The primary purpose of educational facilities must be to functionally support the successful delivery of educational programs in comfortable, healthy, and safe environments, and to preserve available educational funding for the purpose of teaching and learning.
Public School Facilities Quick Facts

- Number of students – 885,820
- Number of schools – 1,382
- Square feet (SF) within schools – 139,160,537
- Average gross square feet (GSF) per student – 157
- **Replacement Value** – $44,531,371,840 (@ $320 GSF)
- Annualized Replacement Value (ARV or $44.5B/50 years) – $890,627,436.80
- Each 2% cost avoided equates to a year of extended life – $890M
- Average age of GSF down 5 years in a 10 year period – 24 years in 2005; 29 years in 2016
School Facilities are Important

• *Maryland Constitution Article VIII* – “*...a thorough and efficient system of free public schools.*”

• The 2004 Kopp Commission reported the need for “minimum facility standards” important to safely, sufficiently, and efficiently support educational programs.

Funding is Limited

• The average educational space gross square feet (GSF) per student has grown over the last 45 years at 1.6%, and combined with cost of construction at 1.25% above the United States CPI, our school facilities cost escalation is trending at 2.85% annually over CPI.

• In 2005 the Kopp Commission recommended $250M/yr for the CIP. With an annual cost escalation at 2.85% plus the average 3% annual CPI inflation, the $250M today would be $495M.
Maryland’s PK-12 Facilities Replacement Value

Square feet per student has doubled from 80 to 160 in the 45 years between 1972 and 2017.

Statewide Square Feet Per Student
1960 to 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
<th>Square Feet per Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>1972</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>1980</td>
<td>160</td>
<td>150</td>
</tr>
<tr>
<td>2017</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

157 square feet per student
Cost of Ownership is Increasing

• The last slide graphically shows that our schools have doubled in size per student in the last 45 years. This is where the 1.6% per year average growth factor was derived. When combined with average CPI and construction cost escalation, we have a 5.85% escalation factor. A dollar of construction forty-five years ago would cost $12.91 today.

• Clearly, the cost of ownership is increasing and this is further evidenced by the fact that it is only within recent decades that local governances have depended on State financial assistance for their school facilities.

• Today, Maryland’s PreK-12 facilities have a $44.5B replacement value with a $20B estimated differed maintenance backlog.
Functional Sustainability

• Since 1972, the State has invested $7.8B in our public PK-12 school facilities.

• There are basically three factors that impact the functional sustainability of school facilities:
  1. **Available Funding** — Combined state, local, and other funding
  2. **Replacement Value** (RV) — Driven primarily by Gross Square Footage (GSF).
  3. **Maintenance Effectiveness** — Ability to achieve maximum life of the facilities

• Sustaining school facilities conditions requires consideration of all three of the factors. It may be prudent to minimize expectations of continued increases in funding.
Why Facilities Standards?

• Knowing the necessary size and attributes of school facilities will allow LEAs, Counties and the State to focus on what is most important.

• Uniform and comparable facilities measures support functional performance, transparency, good policy, and public support.

• The DRAFT PK-12 School Facilities Adequacy Standards define facilities space and attributes needed to support State-required education programs as defined and justified by the Maryland State Board of Education.

• The Kopp Commission reported the need for “minimum facility standards.” Facility standards will allow accurate measurement of unfunded needs because it is important to safely, sufficiently, and efficiently support educational programs.
Measure What is Important

• What is important must be measured and then utilized to drive policy and management decisions.

• Statewide PK-12 minimum facilities standards can define expectations of sufficiency:
  - Permitting non-political prioritization of need;
  - Vital if resources such as funding are limited;
  - For comparable measures allowing focus and team effort of LEAs, educators, Counties, State, and building industries; and,
  - Providing longitudinal comparisons of information with the scale of state and national metrics that can best drive continuous improvement and verified best practices.
More Support and Less Regulation

The IAC could provide measures, tools, and technical guidance to support LEAs’ facilities management tasks by leveraging the efficiency of statewide scale for:

- Educational Facilities Conditions Database
  - Independent, uniform, and robust adequacy measures
- Planning and Construction
  - Post-occupancy performance information
  - Life-cycle and whole-life cost information
  - Early planning/design collaboration
  - Standard contract and procurement documents
- Maintenance System with support
  - Uniform and robust effectiveness measures
  - Budgets, comparable information, and best practices
  - Building systems technical support with maintenance and operational information and benchmarks
Measures Yield Measurable Success
NM’s Facilities Condition Index (FCI) “Bricks and Mortar”

In 2001, with a few percent carved from the State of New Mexico’s school facilities CIP budget, facilities management support became available to all LEAs.

In 2001, the average FCI was 71% (lower is better) and was reduced to 36% over 8 years, and has been maintained with reduced State spending.
Ownership and Cycle-of-Life

Educational Facility Lifecycle

Design

Planning

Construction

Operation/Maintenance

District
- Admin/Teachers
- Students
- Community
- School Board

Data Discussions Decisions

Data Discussions Decisions

Data Discussions Decisions
Thank you!

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