#### 21st Century School Facilities Commission

#### **Process, Procedure, and Educational Specifications Subcommittee**

Dr. Kevin Maxwell, Co–Chair Dr. Theresa Alban, Co–Chair

1

Agenda October 17, 2017 10:00 a.m. House Office Building, Room 120 Annapolis, Maryland

Work Session

**Designing for Students: Maximizing the Efficiency and Effectiveness of School Design and Construction** 

- Scott Walters, AIA LEED AP, Senior Associate, Hord Coplan Macht Architects
- Michael Archbold, AIA, Senior A/E Supervisor of Design, Baltimore County Public Schools

**Discussion of DRAFT Potential Consensus Documents** 

- Alex Szachnowicz, Anne Arundel County Public Schools
- Michael Rubenstein, Department of Legislative Services

### **Designing for Students:** Maximizing the Efficiency and Effectiveness of School Design and Construction

A summary of workshops and surveys conducted by **AIA** Baltimore



### Acknowledgments

AIA Baltimore - Committee on Architecture for Education

AIA Maryland

Baltimore County Public Schools Westowne Elementary School Catonsville Elementary School

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# Maximize the value of each dollar invested into public education.

We are committed in finding ways to maximize taxpayer's investment in the life cycle cost of schools by building more efficiently and to deliver 21st century learning spaces for today's learners.



### Research has proven there is an **undeniable link between properly designed learning environments and learning**.



### Schools are homes for the community.

The best schools in our state have a strong sense of community – not only within the school, but also within their neighborhood.



# We are adamant proponents of not sacrificing life cycle costs for first time costs.

It is financially unsustainable to achieve lower construction cost by sacrificing life-cycle cost. We cannot burden future generations with higher energy consumption, accelerated deterioration, higher maintenance burden, poor acoustics and IAQ, or educationally inflexible and inappropriate spaces.



### The problems facing public education are ever-changing; today we face budget shortfalls and demographic change.

We believe the solution is to build what is proven to work, make it adaptable, assess frequently and maintain them as effective learning environments.

### Panel Discussions and Round Tables



### **Panel Discussion and Round Table** Session One

Thought Curriculum & Space

#### Moderator

Mike Archbold, AIA Senior A/E Supervisor Design, Office of Engineering and Construction Baltimore County Public Schools

#### **Panelists**

George Roberts Community Superintendent Zone 2 Baltimore County Public Schools

Dr. Lynette Washington Executive Director of Facilities Baltimore City Public Schools Morna McDermott McNulty Associate Professor College of Education, Towson University

Gloria Mikolajczyk School Facilities Architect Supervisor Maryland State Department of Education John S. Palmer Principal, Westowne Elementary School Baltimore County Public Schools

### Panel Discussion and Round Table

Session Two

### Adaptability Flexibility & Future Proofing

#### Moderator

Scott Walters, AIA Senior Associate, Design Director of Education Studio Hord Coplan Macht

#### **Panelists**

Jon Wray Secondary Mathematics Instructional Facilitator Howard County Public Schools

Merril E. Plait Administrator Office of Engineering and Construction Baltimore County Public Schools Mick Rayburn, Project Manager The Whiting-Turner Contracting Company

Jillian Storms School Facilities Architect Maryland State Department of Education

Cynthia Smith Director - Facilities Design and Construction Baltimore City Public Schools David Recchia Project Manager/Architect Ruebling and Associates, A JMT Division

Linda Miller Principal, Catonsville Elementary School Baltimore County Public Schools

### Survey Responses and Conclusions



### Survey Background

The survey was sent out by regional AIA chapters to the design and planning community over the months of January and February of 2017.

School design needs to be innovative and encourage an atmosphere of curiosity and discovery

Survey Respondent

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#### **Jurisdiction Experience**

Respondents were able to report experience in more than one jurisdiction when applicable. Percentage of respondents with experience in county indicated in table. **Experience was reported in all 24 Maryland Jurisdictions.** 

### **Role of Respondents**

- Architect
- Facilities Planner
- Work in a Government Agency
- Other





Designing for Students: Maximizing the Efficiency and Effectiveness of School Design and Construction

50%

%00

**AIA Baltimore** 



### **Committee Recommendations**

- **1.** Develop Assessment Tools
- **2. Close the Communication Gap**
- **3.** Plan for Collaboration
- **4.** Advocate for Furniture and Technology Funding
- **5.** Share Space with Community

### 6. Advance Sustainability Through Low/No Interest Loans



## **Develop Assessment Tools**

### **Recommendations:**

Develop assessment tool and database of the results to share statewide.

