IAC MEETING AGENDA
Thursday, October 15, 2020

Maryland State Department of Education
Virtual Meeting
9:00 a.m.

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Introduction

- Meeting called to order
- Roll Call

Public Comment

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INTERAGENCY COMMISSION ON SCHOOL CONSTRUCTION

LARRY HOGAN
GOVERNOR

KAREN B. SALMON, Ph.D.
CHAIRPERSON

ROBERT A. GORRELL
EXECUTIVE DIRECTOR

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Meeting Minutes
September 10, 2020

Call to Order:
Dr. Karen Salmon called the video-conference meeting of the Interagency Commission on School Construction to order at 9:01 a.m.

Members in Attendance:
Dr. Karen Salmon, State Superintendent of Schools, Chair
Edward Kasemeyer, Appointee of the President of the Senate
Secretary Ellington Churchill, Department of General Services
Gloria Lawlah, Appointee of the President of the Senate
Linda Eberhart, Appointee of the Speaker of the House
Brian Gibbons, Appointee of the Speaker of the House
Dick Lombardo, Appointee of the Governor
Secretary Robert S. McCord, Maryland Department of Planning

Members Not in Attendance:
Denise Avara, Appointee of the Governor

Revisions to the Agenda:
None

Public Comment:
None

IAC Correspondence:
None

I. Consent Agenda ***Motion Carried***

Upon a motion by Mr. Gibbons and a second by Mr. Kasemeyer, the members voted unanimously to approve the consent agenda.

A. Approval of August 20, 2020 Minutes

To approve the minutes of the August 20, 2020 Interagency Commission on School Construction Meeting.

B. Summary of Contracts Awards

To approve contract procurement as presented.

II. Total Cost of Ownership Presentation ***Informational Only***

Deputy Director Alex Donahue, Senior Regional Facilities Manager Bret Waskiewicz, and Regional Facilities Manager Ben Kaplan delivered a presentation regarding total cost of ownership. The presentation highlighted that costs of operating and maintaining a facility over the course of a 30-year life span can often exceed the cost to construct the facility. Along with the suggested use of industry standards on funding allocation, right-sizing facilities, gross area baselines, and the IAC's Educational Facility Sufficiency Standards, total cost of ownership is necessary to weigh an accurate estimated cost of various options before deciding on a specific solution for the LEA's facility.

Chairperson Salmon emphasized the importance of assessing the total cost of ownership, and noted that the IAC has continued to emphasize its relevance to sustainable facility management. Chairperson Salmon also commended the IAC Director for being able to clearly articulate this concept to various subcommittees, IAC members, and additional stakeholders.

III. FY2020 Maintenance Report ***Motion Carried***

Scott Snyder, Acting Maintenance Manager, presented the final draft of the IAC's FY 2020 Report on the Maintenance of Maryland's Public School Buildings.

During the presentation, Scott Snyder gave a general overview of the 260 maintenance effectiveness assessments performed in FY 2020 representing 18.8% of Maryland's PK-12 public school facilities. In FY 2020, the goal was for the three IAC assessors to visit 25% of school facilities in each LEA. This goal was met for 18 out of 24 LEAs. The remaining 6 LEAs each had at least one assessment performed, but did not meet the 25% goal. Due to COVID-19, all FY 2020 assessments scheduled from March 13th through June 30th were cancelled. Mr. Snyder delivered a brief update on the Maintenance-Effectiveness Assessment, for which there will be significant changes in FY 2021. These changes will be targeted to focus on the qualities most important for facilities, including usefulness, reliability, and longevity. Following the presentation, Secretary McCord suggested future modifications to the document to appropriately acknowledge the importance of total cost of ownership and overall square footage.

Upon a motion from Ms. Lawlah and a second from Ms. Eberhart, the members voted unanimously to approve the final draft of the IAC's FY 2020 Report on the Maintenance of Maryland's Public School Buildings, dated October 1, 2020, pending non-substantive edits by staff.

IV. Cecil County Gilpin Manor Elementary School Reversion/Amendment/Reallocation ***Motion Carried***

Wanda Ascencio, Finance and Business Manager, presented a request from the Cecil County Public School System (CCPS) to have the Gilpin Manor ES Replacement project contingency reserved for change orders reverted and to utilize the funding for the Cecil Manor Elementary School. Staff recommended approval of the request.

Upon a motion from Mr. Gibbons and a second from Ms. Lawlah, the IAC voted unanimously to:

1. Revert the unused project contingency for change orders in the amount of $289,557 from the Gilpin Manor Elementary School Replacement project PSC #07.016.17/18/19 LPC to the Statewide Reserved Appropriations Account for CCPS.
2. Amend the FY 2021 CIP by allocating the $289,557 held in the Statewide Reserved Appropriations Account for CCPS to the Cecil Manor Elementary HVAC project PSC# 07.030.19/21 SR.

V. Baltimore City E15M HVAC Project Status Report ***Informational Only***

Director Gorrell noted that because of the short timeframe between IAC meetings, there were no updates to report regarding the Baltimore City E15M HVAC allocations.

Adjournment:

Before adjourning, Dr. Salmon noted that she recently had an opportunity to visit several schools in Caroline County where students are back in school facilities and are off to a good start of the school year. She was also able to visit the Greensboro Elementary School project which is under construction and is the first new school to be constructed in Caroline County in over 40 years.

Upon a motion from Mr. Gibbons and a second from Mr. Lombardo, the video-conference meeting of the Interagency Commission on School Construction adjourned at 9:38 a.m.

Item I. B. - SUMMARY OF CONTRACT AWARDS

Motion: To approve contract procurement as noted below.

The IAC staff has reviewed the contract procurement for the following State approved projects and recommends IAC approval.

		Bid Opening	Total Contract	State Funds	Local Funds
Frederick County					
1.	Brunswick Elementary PSC #10.025.19 SSGP Security Vestibule - SSGP		**$17,626**	$11,281	$6,345
	1 - Cromwell Contracting, LLC	09/03/20	$17,626		
2.	Waverley Elementary PSC #10.058.18/20/21/21 EGRC LPC Construction - Replacement (Contract #2)		**$42,945,350**	$0	$42,945,350
	Oak Contracting, LLC	7/29/20	$895,000		
	9D - L&R Enterprises, Inc. t/a L&R Floors	7/29/20	$499,400		
Montgomery County					
3.	Rockville High PSC #15.087.19 SSGP SSGP - Security Vestibule		**$1,236,700**	$124,500	$1,112,200
	1 - Keller Brothers, Inc.	4/3/2019	$1,236,700		
4.	Cloverly Elementary PSC #15.234.21 ASP ASP - Doors Replacement		**$144,234**	$143,709	$525
	1 - Metro Metal Services, Inc.	01/15/19	$144,234		
Baltimore City					
5.	#245 Leith Walk Elementary PSC #30.194.19 BC HVAC Systemic Renovation - Building Automation System Upgrade		**$46,000**	$46,000	$0
	1 - Trane Company	4/19/2019	$46,000		
Summary Totals					
Total Projects: 5		**Total Contracts: 6**	**$2,838,960**	**$325,490**	**$44,064,420**

APPROVAL OF CONTRACTS

LEA: Frederick County **PSC No.** 10.025.19 SSGP

Project Name: Brunswick Elementary **Bid Opening:** 09/03/20

Project Type: Security Vestibule

Scope of Work: SSGP

Basis for Award of Contract: quote dated 09/3/30 utilizing FCPS1-0000253742

Basis of Funding: 64% of eligible quote

Local Funds: $6,345
State Funds: $11,281
Total Contract: $17,626

State Contingency for Change Orders: $0

Transfer State Funds:	**Account No.**	**Amount**
Decrease Project Amount:	10.025.2019	$71,719
Increase Contingency Amount:	40.000.2019	$71,719
Decrease Contingency Amount:		
Increase Project Amount:		

Contract #	**Contractor**	**Total Contract**
1	Cromwell Contracting, LLC	$17,626
		$17,626

Notes: (1) Renovations to the interior of the school to provide a new security vestibule to improve school security and to better control accessibility.

IAC Approval Date:

APPROVAL OF CONTRACTS

LEA: Frederick County **PSC No.** 10.058.18/20/21/21 EGRC LPC

Project Name: Waverley Elementary **Bid Opening:** 7/29/20

Project Type: Construction

Scope of Work: Replacement (Contract #2)

Basis for Award of Contract: base bid

Basis of Funding: 64% of eligible base bid

Local Funds: $42,945,350
State Funds: $0
Total Contract: $42,945,350

State Contingency for Change Orders: $0

Transfer State Funds:	**Account No.**	**Amount**
Decrease Project Amount:		$0
Increase Contingency Amount:		$0
Decrease Contingency Amount:		$0
Increase Project Amount:		$0

Contract #	**Contractor**	**Total Contract**
	Oak Contracting, LLC	$895,000
9D	L&R Enterprises, Inc. t/a L&R Floors	$499,400
		$1,394,400

Notes: (1) Replacement school on the same site with 130,225 sf, including cooperative use space, as well as demolition of 54,178 sf.
(2) Prevailing wage rates apply to these contracts.
(3) Apparent lowest bidder for package 3A (Chevy Chase Contractors, Inc.) & 9A (Can-Am Contractors) requested to withdraw bids due to mathematical error. Bidder (Singer Equipment) for Package 11A did not submit pricing with their proposal; Contract package 9D was re-bid and awarded to L&R Enterprises, Inc.; Oak Contracting, LLC submitted the pre-construction and construction CM fees.
(4) Ineligible equipment ($319,919) and Pre-construction CM fees ($75,000).
(5) Project eligible for additional funding in a future fiscal year.

IAC Approval Date:

BID 20C17, WAVERLEY ELEMENTARY SCHOOL - NEW CONSTRUCTION - RE-BID 9D RESILIENT FLOORING RUBBER ATHLETIC SURFACING
PREVAILING WAGE - BID TABULATION

VENDOR:	Base Bid – Phase 1 Stage B Activities (Applies to all Contract Packages in this Solicitation: 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 15A, & 16A)	Base Bid – Phase 2 Activities (Applies to all Contract Packages in this Solicitation: 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 9B, 9C, 9D, 9E, 11A, 11B, 15A, & 16A)	Base Bid – Phase 3 Activities (Applies to all Contract Packages in this Solicitation: 2A & 16A)	TOTAL BASE BID (Phase 1 Stage A, Phase 1 Stage B, Phase 2, and Phase 3):	ALT 1	ALT 1A	ALT 2	ALT 4	TOTAL with ALTS 1, 1A, 2 and 4
CONTRACT PACKAGE: 9D RESILIENT FLOORING & RUBBER ATHLETIC SURFACING (5% MBE GOAL)									
L&R Floors	**$ -**	**$ 520,200.00**	**$ -**	**$ 520,200.00**	**$ 11,200.00**	**$ -**	**$ (32,000.00)**	**$ -**	**$ 499,400.00**
Atlascopco	$ -	$ 575,000.00	$ -	$ 575,000.00	$ 15,600.00	$ -	$ (25,000.00)	$ -	$ 565,600.00

Base Bid – Phase 1 Stage B Activities: Applies to all Contract Packages in this Solicitation: 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 15A, & 16A. To perform all activities required after July 2, 2020.

Base Bid – Phase 2 Activities: Applies to all Contract Packages in this Solicitation: 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 9B, 9C, 9D, 9E, 11A, 11B, 15A, & 16A. To perform all activities required after July 2,

Base Bid – Phase 3 Activities: Applies to all Contract Packages in this Solicitation: 2A & 16A. To perform all activities required after July 2, 2022.

Total Base Bid (Phase 1 Stage B, Phase 2, and Phase 3).

Alternate No. 1 - Specialized Program Suite.

Alternate No. 1A - Solid Surface Countertops in Specialized Program Suite.

Alternate No. 2 - Terrazzo at Select Corridors and Spaces.

