

Matrix Issue I-III.C. Total Cost of Ownership (TCO) Incentive Program Scenarios Studies originally prepared for Senator Rosapepe

Wiki Definition: *Total cost of ownership (TCO) is a financial estimate intended to help buyers and owners determine the direct and indirect costs of a product or system. It is a management accounting concept that can be used in full cost accounting or even ecological economics where it includes social costs.*

Function

The draft incentive compares the **Baseline TCO** of a project against the **Projected TCO** and awards a portion of the reduced TCO to the Local Education Agency (LEA) as percentage points added to the State Share Percentage. This bonus will increase the State Share Percentage for the construction cost of a project—thereby reducing the LEA share—but, overall, both the State and LEA will have lower TCO. The TCO incentive would apply to new, replacement, or renewal projects. A renewal project follows the definition of the National Council of School Facilities that defines a renewed school facility as one with a Facility Condition Index (FCI) (=cost of repair divided by cost of replacement) of 15% or lower (inverse is 85%).

Purpose

The eight incentive scenarios described in this explainer are intended to provide a general understanding of calculation variables. Scenarios A–D do not provide an incentive for any savings over 100%. These scenarios benefit high-wealth LEAs more than they benefit low-wealth LEAs. Scenarios E–H provide an incentive for savings over 100% which could be paid as a bonus above the project cost, thereby obtaining more equal benefits for low- and high-wealth LEAs.

Definitions

The **Baseline TCO** of a school facility is based upon the IAC's annual allowed project cost per square foot (including site work) times the total square feet allowed by the IAC for the project PLUS the estimated 30-year cost to operate and maintain the project calculated at 4% per year of the IAC project cost (including site work but excluding land and soft costs such as design, surveys, and relocatable furniture, fixtures, and equipment).

The **Projected TCO** shall be the same calculation except that the project cost shall be the contracted project cost (verified at project completion) PLUS the calculated 30-year cost to operate and maintain. Calculated cost to operate and maintain shall be based upon standardized building-system life-cycle costs. The IAC would develop these baseline cost data based upon industry standards, manufacturer recommendations, IFMA's Asset Lifecycle Model for Total Cost of Ownership Management, and other similar information. These cost data would be challengeable by LEAs.

Savings

Two possible examples of TCO savings for a project:

- 1) A project is made up of many building systems. Sometimes, long-life low-maintenance building systems costing more to install—such as a standing seam metal roof—can yield a 30-year TCO that is lower than the Baseline TCO.
- 2) A reduction in GSF will generally result in a lower TCO. A 10% smaller footprint would likely yield a 10% or lower Projected TCO.

Matrix Issue I-III.C. Total Cost of Ownership (TCO) Incentive Program Scenarios
Studies originally prepared for Senator Rosapepe

Spreadsheets of all eight scenarios have been provided to the members. Only Scenarios C, G and H will be handouts at the meeting, as they generally demonstrate total savings to the State as well as features of fair balance for State distributions. It should be noted that the total State and Local combined TCO savings are uniform for all eight scenarios.

Scenarios A – D:

State Share Percentage cannot exceed 100% of IAC-eligible project costs.

- A. Scenario A: 1% SAVINGS INCENTIVE for each 1% REDUCTION.
- B. Scenario B: 3/4% SAVINGS INCENTIVE for each 1% REDUCTION.
- C. Scenario C: 3/4% SAVINGS INCENTIVE for each 1% REDUCTION (except, for LEAs with state share of 89% or more, a 1% savings incentive up to 100%).
- D. Scenario D: 3/4% SAVINGS INCENTIVE for each 1% REDUCTION (except, for LEAs with state share of 89% or more, a 1% savings incentive up to 100%) PLUS 1/2% ADDITIONAL SAVINGS for reductions of 30% or more.

Scenarios E – H:

State Share Percentage may exceed 100% of IAC-eligible project costs. Under these scenarios, the LEA would receive 75 percent of any state share above 100% of project cost. This bonus above eligible project costs could be utilized for any tax-exempt bond qualified expense for the project such as design and furniture, or may be added to the LEA's Education Article 5-303 reserve account.

- E. Scenario E: 1% SAVINGS INCENTIVE for each 1% REDUCTION.
- F. Scenario F: 3/4% SAVINGS INCENTIVE for each 1% REDUCTION.
- G. Scenario G: 3/4% SAVINGS INCENTIVE for each 1% REDUCTION (except, for LEAs with state share of 89% or more, a 1% savings incentive up to 100%).
- H. Scenario H: 3/4% SAVINGS INCENTIVE for each 1% REDUCTION (except, for LEAs with state share of 89% or more, a 1% savings incentive up to 100%) PLUS 1/2% ADDITIONAL SAVINGS for reductions of 30% or more.