

STATE OF MARYLAND PUBLIC SCHOOL CONSTRUCTION PROGRAM

200 W. BALTIMORE STREET BALTIMORE, MARYLAND 21201 410-767-0617

DAVID G. LEVER EXECUTIVE DIRECTOR

INTERAGENCY COMMITTEE ON SCHOOL CONSTRUCTION

JACK R. SMITH, Ph.D. CHAIRPERSON

December 8, 2015

The Honorable Larry Hogan, Governor The Honorable Nancy K. Kopp, State Treasurer The Honorable Peter Franchot, Comptroller

Re: Eligibility of Window Air Conditioning Units

Dear Board of Public Works Members:

I write to inform you of the action of the Interagency Committee on School Construction (IAC) on December 3, 2015 regarding the IAC policy on window air conditioning units. At the regularly scheduled meeting on that date, the IAC considered the enclosed motion to make window air conditioning units eligible for State funding. The motion was presented by the Secretary of the Department of General Services.

During discussion, Mr. Timothy Maloney, representing the Senate, proposed deferral of the motion pending further consultation between the members of the Board of Public Works and the leadership of the General Assembly. The proposed deferral was seconded and was approved by the IAC on a three-to-two vote. The IAC agreed that following consultation, the motion on window air conditioning eligibility would be considered by the IAC at a meeting in the near future.

Please call me at any time if you have questions on the IAC action.

Sincerely,

David Lever, R.A., D.A.

Executive Director

Maryland Public School Construction Program

Enclosure

cc: The Honorable Mike Miller, President of the Senate

The Honorable Mike Busch, Speaker of the House

Interim State Superintendent Jack R. Smith, Chair, Interagency Committee on School Construction

Secretary David Craig, Member, Interagency Committee on School Construction Secretary Gail Bassette, Member, Interagency Committee on School Construction

Mr. Timothy Maloney, Member, Interagency Committee on School Construction

Mr. John Bohanan, Member, Interagency Committee on School Construction

Secretary David Brinkley, Department of Budget and Management

Ms. Joan Schaefer, Deputy Director

Mr. Mark Newgent, Deputy Policy Advisor, Office of the Governor

Ms. Susanne Brogan, Deputy Treasurer

Mr. Len Foxwell, Deputy Comptroller

Mr. John Gontrum, Assistant Comptroller

Ms. Sheila McDonald, Executive Secretary, Board of Public Works

SECTION II-DISCUSSION ITEMS AND DEFERRED ITEMS – cont'd

IAC Meeting
December 3, 2015
Supplemental

D. Window Air Condition Unit Research

Sizing the Unit

Room size = 800 SF Occupants = 25

DGS Mechanical Engineer ran calculations and determine that based on these parameters, 2.5 tons (30,000 BTU) of cooling capacity is required.

Cost of the Unit

Cost of one window unit of this cooling capacity is \$2,000

Proper installation includes insulated metal panel to replace removed window section and support for 200 pound unit \$1,000

Security Screen \$1,200

Unit properly placed and secured in window costs \$4,200 each

Electrical Upgrade Requirements and Costs

Assumptions for estimate

Upgrade existing service by 400 amps. The schools are almost all in Baltimore County and Baltimore City, so assume that capacity is available at the street or pole.

Panel with 20 20 amp breakers

Run a dedicated circuit from electrical room to each of 20 classrooms terminating in dedicated outlet. Average distance will be 150' from electrical room.

Service is 208/230

Total estimated cost is \$110,000

Divide estimate by 20 get electrical cost per unit - \$5,500

Total Cost Per Unit

Installed Cost of Unit + Electrical Upgrade Cost Per Unit = Total Cost Per Unit \$4,200 +\$5,500 = \$9,700

The Maximum Scale of the Program

Number of Classrooms

Maryland State Department of Education has requested classroom count from Local Education Agencies

