The purpose of an LCCA is to estimate the overall costs of project alternatives and to select the design that ensures the facility will provide the lowest overall cost of ownership consistent with its quality and function. The LCCA should be performed early in the design process while there is still a chance to refine the design to ensure a reduction in life-cycle costs.

Kansas City District Life-Cycle Cost Analysis Overview:

- LCCA is legally mandated for Federal building projects
- LCCA achieves high performance and sustainable facilities
- All new "buildings" are required to be High Performance Sustainable Buildings
- LCCA experience includes analysis for mechanical systems, building envelopes, alternative energy systems and lighting design
- Provides objective economic documentation of decisions made during the design
- Develops initial data for the project Report Card to provide to the customer
- Provides advance information to customer for maintenance contracts and Operations and Maintenance budgets
- The Kansas City District is known Corps-wide for its LCCA expertise
- Design and Cost Engineers have extensive experience evaluating systems to identify initial and ongoing costs
- Significant experience in using LCCA as a tool to help customers select the best system and overall building solution
- The District employs seven Cost Engineers, four Interior Designers, six Architects, three Fire Protection Engineers, six Mechanical Engineers and five Electrical Engineers
- Over 620 years of combined experience with LCCA

Point of Contact: Steve Burns Chief, Mechanical and Electrical Section 816-389-3189 MISSION STATEMENT: Life-Cycle Cost Analysis services for our customers within the Kansas City District Area of Responsibility.

VISION STATEMENT: Be the premier provider of LCCA studies in USACE. Provide our customers with options to allow for long term economic savings.

U.S. ARMY CORPS OF ENGINEERS - Kansas City District, Northwestern Division