



## **Workgroup on Educational Development Specifications**

### **Materials for discussion**

#### **A. Topic #5: Cost per Student of School Construction**

1. Methods for Calculating Cost per Student (Options 1-3), revised to include figures for cost both including *and* excluding site costs.
2. Cost analysis on sample set of projects from School Planning & Management Magazine.
3. Data, Design, and Cost of Ownership
4. Total Cost of Ownership – Estimate Tool

# Option 1: SB92 Calculation Method

## SB92 Statutory Calculation with Rolling 3 Year Average (FY15-FY17) of New, Replacement, Renovation, & Renovation/Addition

| 2015                          |                    |                             |                          | 2015 with Site                  |                                |                          |                                | 2015 without Site                  |                                   |                          |                                |
|-------------------------------|--------------------|-----------------------------|--------------------------|---------------------------------|--------------------------------|--------------------------|--------------------------------|------------------------------------|-----------------------------------|--------------------------|--------------------------------|
| School Type                   | # of Project Types | Average Proposed Enrollment | Average S.F. per Student | Average cost with site per S.F. | Average Project Cost with Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" | Average cost without site per S.F. | Average Project Cost without Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" |
| Elementary                    | 3                  | 640                         | 135                      | \$ 267                          | \$ 23,296,774                  | \$ 35,918                | \$ 25,143                      | \$ 236                             | \$ 20,307,502                     | \$ 31,648                | \$ 22,153                      |
| Elementary/Middle (PK-8)      | 0                  |                             |                          |                                 |                                |                          |                                |                                    |                                   |                          |                                |
| Middle                        | 3                  | 826                         | 158                      | \$ 329                          | \$ 42,974,387                  | \$ 52,214                | \$ 36,550                      | \$ 270                             | \$ 35,399,522                     | \$ 42,927                | \$ 30,049                      |
| High                          | 2                  | 1,369                       | 179                      | \$ 389                          | \$ 88,673,748                  | \$ 70,539                | \$ 49,378                      | \$ 323                             | \$ 73,769,765                     | \$ 58,670                | \$ 41,069                      |
| <b>Total All School Types</b> | <b>8</b>           |                             |                          |                                 |                                |                          |                                |                                    |                                   |                          |                                |

| 2016                          |                    |                             |                          | 2016 with Site                  |                                |                          |                                | 2016 without Site                  |                                   |                          |                                |
|-------------------------------|--------------------|-----------------------------|--------------------------|---------------------------------|--------------------------------|--------------------------|--------------------------------|------------------------------------|-----------------------------------|--------------------------|--------------------------------|
| School Type                   | # of Project Types | Average Proposed Enrollment | Average S.F. per Student | Average cost with site per S.F. | Average Project Cost with Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" | Average cost without site per S.F. | Average Project Cost without Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" |
| Elementary                    | 11                 | 635                         | 141                      | \$ 284                          | \$ 24,965,774                  | \$ 39,706                | \$ 27,794                      | \$ 253                             | \$ 22,274,215                     | \$ 35,546                | \$ 24,882                      |
| Elementary/Middle (PK-8)      | 2                  | 634                         | 186                      | \$ 309                          | \$ 36,520,545                  | \$ 57,589                | \$ 40,312                      | \$ 294                             | \$ 34,694,518                     | \$ 54,709                | \$ 38,297                      |
| Middle                        | 2                  | 986                         | 160                      | \$ 211                          | \$ 33,560,503                  | \$ 34,990                | \$ 24,493                      | \$ 183                             | \$ 29,037,147                     | \$ 30,148                | \$ 21,104                      |
| High                          | 4                  | 1,008                       | 177                      | \$ 311                          | \$ 52,868,175                  | \$ 54,194                | \$ 37,936                      | \$ 290                             | \$ 49,075,297                     | \$ 50,825                | \$ 35,578                      |
| <b>Total All School Types</b> | <b>19</b>          |                             |                          |                                 |                                |                          |                                |                                    |                                   |                          |                                |