School System	Number of Classrooms without Cooling	Total Cost for Schools (\$9,700 per Classroom)	State Cost Share	State Cost at State Share	State Cost at Full Cost
Baltimore County	1109	\$10,757,300	52%	\$5,593,796	\$10,757,300
Garrett County	36	\$349,200	50%	\$174,600	\$349,200
Baltimore City	416	\$4,035,200	93%	\$3,752,736	\$4,035,200
TOTAL	1561	\$15,141,700		\$9,521,132	\$15,141,700

SECTION II-DISCUSSION ITEMS AND DEFERRED ITEMS - cont'd

IAC Meeting December 3, 2015 Supplemental

Other Considerations

Noise generation within room

Portable unit puts all noise in the room, add the concern of maintenance and periodic replacement of the condensate pump, and are therefore not recommended as an eligible item. A high quality window unit is acceptable in terms of noise generation.

Ventilation

Air exchange is a mode of operation with high quality window units.

Energy Efficiency

Units are available with options for programmability and control through computer and phone based applications which can increase the operating efficiency of the units.

Motion:

WINDOW AIR CONDITIONING UNITS, AND ASSOCIATED ELECTRICAL UPGRADES, INSTALLATION, AND SECURITY, ARE AN ELIGIBLE PROJECT TYPE, FOR ALL PUBLIC SCHOOL CONSTRUCTION PROGRAM FUNDING PROGRAMS, IN FACILITIES WHERE MORE THAN 50% OF CLASSROOMS CURRENTLY HAVE NO PROVISION FOR COOLING. PROJECTS SHALL BE SUBJECT TO THE SAME DEPARTMENT OF GENERAL SERVICES DESIGN REVIEW REQUIREMENTS AS TYPICAL SYSTEMIC RENOVATION PROJECTS. LOCAL EDUCATION AGENCIES SHALL PROVIDE THIRD PARTY CERTIFICATION OF SCHEDULED MAINTENANCE AND OPERABILITY OF STATE FUNDED WINDOW AIR CONDITIONING UNITS EVERY YEAR.

IAC ACTION: THE ABOVE REFERENCED ITEMS WERE:										
	Approved	Disapproved	Deferred	Abstain	Recuse					
Dr. Jack R. Smith										
Mr. David Craig										
Ms. Gail Bassette										
Mr. Tim Maloney										
Mr. John Bohanan										

IAC Summary on School Buildings Lacking Cooling in a Majority of Classrooms - December 2, 2015

- 1. This summary is based on information provided by school systems to the Maryland State Department of Education on buildings in which a majority of classrooms lack cooling, and for which they would consider requesting State support for window air conditioning units if they were an eligible project type.
- 2. On December 3, 2015, the Interagency Committee on School Construction will take up a motion to make window air conditioning units an eligible project type, for all Public School Construction Program funding programs, in buildings in which a majority of classrooms currently lack cooling, subject to certain design review and maintenance requirements.
- 3. Whether to request funding, and through which program, is determined by the decision processes of the school systems. The State cost share applies to the Capital Improvement Program, and historically has applied to any special initiatives.
- 4. The cost estimates were developed based on research of equipment costs, installation costs, and electrical upgrade costs by the Department of General Services. The costs are \$4,200 per classroom for the unit(s) and installation and \$5,500 per classroom for the electrical upgrades to support the power demands of the units, for a total of \$9,700 per classroom.
- * Baltimore County Indicated that QZAB funding is not likely to be requested due to requirements of private sector entity/school contribution matching 10% of the amount of QZAB funds requested (no federal, state, or local government entity contributions.) Due to the estimated cost of these projects,
- ** Baltimore County Some electrical work required, if not a total electrical upgrade