Alternate No. 4 - Casework Coutertops (Solid vs. P.-Lam)

RFP 19C3, Construction Management Services for Waverley Elementary School Replacement
Bid Tabulation

	Dustin Construction	Hess	Lendlease	**Oak Contracting**	Whiting-Turner
Construction Management Fees:					
Pre-Construction Fee: From the date of award of CM Contract to the date of award of the Prime Contractor Construction Contracts:	$ 92,500.00	$ 50,000.00	$ 154,068.22	$ 75,000.00	$ 191,015.00
Construction Fee: From the date of award of the Prime Contractor Construction Contracts through Construction, Substantial Completion and Project Close-out and Warranty:	$ 1,001,700.00	$ 1,020,000.00	$ 1,380,720.34	$ 820,000.00	$ 2,272,092.00
Total Construction Management Fee:	**$ 1,094,200.00**	**$ 1,070,000.00**	**$ 1,534,788.56**	**$ 895,000.00**	**$ 2,463,107.00**
Reimbursable Expenses:					
Reimbursable Expenses (Estimated): Pre-Construction Reimbursable Expenses: From the date of award of CM Contract to the date of award of the Prime Contractor Construction Contracts:	$ 10,000.00	$ 10,000.00	$ 15,100.21	$ 4,000.00	$ 4,200.00
Construction Reimbursable Expenses (Estimated): From the date of award of the Prime Contractor Construction Contracts through Construction, Substantial Completion and Project Close-out and Warranty	$ 430,985.50	$ 481,700.00	$ 501,362.94	$ 404,250.00	$ 622,711.00
Total Reimbursable Expenses:	**$ 440,985.50**	**$ 491,700.00**	**$ 516,463.15**	**$ 408,250.00**	**$ 626,911.00**
Informational Unit Price: Construction Management Fee per Month if the Project Schedule is extended:	$ 46,000.00	$ 60,000.00	$ 43,802.31	$ 41,000.00	$ 55,000.00

KM/ab
BOE Mtg. 12.12.18

APPROVAL OF CONTRACTS

LEA: Montgomery County **PSC No.** 15.087.19 SSGP

Project Name: Rockville High **Bid Opening:** 4/3/2019

Project Type: SSGP

Scope of Work: Security Vestibule

Basis for Award of Contract: base bid plus alternates 1 & 2

Basis of Funding: SSGP

Local Funds: $1,112,200
State Funds: $124,500
Total Contract: $1,236,700

State Contingency for Change Orders: 0

Transfer State Funds:	**Account No.**	**Amount**
Decrease Project Amount:		$0
Increase Contingency Amount:		$0
Decrease Contingency Amount:		$0
Increase Project Amount:		$0

Contract #	**Contractor**	**Total Contract**
1	Keller Brothers, Inc.	$1,236,700
		$1,236,700

Notes: (1) Remodel and relocate the administrative suite to create a guided security vestibule.
(2) Eligible for funding available within FY 2019 SSGP allocation for LEA at time of reimbursement request.

IAC Approval Date:

Craig, Gauden Davis, Inc.

Rockville High School Security Vestibule

April 3, 2020
2:00 p.m.

BIDDER	Buch Construction, Inc.	Keller Brothers, Inc			
MBE Forms A & B	X	X			
Base Bid	$1,217,930	$1,208,800			
Alternate 1: Flooring	$15,000	$13,100			
Alternate 2: Casework	$20,000	$14,800			
Bid Bond Included	X	X			
Addenda Acknowledged	X	X			

APPROVAL OF CONTRACTS

LEA: Montgomery County **PSC No.** 15.234.21 ASP

Project Name: Cloverly Elementary **Bid Opening:** 01/15/19

Project Type: ASP

Scope of Work: Doors Replacement

Basis for Award of Contract: base bid

Basis of Funding: ASP

Local Funds:	$525
State Funds:	$143,709
Total Contract:	$144,234

State Contingency for Change Orders: $0

Transfer State Funds:	**Account No.**	**Amount**
Decrease Project Amount:		$0
Increase Contingency Amount:		$0
Decrease Contingency Amount:		$0
Increase Project Amount:		$0

Contract #	**Contractor**	**Total Contract**
1	Metro Metal Services, Inc.	$144,234
		$144,234

Notes: (1) Replacement of interior and exterior doors.
(2) Eligible for funding available within FY 2021 ASP allocation for LEA at time of reimbursement request.

IAC Approval Date:

APPROVAL OF CONTRACTS

LEA: Baltimore City **PSC No.** 30.194.19 BC HVAC

Project Name: #245 Leith Walk Elementary **Bid Opening:** 4/19/2019

Project Type: Systemic Renovation

Scope of Work: Building Automation System Upgrade

Basis for Award of Contract: proposal dated 4/19/19 utilizing PO# 87976

Basis of Funding: 100 % of eligible proposal

Local Funds: $0
State Funds: $46,000
Total Contract: $46,000

State Contingency for Change Orders: $0

Transfer State Funds:	**Account No.**	**Amount**
Decrease Project Amount:		$0
Increase Contingency Amount:		$0
Decrease Contingency Amount:		$0
Increase Project Amount:		$0

Contract #	**Contractor**	**Total Contract**
1	Trane Company	$46,000
		$46,000

Notes: (1) Work to include tune-up and corrective measures to include retro commissioning of DDC Control System front end; software installation and upgrades; and all other associated work required.

IAC Approval Date:

Item II. FY 2020 and FY 2021 Aging Schools Program Approved Projects Report

Motion:

This item is informational and does not require IAC action.

Background Information and Building Data:

Beginning each July 1, allocations for the Aging Schools Program (ASP) totaling $6,108,990 are distributed to the Local Education Agencies in accordance with Education Article, § 5-206(f)(2).

All projects that receive funding allocations through this program are required to be placed under contract before the end of the fiscal year of the allocation. The contracted funds are required to be expended and **reimbursed within six months** following the end of the fiscal year in which the funds were allocated. Uncontracted funds are generally held in reserve and re-allocated to the LEA during the next fiscal year.

Attachment A provides a quick reference on the current status of the FY 2020 and FY 2021 State General Obligation Bond Appropriations. The report is organized by Local Education Agency, PSC#, project scope, available program funding, estimated project cost, project status, funds requested, approved and expended. All eligible projects are required to have a lifespan of least 15 years.

For Fiscal Year 2020, the IAC received a total of 96 ASP applications from twenty-two jurisdictions of which 94 projects were approved, (1) one project was canceled and (1) project was denied. To date a total of $6,905,819 has been approved through the Fiscal Year 2020 ASP. The total ASP allocation for Fiscal Year 2020 was $7,311,197, which includes $1,202,207 in reserved prior year funds.

For Fiscal Year 2021, the IAC received and staff approved a total of 27 ASP applications from twenty-four jurisdictions. To date a total of $1,384,128 has been approved through the Fiscal Year 2021 ASP. The total ASP allocation for Fiscal Year 2021 was $6,565,637, which includes $456,647 in reserved prior year funds.

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
02 Anne Arundel			**$506,038**					
Shipley's Choice Elementary	**02.049.20**	Door Replacement		**$52,000**	Approved	$52,000	$52,000	$0
Southern Middle	**02.042.20**	Elevator Replacement		**$290,000**	Approved	$289,702	$289,664	$0
Southern High	**02.068.20**	Door Replacement		**$262,600**	Approved	$164,336	$164,336	$0
Remaining Balance			**$38**	**$604,600**		**$506,038**	**$506,000**	**$0**
03 Baltimore			**$1,583,041**					
Overlea High	**03.165.20**	Flooring Replacement		**$370,000**	Approved	$159,624	$159,624	$0
Sussex Elementary	**03.163.20**	Boiler Replacement		**$535,000**	Approved	$379,876	$379,876	$0
Rosedale Center	**03.015.20**	Boiler Replacement		**$760,000**	Approved	$500,000	$500,000	$0
Randallstown High	**03.032.20**	Generator Replacement		**$300,000**	Approved	$210,500	$210,500	$0
Joppa View Elementary	**03.112.20**	Intercom System Replacement		**$140,000**	Approved	$125,000	$125,000	$0
Cromwell Valley Elementary	**03.123.20**	Intercom System Replacement		**$140,041**	Approved	$108,041	$108,041	$0
Fullerton Elementary	**03.004.20**	Intercom System Replacement		**$140,000**	Approved	$100,000	$100,000	$0
Remaining Balance			**$0**	**$2,385,041**		**$1,583,041**	**$1,583,041**	**$0**
04 Calvert			**$38,982**					
Plum Point Middle	**04.017.20**	Partial Intercom Replacement		**$24,988**	Approved	$24,988	$24,988	$24,988
Mt. Harmony Elementary	**04.007.20**	Partial Intercom Replacement		**$20,934**	Approved	$13,994	$13,994	$13,994
Remaining Balance			**$0**	**$45,922**		**$38,982**	**$38,982**	**$38,982**
05 Caroline			**$50,114**					
Career and Technology Ctr	**05.009.20**	Parking Lot Coating		**$12,400**	Approved	$12,400	$12,400	$0

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Career and Technology Ctr	**05.009.20**	Hallway Extension		**$46,000**	Approved	$37,714	$37,714	$0
Remaining Balance			**$0**	**$58,400**		**$50,114**	**$50,114**	**$0**
06 Carroll			**$141,231**					
Winters Mill High	**06.052.20**	Outdoor Track Surface		**$34,040**	Approved	$34,040	$34,040	$34,040
Sykesville Middle	**06.029.20**	Flooring		**$15,421**	Approved	$15,421	$15,421	$0
Shiloh Middle	**06.054.20**	PA System		**$19,000**	Approved	$19,000	$19,000	$0
Linton Springs Elementary	**06.045.20**	PA System		**$16,882**	Approved	$16,882	$16,882	$0
Freedom Elementary	**06.015.20**	PA System		**$15,882**	Approved	$15,882	$15,882	$0
Hampstead Elementary	**06.022.20**	PA System		**$15,882**	Approved	$15,882	$15,882	$0
Westminster High	**06.042.20**	Flooring		**$29,400**	Approved	$24,124	$24,124	$0
Remaining Balance			**$0**	**$146,507**		**$141,231**	**$141,231**	**$34,040**
07 Cecil			**$118,325**					
Perryville Elementary	**07.020.20**	Playground Restoration		**$16,000**	Approved	$16,000	$14,399	$14,399
Cecilton Elementary	**07.031.20**	Flooring Replacement		**$11,000**	Approved	$11,000	$10,670	$10,670
Thomson Estates Elementary	**07.011.20**	Flooring Replacement		**$11,500**	Approved	$11,500	$11,020	$11,020
Holly Hall Elementary	**07.037.20**	Flooring Replacement		**$12,500**	Approved	$12,500	$12,271	$12,271
Bainbridge Elementary	**07.034.20**	Sidewalk Replacement		**$13,000**	Approved	$13,000	$12,744	$12,744
Rising Sun High	**07.022.20**	Boiler Valve Replacement		**$12,300**	Approved	$12,300	$11,927	$11,927
Elk Neck Elementary	**07.024.20**	Air Conditioning Replacement		**$14,600**	Approved	$14,600	$13,310	$13,310
Bainbridge Elementary	**07.034.20**	Boiler Controls Replacement		**$15,250**	Approved	$15,250	$14,850	$14,850

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Leeds Elementary	**07.041.20**	Boiler Supply Line Upgrade		**$14,850**	Approved	$13,509	$13,509	$13,509
Remaining Balance			**$3,625**	**$121,000**		**$119,659**	**$114,700**	**$114,700**
08 Charles			**$106,681**					
Piccowaxen Middle	**08.015.20**	Power Conditioning Panel		**$50,000**	Approved	$50,000	$50,000	$0
Remaining Balance			**$56,681**	**$50,000**		**$50,000**	**$50,000**	**$0**
09 Dorchester			**$38,292**					
Sandy Hill Elementary	**09.001.20**	Access Control System		**$38,982**	Approved	$38,982	$38,292	$0
Remaining Balance			**$0**	**$38,982**		**$38,982**	**$38,292**	**$0**
10 Frederick			**$189,381**					
Thurmont Primary	**10.064.20**	Envelope Repair/Water Infiltration		**$99,847**	Approved	$99,847	$99,847	$0
Monocacy Elementary	**10.040.20**	Fire alarm replacement		**$106,500**	Approved	$89,534	$89,534	$0
Remaining Balance			**$0**	**$206,347**		**$189,381**	**$189,381**	**$0**
12 Harford			**$243,087**					
Fallston High	**12.001.20**	Wall Repair		**$176,888**	Approved	$176,888	$176,888	$0
Edgewood Middle	**12.014.20**	Stage Partition Replacement		**$22,000**	Approved	$22,000	$22,000	$0
C. Milton Wright High	**12.020.20**	Parking Lot Pole Replacement		**$17,976**	Approved	$17,976	$17,976	$0
Remaining Balance			**$26,223**	**$216,864**		**$216,864**	**$216,864**	**$0**