| 2017                          |                    |                             |                          | 2017 with Site                  |                                |                          |                                | 2017 without Site                  |                                   |                          |                                |
|-------------------------------|--------------------|-----------------------------|--------------------------|---------------------------------|--------------------------------|--------------------------|--------------------------------|------------------------------------|-----------------------------------|--------------------------|--------------------------------|
| School Type                   | # of Project Types | Average Proposed Enrollment | Average S.F. per Student | Average cost with site per S.F. | Average Project Cost with Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" | Average cost without site per S.F. | Average Project Cost without Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" |
| Elementary                    | 15                 | 652                         | 144                      | \$ 333                          | \$ 30,687,888                  | \$ 47,964                | \$ 33,575                      | \$ 277                             | \$ 25,367,278                     | \$ 40,052                | \$ 28,037                      |
| Elementary/Middle (PK-8)      | 0                  |                             |                          |                                 |                                |                          |                                |                                    |                                   |                          |                                |
| Middle                        | 0                  |                             |                          |                                 |                                |                          |                                |                                    |                                   |                          |                                |
| High                          | 2                  | 973                         | 257                      | \$ 363                          | \$ 92,717,689                  | \$ 90,136                | \$ 63,095                      | \$ 297                             | \$ 74,187,829                     | \$ 72,945                | \$ 51,062                      |
| <b>Total All School Types</b> | <b>17</b>          |                             |                          |                                 |                                |                          |                                |                                    |                                   |                          |                                |

| 3 Year Average (FY 15 - FY 17) |                    |                             |                          | 3 Year Average with site (FY 15 - FY 17) |                                |                          |                                | 3 Year Average without Site (FY 15 - FY 17) |                                   |                          |                                |
|--------------------------------|--------------------|-----------------------------|--------------------------|--|--------------------------------|--------------------------|--------------------------------|---|-----------------------------------|--------------------------|--------------------------------|
| School Type                    | # of Project Types | Average Proposed Enrollment | Average S.F. per Student | Average cost with site per S.F.          | Average Project Cost with Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" | Average cost without site per S.F.          | Average Project Cost without Site | Average Cost Per Student | 30% Deduction "IIPP Threshold" |
| Elementary                     | 29                 | 644                         | 142                      | \$ 308                                   | \$ 27,752,833                  | \$ 43,585                | \$ 30,510                      | \$ 264                                      | \$ 23,670,622                     | \$ 37,474                | \$ 26,232                      |
| Elementary/Middle (PK-8)       | 2                  | 634                         | 186                      | \$ 309                                   | \$ 36,520,545                  | \$ 57,589                | \$ 40,312                      | \$ 294                                      | \$ 34,694,518                     | \$ 54,709                | \$ 38,297                      |
| Middle                         | 5                  | 890                         | 159                      | \$ 282                                   | \$ 39,208,834                  | \$ 45,325                | \$ 31,727                      | \$ 236                                      | \$ 32,854,572                     | \$ 37,816                | \$ 26,471                      |
| High                           | 8                  | 1089                        | 197                      | \$ 343                                   | \$ 71,781,946                  | \$ 67,266                | \$ 47,086                      | \$ 300                                      | \$ 61,527,047                     | \$ 58,316                | \$ 40,821                      |
| <b>Total All School Types</b>  | <b>44</b>          |                             |                          |  |                                |                          |                                |   |                                   |                          |                                |

Notes:  
Data includes eligible & ineligible costs.  
Backup Data available upon request.

