

Capital Debt Affordability Committee

Treasurer Nancy K. Kopp, Chair
Louis L. Goldstein Treasury Building
80 Calvert Street, Assembly Room
Annapolis, MD 21401

Agenda

September 18, 2017

3:00 PM

1) Treasurer's Opening Comments

2) Review of Capital Programs:

Capital Program

Teresa Garraty, Executive Director, Office of Capital Budgeting, Department of Budget and Management

Public School Construction Program

Robert Gorrell, Executive Director, MD Interagency Committee on School Construction

3) Review of Size and Condition of Debt of Higher Education Institutions:

- Amount Issued in prior five fiscal years
- Amount outstanding
- Amount authorized but unissued
- Debt service projections for the next 10 fiscal years
- Status of refunding potential
- Current projections for new issuances
- Rating Agency Updates
- 5 year Capital Improvement Plan

University System of Maryland

Robert Page, Comptroller, Administration and Finance

St. Mary's College

Charles "Chip" Jackson, Vice President for Finance and Business

Morgan State University

Bic Janak, Assistant Vice President for Finance and Management

Baltimore City Community College

Calvin Harris, Director of Facilities and Planning

The final CDAC meeting will be on Friday, September 29, 2017 at 10am to review and discuss the recommendation of general obligation bond authorizations.

Capital Program



Review of the Capital Improvement Program

*Presentation to
Capital Debt Affordability Committee*

by

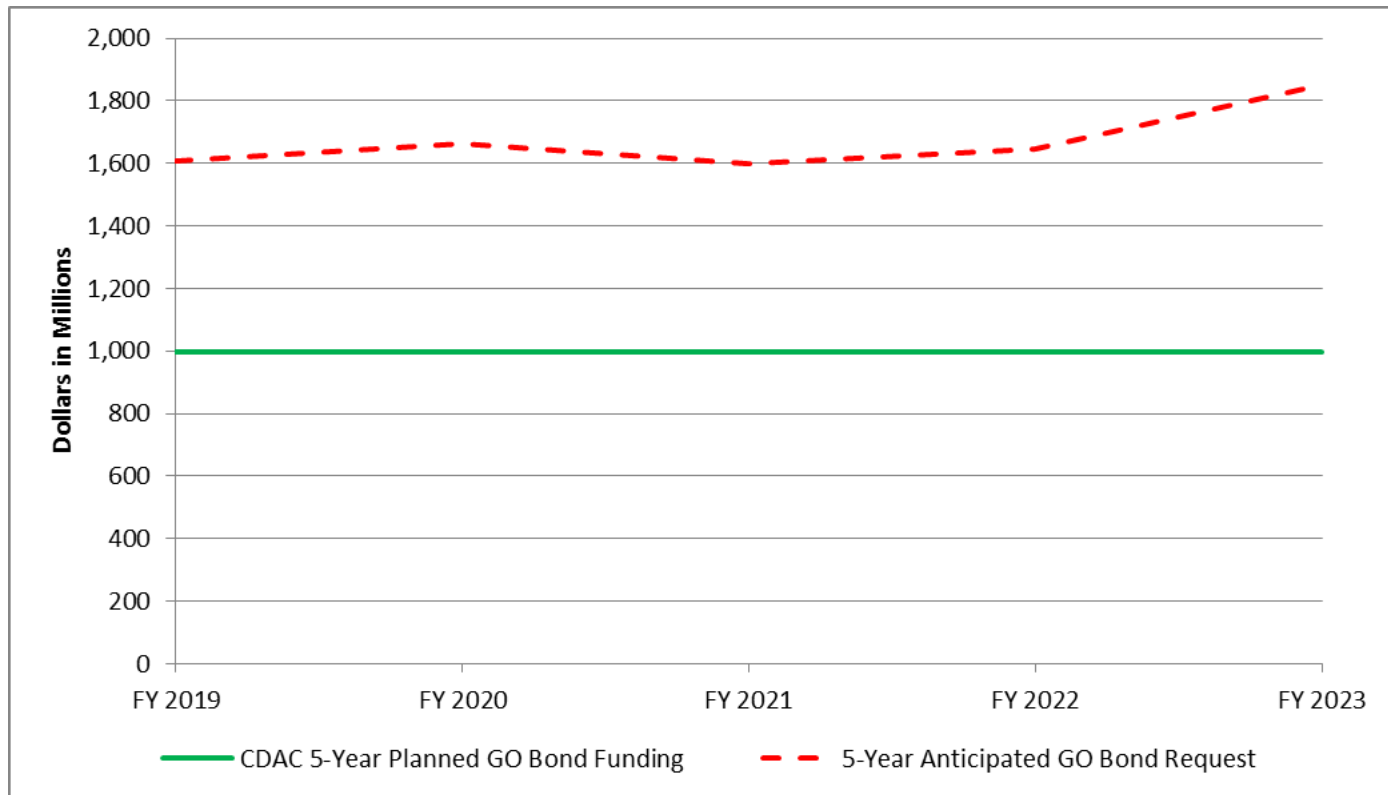
*Teresa Garraty
Maryland Department of Budget & Management*

September 18, 2017

Presentation Summary

- Summary of FY 2019 – FY 2023 Capital Budget Requests
- Rising debt levels and fiscal responsibility - holding new debt authorization level at \$995 million.