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
13 Howard			**$87,776**					
Bryant Woods Elementary	**13.079.20**	Playground Equipment		**$92,000**	Approved	$87,776	$87,776	$0
Remaining Balance			**$0**	**$92,000**		**$87,776**	**$87,776**	**$0**
14 Kent			**$98,288**					
Kent County High	**14.007.20**	Intercom Replacement		**$ 5,285**	Approved	$5,285	$5,285	$5,285
Kent County Middle	**14.003.20**	Repave parking lot area		**$91,503**	Approved	$91,503	$91,503	$91,502
Remaining Balance			**$1,500**	**$96,788**		**$96,788**	**$96,788**	**$96,787**
15 Montgomery			**$602,651**					
Highland View Elementary	**15.101.20**	Trash Compactor Replacement		**$11,267**	Approved	$11,267	$11,267	$0
Magruder High	**15.045.20**	Trash Compactor Replacement		**$14,576**	Approved	$14,576	$14,576	$0
Poolesville High	**15.066.20**	Trash Compactor Replacement		**$14,576**	Approved	$14,576	$14,576	$0
Sherwood High	**15.135.20**	Trash Compactor Replacement		**$14,576**	Approved	$14,576	$14,576	$0
Stone Mills Elementary	**15.157.20**	Trash Compactor Replacement		**$11,267**	Approved	$11,267	$11,184	$0
Rockwell Elementary	**15.173.20**	Asphalt Resurfacing		**$78,000**	Approved	$78,000	$78,000	$0
Cedar Grove Elementary	**15.214.20**	Asphalt Resurfacing		**$65,000**	Approved	$65,000	$65,000	$0
Piney Branch Elementary	**15.249.20**	Bleacher Replacement		**$44,900**	Approved	$44,900	$44,900	$0
Quince Orchard High	**15.158.20**	Wall Replacement		**$95,500**	Approved	$95,500	$95,500	$0
Shady Grove Middle	**15.275.20**	Water Heater Replacement		**$85,000**	Approved	$85,000	$85,000	$0

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Watkins Mill High	**15.166.20**	Gym Divider Wall Replacement		**$95,500**	Approved	$95,500	$95,500	$0
Germantown Elementary	**15.013.20**	Gym Floor Replacement		**$72,572**	Approved	$72,572	$72,572	$0
Remaining Balance			**$0**	**$602,734**		**$602,734**	**$602,651**	**$0**
16 Prince George's			**$1,464,579**					
G. James Gholson Middle	**16.208.20**	Generator Replacement		**$128,000**	Approved	$128,000	$128,000	$0
Kingsford Elementary	**16.133.20**	Generator Replacement		**$100,000**	Approved	$100,000	$100,000	$0
Lake Arbor Elementary School	**16.234.20**	Generator Replacement		**$100,000**	Approved	$100,000	$100,000	$0
Lamont Elementary	**16.241.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Robert Frost Elementary School	**16.112.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Magnolia Elementary	**16.135.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Allenwood Elementary	**16.205.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Barnaby Manor Elementary	**16.123.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Beacon Heights Elementary	**16.189.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Carrollton Elementary	**16.142.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Dodge Park Elementary	**16.117.20**	Generator Replacement		**$134,000**	Approved	$134,000	$134,000	$0
Remaining Balance			**$64,579**	**$1,400,000**		**$1,400,000**	**$1,400,000**	**$0**
17 Queen Anne's			**$54,014**					
Kent Island High	**17.023.20**	PA Replacement		**$50,000**	Approved	$50,000	$50,000	$0
Remaining Balance			**$4,014**	**$50,000**		**$50,000**	**$50,000**	**$0**

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
18 St. Mary's			**$50,074**					
Green Holly ES	**18.022.20**	Life Safety Communications System		**$110,000**	Approved	$50,074	$50,074	$0
Remaining Balance			**$0**	**$110,000**		**$50,074**	**$50,074**	**$0**
19 Somerset			**$38,407**					
Crisfield High	**19.004.20**	Intercom Replacement/New VOIP		**$18,017**	Approved	$18,017	$18,017	$18,017
Greenwood Elementary	**19.014.20**	Intercom Replacement/New VOIP		**$17,415**	Approved	$17,415	$17,415	$17,415
Remaining Balance			**$2,975**	**$35,432**		**$35,432**	**$35,432**	**$35,432**
20 Talbot			**$85,358**					
St. Michael M/H	**20.008.20**	Outdoor Stadium Bleacher Replacement		**$39,700**	Approved	$39,700	$39,700	$0
Remaining Balance			**$45,658**	**$39,700**		**$39,700**	**$39,700**	**$0**
21 Washington			**$134,904**					
Williamsport High	**21.031.20**	Domestic Water Line Replacement		**$150,000**	Approved	$134,904	$134,904	$0
Remaining Balance			**$0**	**$150,000**		**$134,904**	**$134,904**	**$0**
22 Wicomico			**$117,661**					
Wicomico Middle	**22.015.20**	Gym Floor Refinishing		**$28,711**	Approved	$28,711	$28,711	$0
Pinehurst Elementary	**22.002.20**	VCT Flooring		**$26,956**	Approved	$26,956	$26,956	$0
Parkside High	**22.001.20**	VCT Flooring		**$22,684**	Approved	$22,684	$22,684	$0
Delmar Elementary	**22.007.20**	Bathrooms Epoxy Floor Finish		**$25,500**	Approved	$25,500	$25,500	$0

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Wicomico High	**22.009.20**	VCT Flooring Installation		**$14,207**	Approved	$13,810	$13,810	$0
Remaining Balance			**$0**	**$118,058**		**$117,661**	**$117,661**	**$0**
30 Baltimore City			**$1,387,924**					
North Bend PK-8 #081	**30.041.20**	Playground		**$43,200**	Approved	$43,200	$43,200	$0
Bragg Nature Study Center	**30.276.20**	CCTV Cameras		**$17,500**	Approved	$17,500	$17,500	$0
Barclay PK-8 #054	**30.260.20**	Flooring Replacement		**$78,074**	Approved	$78,074	$78,074	$0
Baltimore School for the Arts #415	**30.178.20**	Domestic Water Pumps Replacement		**$42,040**	Approved	$42,040	$42,040	$0
Beechfield PK-8 #246	**30.195.20**	Flooring Replacement		**$63,577**	Approved	$63,577	$63,577	$0
Maree G. Farring PK-8 #203	**30.159.20**	Concrete Replacement		**$26,700**	Approved	$26,700	$26,700	$0
Rosemont PK-8 #063	**30.127.20**	Asphalt & Concrete Replacement		**$77,000**	Approved	$77,000	$77,000	$0
George G. Kelson Building #157	**30.129.20**	Install CCTV & New Surveillance System		**$39,215**	Approved	$39,215	$39,215	$0
Mergenthaler Vocational-Technical High #410	**30.226.20**	Sidewalk Replacement & Parking Lot Repavement		**$211,243**	Approved	$211,243	$211,200	$0
Callaway Elementary #251	**30.257.20**	Sidewalk Replacement and Concrete Fixtures		**$136,681**	Approved	$136,681	$136,681	$0
Booker T. Washington Building #130	**30.168.20**	Sidewalk Replacement		**$82,916**	Approved	$82,916	$82,916	$0
Walbrook Building #411	**30.188.20**	Sidewalk Replacement		**$140,550**	Approved	$140,550	$140,550	$0
Beechfield PK-8 #246	**30.195.20**	Basketball Court Asphalt Repair		**$34,935**	Approved	$34,935	$34,935	$0
Lockerman-Bundy Elementary #261	**30.067.20**	Storage Tank		**$71,000**	Approved	$71,000	$71,000	$0

Project Name	PSC #	Scope	FY 2020 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Baltimore City College High #480	**30.110.20**	Plumbing		**$49,450**	Approved	$49,450	$49,450	$0
Hamilton PK-8 #236	**30.096.20**	Flooring Replacement		**$44,000**	Approved	$44,000	$44,000	$0
Dr. Bernard E. Harris, Sr. Elementary #250	**30.204.20**	Storm Drain Replacement		**$72,750**	Approved	$72,750	$72,750	$0
Hamilton PK-8 #236	**30.096.20**	Playground Equipment		**$36,810**	Approved	$36,810	$36,810	$0
William Paca E #83	**30.042.20**	Playground Equipment		**$46,910**	Approved	$46,910	$46,910	$0
Edgecombe Circle PK-8 #62	**30.199.20**	Playground Equipment		**$47,720**	Approved	$47,720	$47,720	$0
Remaining Balance			**$25,696**	**$1,362,271**		**$1,362,271**	**$1,362,228**	**$0**
Total Remaining Balance			**$230,989**	**$7,930,646**		**$6,911,632**	**$6,905,819**	**$319,941**

LEA / Project	PSC #	Scope	FY 2021 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
11 Garrett			**$144,900**					
Grantsville Elementary	**11.004.21**	Playground		**$100,000**	Approved	$100,000	$100,000	$0
Yough Glades Elementary	**11.015.21**	Playground		**$50,000**	Approved	$44,900	$44,900	$0
Remaining Balance			**$0**	**$150,000**		**$144,900**	**$144,900**	**$0**
15 Montgomery			**$602,651**					
McAuliffe ES	**15.151.21**	Ceiling Tile Replacement		$60,000	Approved	$60,000	$60,000	$0
Cold Spring ES	**15.007.21**	Masonry Wall Repair		$49,790	Approved	$49,790	$49,790	$0
Cloverly ES	**15.234.21**	Door Replacement		$143,709	Approved	$143,709	$143,709	$0
Cloverly ES	**15.234.21**	Ceiling Tile Replacement		$235,000	Approved	$235,000	$235,000	$0
Resnik ES	**15.165.21**	Flooring		$114,152	Approved	$114,152	$114,152	$0
Remaining Balance			**$0**	**$602,651**		**$602,651**	**$602,651**	**$0**
17 Queen Anne's			**$67,222**					
Grasonville Elementary School	**17.009.21**	PA System		**$59,000**	Approved	$50,074	$50,074	$0
Remaining Balance			**$67,222**	**$59,000**		**$50,074**	**$50,074**	**$0**
19 Somerset			**$41,267**					
Deal Island Elementary	**19.007.21**	Partition Replacement		**$17,500**	Approved	$17,500	$17,500	$0
Crisfield High	**19.004.21**	Walk-In Refrigerator Replacement		**$40,000**	Approved	$15,000	$15,000	$0
Remaining Balance			**$41,267**	**$57,500**		**$32,500**	**$32,500**	$0
22 Wicomico			**$106,627**					

LEA / Project	PSC #	Scope	FY 2021 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Wicomico Middle	**22.015.21**	Masonry		**$37,273**	Approved	$37,273	$37,273	$0
Glen Avenue Elementary	**22.010.21**	Flooring		**$23,284**	Approved	$23,284	$23,284	$0
Remaining Balance			**$46,070**	**$60,557**		**$60,557**	**$60,557**	**$0**
30 Baltimore City			**$1,542,316**					
Cecil Elementary	**30.250.21**	Intercom & Paging System		**$24,992**	Approved	$24,992	$24,992	$0
Dr. Nathan Pitts #058	**30.218.21**	Intercom & Paging System		**$24,950**	Approved	$24,950	$24,950	$0
Excel At Francis Woods #178	**30.115.21**	Intercom & Paging System		**$24,968**	Approved	$24,968	$24,968	$0
Edmondson High #400	**30.246.21**	Intercom & Paging System		**$43,056**	Approved	$43,056	$43,056	$0
Westside Skill Center	**30.180.21**	Intercom & Paging System		**$23,076**	Approved	$23,076	$23,076	$0
Windsor Hills #087	**30.045.21**	Intercom & Paging System		**$24,988**	Approved	$24,988	$24,988	$0
Thomas Jefferson Elementary #232	**30.090.21**	Intercom & Paging System		**$24,973**	Approved	$24,973	$24,973	$0
Bragg Nature Center Farm	**30.276.21**	Masonry		**$54,100**	Approved	$54,100	$54,100	$0
Beechfield Elementary	**30.195.21**	Playground Equipment		**$40,880**	Approved	$40,880	$40,880	$0
Woodhome EM #205	**30.196.21**	Intercom System		**$24,863**	Approved	$24,863	$24,863	$0
Furman Templeton Elementary #125	**30.061.21**	Playground Equipment		**$46,000**	Approved	$46,000	$46,000	$0
George G. Kelson #157	**30.056.21**	Playground Equipment		**$48,000**	Approved	$48,000	$48,000	$0
Lakeland PK-8 # 012	**30.179.21**	Gym Floor Replacement		**$52,000**	Approved	$52,000	$52,000	$0

LEA / Project	PSC #	Scope	FY 2021 Total Final Program Funding Available including Reserved Funds	LEA Project Estimate	Project Status	ASP Funding Requested	ASP Funding Approved	ASP Funding Expended
Francis M. Wood #178	**30.115.21**	Water Pump Replacement		**$14,200**	Approved	$14,200	$14,200	$0
Roland Park Elementary/Middle # 233	**30.092.21**	Water Pump Controller		**$22,400**	Approved	$22,400	$22,400	$0
Remaining Balance			**$1,048,870**	**$493,446**		**$493,446**	**$493,446**	**$0**
Total Remaining Balance			**$1,203,429**	**$1,423,154**		**$1,384,128**	**$1,384,128**	**$0**

Item III. Maryland Public Schools: An Introduction to Fiscal Sustainability Revisions

Motion:

This item is informational and does not require IAC action.