### Option 2: FY 20 CIP Eligible Cost Basis Calculation

| FY 20 CIP Eligible Cost Basis Calculation |   |  |   |   | FY 20 CIP Eligible Cost Basis with Site   |   |                                       |                                    | FY 20 CIP Eligible Cost Basis without Site  |  |                                       |                                    |
|---|---|--|---|---|---|---|---------------------------------------|------------------------------------|---|--|---------------------------------------|------------------------------------|
| A   | B   | C  | D   | E   | F   | G   | H                                     | I                                  | J   | K  | L                                     | M                                  |
| School Type                               | # of Project Types from FY15-FY17               | Average # of students from FY15- FY17                                  | IAC Eligible S.F. per Student*                        | IAC Eligible Gross S.F.                                   | IAC Eligible Cost w/site per S.F. FY 2020 | IAC Eligible project cost with site                             | Average Cost per Student              | 30% Deduction "IIPP Threshold"     | IAC Eligible Cost w/o site per S.F. FY 2020 | IAC Eligible project cost without site                           | Average Cost per Student              | 30% Deduction "IIPP Threshold"     |
| Elementary                                | 29  | 644  | 108   | 69,552  | \$ 378                                    | \$ 26,290,656   | \$ 40,824                             | \$ 28,577                          | \$ 318                                      | \$ 22,117,536  | \$ 34,344                             | \$ 24,041                          |
| Elementary/Middle (PK-8)                  | 2   | 634  | 119   | 75,446  | \$ 378                                    | \$ 28,518,588   | \$ 44,982                             | \$ 31,487                          | \$ 318                                      | \$ 23,991,828  | \$ 37,842                             | \$ 26,489                          |
| Middle                                    | 5   | 889  | 130   | 115,570   | \$ 378                                    | \$ 43,685,460   | \$ 49,140                             | \$ 34,398                          | \$ 318                                      | \$ 36,751,260  | \$ 41,340                             | \$ 28,938                          |
| High                                      | 8   | 1,089  | 160   | 174,240   | \$ 378                                    | \$ 65,862,720   | \$ 60,480                             | \$ 42,336                          | \$ 318                                      | \$ 55,408,320  | \$ 50,880                             | \$ 35,616                          |
| Data Source:                              | Count of projects used to average # of students | Average # of students from Rolling State Average projects (FY15- FY17) | IAC Administrative Procedures Guide - APPENDIX 102 B* | Average # of Students (C) x Eligible S.F. per Student (D) |   | IAC Eligible Gross S.F. (E.) x IAC Cost w/ site for FY 2020 (F) | Project Cost (G) / # of Students (C.) | Average Cost per Student (H) - 30% |   | IAC Eligible Gross S.F. (E.) x IAC Cost w/o site for FY 2020 (J) | Project Cost (K) / # of Students (C.) | Average Cost per Student (M) - 30% |

**Note:**

FY 2020 Construction cost with site of \$378.00; Construction cost without site of \$318.00.

\*The PK-8 IAC Eligible S.F. per Student number is not published in the APG - Appendix 102 B - State-Funded Maximum Gross Area Allowance, therefore the number used is estimated.

