21st Century School Facilities Commission
Process, Procedure, and Educational Specifications Subcommittee

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

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

Photography: Robert Benson, Chris Cooper, Robert Creamer, Tom Holdsworth, Alan Jaramillo, Sam Kittner, Joseph Romero, Patrick Ross
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

David Recchia
Project Manager/Architect
Ruebling and Associates, A JMT Division

Jillian Storms
School Facilities Architect
Maryland State Department of Education

Linda Miller
Principal, Catonsville Elementary School
Baltimore County Public Schools

Cynthia Smith
Director - Facilities Design and Construction
Baltimore City Public Schools
Survey Responses and Conclusions
The survey was sent out by regional AIA chapters to the design and planning community over the months of January and February of 2017.

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

School design needs to be innovative and encourage an atmosphere of curiosity and discovery.
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
2. 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
5. 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
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 prefabrication options.

6. 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.

9. 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?
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?
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.


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

1. Should we keep DGS review for design development for systemics?
   - Yes
   - Differentiate?
   - 3rd Party Hire?

2. Should we keep DGS review for design development for major projects?
   - Yes
   - Differentiate?
   - 3rd Party Hire?

3. Should we keep DGS review for construction documents for systemics?
   - Yes
   - Differentiate?
   - 3rd Party Hire?
4. Should we keep DGS review for construction documents for major projects?

Yes

Differentiate?

3rd Party Hire?

5. Should we keep DGS review for change orders for systemics?

Yes

Differentiate?

3rd Party Hire?

6. Should we keep DGS review for change orders for major projects?

Yes

Differentiate?

3rd Party Hire?

7. Should we keep MSDE review -- when/where should feasibility deadline be?

Yes

Differentiate?

?
8. Should we keep MSDE review - ed specs?
   - Yes
     - Due Date?
     - Combine with schematic?
   - No

9. Should we keep MSDE review of schematics?
   - Yes
     - Due Date?
     - Combine with ed spec?
   - No

10. Should we keep MSDE review of 100% locally funded projects?
    - Yes
      - Change threshold amount?
      - Systemics?
      - Change threshold amount?
      - Major projects?
    - No

11. Should we keep PSCP review - contract reviews (including MBE)?
    - Yes
    - ?
    - No
12. Should we keep PSCP review of payment/closeout?