### Workgroup on the Assessment and Funding of School Facilities

Dr. Karen B. Salmon, Chair

### Wednesday August 28, 2019 9:00 a.m. to 1:00 p.m. 3 West Miller Senate Office Building Senate Budget and Taxation Committee

### Agenda

- I. Welcome and Opening Remarks
- II. Proposed Work Plan
- III. Assessment Weighting How a Deficiency Score is Calculated
- IV. Closing Remarks and Adjournment

### Workgroup on the Assessment and Funding of School Facilities Draft Work Plan

### **Objectives:**

The workgroup shall:

- Consider how relative facility condition within the facilities sufficiency standards should be prioritized
  - Take local priorities into account
  - Should prioritization be by category?
  - Should prioritization be by local jurisdiction or statewide?
- Determine whether and how assessment results should be used in construction funding decisions
- Consider whether the State should provide funding incentives for local jurisdictions that reduce the total cost of ownership of public school facilities

### Work Plan:

### August 28, 2019

- Consider potential assessment category weightings
- Evaluate and test model demonstrating how weightings and priority categories can impact a school's deficiency score based facility condition and educational sufficiency

#### September 25, 2019

- Consider potential incentives to minimize Total Cost of Ownership (TCO), including Ed Specs Workgroup recommendation that the State create and maintain Life Cycle Cost Analysis (LCCA) comparable standards and measures used in a tool for calculating total cost of ownership
- Discussion how assessment data may be used in State funding decisions (project prioritization Statewide or by LEA)
- Consider split Funding (CIP vs. Prioritized) or prioritized funding pilot program

### October 7, 2019

Ed Specs Workgroup Recommendations

- Consider implementing National Council on School Facilities cost codes for consistent reporting across LEAs
- Consider implementing post-occupancy evaluations utilizing a standard template that will facilitate collection and availability of comparable information for all LEAs.
- Consider implementation of a standard maintenance management system to collect data on LEAs' facility operations, maintenance, and capital-renewal activities.
- Consider the implementation of real time utilities metering for each facility.
- Consider the implementation of post-occupancy evaluations utilizing a standard template that will facilitate collection and availability of comparable information for all LEAs.
- Consider allocating earmarked maintenance funding

### October 28, 2019

Discuss and revise preliminary recommendations and draft final report

#### November 19, 2019

• Adoption of final Workgroup Report

### Final Report due December 1, 2019

| <b>Requirements of Ed. Art. §5-310 and 2018 Md. Laws, Chap. 14</b><br>The Workgroup shall report its findings and recommendations to the Governor and General Assembly on or before December 1, 2019                                                                                                                                                                                                    |                        |                           |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|--|--|--|
| Statutory Requirement                                                                                                                                                                                                                                                                                                                                                                                   | Background Information | Workgroup Recommendations |  |  |  |
| 1. The Workgroup shall consider how the relative<br>condition of public school facilities within the<br>educational facilities sufficiency standards and the<br>facility condition should be prioritized, taking into<br>account local priorities and in consultation with local<br>jurisdictions, including whether the prioritization should<br>be by category and by local jurisdiction or statewide |                        |                           |  |  |  |
| <ol> <li>The Workgroup shall determine whether the results<br/>should be incorporated into school construction funding<br/>decisions</li> </ol>                                                                                                                                                                                                                                                         |                        |                           |  |  |  |
| 3. If determined to be appropriate, the Workgroup shall determine how the assessment results should be incorporated into school construction funding.                                                                                                                                                                                                                                                   |                        |                           |  |  |  |
| 4. The Workgroup shall consider whether the State<br>should provide funding incentives for local jurisdictions<br>that reduce the total cost of ownership of public school<br>facilities.                                                                                                                                                                                                               |                        |                           |  |  |  |

| Recommendations of the Ed Specs Workgroup for the Workgroup on the Assessment and Funding of School Facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |                           |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|--|--|
| Ed Specs Workgroup Recommendation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Background Information | Workgroup Recommendations |  |  |
| 5. Create incentives that encourage LEAs to analyze and<br>plan/design for total cost of ownership for new, replacement, and<br>fully renovated school facilities based on the costs of building,<br>operating, and maintaining facilities over the full life of a project.<br>(Incentives as presented at the April 10 Ed Spec Workgroup<br>Meeting to increase State participation by a percentage or a<br>fraction of a percentage corresponding to the number of<br>percentage points an LEA reduces the total cost of ownership<br>under the baseline total cost of ownership;<br>http://www.pscp.state.md.us/Workgroups/EDSW/EDSWindex.cfm) |                        |                           |  |  |
| <ol><li>Create and maintain LCCA comparable standards and measures<br/>used in a tool for calculating total cost of ownership.</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                           |  |  |
| 7. Implement post-occupancy evaluations utilizing a standard template that will facilitate collection and availability of comparable information for all LEAs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |                           |  |  |
| 8. Implement the National Council on School Facilities' "Definitions<br>of Key Facilities Data Elements" for budgets and expenditures that<br>make up the total cost of ownership that LEAs report to MSDE and<br>track the cost of ownership.                                                                                                                                                                                                                                                                                                                                                                                                    |                        |                           |  |  |
| 9. Explore the implementation of a standard maintenance<br>management system to collect data on LEAs' facility operations,<br>maintenance, and capital-renewal activities. Analyze the data and<br>provide reports to State and local stakeholders.                                                                                                                                                                                                                                                                                                                                                                                               |                        |                           |  |  |
| 10. Explore the implementation of real time utilities metering for each facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                           |  |  |



# Maryland's Portfolio of School Facilities



**Facilities -** Nearly <u>**1,400**</u> active public K-12 school facilities



Total Area - 140 million gross square feet



Enrollment - Serving more than <u>893,000</u> students



Total Asset Value - \$55.3 Billion





Source: NCES State Comparison of Education Statistics Report, Total Enrolled



Source: IAC Trend Estimates

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### Current Condition of Maryland's Portfolio



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# What Can Be Done



### The State's portfolio...

Over a 20 year period, the State's and LEA's combined budget averages **\$1.9 Billion per year** 

Industry Standard for Investment: \$1.106 Billion + \$1.106 Billion = \$2.212 Billion per year

### Therefore...

It is absolutely essential we get the most out of our \$1.9 Billion per year, or whatever amount we can afford.

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# Measuring the Need with Specificity

We must focus on the facility deficiencies that most greatly hinder teaching and learning.



### Efficient Management Requires Good Data

- Sustaining safety and functionality over time can be difficult.
- Good efficient management does not happen on its own. It requires people, a plan, resources, and expected outcomes that are measurable and comparable.
- Investment in facilities management is a decision that should be based on need and return-on-investment.



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### **COMPARABLE DEFICIENCY MEASUREMENTS**

Problem: Inadequate Facility Condition

Problem: Inadequate Educational Sufficiency Quantifying the deficiencies identifies problems, not solutions

Solutions (to be determined by the LEA):

Repair, renovation, replacement, addition... After LEA determines solutions, the State reviews the proposed project, provides technical review assistance, and may provide funding through the CIP or other IAC program.

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### Deriving an Educational Facility Deficiency Score



Facility Condition Index

The usability of the space for supporting delivery of education

Single score for the facility that reflects both types of deficiencies

### **Building-System Level**

Calculating a Facility Condition Index



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# **EDUCATIONAL SUFFICIENCY**

### Maryland Educational Facilities Sufficiency Standards



Non-mandatory qualitative & quantitative standards describing the minimum facility attributes needed to deliver the educational programs and services required by the State

EXAMPLE If a school cannot maintain a steady temperature of 68-75 degrees...



We assign a value to demonstrate the severity of the deficiency

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# The dollar figures in the deficiency calculations

- Represent the magnitude of the problem, **not the cost to correct**.
- Represent the percentage a school is away from being perfectly sufficient.