## Option 3: Three Year Average CIP Eligible Cost Basis Calculation (FY 2015 - FY 2017)

### Three Year Average CIP Eligible Cost Basis Calculation (FY 2015 - FY 2017)

| FY 2015 | School Type                   | # of Project Types | Average # of students | IAC Eligible S.F. per Student | IAC Eligible Gross S.F. | FY 15                             |                                     |                          |                                | FY 15                               |  |                          |                                |
|---------|-------------------------------|--------------------|-----------------------|-------------------------------|-------------------------|-----------------------------------|-------------------------------------|--------------------------|--------------------------------|-------------------------------------|--|--------------------------|--------------------------------|
|         |                               |                    |                       |                               |                         | IAC Eligible Cost w/site per S.F. | IAC Eligible project cost with site | Average Cost per Student | 30% Deduction "IIPP Threshold" | IAC Eligible Cost w/o site per S.F. | IAC Eligible project cost without site | Average Cost per Student | 30% Deduction "IIPP Threshold" |
|         | Elementary                    | 3                  | 844                   | 104                           | 87,741.33               | \$ 261                            | \$ 22,896,978                       | \$ 27,140                | \$ 18,998                      | \$ 233                              | \$ 20,443,731                          | \$ 24,232                | \$ 16,962                      |
|         | Elementary/Middle (PK-8)      | 0                  |                       |                               |                         | \$ 261                            |                                     |                          |                                | \$ 233                              |  |                          |                                |
|         | Middle                        | 3                  | 682                   | 135                           | 92,025.00               | \$ 261                            | \$ 24,014,844                       | \$ 35,230                | \$ 24,661                      | \$ 233                              | \$ 21,441,825                          | \$ 31,455                | \$ 22,019                      |
|         | High                          | 2                  | 934                   | 160                           | 149,360.00              | \$ 261                            | \$ 38,976,986                       | \$ 41,754                | \$ 29,228                      | \$ 233                              | \$ 34,800,880                          | \$ 37,280                | \$ 26,096                      |
|         | <b>Total All School Types</b> | <b>8</b>           |                       |                               |                         |                                   |                                     |                          |                                |                                     |  |                          |                                |

| FY 2016 | School Type                   | # of Project Types | Average # of students | IAC Eligible S.F. per Student | IAC Eligible Gross S.F. | FY 16                             |                                     |                          |                                | FY 16                               |  |                          |                                |
|---------|-------------------------------|--------------------|-----------------------|-------------------------------|-------------------------|-----------------------------------|-------------------------------------|--------------------------|--------------------------------|-------------------------------------|--|--------------------------|--------------------------------|
|         |                               |                    |                       |                               |                         | IAC Eligible Cost w/site per S.F. | IAC Eligible project cost with site | Average Cost per Student | 30% Deduction "IIPP Threshold" | IAC Eligible Cost w/o site per S.F. | IAC Eligible project cost without site | Average Cost per Student | 30% Deduction "IIPP Threshold" |
|         | Elementary                    | 11                 | 572                   | 108                           | 61,756.36               | \$ 336                            | \$ 20,724,201                       | \$ 36,243                | \$ 25,370                      | \$ 282                              | \$ 17,415,295                          | \$ 30,456                | \$ 21,319                      |
|         | Elementary/Middle (PK-8)      | 2                  | 655                   | 121                           | 79,255.00               | \$ 336                            | \$ 26,596,393                       | \$ 40,605                | \$ 28,424                      | \$ 282                              | \$ 22,349,910                          | \$ 34,122                | \$ 23,885                      |
|         | Middle                        | 2                  | 702                   | 135                           | 94,770.00               | \$ 336                            | \$ 31,802,917                       | \$ 45,303                | \$ 31,712                      | \$ 282                              | \$ 26,725,140                          | \$ 38,070                | \$ 26,649                      |
|         | High                          | 4                  | 996                   | 160                           | 159,400.00              | \$ 336                            | \$ 53,491,452                       | \$ 53,693                | \$ 37,585                      | \$ 282                              | \$ 44,950,800                          | \$ 45,120                | \$ 31,584                      |
|         | <b>Total All School Types</b> | <b>19</b>          |                       |                               |                         |                                   |                                     |                          |                                |                                     |  |                          |                                |