1	2	3	4	5	6	7	8	9
School System	Name of School	Number of Classrooms without Cooling	Electrical Upgrade Required Yes or No	QZAB Eligible	Total Cost for School (\$9,700 per Classroom)	State Cost Share	State Cost at State Share	State Cost at Full Cost
Baltimore County	Baltimore Highlands Elementary	14	Yes	Yes*	\$135,800	52%	\$70,616	\$135,800
Baltimore County	Battle Grove Elementary	23	Yes	Yes*	\$223,100	52%	\$116,012	\$223,100
Baltimore County	Bear Creek Elementary	25	Yes	Yes*	\$242,500	52%	\$126,100	\$242,500
Baltimore County	Bedford Elementary	16	Yes**	Yes*	\$155,200	52%	\$80,704	\$155,200
Baltimore County	Berkshire Elementary	21	Yes**	Yes*	\$203,700	52%	\$105,924	\$203,700
Baltimore County	Chapel Hill Elementary	19	Yes	No	\$184,300	52%	\$95,836	\$184,300
Baltimore County	Charlesmont Elementary	26	Yes	Yes*	\$252,200	52%	\$131,144	\$252,200
Baltimore County	Church Lane Elementary	18	Yes	Yes*	\$174,600	52%	\$90,792	\$174,600
Baltimore County	Colgate Elementary	18	Yes	Yes*	\$174,600	52%	\$90,792	\$174,600
Baltimore County	Dundalk Elementary	34	Yes	Yes*	\$329,800	52%	\$171,496	\$329,800
Baltimore County	Edmondson Heights Elemetary	19	Yes	Yes*	\$184,300	52%	\$95,836	\$184,300
Baltimore County	Grange Elementary	24	Yes	Yes*	\$232,800	52%	\$121,056	\$232,800

Baltimore County	Kingsville Elementary	21	Yes	No	\$203,700	52%	\$105,924	\$203,700
Baltimore County	Lansdowne Elementary	20	Yes	Yes*	\$194,000	52%	\$100,880	\$194,000
Baltimore County	Oakleigh Elementary	22	Yes**	Yes*	\$213,400	52%	\$110,968	\$213,400
Baltimore County	Orems Elementary	16	Yes	Yes*	\$155,200	52%	\$80,704	\$155,200
Baltimore County	Pot Spring Elementary	19	Yes	Yes*	\$184,300	52%	\$95,836	\$184,300
Baltimore County	Reisterstown Elementary	25	Yes	Yes*	\$242,500	52%	\$126,100	\$242,500
Baltimore County	Victory Villa Elementary	20	Yes	Yes*	\$194,000	52%	\$100,880	\$194,000
Baltimore County	Arbutus Middle	45	Yes	Yes*	\$436,500	52%	\$226,980	\$436,500
Baltimore County	Franklin Middle	44	Yes	Yes*	\$426,800	52%	\$221,936	\$426,800
Baltimore County	Golden Ring Middle	47	Yes	Yes*	\$455,900	52%	\$237,068	\$455,900
Baltimore County	Middle River Middle	51	Yes	Yes*	\$494,700	52%	\$257,244	\$494,700
Baltimore County	Southwest Academy	44	Yes	Yes*	\$426,800	52%	\$221,936	\$426,800
Baltimore County	Stemmers Run Middle	61	Yes	Yes*	\$591,700	52%	\$307,684	\$591,700
Baltimore County	Sudbrook Magnet Middle	47	Yes	No	\$455,900	52%	\$237,068	\$455,900
Baltimore County	Dulaney High	44	Yes**	No	\$426,800	52%	\$221,936	\$426,800
Baltimore County	Franklin High	48	Yes	No	\$465,600	52%	\$242,112	\$465,600
Baltimore County	Kenwood High	65	Yes	Yes*	\$630,500	52%	\$327,860	\$630,500
Baltimore County	Lansdowne High	47	Yes**	Yes*	\$455,900	52%	\$237,068	\$455,900
Baltimore County	Patapsco High	45	Yes**	Yes*	\$436,500	52%	\$226,980	\$436,500
Baltimore County	Woodlawn High	62	Yes**	Yes*	\$601,400	52%	\$312,728	\$601,400
Baltimore County	Campfield Early Learning Center	22	Yes	Yes*	\$213,400	52%	\$110,968	\$213,400
Baltimore County	Catonsville Alternative	11	Yes	Yes*	\$106,700	52%	\$55,484	\$106,700
Baltimore County	Rosedale Center	26	Yes	Yes*	\$252,200	52%	\$131,144	\$252,200
Subtotal		1109			\$10,757,300	52%	\$5,593,796	\$10,757,300
Comett	Crellin ES	4	Yes	Yes	\$38,800	50%	\$19,400	\$38,800
Garrett		4			\$87,300		\$43,650	\$87,300
Garrett	Route 40 ES	9	Yes	No	\$38,800	50%	\$19,400	\$38,800
Garrett	Swan Meadow	4	Yes	No	\$174,600	50%	\$19,400	\$174,600
Garrett	Youth Glades ES	18	Yes	Yes	\$9,700	50%		\$174,600
Garrett	Hickory Environmental Cnt	1	Yes	N/A		50%	\$4,850	1 1
Subtotal		36			\$349,200	50%	\$174,600	\$349,200
Baltimore City	Edgecomb Circle Elem	21	Yes	Yes	\$203,700	93%	\$189,441	\$203,700
Baltimore City	Booker T. Washington Bldg	18	Yes	Yes	\$174,600	93%	\$162,378	\$174,600
Baltimore City	Mary E. Rodman	19	Yes	Yes	\$184,300	93%	\$171,399	\$184,300
Baltimore City	Govans Elem	13	Yes	Yes	\$126,100	93%	\$117,273	\$126,100
Baltimore City	Brehms Lane Elem	34	Yes	Yes	\$329,800	93%	\$306,714	\$329,800
Baltimore City	Northwood Elem	18	Yes	Yes	\$174,600	93%	\$162,378	\$174,600
Baltimore City	Cross Country Elem	38	Yes	Yes	\$368,600	93%	\$342,798	\$368,600