Background information:

Attached is a draft document which was originally presented to you on August 20, 2020 and which has since been revised based upon feedback we received. This document is intended to provide a broad overview to the public of the importance of understanding the total cost of ownership of school facilities and to explain the IAC's facility standards which include the Educational Facilities Sufficiency Standards and the Gross Area Baselines.

Suggested revisions have been tracked for your review. Unless additional revisions are needed, the document will be finalized, published to the IAC's website, and distributed to the IAC's stakeholders early next week.

September 2020

Maryland Public Schools: An Introduction to Fiscal Sustainability

Prepared by the IAC

Maryland Interagency Commission on School Construction

~~What Kids Require to Learn~~Educationally Sufficient Learning Environments

Teachers matter more to student achievement than any other aspect of schooling. Teachers are resourceful and creative and have demonstrated time and time again an ability to make the best of any situation. They succeed in educating children regardless of the facility they occupy; however, too often teachers must overcome poor learning environments, and students must endure conditions that are not conducive to learning.

School facilities attributes and their condition affect the ability of teachers to teach and students to learn. Facilities play a supporting role when they are safe, healthy, and educationally sufficient, and when the environment complements learning. It is the task, therefore, of the IAC and of each LEA's facilities divisions to provide a learning environment sufficient to support the critical work of educating Maryland's children. Facilities should seamlessly support their inhabitants, functioning well enough that facility concerns are left to facilities specialists while teachers focus on teaching and students focus on learning. ~~The public agree that facility improvement is necessary, opinions differ on what is needed and the level of funding derived from taxes.~~

There is an abundance of evidence that poor conditions inhibit learning. Factors that directly impact student learning include temperature, lighting, acoustics, and age (Earthman, 2002, p. 1). This fact is easy to see in present day Maryland when some LEAs battle lack of adequate heating or cooling, the presence of mold, antiquated layouts, open space classrooms, and other challenges. Researchers have found that students in poor facilities perform 5 to 17 percentile points lower than students that are in buildings in good condition (Earthman, 2002, p. 1). Poor conditions are generally the result of insufficient funding to sustain good conditions; good conditions can become fiscally unsustainable as facilities age individually and as a portfolio. Fiscal sustainability requires a balance between supply (available funding) and demand (total need). The total size of a school facilities portfolio is the practical indicator of the total demand for facilities funding.

Like school conditions, there are many studies related to classroom enrollment size, student to teacher ratios, and total school enrollment size (design capacity), which indicate that each of these factors can impact learning. In a 2014 study commissioned by the Maryland State Department of Education, APA Consulting found evidence suggesting that school operating efficiency is 'U' shaped, and schools with very small enrollment can suffer operational inefficiencies. The study found that operating cost efficiencies increase with design capacity up to a point, then the efficiency advantage is erased by the increasing costs of administration and coordination (Augenblick, Palaich and Associates Consulting, 2014, p. 11). School districts struggle to find the right size of the enrollment, and the percentage of schools with small enrollment continues to decline. The cost to operate is likely a contributor to this decline.

> "… Students in poor facilities perform 5 to 17 percentile points lower than students in standard buildings." - Glen Earthman, School Facilities Conditions and Student Academic Achievement

While there is significant research on the appropriate class or school size (in terms of student enrollment), less attention is paid to the total space, or gross square-foot-per-student, despite the fact that total asset size is a significant factor of operational cost over time. There is a dearth of research on gross square-foot-per-

student and educational performance despite the obvious: that school facilities are too often in need of repair, renewal, or replacement and these needs are outpacing funding, and school conditions are declining.

Jones, M.A., from the University of Georgia, hypothesized that space per student did not affect reading and math learning as measured by standardized testing (Jones, 2006). She found essentially little correlation of academic performance in math and reading associated to square-foot-per-student. Specifically, her research revealed only statistically marginal correlation for reading (p-value α=.10) and none for math (p-value α= less than .05).

The amount of square footage per student has increased drastically since the early 1970s as schools have taken on additional responsibilities that were historically provided within the home or by the community, including multi-model-athletics, health, and additional services for special-needs students and younger (pre-kindergarten) students. In Maryland, the gross square feet per student has doubled in this time period.

In and of itself, this expansion of responsibility is not a problem (and many would argue these changes have been positive!); however, these expanded services have not necessarily been accompanied by additional capital or operational dollars. The available funding, therefore, has been diluted, contributing to a decline in the average school condition. Additional emphasis on the **Total Cost of Ownership (TCO)** of each school facility project will help to counter this trend. This means that during the planning phase of a project, we must analyze the cost to own the facility over time to ensure that we can not only build the facility, but also that we will be able to provide the maintenance necessary to sustain the school, and subsequently the entire school facilities portfolio. School related space must be carefully conceived, planned, designed, and built to be as flexible as possible and right-sized so that we can provide essential services cost effectively, and the anticipated costs to own must be planned for and well-understood before commencing a project. Minimizing gross square feet per student is essential, as is building quality easily maintained structures. Conservatively managing the size of space on a per-student basis is also the most cost effective path to *Net Zero Energy Schools*. Fiscal sustainability to ensure good quality learning environments over time requires strategies to control costs and this requires close attention to the TCO for each project and for entire facilities portfolios.

Total Cost of Ownership

The "Total Cost of Ownership" includes both the **initial costs** to plan, design, and construct a facility and all the operational and maintenance (O&M) **costs to own** the facility over time. After a facility is built, it must be properly operated and maintained to preserve the intended educational environment over the expected life of the investment. Unfortunately, unlike many modern commodities, school facilities are not set-and-forget assets. Over the expected life of a school facility, major building systems (components) such as roofs, HVAC, and electrical systems must be replaced, with some systems needing to be replaced several times.

Figure 1: Total Cost of a Facility

The expected life of a school facility is 30 years before needing significant investment such as major renovation, renewal or replacement (this is standard benchmark for

comparable measures). Building systems replacement(s), **known as capital maintenance** (aka systemics) are required maintenance costs along with all the maintenance types: preventive, reactive, and planned. Operational costs include utilities, custodial, and building services, which is often not accounted for. After the initial capital investment to build the facility, the 30-year O&M costs can make up more than half of the total cost of ownership (Figure 1).

In an era where needs seem to exceed available resources, it is more important than ever that the total cost of owning a facility is considered early and often throughout a school construction project. Total cost of ownership can be controlled through smart selection of building materials and systems, and of course, through smart use of space. Innovative design and furniture selection are essential. Perhaps more than any other choice, using space wisely and reducing space to the amount necessary to fully support the occupants but without excess, can ensure that the total cost of ownership is affordable.

Building systems that exceed their expected useful life often cannot be properly maintained and a facility's conditions and educational environment will decline. Conversely, quality initial investment and sufficient O&M budgets can result in facilities that function well over their full expected life and sometimes beyond. In other words, additional up-front expense often pays for itself over time, and both up front and long-term costs should be considered when making project decisions. *Educational Week* cites a 2014 Pew Research center poll showing 92 percent of Americans think schools should be upgraded, yet more than half the nation's taxpayers today think their taxes are too high (Burnette II, 2017).

Educational Week cites a 2014 Pew Research center poll showing 92 percent of Americans think schools should be upgraded, yet more than half the nation's taxpayers today think their taxes are too high (Burnette II, 2017).

As school facilities owners and managers of our nation's portfolio of schools see conditions worsening, we face a dilemma: **either we must convince the public to raise their taxes or we must reduce the cost of ownership.** Generations of administrators, teachers, and most importantly, students, will have to live with the financial implications of choices made today, and unlike capital expenses (typically), O&M expenses directly compete with funding that would otherwise be available for teachers and textbooks.

IAC's Educational Facility Sufficiency Standards

The Maryland Public School Facilities Educational Sufficiency Standards establish acceptable *minimum* levels for the physical attributes, capacity, and educational suitability of existing public K-12 school facilities. These minimums are used to assess learning spaces of existing facilities. **They are <u>not</u> the basis of IAC funding** for school construction projects. Instead, funding is defined by the IAC's Gross Area Baselines (see page 4).

The Sufficiency Standards are based upon proven conditions that affect a student's ability to learn, like adequate temperature, lighting, acoustics, and so on, and prescribe attributes both for the facility itself and also for the educational suitability of spaces within the facility. For example: the standards prescribe that the heating, ventilation, and air conditioning (HVAC) system must be capable of maintaining a temperature between 68 and 75 degrees Fahrenheit. This would be a facility requirement. But the standards also require that at the middle and high school levels, at least 4 net square feet of space per student be provided for science programming and the space must be outfitted with appropriate science fixtures and equipment. This

is an example of an educational sufficiency requirement. Facilities must have good physical conditions and also appropriate layouts and amounts of space.

The sufficiency standards are **used only as a measure of relative need** and this metric can be used to compare school facilities against one another . Scores are derived from the measurement of school facilities conditions and educational sufficiency and are used:

- To assess overall condition of the statewide school facilities portfolio
- To project school facilities needs to improve or maintain conditions at a certain level
- In the future, as a consideration for certain IAC funding programs.

IAC Gross Area Baselines

IAC Capital Improvement Program (CIP) funding for each new, renewal, or replacement school project is primarily based upon the project's gross square footage. To determine the funding for any project, the IAC multiplies the eligible square footage per student by the eligible projected enrollment at the facility. Then, the resulting number of square feet is multiplied by the current year cost per square foot. Finally, the result is multiplied by the State cost share for the LEA (Figure 2).

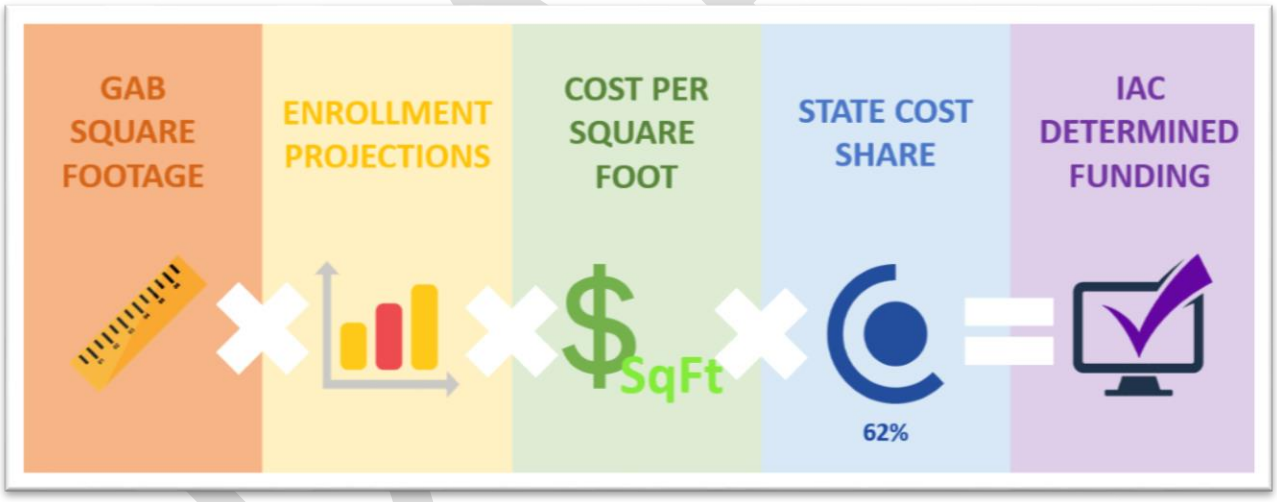

Figure 2: Determining IAC Funding

In May of 2019, the IAC adopted new Gross Area Baselines (GABs) to replace the Maximum Gross Area Allowances used per COMAR 14.39.02.06 in calculating state construction allocations. To develop the GABs, IAC staff launched a side-by-side review of the Area Allowances and MSDE's facilities guidelines. IAC staff created detailed tallies at the elementary, middle, and high school levels of all needed spaces and their sizes as recommended in MSDE's existing facilities guidelines. IAC staff also worked with stakeholders in the Local Education Agencies for feedback before recommending that the IAC approve the GABs.

The IAC Gross Area Baseline Calculator can be found on the IAC's website. These square footages are intended to include the space necessary to provide traditional education, but in a reasonable way so that the total cost of ownership is as low as possible while still meeting the educational needs of a school's student population. The GABs do not represent the minimum possible sizes of schools and in fact are representative

of recently built size-efficient status quo schools that are supporting the delivery of traditional educational programs.

What Can We Do?