| FY 2017 | School Type                   | # of Project Types | Average # of students | IAC Eligible S.F. per Student | IAC Eligible Gross S.F. | FY 17                             |                                     |                          |                                | FY 17                               |  |                          |                                |
|---------|-------------------------------|--------------------|-----------------------|-------------------------------|-------------------------|-----------------------------------|-------------------------------------|--------------------------|--------------------------------|-------------------------------------|--|--------------------------|--------------------------------|
|         |                               |                    |                       |                               |                         | IAC Eligible Cost w/site per S.F. | IAC Eligible project cost with site | Average Cost per Student | 30% Deduction "IIPP Threshold" | IAC Eligible Cost w/o site per S.F. | IAC Eligible project cost without site | Average Cost per Student | 30% Deduction "IIPP Threshold" |
|         | Elementary                    | 15                 | 586                   | 108                           | 63,338.40               | \$ 349                            | \$ 22,084,200                       | \$ 37,656                | \$ 26,359                      | \$ 293                              | \$ 18,558,151                          | \$ 31,644                | \$ 22,151                      |
|         | Elementary/Middle (PK-8)      | 0                  |                       |                               |                         | \$ 349                            |                                     |                          |                                | \$ 293                              |  |                          |                                |
|         | Middle                        | 0                  |                       |                               |                         | \$ 349                            |                                     |                          |                                | \$ 293                              |  |                          |                                |
|         | High                          | 2                  | 996                   | 160                           | 159,400.00              | \$ 349                            | \$ 55,577,998                       | \$ 55,787                | \$ 39,051                      | \$ 293                              | \$ 46,704,200                          | \$ 46,880                | \$ 32,816                      |
|         | <b>Total All School Types</b> | <b>17</b>          |                       |                               |                         |                                   |                                     |                          |                                |                                     |  |                          |                                |

### Three Year Average (FY 2015 - FY 2017)

| 3 Year Rolling Average (FY 2015 - FY 2017) | School Type                   | # of Project Types | Average # of students | IAC Eligible S.F. per Student | IAC Eligible Gross S.F. | FY 15-FY17                        |                                     |                          |                                | FY 15-FY17                          |  |                          |                                |
|--|-------------------------------|--------------------|-----------------------|-------------------------------|-------------------------|-----------------------------------|-------------------------------------|--------------------------|--------------------------------|-------------------------------------|--|--------------------------|--------------------------------|
|  |                               |                    |                       |                               |                         | IAC Eligible Cost w/site per S.F. | IAC Eligible project cost with site | Average Cost per Student | 30% Deduction "IIPP Threshold" | IAC Eligible Cost w/o site per S.F. | IAC Eligible project cost without site | Average Cost per Student | 30% Deduction "IIPP Threshold" |
|  | Elementary                    | 29                 | 644                   | 108                           | 69,566.90               | \$ 315                            | \$ 21,918,442                       | \$ 34,028                | \$ 23,819                      | \$ 269                              | \$ 18,736,452                          | \$ 29,088                | \$ 20,361                      |
|  | Elementary/Middle (PK-8)      | 2                  | 634                   | 119                           | 75,446.00               | \$ 315                            | \$ 23,770,771                       | \$ 37,493                | \$ 26,245                      | \$ 269                              | \$ 20,319,871                          | \$ 32,050                | \$ 22,435                      |
|  | Middle                        | 5                  | 890                   | 130                           | 115,674.00              | \$ 315                            | \$ 36,445,407                       | \$ 40,959                | \$ 28,671                      | \$ 269                              | \$ 31,154,478                          | \$ 35,013                | \$ 24,509                      |
|  | High                          | 8                  | 1,089                 | 160                           | 174,240.00              | \$ 315                            | \$ 54,897,797                       | \$ 50,411                | \$ 35,288                      | \$ 269                              | \$ 46,928,059                          | \$ 43,093                | \$ 30,165                      |
|  | <b>Total All School Types</b> | <b>44</b>          |                       |                               |                         |                                   |                                     |                          |                                |                                     |  |                          |                                |