Baltimore City	Claremont School	11	Yes	Yes	\$106,700	93%	\$99,231	\$106,700
Baltimore City	Northwestern HS	61	Yes	Yes	\$591,700	93%	\$550,281	\$591,700
Baltimore City	Johnson Square Elem	18	Yes	Yes	\$174,600	93%	\$162,378	\$174,600
Baltimore City	Hilton Elem	26	Yes	Yes	\$252,200	93%	\$234,546	\$252,200
Baltimore City	Franklin Square Elem	21	Yes	Yes	\$203,700	93%	\$189,441	\$203,700
Baltimore City	Yorkwood Elem	19	Yes	Yes	\$184,300	93%	\$171,399	\$184,300
Baltimore City	Mergenthaler Voc Technical HS	99	Yes	Yes	\$960,300	93%	\$893,079	\$960,300
Subtotal		416			\$4,035,200	93%	\$3,752,736	\$4,035,200
TOTAL		1561			\$15,141,700		\$9,521,132	\$15,141,700

IAC School Survey on Window Air Conditioners - November 2015

SFB/Standards Guidelines/IAQ/AC/School survey 11-2015.xlsx

- Col. 1. List name of school system
- Col. 2. List each school by name in which the majority of classrooms do not have air conditioning, either with a central system or with individual window units.
- Col. 3. Estimate the number of classrooms without cooling.
- Col. 4. Estimate the volume of a typical classroom in the school in cubic feet floor area x height.
- Col. 5. Indicate whether the school would require an electrical power upgrade to accommodate additional window units.
- Col. 6. Indicate whether school system would be likely to request State funding for window AC units for this school.
- Col. 8. Indicate reason why system would not request window units. For Example: "Approved replacement project underway"
- Col 9. Indicate whether school is eligible for QZAB, i. e. , has 35% or more FARMS enrollment.
- * Baltimore County QZAB funding not recommended due to requirements of private sector entity/school contribution matching 10% of the amount of QZAB funds requested (no federal, state, or local government entity contributions.) Due to the estimated cost of these projects, the requirement would most likely be prohibitive.
- ** Baltimore County Some electrical work required, if not a total electrical upgrade