1. The State as a whole and each LEA can take a portfolio perspective in understanding school facility needs. Each new, replacement, or renewed school project can improve the affordability of the portfolio **one project at a time**.
2. Consider the Total Cost of Ownership (TCO) from the earliest point of project planning. Fiscal sustainability requires exemplary planning and accountability.
3. Create Educational Specifications that make known the estimated TCO and make this information fully transparent to the public so that they understand the annual per student cost-to-own over 30-years **before** beginning a feasibility study or start of design.
4. Select architects, builders, or developers based upon TCO budgets and hold them accountable. The initial building or renovation of a facility only represents about half the cost to own. Remember that right-sized facilities incorporating innovative and effective design and appropriate flexible, movable furniture are essential to achieving an affordable portfolio that can be maintained in good condition over time.

The 2020 COVID-19 pandemic has amplified the need for deliberate, well-thought-out planning that will support shared and flexible specialty spaces, not only to accommodate the natural evolution of educational delivery, but for the reconfiguration of spaces for other reasons. The changing face of educational programs pressured our school facilities footprints to grow. Greater flexibility in how educational spaces can be utilized over time is necessary. Today we are looking at how we can transform gyms and cafeterias into classrooms, and there may be need for additional flexibility in the future. By wisely planning and using movable furniture, we can configure and reconfigure school spaces as needed for any future event or need. By enhancing flexibility and reducing total space, the corresponding lower TCO can free funding for other educational needs~~teachers and programs~~. ~~We know that the public is not willing to increase taxes to build and maintain more space, but are communities prepared to make wise decisions to minimize space so that spaces remain effective without compromising budget for teachers? Let's hope so.~~It is becoming increasingly clear that simply building and maintaining more space is not fiscally sustainable. We will continue to work with communities on making wise decisions to minimize space, and to maximize the effectiveness of spaces, so that the facilities we fund serve our students, and those who teach them, well.

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Additional Information

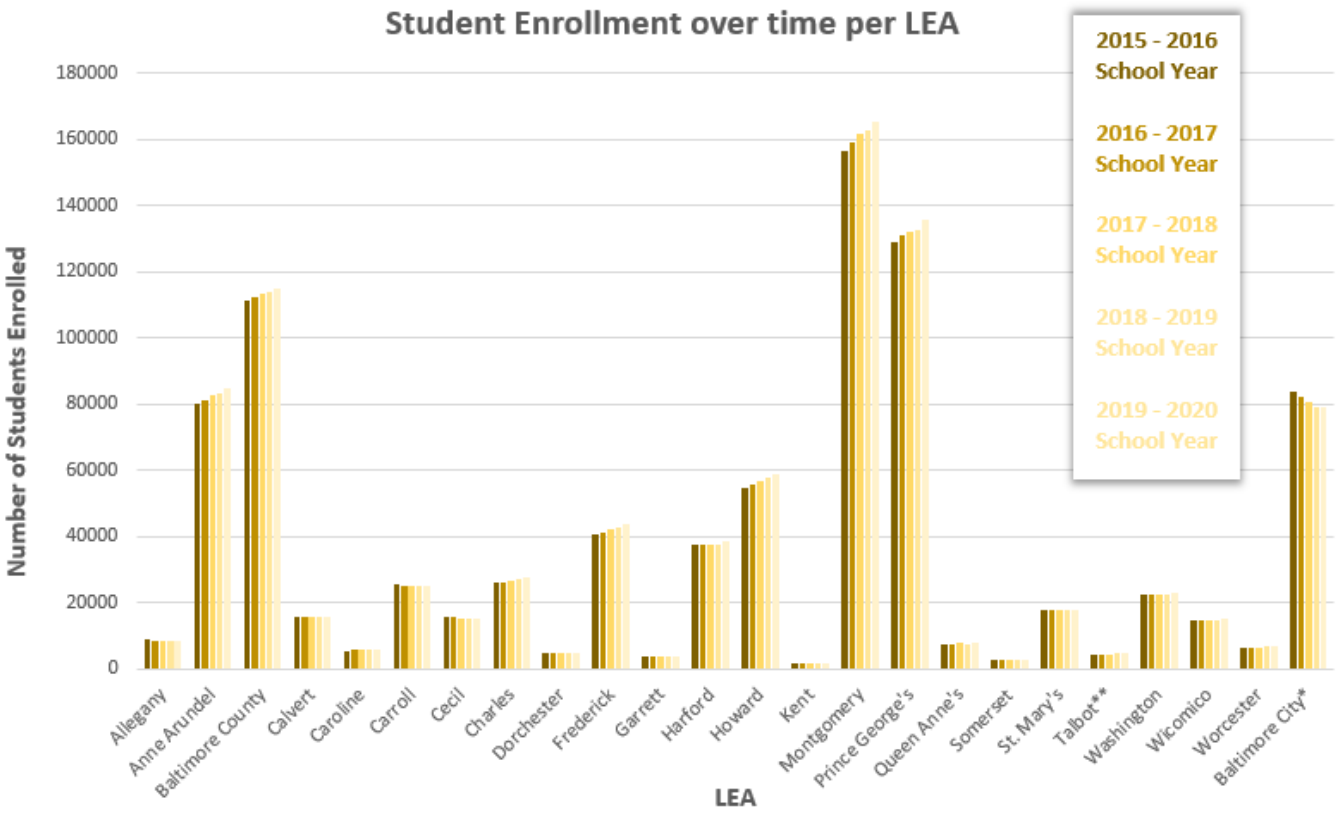
Please see the IAC's website homepage and look for School Facilities Webinar Series for additional information regarding school facilities total cost of ownership. Questions can be directed to our office at (410) 767-0617 or iac.pscp@maryland.gov.

Motion:

This item is informational only and does not require IAC action.

Background Information:

In FY 2021, IAC Designees and Staff were tasked with delivering a Supplemental Information Survey to LEAs as a part of the CIP submission process. The IAC and partnering agencies surveyed four categories in which the IAC could differentiate among school systems for project reviews: air conditioning availability in classrooms; design and planning professionals on staff; open space instructional areas; and number of relocatable classrooms per LEA. A summary of the categories examined and their findings is included below. Where we had the data, we include the results of the surveys over the past 5 years, if informative.



Air Conditioning Availability in Classrooms:

Addressing overheated classrooms became a focus of the Governor and Board of Public Works over the last five years. The IAC adopted The Maryland Public School Facilities Educational Sufficiency Standards on May 31, 2018 which sets a maximum temperature of 75 degrees Fahrenheit for general and specialty classrooms. Schools systems have been working diligently to address this issue with the completion of replacement schools, major school renovations, and systemic renovation projects. The State has been tracking the progress of school systems in addressing this issue for the last 15 years and providing capital support. The following table shows the number and percentage of schools within a school system that do not have a means to cool their classrooms with either a central air-conditioning system, package unit(s) within the room, or with window units.

Findings

As of December 2019, 96% of the public schools in Maryland have a means to provide air conditioning in their classrooms spaces for the comfort of students and staff. When this survey was first conducted in 2004, only 78% of the schools were air conditioned, so progress has been made. Currently 20 of the 24 school systems report are able to report that all of their schools have air conditioning in their classrooms.

The table shows that 58 public schools total in Maryland remain without air conditioning. These include eight in Baltimore County, one in Dorchester, six in Garrett, and 43 in Baltimore City. Baltimore County, Dorchester County, and Baltimore City intend to address these facilities through systemic renovations, facility renovations, or facility replacements within the next 3 years. Only Garrett County Public Schools report that they have no plans to address the 50% of their schools without air conditioning. Due to higher elevations and generally cooler temperatures, there may be less of a need than other parts of the State to address when prioritized against other school expenditures.

Remaining Maryland Public Schools Without Air Conditioning

Data as of March 2020

School System	Total # School Facilities per MSDE	Number of Schools Without Air Conditioning (AC)					School Projects to be Completed in 3 Years				Total # of schools not addressed in 3 years	% Schools without AC Not Addressed in 3 Yrs
		ES or ES/MS	MS or MS/HS	High	Other	TOTAL	In Planning Phase	In Design Phase	In Con-struction	TOTAL		
Baltimore Co.	174	4	0	2	2	8	0	3	3	6	2	1%
Dorchester	13	1	0	0	0	1	0	0	1	1	0	0%
Garrett	12	5	0	1	0	6	0	0	0	0	6	50%
Baltimore City	167	29	2	10	2	43	12	16	15	43	0	0%
Total SY 19-20	366	39	2	13	4	58	12	19	19	50	8	2%
						16% of Total # of Schools						

School Types

Other = Alternative Education, Career & Technology Education, and Special Education Schools
School levels = Elementary School (ES), Middle School (MS), and High School (HS) or combination

Notes:

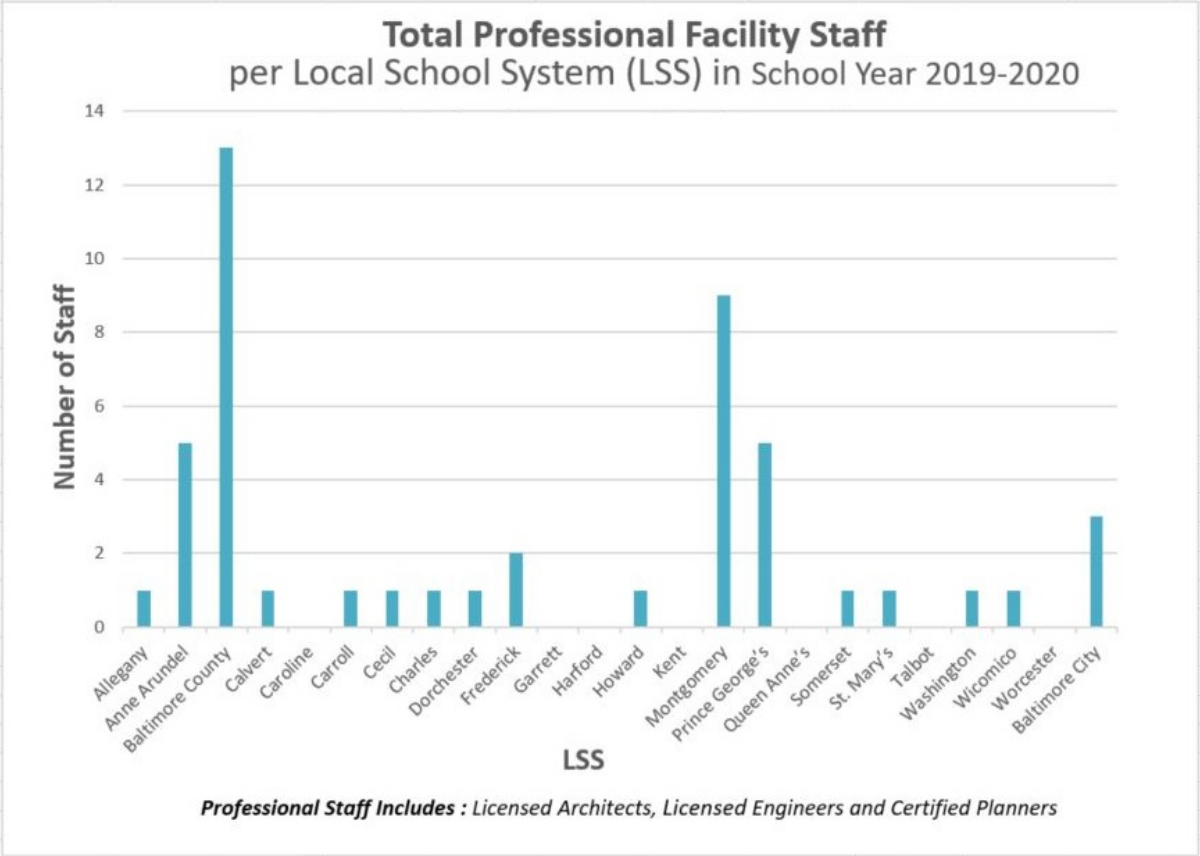
1. "With AC" means classrooms have cooling with either a central system or window units.

Design and Planning Professionals on Staff

The number of registered, licensed or certified design professionals on the staff of a local board of education is thought to be a measure of the board's internal capacity to perform design reviews and manage complex capital projects. Since 2006, the Designees have tracked the number of registered architects, licensed engineers, and certified planners and reported annually to the IAC.

Findings

The total number of design and planning professionals on staff within local school systems throughout Maryland is 48. The graph below provides a pictorial representation of totals collected with the data. Anne Arundel, Montgomery, Prince George's, and Baltimore Counties have the most professionals on their staff. School systems in Caroline, Garrett, Harford, Kent, Queen Anne's, Talbot, and Worcester Counties have no planning or design professionals on their staff.



The following table includes subtotals for registered architects, licensed engineers, and certified planners as well as indicates the number of professional staff in the State agencies working with the IAC on public schools.