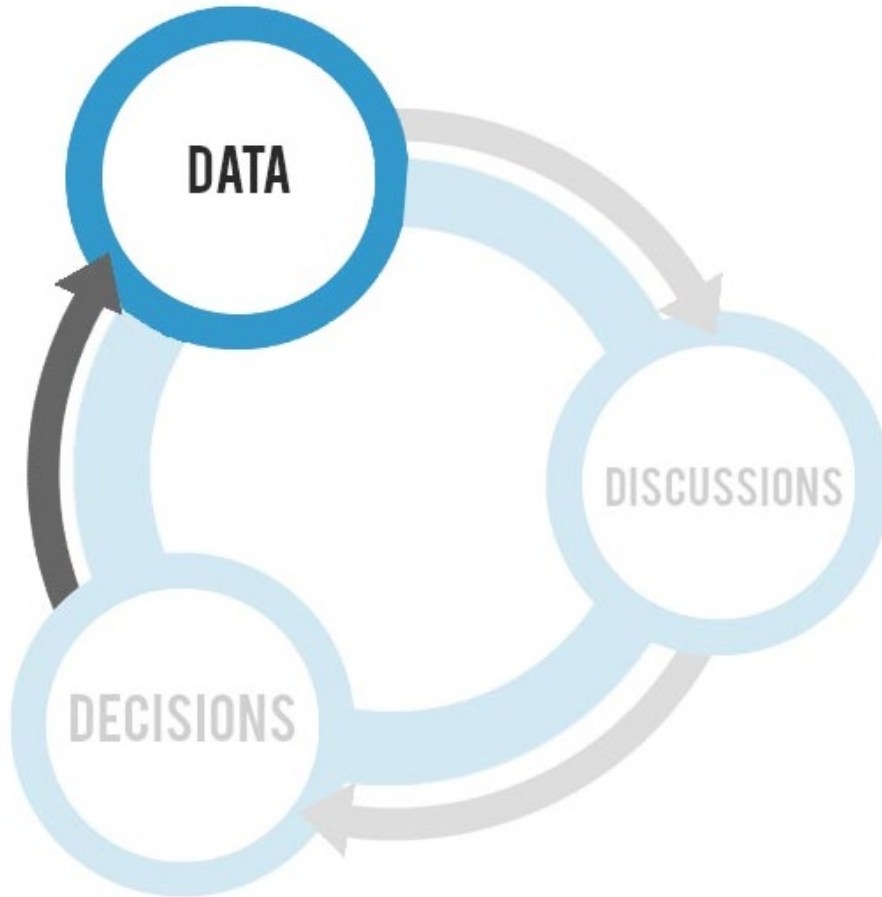
**Note:**

Construction cost with site of \$260.96 for 2015, \$335.58 for 2016 & \$348.67 for 2017 = 3 year average of \$315.07.  
 Construction cost without site of \$233.00 for 2015, \$282 for 2016 & \$293.00 for 2017 = 3 year average of \$269.33.