1	2	3	4	5	6	7	8	9	10	11
		Number of Classrooms without	Typical Size of Classrooms	Electrical Upgrade Required		Number of Classrooms Likely to		QZAB	Window units per classroom (estimated) Baltimore	FRPM%
	Name of School	Cooling	in Cubic Feet	Yes or No	Likely Request Yes or No	Request	Comments	Eligible	County Only	SY 14-15
Allegany	Allegany High	45	7,200	Yes	No	0	Building is scheduled for replacement	Yes	-	42.28
Allegany Total	Dalifara da Ela carta da	45 14	7,200	V	Diana and finalizad at this time	14	OD	\/*	0	85.47
Baltimore County Baltimore County	Baltimore Highlands Elementary Battle Grove Elementary	23	8,650 8,925	Yes Yes	Plans not finalized at this time Plans not finalized at this time	23	SR requested - FY2017	Yes* Yes*	2 2	71.30
Baltimore County	Bear Creek Elementary	25	8,100	Yes	Plans not finalized at this time	25	SR requested - FY2017	Yes*	2	62.85
Baltimore County	Bedford Elementary	16	9.075	Yes**	Plans not finalized at this time	16	Six requested - 1 12017	Yes*	2	71.04
Baltimore County	Berkshire Elementary	21	10,050	Yes**	Plans not finalized at this time	21		Yes*	2	71.43
Baltimore County	Chapel Hill Elementary	19	8,400	Yes	Plans not finalized at this time	19	SR requested - FY2017	No	2	10.17
Baltimore County	Charlesmont Elementary	26	8,750	Yes	Plans not finalized at this time	26	OK requested - 1 12017	Yes*	2	72.06
Baltimore County	Church Lane Elementary	18	9,400	Yes	Plans not finalized at this time	18		Yes*	2	65.32
Baltimore County	Colgate Elementary	18	8,825	Yes	Plans not finalized at this time	18		Yes*	2	83.29
	Dundalk Elementary	34	6,425	Yes	Plans not finalized at this time	34		Yes*	2	77.79
Baltimore County	Edmondson Heights Elemetary	19	9,500	Yes	Plans not finalized at this time	19	SR requested - FY2017	Yes*	2	70.97
Baltimore County	Grange Elementary	24	8,375	Yes	Plans not finalized at this time	24	SR requested - FY2017	Yes*	2	59.82
Baltimore County	Kingsville Elementary	21	8,810	Yes	Plans not finalized at this time	21	SR requested - FY2017	No	2	10.83
Baltimore County	Lansdowne Elementary	20	9,275	Yes	Plans not finalized at this time	20	Replacement School - request FY2017	Yes*	2	76.06
Baltimore County	Oakleigh Elementary	22	8,775	Yes**	Plans not finalized at this time	22	SR requested - FY2017	Yes*	2	51.87
Baltimore County	Orems Elementary	16	8,575	Yes	Plans not finalized at this time	16		Yes*	2	51.06
Baltimore County	Pot Spring Elementary	19	8,200	Yes	Plans not finalized at this time	19	SR requested - FY2017	Yes*	2	46.30
Baltimore County	Reisterstown Elementary	25	8,450	Yes	Plans not finalized at this time	25		Yes*	2	55.64
Baltimore County	Victory Villa Elementary	20	8,275	Yes	Plans not finalized at this time	20	Replacement School - request FY2017	Yes*	2	64.55
Baltimore County	Arbutus Middle	45	7,700	Yes	Plans not finalized at this time	45		Yes*	2	43.31
Baltimore County	Franklin Middle	44	6,525	Yes	Plans not finalized at this time	44	SR requested - FY2017	Yes*	2	40.49
Baltimore County	Golden Ring Middle	47	6,500	Yes	Plans not finalized at this time	47		Yes*	2	71.05
Baltimore County	Middle River Middle	51	8,190	Yes	Plans not finalized at this time	51		Yes*	2	66.22
Baltimore County	Southwest Academy	44	7,825	Yes	Plans not finalized at this time	44		Yes*	2	68.08
Baltimore County	Stemmers Run Middle	61	7,000	Yes	Plans not finalized at this time	61		Yes*	2	63.40
Baltimore County	Sudbrook Magnet Middle	47	7,675	Yes	Plans not finalized at this time	47		No	2	33.70
Baltimore County	Dulaney High	44	7,500	Yes**	Plans not finalized at this time	44	Limited Renovation - request FY2017	No	2	70.13
Baltimore County	Franklin High	48	7,050	Yes	Plans not finalized at this time	48		No	2	29.77
Baltimore County	Kenwood High	65	7,775	Yes	Plans not finalized at this time	65		Yes*	2	55.43
Baltimore County	Lansdowne High	47	6,925	Yes**	Plans not finalized at this time	47	Limited Renovation - request FY2017	Yes*	2	60.47
Baltimore County	Patapsco High	45	7,850	Yes**	Plans not finalized at this time	45	Limited Renovation - request FY2017	Yes*	2	52.87
Baltimore County	Woodlawn High	62	7,625	Yes**	Plans not finalized at this time	62	Limited Renovation - request FY2017	Yes*	2	60.16
Baltimore County	Campfield Early Learning Center	22	7,925	Yes	Plans not finalized at this time	22		Yes*	2	65.51
	Catonsville Alternative	11	6,800	Yes	Plans not finalized at this time	11		Yes*	2	69.84
	Rosedale Center	26	7,950	Yes	Plans not finalized at this time	26		Yes*	2	72.41
Baltimore County To		1109	283,650	NI-	NI-	1109	Deale de la companie	V		40.04
Garrett	Accident ES	21	8,000	No	No	0	Replacing heater units with heat pumps in FY16/17 on performance contract with Johnson Controls	Yes		46.64
Garrett	Crellin ES	4	8,000	Yes	Yes	4		Yes		60.61