Numbers of Design & Planning Professionals on Staff
In Maryland Public School Sytems

Data as of March 2020

School System	Registered Architects	Registered Engineers	AICP	Total RA, PE, and AICP on Staff
Allegany	0	1	0	**1**
Anne Arundel	2	3	0	**5**
Baltimore County	3	10	0	**13**
Calvert	1	0	0	**1**
Caroline	0	0	0	**0**
Carroll	0	1	0	**1**
Cecil	1	0	0	**1**
Charles	1	0	0	**1**
Dorchester	0	1	0	**1**
Frederick	0	0	2	**2**
Garrett	0	0	0	**0**
Harford	0	0	0	**0**
Howard	0	0	1	**1**
Kent	0	0	0	**0**
Montgomery	6	2	1	**9**
Prince George's	3	1	1	**5**
Queen Anne's	0	0	0	**0**
Somerset	1	0	0	**1**
St. Mary's	0	0	1	**1**
Talbot	0	0	0	**0**
Washington	0	1	0	**1**
Wicomico	1	0	0	**1**
Worcester	0	0	0	**0**
Baltimore City	1	2	0	**3**
Subtotal Local-Level	**20**	**22**	**6**	**48**
DGS Staff	4	9	0	**13**
MDP Staff	0	0	1	**1**
MSDE Staff	3	0	0	**3**
Subtotal State-level	**7**	**9**	**1**	**17**
TOTAL Statewide	**27**	**31**	**7**	**65**

Color Key: = No licensed professionals on staff

Abbreviations:

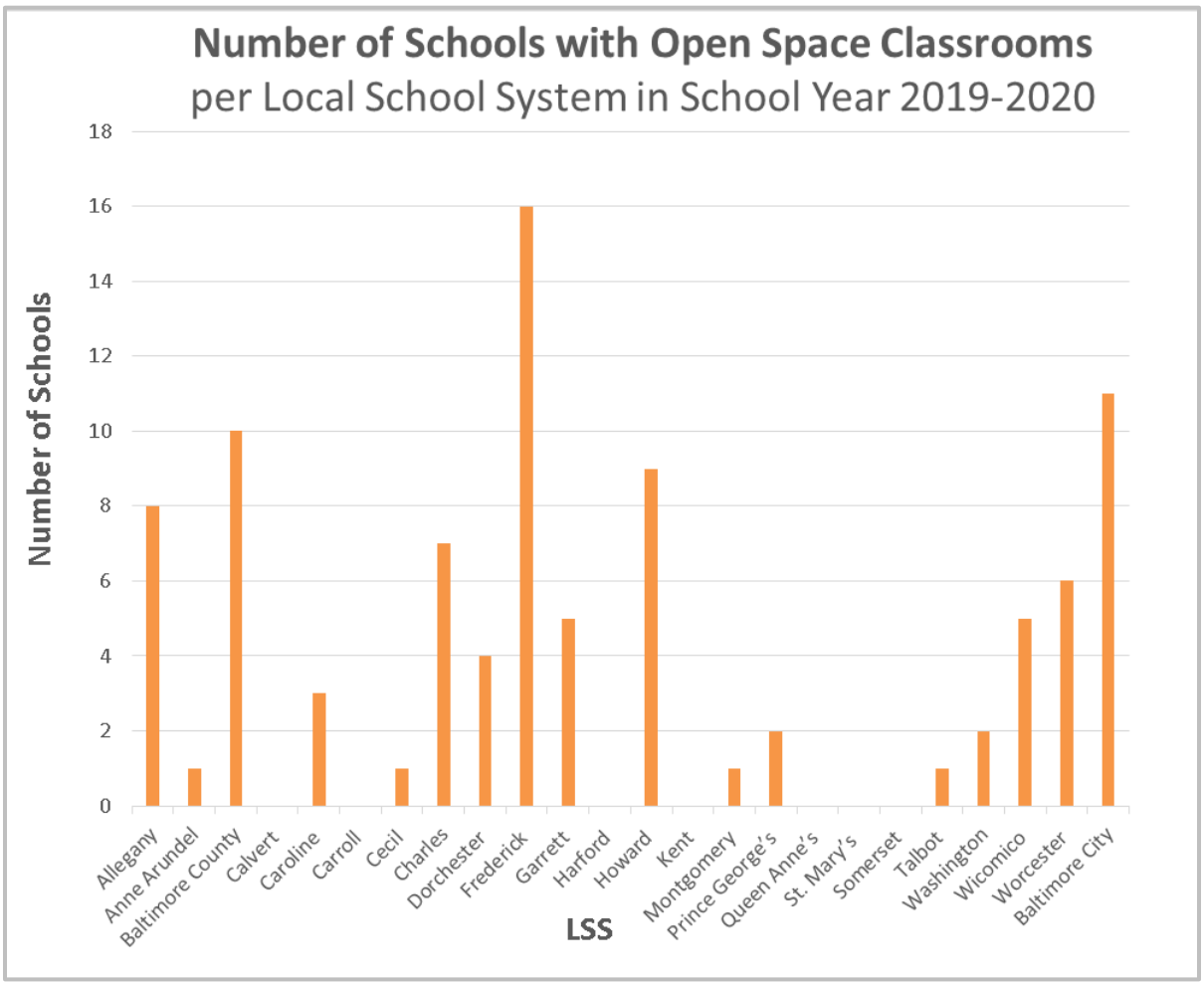
AICP = Member American Institute of Certified Planners
DGS = Department of General Services
MDP = Maryland Department of Planning
MSDE = Staff in the School Facilities Branch of the Maryland State Department of Education
PE = Professional Engineer - Total licensed in all disciplines (civil, structural, mechanical, etc)
RA = Registered Architect

Open Space Instructional Areas

A survey has been conducted for the past 5 years to track the amount of public schools remaining in Maryland with open space instructional areas. This includes classrooms with partial-height partitions dividing the instructional areas. These spaces typically share the same mechanical supply and return systems and may have issues with acoustical separation.

Findings

There is a total of 122 schools throughout the state with open space instructional areas. The graph below provides a pictorial comparison of the total number of schools with open space classrooms in each local school system. Baltimore County, Frederick County, and Baltimore City have the greatest number of schools with open spaces.



The following table provides all the data collected, including grade level of the schools and whether there is a plan to address the open space within the next three years for each school system. Schools system are highlighted where their three-year plans do not address 10 or more open space schools or where more than 25% are not addressed.

The school system with the highest percentage of open space classrooms within its school system is Worcester County with 43% of its schools (or 6 total) that are not planned to be addressed in the next 3 years. Worcester County maintains lower class sizes than many school systems and finds open space classrooms less of an educational challenge. Frederick County has the highest number of schools in the state (16 total) that are not planned to be addressed within the next three years, which is 24% of the total number of open space schools within their school system. Baltimore City has the highest amount of current open space schools at 18, but they plan to address seven of them within the next three years. This leaves 11 or 7% of the total number of schools within this school system that are not set to be addressed as of yet.

Number of Open Space Public Schools In Maryland

Data as of March 2020

School System	Total # School Facilities per MSDE	# Existing Schools with Open Space (OS) Classrooms					# OS Schools in 3-Year Plan	# OS Schools Not in 3 Yr Plan	% of OS Schools Not Address
		ES or ES/MS	MS or MS/HS	HS	Other	TOTAL			
Allegany	26	8	0	0	0	**8**	0	**8**	**31%**
Anne Arundel	124	1	3	1	0	**5**	4	**1**	**1%**
Baltimore County	174	7	1	1	2	**11**	1	**10**	**6%**
Calvert	25	0	1	0	0	**1**	1	**0**	**0%**
Caroline	10	3	1	0	0	**4**	1	**3**	**30%**
Carroll	44	0	0	0	0	**0**	0	**0**	**0%**
Cecil	29	1	0	0	0	**1**	0	**1**	**3%**
Charles	38	4	3	2	1	**10**	3	**7**	**18%**
Dorchester	13	5	0	0	0	**5**	1	**4**	**31%**
Frederick	68	11	4	2	0	**17**	1	**16**	**24%**
Garrett	12	3	2	0	0	**5**	0	**5**	**42%**
Harford	54	0	0	0	0	**0**	0	**0**	**0%**
Howard	77	10	0	0	0	**10**	1	**9**	**12%**
Kent	5	0	0	0	0	**0**	0	**0**	**0%**
Montgomery	208	1	0	1	0	**2**	1	**1**	**0%**
Prince George's	208	3	1	0	0	**4**	2	**2**	**1%**
Queen Anne's	14	0	0	0	0	**0**	0	**0**	**0%**
Somerset	9	2	0	0	0	**2**	0	**0**	**0%**
St. Mary's	30	0	0	0	0	**0**	0	**0**	**0%**
Talbot	8	1	0	0	0	**1**	0	**1**	**13%**
Washington	45	3	1	0	0	**4**	2	**2**	**4%**
Wicomico	24	6	1	0	0	**7**	2	**5**	**21%**
Worcester	14	4	3	0	0	**7**	1	**6**	**43%**
Baltimore City	167	16	0	1	1	**18**	7	**11**	**7%**
Total SY 19-20	**1426**	**89**	**21**	**8**	**4**	**122**	**28**	**92**	**6%**

Color Key: = 10 or more schools not in Plan and/or more than 25% is OS

School Types

Other = Alternative Education, Career & Technology Education, and Special Education Schools

School levels = Elementary School (ES), Middle School (MS), and High School (HS) or combination

Notes:

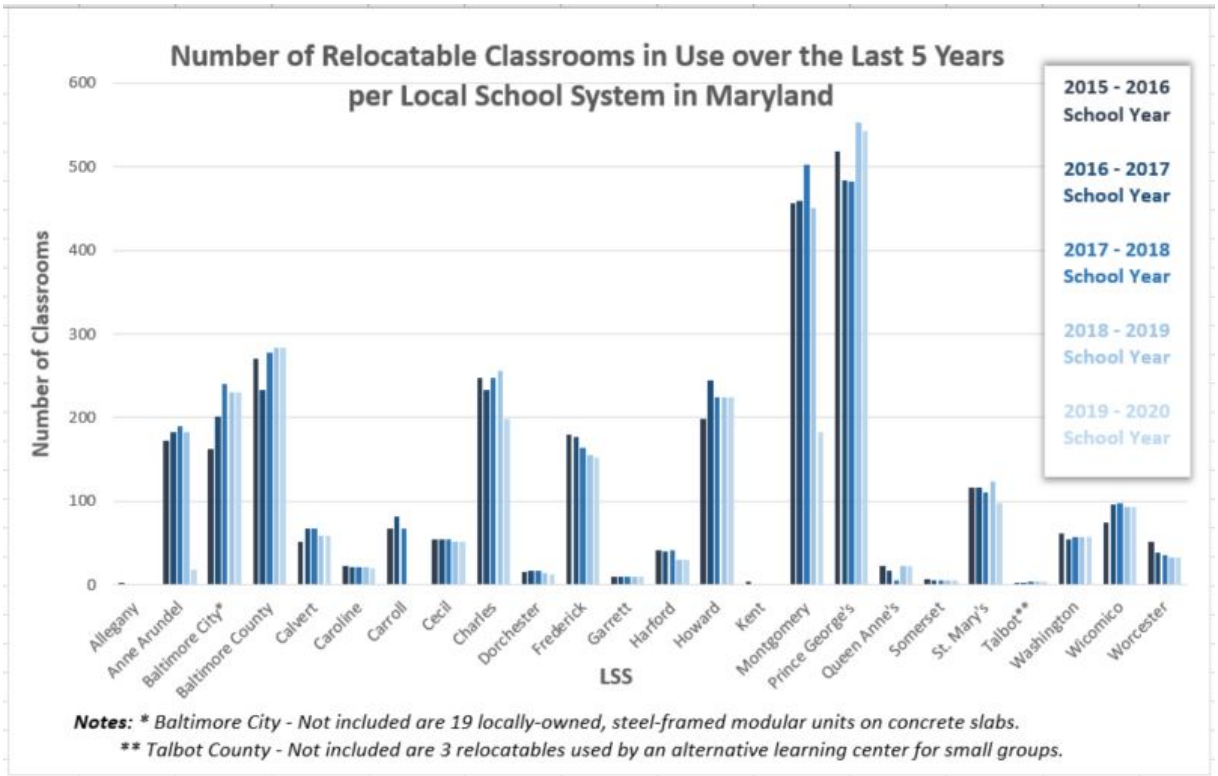
1. "Open space schools" includes schools with partial-height partitions dividing instructional areas.
2. Total number of open space schools to remain assumes all projects in 6-year State capital plan are implemented.
3. Total number of open space schools to remain does not include projects that may be locally-funded during that period.
4. Allegany - ACPS views open space schools as offering opportunities for collaborative learning.
5 Prince George's - PGCPS is confirming that there are no other open space school in inventory other than those noted above.
6. Baltimore City - Schools in 6 year plan to either be addressed or to be surplused.

Relocatable Classrooms

In school year 2019–2020, there are 2,930 relocatable classrooms in use for instruction in Maryland's 24 local school systems this includes both local and state owned. The total is a 161 classroom increase from school year 2018-2019. Five school systems reported increases and seven reported decreases. The graphs below provide of pictorial representation of key data.