## Cost Analysis on Sample Set of Projects from School Planning & Management Magazine, November–December 2018

| Project   | Grades Served | Project Type | Enrollment /Capacity | Project GSF per Student/ Capacity | MD State-Eligible GSF per Capacity (APG App. 102B) | Constr. Cost (\$/SF)      | 30 YR M&O per Student Capacity<br><small>(\$8/yr/SF x 30 = \$240/yr/SF)</small> | 30 YR M&O per Student Enrollment<br><small>(\$8/yr/SF x 30 = \$240/yr/SF)</small> | Location; GSF           |
|-----------|---------------|--------------|----------------------|-----------------------------------|--|---------------------------|---|---|-------------------------|
| Snow Hill | 9-12          | Reno -Addn   | 328/720              | 396/180                           | <b>160</b>   | \$300<br><br>\$39,000,000 | <b>\$43,333</b><br><br>(240*130,000/720)  | \$95,122<br><br>(240*130,000/328)   | Snowhill, MD; 130,000   |
| <b>A</b>  | K-6           | <b>Reno</b>  | 939/939              | 107/107                           | <b>110</b>   | \$110                     | <b>\$26,400</b>   | \$26,400  | Selden, NY; 100,846     |
| <b>B</b>  | PK-5          | New          | 240/460              | 290/151                           | <b>127</b>   | \$719                     | <b>\$30,480</b>   | \$58,420  | Bronx, NY; 69,500       |
| <b>C</b>  | PK-12         | New          | 240/405              | 229/136                           | <b>130</b>   | \$175                     | <b>\$31,200</b>   | \$52,650  | Wisner, NE; 55,000      |
| <b>D</b>  | 7-8           | New          | 1318/1860            | 148/105                           | <b>131</b>   | \$185                     | <b>\$31,440</b>   | \$44,369  | Biloxi, MS; 194,749     |
| <b>E</b>  | 6-8           | New          | 882/900              | 149/146                           | <b>144</b>   | \$200                     | <b>\$34,560</b>   | \$35,265  | Perrysburg, OH; 131,307 |
| <b>F</b>  | 7-12          | New          | 215/153              | 158/170                           | <b>162</b>   | \$852                     | <b>\$38,800</b>   | \$27,668  | Nunavut, CN; 34,000     |
| <b>G</b>  | 9-12          | <b>Reno</b>  | 584/600              | 212/207                           | <b>164</b>   | \$214                     | <b>\$39,360</b>   | \$40,438  | Kasson, MN; 124,000     |
| <b>H</b>  | K-5           | New          | 900/600              | 122/183                           | <b>120</b>   | \$232                     | <b>\$28,800</b>   | \$19,200  | Desoto, TX; 109,500     |
| <b>I</b>  | 9-12          | New          | 564/500              | 118/133                           | <b>160</b>   | \$300                     | <b>\$38,400</b>   | \$34,043  | Waukee, IA; 66,600      |
| <b>J</b>  | K-8           | New          | 788/1211             | 226/147                           | <b>114</b>   | \$179                     | <b>\$27,360</b>   | \$42,047  | Orlando, FL; 178,149    |

# Design



- ✓ Lessons Learned and National Trends
- ✓ Facilities Master Plan
- ✓ Educational Specifications
- ✓ Maintainability
- ✓ **\$ Total Cost of Ownership**

Will the facility design solution be fiscally sustainable?



# Data, Design, and Cost of Ownership

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A paramount goal of Educational Development Specifications is the design of spaces that support the delivery of educational programs fully and cost effectively. Described here is the framework for that effort, including its fiscal hallmarks and the full-life expectancy of school facilities.

The basis for **Life-Cycle Cost Analysis (LCCA)** is typically 30 years, or up to the time for facility replacement or renewal; total cost of ownership is the same (National Institute of Building Science):

- **Building Costs** – Approximately **2%** of the total
- **Operation and Maintenance Costs** – About **6%**
- **Personnel and Other Costs** – About **92%**

*NOTE: **Planning and design** typically makes up about 6% of the building cost and equates to only about **00.12% [12/1000th]** of the total cost of ownership. [  $0.02 \times 0.06 = 0.0012$ ].*

# DRAFT IAC Educational Development Specifications

## Total Cost of Ownership - ESTIMATE TOOL

School Name: ED Specs Workgroup Academy

LEA: Maryland County

| PROJECT FIRST COSTS OF BUILDING SCHOOL FACILITY                                   | Local        | State CIP    | Total               |
|---|--------------|--------------|---------------------|
| <b>Total Project Cost</b>   | \$31,771,600 | \$14,288,400 | <b>\$46,060,000</b> |
| <b>Per Student with Design Capacity (800 students)</b>                            |              |              |                     |
| Excluding Soft Costs  | \$30,890     | \$17,861     | \$48,750            |
| With all Project Costs  | \$39,715     | \$17,861     | <b>\$57,575</b>     |
| <b>Per Student with Current Enrollement (550 students)</b>                        |              |              |                     |
| Excluding Soft Costs  | \$44,930     | \$25,979     | \$70,909            |
| With all Project Costs  | \$57,767     | \$25,979     | \$83,745            |
| <b><u>What If</u> - with IAC MGAA (108 GSF/student) and Design Capacity (800)</b> |              |              |                     |
| <b>Total Project Cost</b>   | \$19,407,600 | \$14,288,400 | <b>\$33,696,000</b> |
| Per Student excluding Soft Costs  | \$24,260     | \$17,861     | \$42,120            |
| Per Student with all Project Costs  | \$33,085     | \$17,861     | <b>\$50,945</b>     |