	Grantsville ES	16	8,500	Yes	No	0	Open space school - central AC would be needed	Yes	60.87
Garrett	Route 40 ES	9	8,000	Yes	Yes	9		No	25.18
Garrett	Swan Meadow	4	8,000	Yes	Yes	4		No	30.95
Garrett	Youth Glades ES	18	8,000	Yes	Yes	18		Yes	59.49
Garrett	Hickory Environmental Cnt	1	10,000	Yes	Yes	1		N/A	61.54
Garrett	Northern HS	44	8,500	Yes	No	0	Submitted FY20 CIP request for chiller system to AC entire school	Yes	40.09
Garrett	Southern HS	41	8,500	Yes	No	0	Submitted FY21 CIP request for chiller system to AC entire school	Yes	36.01
Garrett Total		158	75,500			36	710 Ontare Gorioon		
Harford	Center for Educational Opportunity/Alternative Education	28	7,296	No	No	0	FY16 CIP project in design	N/A	80.65
Harford Total	opportunity// internative Education	28	7,296			0			
Wicomico	East Salisbury ES	12	8,100	Yes	No	0	Includes PE/guidance offices; local funding requested	Yes	86.14
Wicomico	West Salisbury ES	12	8,100	Yes	No	0	Approved replacement project underway	Yes	84.42
Wicomico Total		24	16,200			0	1		
Baltimore City	Edgecomb Circle Elem	21	6,000	yes	Yes	21		yes	96.27
Baltimore City	Booker T. Washington Bldg	18	6,720	yes	Yes	18		yes	97.12
Baltimore City	Mary E. Rodman	19	8,838	yes	Yes	19	21st C Year 2 School	yes	93.82
Baltimore City	Govans Elem	13	4,800	yes	Yes	13	21st C Year 2 School	ves	91.81
Baltimore City	Brehms Lane Elem	34	6,000	yes	Yes	34	2.00 0 100. 2 0011001	yes	94.37
Baltimore City	Northwood Elem	18	8,000	ves	Yes	18	MSDE assumes 8,000 CF; Year 3/4 School	ves	81.90
Baltimore City	Cross Country Elem	38	6,000	yes	Yes	38	21st C Year 2 School		82.42
Baltimore City	Claremont School	11	5,880	yes	Yes	11	MSDE estimates 11 clsrms; to be abandoned	yes yes	91.23
							INSDE estillates 11 cistilis, to be abandoned		
Baltimore City	Northwestern HS	61	6,720	yes	Yes	61		yes	81.97
Baltimore City	Johnson Square Elem	18	8,000	yes	Yes	18	MSDE assumes 8,000 CF	yes	97.51
Baltimore City	Hilton Elem	26	7,280	yes	Yes	26		yes	89.28
Baltimore City	Franklin Square Elem	21	9,100	yes	Yes	21		yes	99.75
Baltimore City	Yorkwood Elem	19	11,610	yes	Yes	19		yes	91.31
	Mergenthaler Voc Technical HS	99	8,000	yes	Yes	99	MSDE assumes 8,000 CF	yes	73.19
Baltimore City									
Baltimore City Baltimore City Tota	al	416	102,948			416			
	al	416 1780	102,948 492,794			416 1561			
Baltimore City Tota	al								
Baltimore City Tota	al								
Baltimore City Tota	al								
Baltimore City Tota	al		492,794	CITY SCHOO	S WITH AIR CONDITIONING -	1561	MSDE		
Baltimore City Tota	Patterson HS		492,794	CITY SCHOO yes	S WITH AIR CONDITIONING - Yes	1561	MSDE 21st C Year 1 School. Majority of classrooms have AC.		77.63
Baltimore City Tota Grand Total		1780	492,794 BALTIMORE			1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms		77.63 82.07
Baltimore City Tota Grand Total Baltimore City	Patterson HS	1780 36	8ALTIMORE 0 6720	yes	Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no		
Baltimore City Tota Grand Total Baltimore City Baltimore City	Patterson HS Edmondson High	36 12	#92,794 BALTIMORE (6720	yes	Yes Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no		82.07
