



Life Cycle Cost (LCC)

Synopsis of the Life Cycle Cost Module (LCC)

OVERVIEW:

A. General Description.

The Life Cycle Cost Module is a DOS-based stand-alone program that provides cost engineers with the capability of developing life cycle cost (LCC) analyses. The term "LCC analysis" refers to an analysis of the total ownership costs of two or more design alternatives/building components over the projected economic life of the building/project. This tool has been developed for the U.S. Army Corps of Engineers by Building Systems Design, Incorporated as a component of the Tri-Service Automated Cost Engineering System (TRACES).

The primary purpose of the LCC Module is to provide USACE cost engineer the capability to perform LCC analyses and produce LCC data during the facility Design Phase. The current version of the module (version 2.2) has a user interface similar to version 5.30 of the MCACES Gold software. The LCC user interface differs in that it features expanded mouse support, point-and-click dialog boxes, and movable and resizable windows.

The current version uses the Life Cycle Cost In Design (LCCID) economic analysis program to calculate the life cycle costs and produce reports. The LCCID engine was developed and is presently being maintained by the U.S. Army Construction Engineering Research Laboratories (CERL) in Champaign, Illinois.

Within the Life Cycle Module software is an accompanying maintenance and repair (M&R) database, which stores cost information for M&R operations to support the LCC studies. The data in the M&R database is based on M&R operations that should be performed for each listed facility component.

B. Functionality.

The software assists the cost engineer in creating LCC studies, either based on an existing study or based on a defaulted template, for both Military Construction (MILCON) and Civil Works (CW) applications. In simple studies, the user can enter all costs for an alternative in a single entry window. In more complex studies, breakdown costs can be entered for one or more of the cost types, using standard breakdown structures implemented in the software.

The program allows the cost engineer to escalate future costs, based either on user-defined escalation rates or--in the case of energy costs--based on escalation data developed annually by the Department of Energy.

The software also allows the user to look up and copy construction costs from an existing MCACES Gold construction estimate and M&R costs from the MCACES M&R database that comes with the LCC module.

The LCC Module produces both individual reports, which show the life cycle costs of each alternative for each of the standard cost column types and comparative reports, which show cost comparisons of the alternatives.

Many other features and capabilities are included in this new and exciting software module.