| COST OF FACILITY OWNERSHIP (on top of 1st Project Cost)                             | Local        | State CIP    | Total               |
|---|--------------|--------------|---------------------|
| <b>Routine Maintenance and Operations 2% of MACC w/o Capital Maintenance or UMA</b> |              |              |                     |
| Annual Cost   | \$780,000    | \$0          | \$780,000           |
| 30-year Cost Total  | \$35,100,000 | \$11,700,000 | <b>\$46,800,000</b> |
| 30 year Cost per Student (Design Capacity)  | \$43,875     | \$14,625     | \$58,500            |
| <b>All Required Maintenance and Operations 4% of MACC w/o UMA</b>                   |              |              |                     |
| Annual Cost   | \$1,950,000  | \$390,000    | \$2,340,000         |
| 30-year Cost Total  | \$58,500,000 | \$11,700,000 | <b>\$70,200,000</b> |
| 30 year Cost per Student (Design Capacity)  | \$73,125     | \$14,625     | \$87,750            |



## Project Information

|   |                     |     |
|---|---------------------|-----|
| IAC Maximum Eligible Students               | 700                 |     |
| Student Design Capacity (Project #)         | <b>800</b>          |     |
| Current Student Enrollment                  | 550                 |     |
| Grades Served                               | K-6                 |     |
| Project Gross Square Feet (GSF)             | 100,000             |     |
| Project GSF Per Student                     | 125.0               |     |
| IAC GSF Per Student                         | 108.0               |     |
| IAC Maximum Eligible Gross Area             | 75,600              |     |
| IAC Eligible Square Foot Cost               | \$378               |     |
| IAC Maximum Eligible Funding                | \$28,576,800        |     |
| IAC Maximum State Participation             | 50%                 |     |
| IAC Maximum Project Funding                 | <b>\$14,288,400</b> |     |
| FTE Teachers                                | 50.0                |     |
| FTE Other Personnel                         | 30.0                |     |
| Teacher : Student Ratio (w/design capacity) | <b>16.0</b>         | 800 |
| All FTE : Student Ratio (w/design capacity) | <b>10.0</b>         | 800 |

### Max Allowable Const Cost (MACC)

|                                 |          | Local        | State        | Total               |
|---------------------------------|----------|--------------|--------------|---------------------|
| Project Cost without Soft Costs | Contract | \$24,711,600 | \$14,288,400 | <b>\$39,000,000</b> |
| Square Foot Cost to Build       |          | \$390        |              |                     |

### Project Soft Costs (in addition to MACC)

|                         |      |             |  |                    |
|-------------------------|------|-------------|--|--------------------|
| Long Range Planning     | Cost | \$20,000    |  | \$20,000           |
| Design Cost (% of MACC) | 6%   | \$2,340,000 |  | \$2,340,000        |
| Land                    | Cost | \$3,500,000 |  | \$3,500,000        |
| Demolition              | Cost | \$0         |  | \$0                |
| Off-site Infrastructure | Cost | \$1,200,000 |  | \$1,200,000        |
| FF&E (4-7% of MACC)     | 6%   | \$2,340,000 |  | \$2,340,000        |
| Total Soft Costs        |      | \$7,040,000 |  | <b>\$7,060,000</b> |

### Annual and Total Costs of Ownership (% of MACC) or Calculated Life Cycle Costs

|   |    |           |           |           |
|---|----|-----------|-----------|-----------|
| Annual M&O  | 2% | \$780,000 |           | \$780,000 |
| Annual Capital Maintenance (Systemics)                                    | 2% | \$390,000 | \$390,000 | \$780,000 |
| <i>Annual Upgrades for Program Support/<br/>Modernize/Additions (UMA)</i> | 2% | \$780,000 |           | \$780,000 |