Baltimore City Baltimore City Baltimore City Baltimore City Baltimore City Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem	36 12 7 27	8000 7200	yes yes yes yes	Yes Yes NO No	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request		82.07 98.66 93.21
Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem	36 12 7 27	8000 7200	yes yes yes yes yes	Yes Yes NO No yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C		82.07 98.66 93.21 98.78
Baltimore City Tota Grand Total Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem	36 12 7 27 0 0	BALTIMORE 0 6720 8000 7200	yes yes yes yes yes yes yes	Yes Yes NO No yes yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms		82.07 98.66 93.21 98.78 98.77
Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem	36 12 7 27	8000 7200	yes yes yes yes yes	Yes Yes NO No yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated		82.07 98.66 93.21 98.78
Baltimore City Tota Grand Total Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem Dr. Carter Godwin Woodson PreK-8	1780 36 12 7 27 0 0 24 1	8000 6720 8000 7200 6720 9450 8000	yes	Yes Yes NO No Syes Yes Yes Yes Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope.		82.07 98.66 93.21 98.78 98.77 99.03 92.58
Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem	36 12 7 27 0 0 24	8000 7200 6720 9450	yes yes yes yes yes yes yes yes yes	Yes Yes NO No yes yes No	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated		82.07 98.66 93.21 98.78 98.77 99.03
Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle	1780 36 12 7 27 0 0 24 1 0 2	#92,794 BALTIMORE 0 6720 8000 7200 6720 9450 8000 25 X 24 8000	yes	Yes Yes NO No Ves Yes Yes No Yes No Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope.		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29
Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle Collington Square Elem	1780 36 12 7 27 0 0 24 1 0 2	#92,794 BALTIMORE (6720 8000 7200 6720 9450 8000 25 X 24 8000 30 X 37	yes	Yes Yes NO No No Syes Yes Yes No Yes Yes Yes Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope. all classrooms have a/c units		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29
Baltimore City Grand Total Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle Collington Square Elem Hazelwood E/M	1780 36 12 7 27 0 0 24 1 0 2	#92,794 BALTIMORE (6720 8000 7200 6720 9450 8000 25 X 24 8000 30 X 37 28 X 26	yes	Yes Yes NO No No yes yes No Yes No Yes yes No yes yes No	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope. all classrooms have a/c units rooms have window A/Cs		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29 96.93 87.73
Baltimore City Grand Total Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle Collington Square Elem Hazelwood E/M Gilmor Elem	36 12 7 27 0 0 24 1 0 0 1	#92,794 BALTIMORE 0 6720 8000 7200 6720 9450 8000 25 X 24 8000 30 X 37 28 X 26 8000	yes	Yes Yes NO No No yes yes No Yes yes No Yes No Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope. all classrooms have a/c units rooms have window A/Cs MSDE assumes 8,000 CF. MSDE no due to scope.		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29 96.93 87.73 94.07