### **Prioritizing Based on Deficiencies**

### Good Condition, Built 1985



- Meets Educationally Sufficient Standards
- Sufficient Space
- At Capacity

### Great Condition, Built 2015



- Does Not Meet Educational Sufficiency Standards
- Not Enough Space
- Significantly Overcrowded

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## **Weighting our Deficiencies**



Beyond Expected Life Weighting Higher

Damaging Other Systems

**Crowded Facility** 

Life/Safety/Health/Code Violations

| Category # | Description                                           | Weight | Category # | Description                                                    | Weight |
|------------|-------------------------------------------------------|--------|------------|----------------------------------------------------------------|--------|
| 1          | Immediate Code/Life/Health Threat                     | 3.5    | 6          | Sufficiency Deficiency – Facility                              | 1.0    |
|            | Used only for critical issues that pose               |        |            | Deficiencies that are related to sufficiency                   |        |
|            | immediate threats to the life, health, or             |        |            | standards for inherent parts of the facility.                  |        |
|            | safety of persons within the facility.                |        |            | ADA Issues                                                     |        |
|            | <ul> <li>Obvious friable asbestos</li> </ul>          |        |            | <ul> <li>Insufficient Parking</li> </ul>                       |        |
|            | <ul> <li>Unprotected exit corridors</li> </ul>        |        |            | <ul> <li>Fixed Equipment (such as serving kitchens)</li> </ul> |        |
|            | <ul> <li>Electrical hazards</li> </ul>                |        |            |                                                                |        |
| 2          | Degraded w/ Potential Mission Impact                  | 1.5    | 7          | Sufficiency Deficiency – Space                                 | 3.0    |
|            | Systems or deficiencies that are mission              |        |            | Deficiencies that are related to sufficiency                   |        |
|            | critical and beyond useful life, or most              |        |            | standards for inherent space-based issues in the               |        |
|            | systems beyond 200% expected life.                    |        |            | facility.                                                      |        |
|            | <ul> <li>Fire alarm system beyond 200%</li> </ul>     |        |            | <ul> <li>Not enough classrooms</li> </ul>                      |        |
|            | <ul> <li>Severely damaged walls</li> </ul>            |        |            | <ul> <li>Lacking square-footage requirements</li> </ul>        |        |
|            | <ul> <li>Systems past 200% life expectancy</li> </ul> |        |            | <ul> <li>Missing mission-critical space</li> </ul>             |        |
| 3          | Mitigate Additional Damage:                           | 2.0    | 8          | Sufficiency Deficiency – Equipment                             | .5     |
|            | Systems or deficiencies that require                  |        |            | Deficiencies that a related to sufficiency standards           |        |
|            | repairs to mitigate additional damage.                |        |            | for non-fixed equipment.                                       |        |
|            | <ul> <li>Leaking roof</li> </ul>                      |        |            | <ul> <li>Missing playgroup equipment</li> </ul>                |        |
|            | <ul> <li>Poor ventilation causing moisture</li> </ul> |        |            |                                                                |        |
|            | leaks                                                 |        |            |                                                                |        |
| 4          | Beyond Expected Life:                                 | .25    | 9          | Normal/Within Life Cycle                                       | .25    |
|            | Systems or deficiencies that are 100% to              | to     |            | Systems that are within the expected life cycle                |        |
|            | 200% beyond expected life and show no                 | 1.5    |            | and do not require replacement.                                |        |
|            | signs of required repairs.                            |        |            | <ul> <li>Functioning, new lighting</li> </ul>                  |        |
|            | <ul> <li>Expired portable buildings</li> </ul>        |        |            | <ul> <li>A 20 year old system with a 25 year life</li> </ul>   |        |
|            | <ul> <li>Many interior finishes without</li> </ul>    |        |            | cycle                                                          |        |
|            | damages                                               |        |            |                                                                |        |
| 5          | Grandfathered or State/District                       | .5     |            |                                                                |        |
|            | Standards:                                            |        |            |                                                                |        |
|            | Systems or deficiencies that are                      |        |            |                                                                |        |
|            | "grandfathered" code issues or specific to            |        |            |                                                                |        |
|            | the local agency.                                     |        |            |                                                                |        |
|            | Fire Sprinklers                                       |        |            |                                                                |        |
|            | <ul> <li>Flooring consistent with local</li> </ul>    |        |            |                                                                |        |
|            | architectural standards                               |        |            |                                                                |        |

### **Scoring Example 1:** 130.18% Our FCI is decent But our educational deficiency score is higher than average Combined, this creates a higher score of 127% 40.35% 36.74% **Educational Deficiency Value** FCI **MDCI**





### **Setting Long-Term Portfolio Goals**



# **BEFORE WE BEGIN...**

### **Elements of the Model**

### **Site-Related Systems**

Industry Standard Replacement Value **x** Degradation %

| Site                 |             |                 |                 |                 |                        |          |                 |                   |                  |                   |
|----------------------|-------------|-----------------|-----------------|-----------------|------------------------|----------|-----------------|-------------------|------------------|-------------------|
|                      |             |                 |                 |                 |                        |          |                 |                   |                  |                   |
| System               | Value/Sq Ft | Life Expectancy | Last Renovation | Next Renovation | Degradation Percentage | Category | Category Weight | Repair Value (UW) | Repair Value (W) | Replacement Value |
| Fencing              | \$12.85     | 100             | 1984            | 2084            | 64%                    | 9        | 0.25            | \$592,128.00      | \$148,032.00     | \$925,200.00      |
| Landscaping          | \$9.32      | 30              | 2004            | 2034            | 19%                    | 9        | 0.25            | \$127,443.60      | \$31,860.90      | \$670,755.78      |
| Parking Lots         | \$3.46      | 20              | 2004            | 2024            | 42%                    | 9        | 0.25            | \$104,630.40      | \$26,157.60      | \$249,120.00      |
|                      |             |                 |                 |                 |                        |          |                 |                   |                  |                   |
| Playground Equipment | \$1.45      | 15              | 1984            | 1999            | 100%                   | 2        | 1.50            | \$104,464.21      | \$156,696.31     | \$104,464.21      |
| Site Lighting        | \$4.74      | 40              | 1984            | 2024            | 100%                   | 9        | 0.25            | \$341,180.85      | \$85,295.21      | \$341,180.85      |
| Site Specialties     | \$5.29      | 40              | 1984            | 2024            | 100%                   | 3        | 2.00            | \$380,659.04      | \$761,318.09     | \$380,659.04      |
| Site Utilities       | \$9.89      | 50              | 1984            | 2034            | 100%                   | 9        | 0.25            | \$712,430.32      | \$178,107.58     | \$712,430.32      |
| Walkways             | \$15.51     | 30              | 1984            | 2014            | 100%                   | 4        | 0.27            | \$1,116,720.00    | \$303,996.00     | \$1,116,720.00    |
|                      |             |                 |                 | /               |                        |          |                 |                   | _                | _ /               |
|                      |             | Based           | upon            |                 |                        |          | Renair          | · Value (W        | ) ÷              | 17                |