Findings – Amount of Relocatable Classrooms

As in the previous five years, Montgomery and Prince George's counties are using the most relocatable classrooms of 451 and 553 respectively. Baltimore City and County, Charles and Howard also show significant use of relocatable classrooms. The student enrollments over time have shown a slight increase overall in most school districts and especially with Montgomery and Prince George's counties. While school districts are planning to construct new school buildings and additions, the need for relocatables will continue given the steady increase in student enrollment in certain school districts and the need to provide space during construction projects.



Number of Relocatable Classrooms in Use for Instruction

Maryland Interagency Commission on School Construction

Data as of March 2020

SCHOOL SYSTEM	STATE-OWNED				LOCALLY-OWNED OR LEASED INSTRUCTIONAL ONLY			TOTAL STATE & LOCAL
	Vacant	Non-Instruc-tional	Instruc-tional	Sub Total	In-Use (NOT Temp)	Temporary Use During Construction	Sub Total	Instructional Only
Allegany	0	0	0	**0**	0	0	**0**	**0**
Anne Arundel	0	0	0	**0**	175	8	**183**	**183**
Baltimore County	0	0	0	**0**	276	8	**284**	**284**
Calvert	4	2	0	**6**	51	8	**59**	**59**
Caroline	0	0	1	**1**	20	0	**20**	**21**
Carroll	0	0	0	**0**	51	0	**51**	**51**
Cecil	0	0	0	**0**	51	0	**51**	**51**
Charles	0	2	58	**60**	162	36	**198**	**256**
Dorchester	0	0	2	**2**	12	0	**12**	**14**
Frederick	0	2	2	**4**	153	0	**153**	**155**
Garrett	0	0	0	**0**	10	0	**10**	**10**
Harford	0	0	0	**0**	23	7	**30**	**30**
Howard	0	0	0	**0**	221	0	**221**	**221**
Kent	0	0	0	**0**	0	0	**0**	**0**
Montgomery	0	0	0	**0**	439	12	**451**	**451**
Prince George's	0	5	10	**15**	503	40	**543**	**553**
Queen Anne's	0	0	0	**0**	22	0	**22**	**22**
Somerset	0	0	0	**0**	6	0	**6**	**6**
St. Mary's	0	7	26	**33**	94	4	**98**	**124**
Talbot**	0	0	0	**0**	4	0	**4**	**4**
Washington***	0	0	0	**0**	57	0	**57**	**57**
Wicomico	0	0	0	**0**	107	8	**115**	**115**
Worcester	0	0	0	**0**	33	0	**33**	**33**
Baltimore City*	0	0	0	**0**	204	26	**230**	**230**
TOTAL 2020	**4**	**18**	**99**	**121**	**2,674**	**157**	**2,831**	**2,930**
Total 2018 (12/18)	*4*	*11*	*107*	***122***	*2,476*	*186*	***2,662***	***2,769***
Total 2017 (12/17)	*10*	*16*	*97*	***123***	*2,447*	*380*	***2,827***	***2,924***
Total 2016 (12/16)	*4*	*19*	*106*	***129***	*2,532*	*291*	***2,823***	***2,929***
Total 2015 (12/15)	*10*	*2*	*118*	***130***	*1,484*	*212*	***1,696***	***1,814***
Total 2014 (10/14)	*12*	*1*	*120*	***133***	*2,525*	*294*	***2,819***	***2,939***

Color Key: = Greater than 300 Relocatable Classrooms

Footnotes

* Baltimore City - Not included are 19 locally-owned, steel-framed modular units on concrete slabs.

** Talbot - Not included are 3 locally-owned relocatables used by the alternative learning center for small groups.

*** Washington - State Relocatable Unit demolished during Summer of 2019.

Change in Number of Relocatable Classrooms

From Prior Year (SY 2018-2019 to SY 2019-2020)

Maryland Interagency Commission on School Construction

Data as of March 2020

SCHOOL SYSTEM	SY 2018-2019	SY 2019-2020	Difference
Allegany	1	0	-1
Anne Arundel	186	183	-3
Baltimore County **	304	284	-20
Calvert	68	59	-9
Caroline	21	21	0
Carroll	51	51	0
Cecil	51	51	0
Charles	256	256	0
Dorchester	17	14	-3
Frederick	153	155	2
Garrett	10	10	0
Harford	30	30	0
Howard	225	221	-4
Kent	3	0	-3
Montgomery	409	451	42
Prince George's	499	553	54
Queen Anne's	29	22	-7
Somerset	6	6	0
St. Mary's	121	124	3
Talbot	4	4	0
Washington ***	58	57	-1
Wicomico	93	115	22
Worcester	35	33	-2
Baltimore City *	139	230	91
TOTAL	**2,769**	**2,930**	**161**

Color Key:

= Increase in 20 classrooms in use or more

= Decrease in 20 classrooms in use or more

Footnotes

* Baltimore City - 26 relocatable in in SY 2019-20 due to construction projects.

** Baltimore Co. - Decrease due to construction projects using less temporary relocatables.

*** Washington - State Relocatable Unit demolished during Summer of 2019.

Number of Relocatable Classrooms in Use for Instruction

Maryland Interagency Commission on School Construction

Data as of March 2020

SCHOOL SYSTEM	STATE-OWNED				LOCALLY-OWNED OR LEASED INSTRUCTIONAL ONLY			TOTAL STATE & LOCAL
	Vacant	Non-Instruc-tional	Instruc-tional	Sub Total	In-Use (NOT Temp)	Temporary Use During Construction	Sub Total	Instructional Only
Allegany	0	0	0	**0**	0	0	**0**	**0**
Anne Arundel	0	0	0	**0**	175	8	**183**	**183**
Baltimore County	0	0	0	**0**	276	8	**284**	**284**
Calvert	4	2	0	**6**	51	8	**59**	**59**
Caroline	0	0	1	**1**	20	0	**20**	**21**
Carroll	0	0	0	**0**	51	0	**51**	**51**
Cecil	0	0	0	**0**	51	0	**51**	**51**
Charles	0	2	58	**60**	162	36	**198**	**256**
Dorchester	0	0	2	**2**	12	0	**12**	**14**
Frederick	0	2	2	**4**	153	0	**153**	**155**
Garrett	0	0	0	**0**	10	0	**10**	**10**
Harford	0	0	0	**0**	23	7	**30**	**30**
Howard	0	0	0	**0**	221	0	**221**	**221**
Kent	0	0	0	**0**	0	0	**0**	**0**
Montgomery	0	0	0	**0**	439	12	**451**	**451**
Prince George's	0	5	10	**15**	503	40	**543**	**553**
Queen Anne's	0	0	0	**0**	22	0	**22**	**22**
Somerset	0	0	0	**0**	6	0	**6**	**6**
St. Mary's	0	7	26	**33**	94	4	**98**	**124**
Talbot**	0	0	0	**0**	4	0	**4**	**4**
Washington***	0	0	0	**0**	57	0	**57**	**57**
Wicomico	0	0	0	**0**	107	8	**115**	**115**
Worcester	0	0	0	**0**	33	0	**33**	**33**
Baltimore City*	0	0	0	**0**	204	26	**230**	**230**
TOTAL 2020	**4**	**18**	**99**	**121**	**2,674**	**157**	**2,831**	**2,930**
Total 2018 (12/18)	*4*	*11*	*107*	***122***	*2,476*	*186*	***2,662***	***2,769***
Total 2017 (12/17)	*10*	*16*	*97*	***123***	*2,447*	*380*	***2,827***	***2,924***
Total 2016 (12/16)	*4*	*19*	*106*	***129***	*2,532*	*291*	***2,823***	***2,929***
Total 2015 (12/15)	*10*	*2*	*118*	***130***	*1,484*	*212*	***1,696***	***1,814***
Total 2014 (10/14)	*12*	*1*	*120*	***133***	*2,525*	*294*	***2,819***	***2,939***

Color Key: = Greater than 300 Relocatable Classrooms

Footnotes

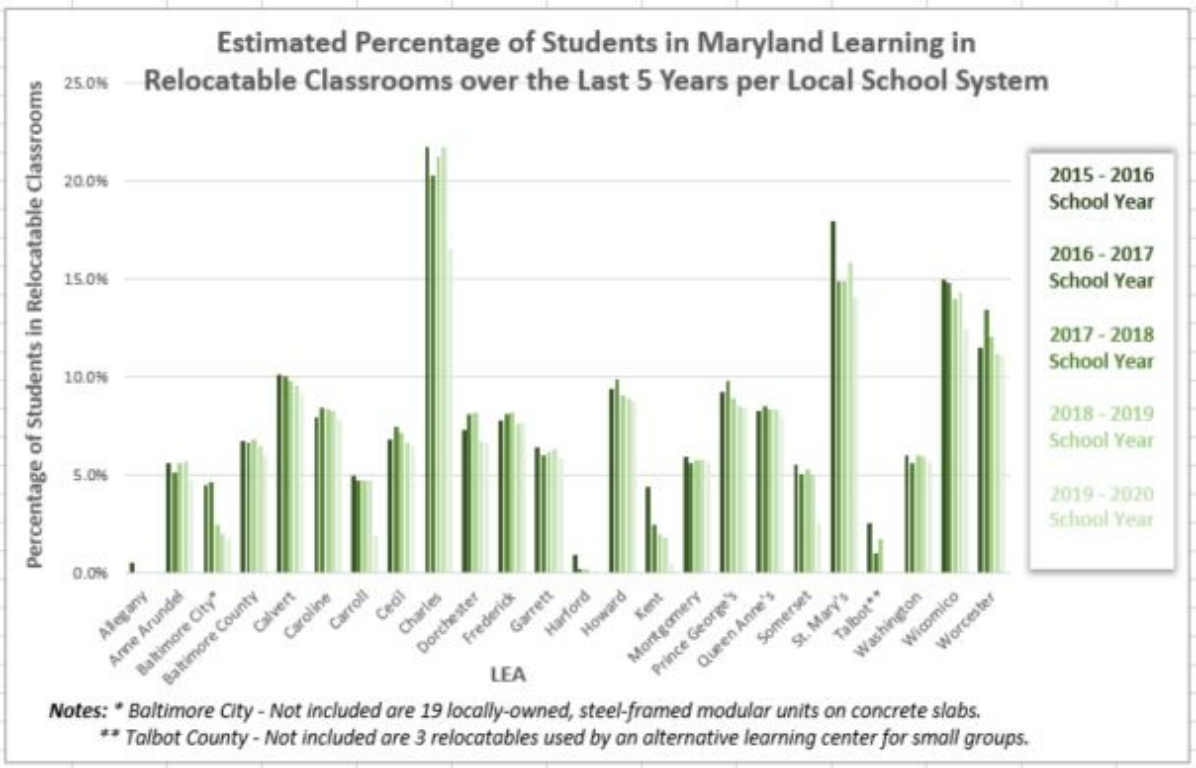
* Baltimore City - Not included are 19 locally-owned, steel-framed modular units on concrete slabs.

** Talbot - Not included are 3 locally-owned relocatables used by the alternative learning center for small groups.

*** Washington - State Relocatable Unit demolished during Summer of 2019.

Findings – Amount of Students Learning in Relocatable Classrooms

Assuming 23 students per classroom, approximately 67,390 Maryland students are currently instructed within relocatable classrooms, which is a higher number compared to last school year. Overall, the total percentage of students within relocatable classrooms has remained steady at around 7%. Charles has the highest percentage of students in relocatable classrooms of 17%, but this is a sharp decrease compared to 22% in the 2018-2019 school year. This trend shows that enrollment growth is increasingly accommodated in traditional brick and mortal classrooms.



Findings – Five-Year Average of Total Number of Relocatable Classrooms

The 5-year average number of relocatable classrooms in use for instruction is part of the eligibility criteria for Capital Grant Program for Local School Systems with Significant Enrollment Growth or Relocatable Classrooms (EGRC) funding. Per the table on the following page, Montgomery and Prince George's County were eligible for this program in the 2021 Capital Funding Year.