Baltimore City Grand Total Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle Collington Square Elem Hazelwood E/M	36 12 7 27 0 0 24 1 0 2 0 0 0	#92,794 BALTIMORE (6720 8000 7200 6720 9450 8000 25 X 24 8000 30 X 37 28 X 26 8000 6000	yes	Yes Yes NO No No yes yes No Yes No Yes yes No yes yes No	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope. all classrooms have a/c units rooms have window A/Cs MSDE assumes 8,000 CF. MSDE no due to		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29 96.93 87.73
Baltimore City Grand Total Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle Collington Square Elem Hazelwood E/M Gilmor Elem	1780 36 12 7 27 0 0 24 1 0 2 1 26	#92,794 BALTIMORE 0 6720 8000 7200 6720 9450 8000 25 X 24 8000 30 X 37 28 X 26 8000	yes	Yes Yes NO No No yes yes No Yes yes No Yes No Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope. all classrooms have a/c units rooms have window A/Cs MSDE assumes 8,000 CF. MSDE no due to scope.		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29 96.93 87.73 94.07
Baltimore City Tota Grand Total Baltimore City Baltimore City	Patterson HS Edmondson High John Eager Howard Elem Arlington Elem City Springs Elem Lakewood Elem Eutaw-Marshburn Elem Dr. Carter Godwin Woodson PreK-8 Hamilton Middle Bldg Diggs-Johnson Middle Collington Square Elem Hazelwood E/M Gilmor Elem Baltimore Polytechnic Institute	36 12 7 27 0 0 24 1 0 0 1	#92,794 BALTIMORE (6720 8000 7200 6720 9450 8000 25 X 24 8000 30 X 37 28 X 26 8000 6000	yes	Yes Yes NO No No yes yes No Yes No Yes No Yes Yes No Yes	1561	21st C Year 1 School. Majority of classrooms have AC. MSDE assumes 8,000 CF. Majority of classrooms have AC. 21st C Year 1 School - MSDE assumes no request 21st C Year 1 School - MSDE assumes no request All classrooms have A/C A/C units in all rooms FY 2017 CIP project. MSDE assumes 8,000 CF; bldg to be vacated 2018. MSDE No due to scope. new A/C units installed (univents) heat/air) MSDE assumes 8,000 CF. MSDE No due to scope. all classrooms have a/c units rooms have window A/Cs MSDE assumes 8,000 CF. MSDE no due to scope. 88 classrooms have A/C units. 68 classrooms have A/C units. Majority of classroom have A/C.		82.07 98.66 93.21 98.78 98.77 99.03 92.58 81.29 96.93 87.73 94.07

Baltimore County	Carney Elementary	-	No	Approved project underway	46.35
Baltimore County	Catonsville Elementary	-	No	Approved project underway	30.64
Baltimore County	Chase Elementary	-	No	Approved project underway	62.50
Baltimore County	Halstead Academy	-	No	Approved project underway	78.99
Baltimore County	Hawthorne Elementary	-	No	Approved project underway	76.71
Baltimore County	Joppa View Elementary	-	No	Approved project underway	30.96
Baltimore County	Pleasant Plains Elementary	-	No	Approved project underway	65.06
Baltimore County	Scotts Branch Elementary	-	No	Approved project underway	74.58
Baltimore County	Villa Cresta Elementary	-	No	Approved project underway	40.15
Baltimore County	Westowne Elementary	-	No	Approved project underway	45.79
Baltimore County	Dumbarton Middle	-	No	Approved project underway	19.62
Baltimore County	Overlea High	-	No	Approved project underway	60.94
Baltimore County	Pikesville High	-	No	Approved project underway	34.66