Based upon life expectancy

Repair Value (W) ÷ Replacement Value = MDCI

/

Repair Value **x** Category

Weight

### **Elements of the Model**

### **Educational Sufficiency Categories**

|                                        |                | Educ         | ational Sufficiency De | eficiencies |        |                  |                  |
|----------------------------------------|----------------|--------------|------------------------|-------------|--------|------------------|------------------|
|                                        |                |              |                        |             |        | Sufficiency      | Sufficiency      |
|                                        |                |              |                        |             |        | Deficiency Value | Deficiency Value |
| Name                                   | Required Value | Actual Value | Unit Value             | Category    | Weight | (UW)             | (W)              |
| Insufficient Student Health Square     |                |              |                        |             |        |                  |                  |
| Footage                                | 500            | 400          | \$329.00               | 7           | 3.00   | \$32,900.00      | \$98,700.00      |
| Insufficient Special Education Square  |                |              |                        |             |        |                  |                  |
| Footage                                | 450            | 395          | \$329.00               | 7           | 3.00   | \$18,095.00      | \$54,285.00      |
| Insufficient Physical Education Square |                |              |                        |             |        |                  |                  |
| Footage                                | 2,200          | 2120         | \$329.00               | 7           | 3.00   | \$26,320.00      | \$78,960.00      |
| Insufficient Media Center Square       |                |              |                        |             |        |                  |                  |
| Footage                                | 2,250          | 1800         | \$329.00               | 7           | 3.00   | \$148,050.00     | \$444,150.00     |
| Insufficient Janitorial Square Footage | 375            | 300          | \$329.00               | 7           | 3.00   | \$24,675.00      | \$74,025.00      |
| Insufficient General Storage           | 750            | 600          | \$329.00               | 7           | 3.00   | \$49,350.00      | \$148,050.00     |
| Insufficient General Classroom Square  |                |              |                        |             |        |                  |                  |
| Footage                                | 24,000         | 19200        | \$329.00               | 7           | 3.00   | \$1,579,200.00   | \$4,737,600.00   |
| Insufficient Food Service Square       |                |              |                        |             |        |                  |                  |
| Footage                                | 12,950         | 10400        | \$329.00               | 7           | 3.00   | \$838,950.00     | \$2,516,850.00   |
| Insufficient Faculty Workspace         | 750            | 600          | \$329.00               | 7           | 3.00   | \$49,350.00      | \$148,050.00     |
| Insufficient Administrative Square     |                |              |                        |             |        | ·                |                  |
| Footage                                | 900            | 750          | \$329.00               | 7           | 3.00   | \$49,350.00      | \$148,050.00     |
| Insufficient Art and Music Square      |                |              |                        |             |        |                  |                  |
| Footage                                | 1,127          | 1127         | \$329.00               | 7           | 3.00   | \$0.00           | \$0.00           |
|                                        |                |              |                        |             |        |                  |                  |

### **Elements of the Model**

## Combined Weighted Score

= Ed. Sufficiency Deficiency Value ÷ Total Replacement Value

| Total S            | cores           |
|--------------------|-----------------|
| Total Replacement  |                 |
| Value              | \$27,345,344.92 |
|                    |                 |
| Unweighted         |                 |
| Facility Repair    | \$14,366,704.24 |
| Facility Condition |                 |
| Index              | 52.54%          |
|                    |                 |
| Ed. Suffic.        |                 |
| Deficiency Value   | \$2,816,240.00  |
| Ed. Suffic.        |                 |
| Deficiency Score   | 10.30%          |
|                    |                 |
| Weighted Total     |                 |
| Value              | \$22,705,191.53 |
| MDCI               | 83.03%          |

= UW Facility Repair Value ÷ Total Replacement Value

|            | Proposed Categories & Weights                                                                                                                                                                                                                                                                                     |                  |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Category # | Description                                                                                                                                                                                                                                                                                                       | Weight           |
| 1          | <ul> <li>Immediate Code/Life/Health Threat</li> <li>Used only for critical issues that pose immediate threats to the life, health, or safety of persons within the facility.</li> <li>Obvious friable asbestos</li> <li>Unprotected exit corridors</li> <li>Electrical hazards</li> </ul>                         | 3.5              |
| 2          | <ul> <li>Degraded w/ Potential Mission Impact</li> <li>Systems or deficiencies that are mission critical and beyond useful life, or most systems</li> <li>beyond 200% expected life.</li> <li>Fire alarm system beyond 200%</li> <li>Severely damaged walls</li> <li>Systems past 200% life expectancy</li> </ul> | 1.5              |
| 3          | <ul> <li>Mitigate Additional Damage:</li> <li>Systems or deficiencies that require repairs to mitigate additional damage.</li> <li>Leaking roof</li> <li>Poor ventilation causing moisture leaks</li> </ul>                                                                                                       | 2.0              |
| 4          | <ul> <li>Beyond Expected Life:</li> <li>Systems or deficiencies that are 100% to 200% beyond expected life and show no signs of required repairs.</li> <li>Expired portable buildings</li> <li>Many interior finishes without damages</li> </ul>                                                                  | .25<br>to<br>1.5 |
| 5          | <ul> <li>Grandfathered or State/District Standards:</li> <li>Systems or deficiencies that are "grandfathered" code issues or specific to the local agency.</li> <li>Fire Sprinklers</li> <li>Flooring consistent with local architectural standards</li> </ul>                                                    | .5               |
| 6          | <ul> <li>Sufficiency Deficiency – Facility</li> <li>Deficiencies that are related to sufficiency standards for inherent parts of the facility.</li> <li>ADA Issues</li> <li>Insufficient Parking</li> <li>Fixed Equipment (such as serving kitchens)</li> </ul>                                                   | 1.0              |
| 7          | <ul> <li>Sufficiency Deficiency - Space</li> <li>Deficiencies that are related to sufficiency standards for inherent space-based issues in the facility.</li> <li>Not enough classrooms</li> <li>Lacking square-footage requirements</li> <li>Missing mission-critical space</li> </ul>                           | 3.0              |
| 8          | <ul> <li>Sufficiency Deficiency – Equipment</li> <li>Deficiencies that a related to sufficiency standards for non-fixed equipment.</li> <li>Missing playgroup equipment</li> </ul>                                                                                                                                | .5               |
| 9          | <ul> <li>Normal/Within Life Cycle</li> <li>Systems that are within the expected life cycle and do not require replacement.</li> <li>Functioning, new lighting</li> <li>A 20 year old system with a 25 year life cycle</li> </ul>                                                                                  | .25              |

### **Hypothetical School A**

| Kev Statistics   |        | Tota                                   | al Scores        |                                                                                         |                                           |
|------------------|--------|----------------------------------------|------------------|-----------------------------------------------------------------------------------------|-------------------------------------------|
|                  |        | Total<br>Replacement                   |                  | SCHOOL A                                                                                | Ratio of Weighted Repair Value by Categor |
| Sq/Ft            | 72,000 | Value                                  | \$ 27,739,496.45 | 72,000 Square Feet                                                                      |                                           |
| Design Capacity  | 600    |                                        |                  | Built in 1951                                                                           |                                           |
| Enrollment       | 600    | Unweighted<br>Facility Repair<br>Value | \$ 22,323,091.73 | Severe Overcrowding (2.0)<br>No Open Space                                              | 1                                         |
| Proj. Enrollment | 1,200  | Facility<br>Condition<br>Index         | 80.47%           | Severe Condition Deficiencies                                                           |                                           |
| Growth Factor    | 2      |                                        |                  | HVAC Broken                                                                             | 7                                         |
| Year Built       | 1951   | Ed. Suffic.<br>Deficiency<br>Value     | \$ 11,181,065.00 | <ul> <li>Lead in Plumbing</li> <li>Playground Equipment<br/>Rusted and Sharp</li> </ul> |                                           |
|                  |        | Ed. Suffic.<br>Deficiency              |                  | Severe Sufficiency Deficiencies                                                         |                                           |
| School Age       | 67     | Score                                  | 40.31%           | Low Classroom Space                                                                     |                                           |
| Open-Plan Space  | No     |                                        |                  | Low Faculty Workspace                                                                   |                                           |
| Open-Plan Space  |        | Weighted<br>Total Repair               |                  | Low Food Service Space     Low Administrative Space                                     | 4 3                                       |
| Deficiency Rate  | 0%     | Value                                  | \$ 76,631,312.89 |                                                                                         |                                           |