- Evaluate Design Features
- Gauge Learning Outcomes
- Assess Square footage + Costs
- Analyze Energy Use



# **Close the Communication Gap**

#### **Recommendations:**

- Create a collaborative feedback tool that would encourage and facilitate communication during design between ed spec planners and designers
- Develop a post occupancy review process with both parties to evaluate how the components of the ed spec positively influenced the design outcome
- Implement action plan and integration



## **Plan for Collaboration**

### **Recommendations:**

- Acknowledge that collaborative learning environments are essential elements of a 21st century school
- Allow the funding formula to acknowledge the need for these types of spaces



# Advocate for Furniture and Technology Funding

#### **Recommendations:**

 Need to identify an alternative funding to allow for state participation in funding for furniture and technology equipment



# **Share Space with Community**

### **Recommendations:**

State act as a facilitator to

- Identify needs of other state/local agencies
  Assist in the creation of inter-agency agreements for those shared spaces within schools, thus being more cost effective



## **Advance Sustainability Through** Low/No Interest Loans

#### **Recommendations:**

- Document energy savings potential, rate of returns for various high performance systems and initiatives Identify and advocate for potential state funding
- mechanisms

### Join the Conversation Kathleen Lane, Executive Director, AIA Baltimore klane@aiabalt.com (410) 625-2585

# Questions?

A summary of workshops and surveys conducted by **AIA** Baltimore 21<sup>st</sup> Century School Facilities Commission Process, Procedures, and Educational Specifications Subcommittee

Procurement/Project Delivery/Efficiencies/Cost-saving

Areas of potential consensus

- 1. The impact of prevailing wage on school construction costs should be examined further.
- 2. Expand the options for LEAs and counties to use alternative methods of project delivery.
- 3. Achieve the equivalent of LEED Silver standards without requiring the LEED certification.
- 4. The IAC should serve as a research clearinghouse for best practices.
- 5. Utilize the IAC as a central repository for information on use of pre-fabrication options.
- Encourage bulk purchasing and bundling, potentially develop a joint purchasing program for common items, e.g. HVAC, windows.
- 7. Continue to allow LEAs choice in construction materials, but provide incentives.
- 8. Reorient school construction procurement toward obtaining best value rather than lowest price.
- Require site approval only within three years of local planning submittal instead of at time of new land purchase.
- 10. Electronic submission of required forms and contracts to the IAC



Areas for Further Discussion

1. Require side—by—side bids for all new projects? For a certain number of years?

2. Construction Manager at risk, construction manager, general contractor, should all be an option, are there barriers? Any changes to the option of value engineering?

3. Charge Green Building Council with examining alternate certifications.

7a. Provide incentives for LEAs to use lower first cost or lower life cycle construction materials strategically

7b. Can aspects of Building Information Modeling be incorporated in a way that is not cost prohibitive?

7c. Should the State provide renewed funding for relocatable classrooms? For modular buildings with a greater lifespan than relocatables? 21<sup>st</sup> Century School Facilities Commission Process, Procedures, and Educational Specifications Subcommittee

Enrollment/Maintenance

Areas of potential consensus

- 1. The Maryland Department of Planning provides reliable enrollment growth projections that should continue to be used as the basis for facilities planning.
- 2. Local school systems with declining enrollment should be encouraged to consolidate buildings and/or find alternative uses for undersubscribed school buildings. However, final authority for redistricting should remain with local governments.
- 3. The State should continue to provide increased support to local school systems with increasing enrollment.
- 4. Incentives for LEAs prioritizing preventative maintenance
- 5. Preserve the requirement for comprehensive maintenance, plans submitted by the LEAs.



Areas for Further Discussion

1. Should some processes be differentiated for some LEAs?

2a. To what extent should State funding policies protect local school systems with declining enrollments from dramatic decreases in State support?

2b. What incentives could the State provide to encourage school consolidation?

3. Should the State incorporate a growth factor to school buildings that are built in communities anticipated to experience enrollment growth? Lower levels of occupancy in the short-term may be worth the long-term savings.

4. What incentive should be provided? What should be the threshold to receive said incentive?

5. How can the maintenance program be more responsive to LEAs, specifically in those needing more guidance? 21<sup>st</sup> Century School Facilities Commission Process, Procedures, and Educational Specifications Subcommittee

Structure and process (See separate handout)

Areas of potential consensus

- 1. Examine/update the State Rated Capacity process to address special programs/adjacent schools/etc.
- 2. Final project proposals should be subject to review and approval by the Interagency Committee on School Construction (IAC).
- 3. The Department of General Services review of Design Development (DD) and Construction Documents (CD) should be eliminated, or at the very least streamlined.
- 4. The State should consider allowing LEAs with demonstrated capacity on the part of their county governments, local design communities, regulatory infrastructures, and the LEAs themselves to bypass State review of DDs and CDs.
- 5. Each step where the State is involved should be adding value. Steps should be eliminated that are simply bureaucratic and redundant.
- 6. Eliminate State review of change orders.
- 7. The timeline for State approval needs to be better aligned with local budgeting timelines.
- 8. In general, the State review process takes too long.
- 9. Allow districts to bundle (for approval purposes) similar systemic renovation projects at different schools (e.g., roofs at three schools) and interrelated systemic projects at a single school (e.g., windows and HVAC at one school).



#### Areas for Further Discussion

1. What role, if any, should the Department of General Services and Maryland State Department of Education play in the planning, funding, and approval process of school construction projects? Responses varied from no involvement to maintaining their current levels of involvement.

2. Should final approval of school construction projects be made by IAC or the Board of Public Works?

4. Should the State review process be streamlined for school systems with greater planning; and design capacity? This could free up PSCP time to provide more technical assistance to smaller systems with limited staff, but could be viewed as unfair by those subject to more thorough review.

### Draft Decision Chart for Structure/Process Potential Consensus Document









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