

Procedures for Life Cycle Cost Analysis

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TO: Users of Department of Examiners of Public Accounts Procedures for Life Cycle Cost Analysis

This document sets forth procedures for conducting life cycle cost analysis under *Ala. Code §§ 41-16-57(c)(1)* and *16-13B-7(c)(1)*. The Department of Examiners of Public Accounts is required to establish these procedures and to distribute the same to all contracting agencies. *Ala. Code §§ 41-16-57(c)(2)* and *16-13B-7(c)(2)*.

Updates and revisions were made throughout this document in order to bring the standards and guidance provided current with applicable law. Suggestions for improvements to these guidelines are welcomed and may be submitted to info@alexaminers.gov or by calling (334) 242-9200.

Sincerely,

Rachel Laurie Riddle
CHIEF EXAMINER

LIFE CYCLE COST ANALYSIS PROCEDURES AND GUIDELINES

1. Life Cycle Cost Analysis Defined

Life Cycle Cost Analysis is defined as “a method for evaluating all relevant costs over the time of a project, product, or measure. This method takes into account first costs, including capital investment costs, purchase, and installation costs; future costs, including energy costs, operating costs, maintenance costs, capital replacement costs, financing costs; and any resale, salvage, or disposal cost, over the life-time of the project, product, or measure.”¹

2. General Provisions

The Awarding Authority² is not required to use life cycle cost analysis in making bid awards; however, Alabama law does allow the use of life cycle cost analysis.

The Awarding Authority may use life cycle cost analysis for personal property purchases as provided by the Alabama Competitive Bid Law, *Ala. Code §§ 41-16-57(c)* and *16-13B-7(c)(1)*. Additionally, Act 2011-530 and Act 2016-298 amended *Ala. Code § 41-16-57(c)(1)* to allow for the use of life cycle cost for goods which are, or are to become, fixtures. Before applying life cycle cost analysis, the Awarding Authority must:

- Determine the personal property (item or items) to be purchased;
- Determine whether the total cost of ownership over the expected life of the item or items, including acquisition costs, plus sustaining costs can be reasonably ascertained using industry recognized and accepted sources;
- Determine that the bid meets the terms, conditions and specifications listed in the invitation to bid;
- Include in the invitation to bid provisions that specify that the lowest responsible bid may be determined using life cycle costs; and
- Include in the invitation to bid the standards to be applied in determining the life cycle costs and the industry recognized and accepted sources that will be applicable to the evaluation.

Alabama law also allows for the use of life cycle costing for real property which is included in the definition of public property pursuant to the Public Works Law³. *Ala. Code §§ 39-2-1* and *39-2-6*, as amended, respectively, defines life cycle costs for public works and prescribes

¹ *Guidance on Life Cycle Cost Analysis Required by Executive Order 13123*, April 2005, prepared for the Department of Energy by Sieglinde K. Fuller, Economist, Office of Applied Economics, National Institute of Standards and Technology, p. 11.

² Awarding Authority refers to those agencies specified in *Ala. Code §§ 41-16-50* and *16-13B-1*.

³ Act 2011-530 amended *Ala. Code §§ 39-2-1* and *39-2-6*, to define life cycle costs for public works projects and to provide conditions under which an awarding authority may consider life cycle costs in determining the lowest responsible bid for a public works project.

the circumstances under which life cycle costing may be utilized for public works. Readers should refer to these statutes when evaluating public works projects.

3. Documentation Requirements

The Awarding Authority must maintain documentation of all items related to the bid process in their bid files as required by Alabama law, including the information on life cycle cost analysis specified below. The Awarding Authority should be aware that often data obtained through electronic means is only available for short periods of time and must, therefore, establish methods to retrieve and maintain this data and make it available for inspection.

- The Awarding Authority must identify how they determined that the Source (“industry recognized and accepted source”) is an Industry Recognized Source. The Source must be independent of the companies solicited or submitting bids.
- The Awarding Authority must determine the relevant costs to be used based on how the personal property is to be used and the characteristics of the personal property. Relevant costs include, but are not limited to purchase price, installation costs, operating costs, energy costs, repair and maintenance costs, training costs, disposal costs, residual values, etc.
- The Awarding Authority must consider all relevant costs related to the item to be purchased in evaluating the total cost of ownership. These elements must be specified in the invitation to bid.
- The Awarding Authority must identify how the cost elements will be used in calculating the total cost of ownership. All information related to the calculation and evaluation of the total cost of ownership must be included in the bid files and must be made available for public inspection.
- The Awarding Authority must receive all information that will be considered in the awarding of the bid by the date of the bid opening. Any information furnished after the opening of the bids must not be considered.

4. Effective Date

These guidelines became effective on January 1, 2009 and shall remain in effect until amended or rescinded by the Department of Examiners of Public Accounts or by operation of law.