### **Hypothetical School B**

|                                    |                   | B                                                                  | Very Poor                         | Condition, No Overcrowding                                                                           | g                                          |
|------------------------------------|-------------------|--------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Key Stat                           | istics            | Total S                                                            | cores                             |                                                                                                      |                                            |
|                                    |                   | Total Replacement                                                  |                                   | <u>SCHOOL B</u>                                                                                      | Ratio of Weighted Repair Value by Category |
| Sq/Ft                              | 72,000            | Value                                                              | \$27,886,376.45                   | 72,000 Square Feet                                                                                   | د                                          |
| Design Capacity                    | 600               |                                                                    |                                   | Built in 1951                                                                                        |                                            |
|                                    |                   | Unweighted                                                         |                                   |                                                                                                      | 4                                          |
| Enrollment                         | 600               | Facility Repair                                                    | \$22,452,346.13                   | No Overcrowding (1.0)                                                                                |                                            |
|                                    |                   | Facility Condition                                                 |                                   | No Open Space                                                                                        |                                            |
| Proj. Enrollment                   | 600               | Index                                                              | 80.51%                            |                                                                                                      |                                            |
| Growth Factor                      | 1                 |                                                                    |                                   | Severe Condition Deficiencies                                                                        |                                            |
| Year Built<br>School Age           | <u>1951</u><br>67 | Ed. Suffic.<br>Deficiency Value<br>Ed. Suffic.<br>Deficiency Score | \$225,365.00<br>0.81%             | <ul> <li>HVAC Broken</li> <li>Lead in Plumbing</li> <li>Playground Equipment Rusted/Sharp</li> </ul> | 3                                          |
| Open-Plan Space                    | No                |                                                                    |                                   | Mild Sufficiency Deficiencies                                                                        |                                            |
| Open-Plan Space<br>Deficiency Rate | 0%                | Weighted Total<br>Value<br>MDCI                                    | \$43,958,094.49<br><b>157.63%</b> | <ul> <li>Low Student Health Space</li> <li>Low Special Education Space</li> </ul>                    | 2                                          |

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Low Physical Education Space

### **Hypothetical School C**

|                                    |        | C: \                                | /ery Poor C            | ondition, Semi-Overcrowded                                                      |                                            |
|------------------------------------|--------|-------------------------------------|------------------------|---------------------------------------------------------------------------------|--------------------------------------------|
| Key Stat                           | istics | Total S                             | cores                  | SCHOOL C                                                                        |                                            |
| Sa/Ft                              | 72 000 | Total Replacement<br>Value          | \$27 886 376 45        | 72 000 Square Feet                                                              | Ratio of Weighted Repair Value by Category |
| Design Capacity                    | 600    |                                     | <i>\$27,666,576.15</i> | Built in 1951                                                                   |                                            |
| Enrollment                         | 600    | Unweighted Facility<br>Repair Value | \$22,452,346.13        | Mild Overcrowding (1.1)                                                         | 4                                          |
| Proj. Enrollment                   | 660    | Facility Condition<br>Index         | 80.51%                 | No Open Space                                                                   |                                            |
| Growth Factor                      | 1.1    |                                     |                        | Severe Condition Deficiencies                                                   |                                            |
| Year Built                         | 1951   | Ed. Suffic.<br>Deficiency Value     | \$1,320,935.00         | HVAC Broken                                                                     |                                            |
| School Age                         | 67     | Ed. Suffic.<br>Deficiency Score     | 4.74%                  | <ul> <li>Lead in Plumbing</li> <li>Playground Equipment Rusted/Sharp</li> </ul> | 3                                          |
| Open-Plan Space                    | No     |                                     |                        | Moderate Sufficiency Deficiencies                                               |                                            |
| Open-Plan Space<br>Deficiency Rate | 0%     | Weighted Total<br>Value             | \$47,244,804.49        | Classroom Space                                                                 | 2                                          |
| -                                  |        | MDCI                                | 169.42%                | Food Service Space                                                              |                                            |

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Faculty Workspace

### **Hypothetical School D**

|                  |        | D:                  | Adequate        | Condition, Very Overcrowded     |
|------------------|--------|---------------------|-----------------|---------------------------------|
| Key Statis       | stics  | Total S             | cores           |                                 |
|                  |        | Total Replacement   |                 | <u>SCHOOL D</u>                 |
| Sq/Ft            | 72,000 | Value               | \$27,345,344.92 | 72,000 Square Feet              |
| Design Capacity  | 600    |                     |                 | Built in 1987                   |
|                  |        | Unweighted Facility |                 |                                 |
| Enrollment       | 600    | Repair Value        | \$14,366,704.24 | Severe Overcrowding (2.0)       |
|                  |        | Facility Condition  |                 | No Open Space                   |
| Proj. Enrollment | 1,200  | Index               | 52.54%          |                                 |
| Growth Factor    | 2      |                     |                 | Mild Condition Deficiencies     |
|                  |        | Ed. Suffic.         |                 |                                 |
| Year Built       | 1987   | Deficiency Value    | \$11,033,015.00 | Plumbing Leaking                |
|                  |        | Ed. Suffic.         |                 | Roof Leaking                    |
| School Age       | 31     | Deficiency Score    | 40.35%          | Old HVAC                        |
| Open-Plan Space  | No     |                     |                 | Severe Sufficiency Deficiencies |
| Open-Plan Space  |        | Weighted Total      |                 | Severe sufficiency bendencies   |
| Deficiency Rate  | 0%     | Value               | \$47,355,516.53 | Low Classroom Space             |
|                  |        | MDCI                | 173.18%         | Low Food Service Space          |

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| \$47,355,516.53 |
| 173.18%         |
|                 |

#### SCHOOL D

- Plumbing Leaking ٠
- Roof Leaking . Old HVAC ٠

- ٠ Low Food Service Space
- Low Faculty Workspace ٠



### **Hypothetical School E**

| E: Adequate Condition, Semi-Overcrowded |        |                        |                 |                                   |                                            |
|-----------------------------------------|--------|------------------------|-----------------|-----------------------------------|--------------------------------------------|
| Key Statistics                          |        | Total S                | cores           |                                   |                                            |
|                                         |        | Total Replacement      |                 | <u>SCHOOL E</u>                   | Ratio of Weighted Repair Value by Category |
| Sq/Ft                                   | 72,000 | Value                  | \$27,345,344.92 | 72,000 Square Feet                |                                            |
| Design Capacity                         | 600    |                        |                 | Built in 1987                     |                                            |
|                                         |        | Unweighted Facility    |                 |                                   | 9                                          |
| Enrollment                              | 600    | Repair Value           | \$14,366,704.24 | Moderate Overcrowding (1.25)      | 2                                          |
|                                         |        | Facility Condition     |                 | No Open Space                     |                                            |
| Proj. Enrollment                        | 750    | Index                  | 52.54%          |                                   |                                            |
| Growth Factor                           | 1.25   |                        |                 | Mild Condition Deficiencies       |                                            |
|                                         |        | Ed. Suffic. Deficiency |                 |                                   | 7                                          |
| Year Built                              | 1987   | Value                  | \$2,816,240.00  | Plumbing Leaking                  |                                            |
|                                         |        | Ed. Suffic. Deficiency |                 | Roof Leaking                      |                                            |
| School Age                              | 31     | Score                  | 10.30%          | Old HVAC                          |                                            |
| Open-Plan Space                         | No     |                        |                 | Moderate Sufficiency Deficiencies | 3                                          |
| Open-Plan Space Deficiency              |        | Weighted Total         |                 |                                   |                                            |
| Rate                                    | 0%     | Value                  | \$22,705,191.53 | Low Classroom Space               |                                            |
|                                         |        | MDCI                   | 83.03%          | Low Food Service Space            |                                            |
|                                         |        |                        |                 | Low Faculty Workspace             |                                            |
|                                         |        |                        |                 |                                   |                                            |

### **Hypothetical School F**

| F: Adequate Condition, Not Overcrowded, w/ Open-Plan Space |               |                                                           |                           |                                                                                                                |                                            |
|------------------------------------------------------------|---------------|-----------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Key Statistics                                             |               | Total Scores                                              |                           | SCHOOL F                                                                                                       | Ratio of Weighted Repair Value by Category |
| Sq/Ft<br>Design Capacity                                   | 72,000<br>600 | Value                                                     | \$27,345,344.92           | 72,000 Square Feet<br>Built in 1987                                                                            | natio of weighted hepair value by category |
| Enrollment                                                 | 600           | Unweighted Facility<br>Repair Value<br>Facility Condition | \$14,366,704.24           | No Overcrowding (1)<br>Open Space (20% Reduction)                                                              | 2 ·1<br>·2                                 |
| Growth Factor                                              | 1             | Ed. Suffic. Deficiency                                    | 52.54%                    | Mild Condition Deficiencies                                                                                    | 7                                          |
| Year Built<br>School Age                                   | 1987<br>31    | Value<br>Ed. Suffic. Deficiency<br>Score                  | \$1,340,675.00            | Roof Leaking     Old HVAC                                                                                      | - 6<br>- 7                                 |
| Open-Plan Space<br>Open-Plan Space<br>Deficiency Rate      | Yes<br>20%    | Weighted Total<br>Value<br>MDCI                           | \$18,278,496.53<br>66.84% | <ul> <li>Mild Sufficiency Deficiencies</li> <li>Low Classroom Space</li> <li>Low Food Service Space</li> </ul> | - 8<br>- 9<br>- 9                          |
|                                                            |               |                                                           | 00.0470                   | Low Faculty Workspace                                                                                          |                                            |