Number of Relocatable Classrooms in Use for Instruction Over a 5-Year Period (2015-2019)

Maryland Interagency Commission on School Construction
Data as of March 2020

SCHOOL SYSTEM	Number of Relocatable Classrooms by School Year					5-Year Average
	2015-16	2016-17	2017-18	2018-19	2019-20	
Allegany	2	1	1	1	0	**1**
Anne Arundel	173	182	190	186	183	**183**
Baltimore County	271	233	278	304	284	**274**
Calvert	51	68	68	68	59	**63**
Caroline	23	21	21	21	21	**21**
Carroll	67	82	68	51	51	**64**
Cecil	55	55	55	51	51	**53**
Charles	248	233	248	256	256	**248**
Dorchester	16	17	17	17	14	**16**
Frederick	179	177	164	153	155	**166**
Garrett	10	10	10	10	10	**10**
Harford	42	40	41	30	30	**37**
Howard	198	244	224	225	221	**222**
Kent	4	0	0	3	0	**1**
Montgomery	457	459	502	409	451	**456**
Prince George's	519	484	482	499	553	**507**
Queen Anne's	23	17	6	29	22	**19**
Somerset	7	6	6	6	6	**6**
St. Mary's	117	117	110	121	124	**118**
Talbot	2	2	4	4	4	**3**
Washington	62	55	57	58	57	**58**
Wicomico	74	96	97	93	115	**95**
Worcester	52	39	35	35	33	**39**
Baltimore City	162	201	240	139	230	**194**
TOTAL	**2,814**	**2,839**	**2,924**	**2,769**	**2,930**	**119**

Color Key: = Greater that 300 students in a 5-Year Average

Findings – Age of Relocatable Classrooms

The IAC has not purchased any new classrooms since 1990. The average age of the State-owned inventory is 41 years, extending beyond the useful life of such type facilities. When considering locally-owned as well as State-owned units, nearly 14% of relocatable classrooms are in units over 30 years old. An estimated 2,775 classrooms are in relocatable units over 30 years old with Prince George's, Baltimore City, and Baltimore County each having over 40 classrooms in aging relocatable. See the table on the following page.

Age of Relocatables Classrooms in Use*

Maryland Interagency Commission on School Construction

Data as of March 2020

School System	< 9 Yrs	10-19 Yrs	20-29 Yrs	30 or >30 Yrs	TOTAL	% Relocatables classrooms 20 years old or more
Allegany	0	0	0	0	**0**	0%
Anne Arundel	17	166	0	0	**183**	0%
Baltimore County**	86	74	70	46	**276**	42%
Calvert	0	20	23	16	**59**	66%
Caroline	2	18	0	0	**20**	0%
Carroll	10	15	16	10	**51**	51% *
Cecil	0	35	0	16	**51**	31%
Charles****	8	96	51	7	**162**	36%
Dorchester	0	6	6	0	**12**	50%
Frederick	28	49	51	25	**153**	50%
Garrett	8	0	2	0	**10**	20%
Harford*****	0	14	8	0	**22**	36%
Howard	98	108	8	7	**221**	7%
Kent	0	0	0	0	**0**	0%
Montgomery	360	74	8	9	**451**	4%
Prince George's	175	101	195	72	**543**	49%
Queen Anne's	0	1	19	2	**22**	95%
Somerset	0	6	0	0	**6**	0%
St. Mary's******	20	12	13	10	**55**	42%
Talbot	1	3	0	0	**4**	0%
Washington	0	42	11	4	**57**	26%
Wicomico	31	26	50	8	**115**	50%
Worcester	0	19	14	0	**33**	42%
Baltimore City***	26	116	18	70	**230**	38%
Subtotal of Locally-Owned Relocatables	870	1,001	563	302	**2,736**	**32%**
State-Owned*******	0	0	1	98	**99**	**100%**
TOTAL	**870**	**1,001**	**564**	**400**	**2,835**	**34%**
Percentage of total:	**30.7%**	**35.3%**	**19.9%**	**14.1%**		

Color Key : = more than 45 total over 30 years of age

Footnotes

* Table includes temporary portables used as classroom space during construction projects.

** Baltimore County - Data received from LEA does not include the age of the 8 relocatables in use during construction.

*** Baltimore City - Data does not include 19 locally-owned, steel-framed modular units on concrete slabs, all of which are over 30 years old, except 3 that average around 20 years old.

**** Charles County - Data received from LEA does not include the age of 36 relocatables in use during construction

***** Harford County - Data received from LEA does not include the age of the 7 relocatables in use during construction. 1 of the normal relocatable's age is unknown.

****** St. Mary's County- Data received from LEA does not include the age of 43 relocatables as they are unknown.

******* State Owned Relocatables have an average age of 41 years.

*** Number corrected following the conclusion of the 10/15/2020 IAC Meeting**

Item V. Approval of Baltimore City E15M HVAC Project Allocation Adjustments

Motion:

To approve allocation adjustments for Baltimore City E15M HVAC projects at three (3) school facilities (#239 Benjamin Franklin BLDG, #87 Windsor Hills PK-8 and #84 Thomas Johnson PK-8) as presented.

Background Information:

The 2018 capital budget bill (SB 186; 2018 Laws of Md, Chap. 9) included a $15 million appropriation for:

Heating, Ventilaiton, and Air Conditioning Improvements. Provide funds to design, construct, and capital equip heating, ventilation, and air conditioning improvements at Baltimore City public school buildings in accordance with Title 5, Subtitle 3 of the Education Article. Further provided that, notwithstanding any provision of Title 5, Sutbitle 3 of the Education Article or any other provision of law, the allocations made for fiscal 2019 by IAC or any successor to IAC are final and shall not be subject to approval by BPW and shall be deemed approved under Title 5, Subtitle 3 of the Education Article.

In order to expedite Baltimore City E15M HVAC projects, at its meeting on August 30, 2018, the IAC waived the applicability of certain COMAR provisions, including the ineligibility of design, the requirement for a local match, and the ineligibility of systems or facilities that have been upgraded or renovated within 15 years.

Of note, a provision to allow for adjustments to be made to each of the E15M HVAC projects was made and was expected to be utilized because Baltimore City, in order to expedite the projects, would have to compress the planning phase for the projects. And, at its meeting on February 12, 2019, the IAC delegated the authourity to modify/adjust Baltimore City HVAC project allocations to IAC staff so long as:

- The adjusted allocation is within 25% of the original allocation, and
- The total of all allocations does not exceed the $15 million appropriation.

Baltimore City has requested (see attached) allocation adjustments for three (3) E15M HVAC projects. IAC approval is required for all three (3) of the requested allocation adjustments to be completed based upon the the 25% threshold. All 10 adjustments are shown in Table 1.

Table 1

Psc#	School Name	Project Scope	Current Allocation	Allocation Adjustment	New Allocation
30.099.19 BC HVAC	#239 Benjamin Franklin BLDG	Boiler	$650,000	($650,000)	$67,965
30.045.19 BC HVAC	#87 Windsor Hills PK-8	Chiller	$1,800,000	$650,000	$2,450,000
30.044.19 BC HVAC	#84 Thomas Johnson PK-8	Air Handler Units	$385,000	$329,392	$714,392
			$2,835,000	**$329,392**	

Approval of this request will leave a total available amount for future allocation of $0.

Staff recommends approval of the request.

Maryland

Jamie Bridges -IAC- <jamie.bridges@maryland.gov>

RE: $15M HVAC funds

Smith, Cynthia <CSmith03@bcps.k12.md.us> Tue, Sep 29, 2020 at 1:42 PM
To: Jamie Bridges -IAC- <jamie.bridges@maryland.gov>

Jamie,

To follow up with our conversations this week, we would like to take the following actions in regards to the $15M HVAC funds.

1. Cancel the construction allocation allotted to the Benjamin Franklin boiler project. We have completed a boiler replacement there via maintenance funds already. This allocation is for $650,000.
2. Add $650,000 to the Windsor Hills HVAC project construction allocation, increasing it to $2,450,000. This will allow us to install a fully operational full-building cooling system (rather than just certain classrooms). This bids are in for this project, and this supports the actual bids received.
3. Add the unallocated balance remaining for the $15M project, in the amount of $329,392.00, to the Thomas Johnson HVAC project. With the additional scope of work to make the project more complete and functional, our current construction estimate is approximately $1,500,000. The additional funds will go towards supporting the construction fund need, with additional funds added by City Schools.

Please let me know if you need additional information.

Thanks,

Cyndi

Cynthia Smith, P.E., PMP, ALEP

Director – Facilities, Design and Construction

Baltimore City Public Schools

200 E North Ave.

Room 407A

Baltimore, MD 21202

410-361-9212

410-340-0342 (cell)

csmith03@bcps.k12.md.us

Item VI. Baltimore City E15M HVAC Status Report

Motion:

This item is informational and does not require IAC action.

Background Information:

Please see attached table: Baltimore City E15M HVAC Status Report.

Baltimore City E15M HVAC Status Report

				Project Schedule		Project Phase					Project Status						Contract Status					
																	Design Contracts			Construct Contracts		
SchoolName	ScopeOfWork	TotalAllocation	Approved	FinishDesign	FinishConstruct	Procurement	Design	Procurement	Construct	CurrentTask	Behind > 2months	Behind <2 months	Behind < 1 month	On-Time	Ahead	Operational	Approved	Contracted	Expended	Approved	Contracted	Expended
Benjamin Franklin HS #239	Boiler replacement	$717,965	02/12/19	-	-					OPERATIONAL 04/2020						●	09/12/19	$67,965	$0	-	-	-
Callaway ES #251	Unit vent replacement	$1,611,887	02/12/19	03/01/20	07/29/21					DESIGN			●				06/14/19	$111,887	$0	-	-	-
Commodore John Rodgers EM #027	Chiller, cooling tower, air handler	$1,120,000	02/12/19	11/05/19	10/02/20					CONSTRUCTION				●			06/14/19	$120,000	$0	04/09/20	$1,000,000	$461,890
Fallstaff ES #241	Boiler replacement	$100,000	02/12/19	03/12/20	08/31/20					OPERATIONAL 09/2020						●	-	-	-	03/12/20	$100,000	$0
Frederick Douglass HS #450	Water heater installation	$43,520	12/13/18	-	06/01/19					OPERATIONAL 04/2019						●	-	-	-	12/13/19	$43,520	$0
Frederick Douglass HS #450	Boiler replacement	$1,072,451	02/12/19	01/30/20	06/28/21					CONSTRUCTION					●		06/14/19	$72,451	$0	04/09/20	$1,000,000	$907,644
Gwynns Falls ES #060	Boiler section replacement	$67,711	02/12/19	-	04/06/19					OPERATIONAL 04/2019						●	-	-	-	12/13/19	$67,711	$0
Harlem Park BLDG #078	Boiler section replacement	$19,630	02/23/19	-	03/05/19					OPERATIONAL 03/2019						●	-	-	-	12/13/19	$19,630	$0
Harlem Park BLDG #078	Boiler replacement	$1,158,423	02/12/19	08/01/19	12/28/20					NTP	●						07/09/19	$158,423	$0	08/13/20	$1,000,000	$0
Highlandtown EM #215	Condenser pipe replacement	$127,000	02/12/19	-	04/22/19					OPERATIONAL 07/2019						●	-	-	-	12/13/19	$127,000	$127,000
Highlandtown EM #215	Chiller replacement	$829,600	02/12/19	08/01/19	12/28/20					CONSTRUCTION				●			07/09/19	$79,600	$0	04/09/20	$750,000	$170,557
Leithwalk EM #245	BAS upgrade	$46,000	02/12/19	-	06/01/19					OPERATIONAL 12/2019						●	-	-	-	-	-	-
Liberty ES #064	Cooling tower, unit vent, controls	$1,086,400	02/12/19	09/05/19	02/01/21					CONSTRUCTION					●		06/14/19	$86,400	$0	03/12/20	$1,000,000	$135,753
Lockerman Bundy ES #261	Water heater installation	$46,500	02/12/19	-	05/15/19					OPERATIONAL 05/2019						●	-	-	-	12/13/19	$46,500	$0
Margaret Brent PK-8 #053	Cooling tower, pipe replacement	$1,066,800	12/13/18	07/05/19	06/02/21					CONSTRUCTION					●		06/14/19	$66,800	$0	12/13/19	$1,000,000	$818,238
Tench Tilghman PK-8 #013	Chiller, air handler replacement	$1,854,000	12/13/18	10/01/19	08/29/21					CONSTRUCTION					●		06/14/19	$153,498	$0	03/12/20	$1,700,502	$881,173
Thomas Johnson EM #084	Air handler replacement	$385,000	02/12/19	02/15/20	07/14/21					OUT FOR BID			●				03/12/20	$35,000	$0	-	-	$0
Westport PK-8 #225	Boiler, air handler replacement	$1,337,721	02/12/19	12/20/19	05/18/21					CONSTRUCTION			●				06/14/19	$137,721	$0	06/25/20	$1,200,000	$0
Windsor Hills EM #087	Chiller replacement	$1,980,000	02/12/19	03/15/20	08/12/21					OUT FOR BID				●			08/28/19	$180,000	$0	-	-	$0
Source: Baltimore City Public Schools, 2020-09-22		**$14,670,608**				**0**	**1**	**3**	**7**		**1**	**0**	**3**	**3**	**4**	**8**		**$1,269,745**	**$0**		**$9,054,863**	**$3,502,255**