### **Hypothetical School G**



### **Hypothetical School H**

| H: Great Condition, Semi-Overcrowded |        |                     |                 |                                    |                                            |  |
|--------------------------------------|--------|---------------------|-----------------|------------------------------------|--------------------------------------------|--|
| Key Statistics                       |        | Total S             | cores           |                                    |                                            |  |
|                                      |        | Total Replacement   |                 | SCHOOL H                           | Ratio of Weighted Repair Value by Category |  |
| Sq/Ft                                | 72,000 | Value               | \$27,345,344.92 |                                    | hand of theighted hepail fande by eategory |  |
| Design Capacity                      | 600    |                     |                 | 72,000 Square Feet                 |                                            |  |
|                                      |        | Unweighted Facility |                 | Built in 2007                      |                                            |  |
| Enrollment                           | 600    | Repair Value        | \$10,046,525.81 |                                    |                                            |  |
|                                      |        | Facility Condition  |                 | Moderate Overcrowding (1.25)       | 9                                          |  |
| Proj. Enrollment                     | 750    | Index               | 36.74%          | No Open Space                      |                                            |  |
| Growth Factor                        | 1.25   |                     |                 |                                    |                                            |  |
|                                      |        | Ed. Suffic.         |                 | No Condition Deficiencies          |                                            |  |
| Year Built                           | 2007   | Deficiency Value    | \$2,816,240.00  | Moderate Sufficiency Deficiencies  |                                            |  |
|                                      |        | Ed. Suffic.         |                 | Woderate sufficiency beneficiences |                                            |  |
| School Age                           | 11     | Deficiency Score    | 10.30%          | Low Classroom Space                |                                            |  |
| Open-Plan Space                      | No     |                     |                 | Low Food Service Space             |                                            |  |
| Open-Plan Space                      |        | Weighted Total      |                 | Low Faculty Workspace              |                                            |  |
| Deficiency Rate                      | 0%     | Value               | \$10,947,379.72 |                                    |                                            |  |

40.03%

MDCI

### **Hypothetical School I**

| I: Great Condition, Not Overcrowded |          |                                                |                 |                                                                                |                                            |
|-------------------------------------|----------|------------------------------------------------|-----------------|--------------------------------------------------------------------------------|--------------------------------------------|
| Key Statistics                      |          | Total Scores                                   |                 |                                                                                |                                            |
| Sq/Ft                               | 72,000   | Total Replacement<br>Value                     | \$27,814,698.02 | SCHOOL I                                                                       | Ratio of Weighted Repair Value by Category |
| Design Capacity                     | 600      | Unweighted Facility                            |                 | Built in 2007                                                                  | 7                                          |
| Enrollment<br>Proi. Enrollment      | 600      | Repair Value<br>Facility Condition<br>Index    | \$10,290,589.42 | No Overcrowding (1.0)<br>No Open Space                                         |                                            |
| Growth Factor                       | 1        | Ed Suffic                                      | 57.567          | No Condition Deficiencies                                                      |                                            |
| Year Built                          | 2007     | Ed. Suffic.<br>Deficiency Value<br>Ed. Suffic. | \$77,315.00     | Mild Sufficiency Deficiencies                                                  |                                            |
| School Age<br>Open-Plan Space       | 11<br>No | Deficiency Score                               | 0.28%           | <ul><li>Low Student Health Space</li><li>Low Special Education Space</li></ul> |                                            |
| Open-Plan Space<br>Deficiency Rate  | 0%       | Weighted Total<br>Value                        | \$2,791,620.63  | Low Physical Education Space                                                   | 9                                          |
|                                     |          | MDCI                                           | 10.04%          |                                                                                |                                            |

### **Hypothetical School J**

| J: Great Condition, Underutilized  |                    |                                               |                                 |                                                         |                                               |
|------------------------------------|--------------------|-----------------------------------------------|---------------------------------|---------------------------------------------------------|-----------------------------------------------|
| Key Statistics                     |                    | Total Scores                                  |                                 |                                                         |                                               |
| Sq/Ft                              | 72,000             | Total<br>Replacement                          | \$27,814,698.02                 | <u>SCHOOL J</u><br>72,000 Square Feet                   | Ratio of Weighted Repair Value by<br>Category |
| Enrollment                         | 600                | Facility Repair<br>Value                      | \$10,290,589.42                 | Built in 2007<br>Underutilized (.83)                    | 7                                             |
| Proj. Enrollment<br>Growth Factor  | 500<br>0.833333333 | Facility Condition<br>Index                   | 37.00%                          | No Open Space                                           |                                               |
| Year Built                         | 2007               | Ed. Suffic.<br>Deficiency Value<br>Ed. Suffic | \$77,315.00                     | Mild Sufficiency Deficiencies  Low Student Health Space |                                               |
| School Age<br>Open-Plan Space      | 11<br>No           | Deficiency Score                              | 0.28%                           | Low Special Education     Space                         |                                               |
| Open-Plan Space<br>Deficiency Rate | 0%                 | Weighted Total<br>Value<br>MDCI               | \$2,791,620.63<br><b>10.04%</b> | Low Physical Education     Space                        | 9                                             |

### **Article - Education**

[Previous][Next]

§5–310.

(a) (1) In this section the following words have the meanings indicated.

(2) "Educational facilities sufficiency standards" means a uniform set of criteria and measures for evaluating the physical attributes and educational suitability of public elementary and secondary school facilities in the State.

(3) "Facility condition index" means a calculation to determine the relative physical condition of public school facilities by dividing the total repair cost of a facility by the total replacement cost of a facility.

(b) (1) Each fiscal year, the Interagency Commission shall survey the condition of school buildings identified by the Department.

(2) The Interagency Commission shall conduct the inspections of individual school buildings that are necessary to complete the survey required in paragraph (1) of this subsection.

(3) The Interagency Commission shall report to the Governor and the General Assembly, on or before October 1 of each year, in accordance with § 2–1246 of the State Government Article, on the results of the survey for the prior fiscal year.

(c) On or before July 1, 2018, in consultation with local education agencies, the Interagency Commission on School Construction shall adopt educational facilities sufficiency standards and a facility condition index for Maryland public schools.

(d) (1) The purpose of the educational facilities sufficiency standards is to establish uniform standards for the assessment of the physical attributes, capacity, and educational suitability of public school facilities in Maryland.

(2) The standards shall include at least the following categories:

- (i) Building condition related to life safety and health;
- (ii) Building systems;

(iii) Building capacity and utilization, including the ability to house students in permanent space;

- (iv) Academic space, including specialty classroom space; and
- (v) Physical education and outdoor recreational space.

(3) The Interagency Commission shall periodically review and update the educational facilities sufficiency standards.

(e) (1) On or before July 1, 2019, the Interagency Commission shall complete an initial statewide facilities assessment using the educational facilities sufficiency standards adopted under subsections (c) and (d) of this section.

(2) In completing the assessment the Interagency Commission shall:

(i) Incorporate the facility condition index adopted under subsection (c) of this section;

(ii) Contract with an independent third–party vendor to conduct data collection and assessment;

(iii) Utilize, to the extent possible, existing data sources, including the Educational Facilities Master Plan and the Maryland Association of Boards of Education; and

(iv) Coordinate with local education agencies to identify data elements to be used in the facility assessment.

(f) (1) Following the completion of the initial statewide facilities assessment, the Interagency Commission shall develop standards and procedures to comprehensively update the facilities assessment such that facility assessment data is not older than 4 years.

(2) Local education agencies shall:

(i) Cooperate with the Interagency Commission to update the facility assessment; and

(ii) Contribute data as requested to update the assessment.

(3) (i) The Interagency Commission shall enter the facility assessment data into an integrated data system, which shall be known as the Integrated Master Facility Asset Library.

(ii) The Interagency Commission shall manage the Integrated Master Facility Asset Library and shall provide access to the Library for all local education agencies using a cloud-based system.

(g) (1) After completion of the initial facility assessment, the Interagency Commission shall share the data results with the Workgroup on the Assessment and Funding of School Facilities and, with the Workgroup, shall consider:

(i) How the relative condition of public school facilities within the educational facilities sufficiency standards and the facility condition index should be prioritized, taking into account local priorities and in consultation with local jurisdictions; and

(ii) If determined to be appropriate, use of the assessment results in funding decisions.

(2) Based on the recommendations of the Workgroup on the Assessment and Funding of School Facilities, and not before May 1, 2020, for use in funding decisions beginning no sooner than fiscal year 2021, the Interagency Commission shall adopt regulations establishing the use of the facility assessment results in annual school construction funding decisions.

(h) (1) Except as provided in § 5–314(e) of this subtitle, each county board shall develop and adopt preventative maintenance schedules based on industry standards for the public school facilities within the jurisdiction of the county board.

(2) On or before July 1 each year, each county board shall report to the Interagency Commission on the board's compliance with the preventative maintenance schedules adopted under this subsection.

(3) The information reported in accordance with paragraph (2) of this subsection shall be entered into the Integrated Master Facility Asset Library.

[Previous][Next]

(b) (1) It is the intent of the General Assembly that, as soon as practicable and within the current debt affordability guidelines, the State should provide at least \$400 million each year for public school construction.

(2) The \$400 million annual goal may be phased in over several years if fiscal constraints prevent the State from fully funding the goal in one fiscal year.

(c) The annual goal established under subsection (b) of this section should be recalculated after the initial school facility assessment required by § 5-310(e) of the Education Article is completed and the Workgroup on the Assessment and Funding of School Facilities established under Section 3 of this Act reports its findings and recommendations.

SECTION 3. AND BE IT FURTHER ENACTED, That:

(a) There is a Workgroup on the Assessment and Funding of School Facilities.

(b) The Workgroup consists of the following members:

(1) two members of the Senate of Maryland, appointed by the President of the Senate;

(2) two members of the House of Delegates, appointed by the Speaker of the House;

(3) the State Superintendent of Schools;

(4) the State Treasurer, or the State Treasurer's designee;

(5) one representative of the Maryland Association of Counties, appointed by the Maryland Association of Counties;

(6) one representative of the Maryland Association of Boards of Education, appointed by the Executive Director of the Association; and

(7) one representative of the Public School Superintendents Association of Maryland, appointed by the Executive Director of the Association.

(c) The State Superintendent of Schools shall chair the Workgroup.

(d) The Interagency <u>Committee</u> <u>Commission</u> on School Construction and the Department of Legislative Services shall provide staff for the Workgroup.

(e) A member of the Workgroup:

(1) may not receive compensation as a member of the Workgroup; but

(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(f) (1) After the initial school facility assessment required by § 5-310(e) of the Education Article is completed, the Workgroup shall:

(i) consider how the relative condition of public school facilities within the educational facilities sufficiency standards and the facility condition index should be prioritized, taking into account local priorities and in consultation with local jurisdictions, including whether the prioritization should be by category and by local jurisdiction or statewide;

(ii) determine whether the results should be incorporated into school construction funding decisions<del>.</del>; and

(2) (iii) If if the Workgroup determines that the assessment results should be incorporated into school construction funding decisions, the Workgroup shall determine how the assessment results should be incorporated into school construction funding.

(2) <u>The Workgroup shall also consider whether the State should provide</u> <u>funding incentives for local jurisdictions that reduce the total cost of ownership of public</u> <u>school facilities.</u>

(g) On or before December 1, 2019, the Workgroup shall report its findings and recommendations to the Governor and, in accordance with § 2-1246 of the State Government Article, the General Assembly.

SECTION 4. AND BE IT FURTHER ENACTED, That the Interagency Committee Commission on School Construction shall:

(1) update the State and local cost–share formula every 2 years; and

(2) adopt a common definition of local pay-as-you-go funding so that all local jurisdictions are reporting comparable data to be included in the local debt calculation used to determine the State share.

SECTION 5. AND BE IT FURTHER ENACTED, That:

(a) (1) The Interagency <u>Committee Commission</u> on School Construction shall explore the feasibility of regional school construction projects, including regional public–private partnership zones and regional career and technical education high schools.

I. PURPOSE. The purpose of Maryland Public School Facilities Educational Sufficiency Standards *(COMAR 13A.01.02.04)* is to establish acceptable minimum levels for the physical attributes, capacity, and educational suitability of existing public K–12 school facilities. The application of these standards shall be limited to space and attributes needed to support educational programs and curricula—defined by the Maryland State Board of Education—that are sustainable within the operational budgets of the school systems for staffing, maintenance, and full utilization of the facilities. The Educational Sufficiency Standards are dynamic. The Interagency Committee on School Construction (IAC), and includes its successor organization, the Interagency Commission on School Construction, shall periodically review the Standards and recommend changes to the Standards as time and circumstances require.

These Standards are intended for use in the evaluation of existing public school facilities with projected five-year future student counts and are not intended to limit the flexibility of design solutions for new construction and renovation projects. A companion document is the Facilities Planning Guide, which provides guidelines and recommendations for use in the programming and design of new schools, replacement schools, and renovations of existing schools. The Facilities Planning Guide is incorporated by reference into these standards and may be amended by the IAC with adequate notice to and input from the public. *[Code of Maryland (COMAR) references in this document are to certain Title 13A regulations of the State Board of Education for State School Administration, General Instructional Programs, Specific Subjects, Special Instructional Programs, and Supporting Programs.]* 

II. GENERAL REQUIREMENTS. These standards are not intended to supersede or omit compliance with applicable building and fire codes or any other code, regulation, law, or standard that has been adopted by State agencies. At the same time, these Standards will not restate the requirements of other codes.

A. Building condition. A school facility must be safe *(COMAR 13A.01.04.03)* and capable of being maintained.

1. Structural. A school facility must be structurally sound. A school facility shall be considered structurally sound and safe if the building presents no imminent danger or major visible signs of decay or distress and the building's structural systems support the loads imposed on them.

2. Exterior envelope. An exterior envelope is safe and capable of being maintained if:

a) Walls and roof are weather tight under normal conditions with routine upkeep; and

*b)* Doors and windows are weather tight under normal conditions with routine upkeep.

- 3. Interior surfaces. An interior surface is safe and capable of being maintained if it is:
  - a) Structurally sound;
  - b) Capable of supporting a finish; and
  - c) Capable of continuing in its intended use with normal maintenance and repair.
- 4. Interior finishes. An interior finish is safe and capable of being maintained if it is:
  - a) Free of exposed lead paint;
  - b) Free of exposed friable asbestos; and
  - c) Capable of continuing in its intended use with normal maintenance and repair.

B. Building systems. Where present, building systems in a school facility must be in working order and capable of being properly maintained. Building systems include roof, plumbing, telephone, electrical, and heating and cooling systems, as well as fire alarm, two-way internal communication, technological infrastructure, and security systems.

1. General. A building system shall be considered to be in working order and capable of being maintained if all of the following apply:

a) The system is capable of being operated as intended and maintained.

*b)* Newly manufactured or cost-effective refurbished replacement parts are available.

- c) The system is capable of supporting the standards established in this rule.
- d) Components of the system present no imminent danger of personal injury.

2. Sanitary facilities. Fixtures shall include, but are not limited to, water closets, urinals, lavatories, and drinking fountains. Restrooms shall be available for general classrooms for grades 3 and below and special needs classrooms without having to exit the building, wherever possible within reasonable cost constraints.

3. Fire alarm and emergency-notification system. A school facility shall have a fire alarm and emergency-notification system as required by applicable State fire codes and emergency procedures.

4. Two-way communication system. A school facility shall have a two-way internal communication system between a central location and each classroom, isolated office space, library media center, physical education space, cafeteria, and other regularly occupied spaces.

III. CLASSIFICATION OF PUBLIC SCHOOLS. The classifications for public schools under these standards are:

A. Elementary school (PK–5 or any subset thereof)

B. Middle school (6–8)

C. High school (9–12)

D. Combination school (a combination of any grade levels)

E. Other school (includes early-childhood-education centers, special-education centers, career-technology centers, alternative-education schools, etc.)

IV. SCHOOL SITE. A school site shall be of sufficient size to accommodate safe access, parking, drainage, and security *(COMAR 13A.01.04.03)*. Additionally, the site shall be provided with an adequate source of water and appropriate means of effluent disposal.

A. Safe access. A school site shall be configured for safe and controlled access that separates pedestrian from vehicular traffic. If buses are used to transport students, then bus loading/unloading areas shall be separated from vehicular-traffic areas wherever possible. Dedicated student drop-off and pickup areas shall be provided for safe use by student passengers arriving or departing by automobile.

B. Parking. A school site shall include a maintainable surfaced area that is stable, firm, and slip resistant and is large enough to accommodate 1.5 parking spaces/staff FTE and one student space /ten high school students. If this standard is not met, alternative parking may be approved after the sufficiency of parking at the site is reviewed by the IAC using the following criteria:

- 1. Availability of street parking around the school;
- 2. Availability of any nearby parking lots;
- 3. Availability of public transit;
- 4. Number of staff who drive to work on a daily basis; and
- 5. Average number of visitors on a daily basis.

C. Drainage. A school site shall be configured such that runoff does not undermine the structural integrity of the school buildings located on the site or create flooding, ponding, or erosion resulting in a threat to health, safety, or welfare.

D. Security.

1. All schools shall have safe and secure site fencing or other barriers with accommodations for safe passage through openings to protect students from the hazards of traffic, railroad tracks, animal nuisance, and steep slopes.

V. SITE RECREATION AND OUTDOOR PHYSICAL EDUCATION. A school facility shall have area, space and fixtures, in accordance with the standard equipment necessary to meet the educational requirements of the public education department, for physical education activity. *(COMAR 13A.01.02.05 and 13A.04.13, Physical Education only)* 

A. Elementary school. Safe play area(s) and playground(s) including hard surfaced court(s) and unpaved recreation area(s) shall be conveniently accessible to the students. Play area(s) and appropriate equipment for physical education and school recreational purposes shall be provided based on the planned school program capacity. For schools that serve students in grade 5 and below, a protected play area shall be provided. Play-equipment areas shall have surfacing materials that meet or exceed safety specifications for shock-absorbing qualities as outlined by the U.S. Consumer Product Safety Commission.

B. Middle school. Hard surfaced court(s) and playing field(s) for physical education activities shall be provided. Playing field(s) and equipment shall be based on the planned school program capacity.

C. High school. A playing field for physical education activities shall be provided. Playing fields and equipment shall be based on the planned school program capacity.

D. Combination school. A combination school shall provide the elements of the grades served by Subsections A, B and C above without duplication, but shall meet the highest standard.

E. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

VI. ACADEMIC CLASSROOM SPACE. All classroom space shall meet or exceed the requirements listed below:

A. Area of classroom spaces. Classroom spaces, including those for physical education, shall be sufficient for educational programs that are appropriate for the class-level needs.

#### B. Classroom fixtures and equipment

1. With the exception of physical-education spaces, each general and specialty classroom shall contain a work surface and seat for each student in the classroom. The work surface and seat shall be appropriate for the normal activity of the class conducted in the room.

2. Each general and specialty classroom shall have an erasable surface and a surface suitable for projection purposes, appropriate for group classroom instruction, and a display surface. A single surface may meet one or more of these purposes.

3. Each general and specialty classroom shall have storage for classroom materials or access to conveniently located storage.

4. With the exception of physical-education spaces and music-education spaces, each general and specialty classroom shall have a work surface and seat for the teacher and for any aide assigned to the classroom. The classroom shall have secure storage for student records that is located in the classroom or is conveniently accessible to the classroom.

#### C. Classroom lighting

1. Each general and specialty classroom shall have a light system capable of maintaining at least 50 foot-candles of well-distributed light. Provide appropriate task lighting in specialty classrooms where enhanced visibility is required.

2. The light level shall be measured at a work surface located in the approximate center of the classroom, between clean light fixtures.

#### D. Classroom temperature and relative humidity

1. Each general and specialty classroom shall have a heating, ventilation and air conditioning (HVAC) system capable of maintaining a temperature between 68 and 75 degrees Fahrenheit and a relative humidity between 30 and 60% at full occupancy.

2. The temperature and humidity shall be measured at a work surface in the approximate center of the classroom.

#### E. Classroom acoustics

1. With the exception of physical-education spaces, each general and specialty classroom shall be maintainable at a sustained background sound level of less than 55 decibels.

2. The sound level shall be measured at a work surface in the approximate center of the classroom.

#### F. Classroom air quality

1. Each general, science, and fine arts classroom shall have an HVAC system that continually moves air and is capable of maintaining a CO2 level of not more than 1,200 parts per million.

2. The air quality shall be measured at a work surface in the approximate center of the classroom.

VII. GENERAL USE CLASSROOMS. (ENGLISH LANGUAGE ARTS/LITERACY, MATHEMATICS, SOCIAL STUDIES AND WORLD LANGUAGES *(COMAR 13A.03, General Instructional Programs and 13A.04, Specific Subjects)*).

A. Cumulative classroom net square foot (sf) requirements, excluding in-classroom storage space and any in-classroom toilet rooms, shall be at least:

| 1. | Prekindergarten | 50 net sf/student |
|----|-----------------|-------------------|
| 2. | Kindergarten    | 50 net sf/student |
| 3. | Grades 1 – 8    | 32 net sf/student |
| 4. | Grades 9 – 12   | 25 net sf/student |

B. At least 2 net sf/student shall be available for dedicated, in-classroom storage and may be provided vertically to avoid the need for additional floor area.

C. Sufficient number of classrooms shall be provided to meet state and local board mandated student/staff ratio requirements.

#### VIII. SPECIALTY CLASSROOMS.

A. Special education *(COMAR 13A.05.01, 13A.05.02)* Maryland assures a free appropriate public education for all students with disabilities, birth through the end of the school year in which the student turns 21 years old, in accordance with the student's Individualized Education Program. Early Intervention Services for children from birth through two years is typically provided through the Maryland Infants and Toddlers Program. To the maximum extent appropriate, students with disabilities are educated in the least restrictive environment with students who are not disabled. A continuum of alternative placements shall be provided.

1. If a special-education space for pull-out purposes other than calming is provided and the space is required to support educational programs, services, and curricula, the space shall not be smaller than 450 net sf.

2. When the need is demonstrated by the LEA, additional space in the classroom shall be provided with, or students shall have an accessible route to: an accessible unisex restroom with one toilet, sink, washer/dryer, and shower stall/tub, as needed, and at least 15 net sf of storage.

3. When the need is demonstrated by the LEA, in 6<sup>th</sup> grade classrooms and above, a kitchenette of least 30 net sf shall be provided.

#### B. Science (COMAR 13A.04.09)

1. For grades PK through 5, no additional space is required beyond the classroom requirement.

2. For grades 6 through 12, 4 net sf/student of the specialty program capacity for science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction. The space shall have science fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Science Content Standards.

3. For grades 9 through 12 only, at least 40 net sf of space is provided for securable, well-ventilated storage/prep space for each science room having science fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.

C. Fine-Arts Education. *(COMAR 13A.04.16)* A school facility shall have classroom space to deliver fine-arts education programs. Fine arts subjects include art, music, dance, and theater. Classroom space(s) for fine-arts education shall not be smaller than the average classroom at the facility. Fine-arts education classroom space(s) may be included in the academic-classroom requirement and may be used for other instruction.

1. Elementary school. Fine-arts education programs may be accommodated within a general use or dedicated arts classroom. Provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full time fine-arts teacher. Provide additional dedicated fine-arts program storage of at least 60 net sf for each subject area per facility.

2. Middle school. Classroom space(s) for fine-arts education programs shall have no less than 4 net sf/student of the specialty program capacity for fine-arts subjects. Provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full time fine-arts teacher. Provide additional 60 net sf of storage for each fine-arts program subject.

3. High school. Classroom space(s) for fine-arts education programs shall have no less than 5 net sf/student of the specialty program capacity for fine-arts subjects.

4. Combination school. A combination school shall provide the elements of the grades served by paragraphs (1), (2) and (3) above without duplication but meeting the higher standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

#### D. Technology Education and Computer Science (COMAR 13A.04.01)

1. For grades K through 5, no additional space is required beyond the classroom requirement.

2. For grades 6 through 8, 3 net sf/student, and 4 net sf/student for grades 9 through 12, of the specialty program capacity for technology education and family and consumer science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction.

3. The space shall have technology fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Technology Education Content Standards, and in high school, the requirements of Maryland Advanced Technology Education electives where such electives are offered.

4. Provide at least 80 net sf for securable, well-ventilated storage/prep space for each technology education room having technology fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.

#### E. Career and Technology Education (COMAR 13A.04.02 and 13A.04.10)

1. Elementary school. No requirement.

2. Middle school. Space shall be provided for career-development and careerexploration activities. Each program lab or classroom space shall be no smaller than 650 net sf.

3. High school. Career and technology education programs space shall be provided with no less than 4 net sf/student of the specialty program capacity of the school for career education. Each program lab or classroom space shall be no smaller than 650 net sf. Spaces for programs requiring licensing, certification, or accreditation by a state board or agency shall meet all applicable health and safety standards. Cosmetology and barber programs shall comply with the sanitation requirements of the State Board of Cosmetologists and the State Board of Barbers, respectively.

4. Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

IX. SCHOOL LIBRARY/MEDIA CENTER. *(COMAR 13A.05.04)* A school facility shall have a unified school library/media program for the use of all students which shall include an organized and centrally managed collection of instructional materials and technologies and direct instruction. Provide space for collections, reference, circulation, instruction, workroom for staff, and storage.

A. Elementary school. The area for stacks and seating space shall be at least 3 net sf/student of the planned school program capacity. The instructional space shall not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

B. Middle or high school. The area for stacks and seating shall be at least 3 net sf/student of the planned school program capacity. The space shall not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

C. Combination school. Provide the elements of the grades set out in Paragraphs (A) and (B) above without duplication, but meeting the higher standards.

D. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

### X. PHYSICAL EDUCATION. (COMAR 13A.01.02.05, 13A.04.13, and 13A.06.04)

A. General requirements. Each school shall provide an instructional program in physical education each year for all students in grades PK-8. Each school shall offer a physical-education program in grades 9–12 which shall enable students to meet graduation requirements and to select physical education electives. The following minimum spaces are required: gymnasium, teacher office or planning area, equipment storage, and outdoor instructional playing field.

1. Elementary school. Provide a gymnasium with at least 2,200 net sf. This space may have multi-purpose use in accommodating other educational program activities such as art program performances.

2. Middle school. Provide a gymnasium with a minimum of 5,200 net sf plus an additional 4 net sf times 40% of the enrollment of the school devoted to bleacher seating.

3. High school. Provide a gymnasium with at least 6,500 net sf plus an additional 4 net sf times 40% of the enrollment of the school devoted to bleacher seating..

4. Combination school. Provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher net sf standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

B. Additional physical education requirements in addition to space requirements in Subsection A:

1. Elementary school. One office shall be provided. Separate physical education equipment storage shall be provided.

2. Middle school. One office shall be provided. Separate physical education equipment storage space shall be provided.

3. High school. Two dressing rooms shall be provided, with lockers, showers and restroom fixtures. Two offices shall be provided. Separate physical education equipment storage space shall be provided.

4. Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

### XI. FOOD SERVICES (COMAR 13A.06.01)

A. Dining. A school facility shall have a space to permit students to eat within the school outside of general classrooms. This space may have more than one function and may fulfill more than one sufficiency standards requirement. Schools are encouraged to provide sufficient lunch periods that are long enough to give all students enough time to be served and to eat their lunches. The dining area shall be sized to accommodate no less than one third of the planned school program capacity of the school. The dining area shall have no less than 15 net sf/seated student.

B. A serving area shall be provided in addition to a dining area.

C. Kitchen. A kitchen shall have a telephone, plumbing providing potable water, a sink suitable for use both in preparing food and washing utensils, and a separate hand-washing sink. Kitchen and equipment shall comply with either the food preparation kitchen or the serving kitchen standards defined as follows:

1. Food preparation kitchen. Provide at least the greater of 1) a minimum of 2 net sf/meal served during the single largest serving period or 2) no fewer than 2 sf per enrolled student eligible for free or reduced-price meals.

2. Serving kitchen. Where food is not prepared, there shall be a minimum of 200 net sf.

### XII. OTHER FACILITY AREAS.

A. Administrative space. A school facility shall have space to be used for the administration of the school. The space shall consist of a minimum of 150 net sf, plus 1 net sf/student of the planned school program capacity.

B. Faculty workroom/lounge. A school facility shall have workspace/lounge available to the faculty. This space is in addition to any workspace/lounge available to a teacher in or near a classroom. The space shall consist of 1 net sf/student of the planned school program capacity with no less than 150 net sf. The space may consist of more than one room and may have more than one function. This space shall include a break area with a sink.

C. Health services. *(COMAR 13A.01.02.05 and 13A.05.05.10A)* A school facility shall have a dedicated health services space with areas for waiting, examination and treatment, resting, storage, and an accessible toilet room. There shall be a separate room for private consultations and for use as a health service professional's office. Provide lockable cabinets for medical records and medications and at least one sink in addition to the sink in the toilet room. All sinks must provide both hot and cold water. Provide a minimum of 500 net sf.

D. Pupil services. *(COMAR 13A.05.05)* A school shall provide a coordinated program of pupil services for all students which shall include, but not be limited to, school counseling, pupil personnel, school psychology, and health services. The school facility shall provide a minimum of 120 net sf for each discipline, except school health services, staffed with greater than a 0.5 full time professional.

XIII. GENERAL STORAGE (EXCLUDES LOCKERS, JANITORIAL, KITCHEN, GENERAL CLASSROOM, SPECIALTY CLASSROOMS, AND ADMINISTRATIVE STORAGE). For storage, at least 1 net sf/student of the planned school program capacity may be distributed in or throughout any type of room or space, but may not count toward required room square footages. General storage must be securable and include textbook storage.

XIV. MAINTENANCE AND JANITORIAL SPACE. Each school shall designate 0.5 net sf per student of the planned school program capacity for maintenance and janitorial space. Janitorial space shall include a janitorial sink.

### XV. STANDARDS VARIANCE.

A. The IAC may grant a variance from any of the Sufficiency Standards if it determines that the intent of the standard can be met by the school system in an alternate manner or if a variance is required for appropriate programmatic needs as demonstrated by the school system. If the IAC grants the variance, the school system shall be deemed to have met the standard.

B. The IAC's Facilities Planning Guide includes the appropriate Sufficiency Standard in each functional section defining design minimums, and the State maximum funding participation is included as the State Funding Participation Goals provided by the total gross square footage per student by enrollment level. Additional State funding above the Funding Participation Goals will be granted only pursuant to a project-specific variance granted by the IAC.

End of Standards