Requested Versus Planned GO Bond Levels





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Summary of Capital Budget Requests by Fiscal Year
FY 2019 - FY 2023
(\$ in Millions)

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Totals
State-Owned Facilities	466	483	665	682	812	3,108
Capital Grant Programs	1,140	1,181	933	965	1,038	5,257
Legislative Initiatives	35	35	35	35	35	175
Estimated Request Total	1,641	1,699	1,633	1,682	1,885	8,540
CDAC Debt Limit	995	995	995	995	995	4,975
CDAC Oversubscription	646	704	638	687	890	3,565
Oversubscribed by	164.92%	170.75%	164.12%	169.05%	189.45%	171.66%



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Major Sources of Funding Demand (\$ in Millions)

State-owned Facilities

- | | |
|---------------------------------|---------|
| ➤ University System of Maryland | \$1,156 |
| ➤ Morgan State University | \$ 341 |
| ➤ Judiciary | \$ 134 |
| ➤ Correctional Facilities | \$ 700 |

Capital Grant Programs

- | | |
|------------------------------|---------|
| ➤ Public School Construction | \$3,524 |
| ➤ Environmental Programs | \$ 197 |
| ➤ Community Colleges | \$ 539 |
| ➤ Housing | \$ 394 |
| ➤ Prince George's Hospital | \$ 104 |

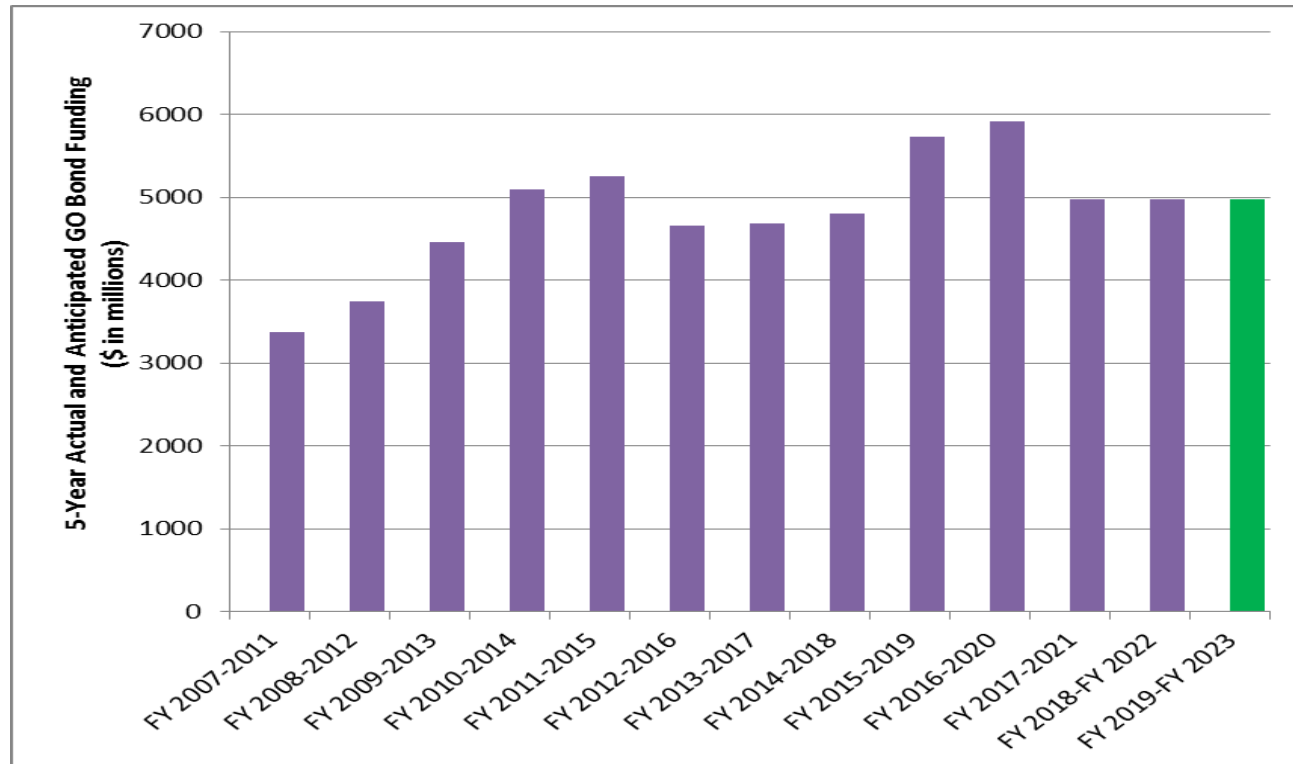


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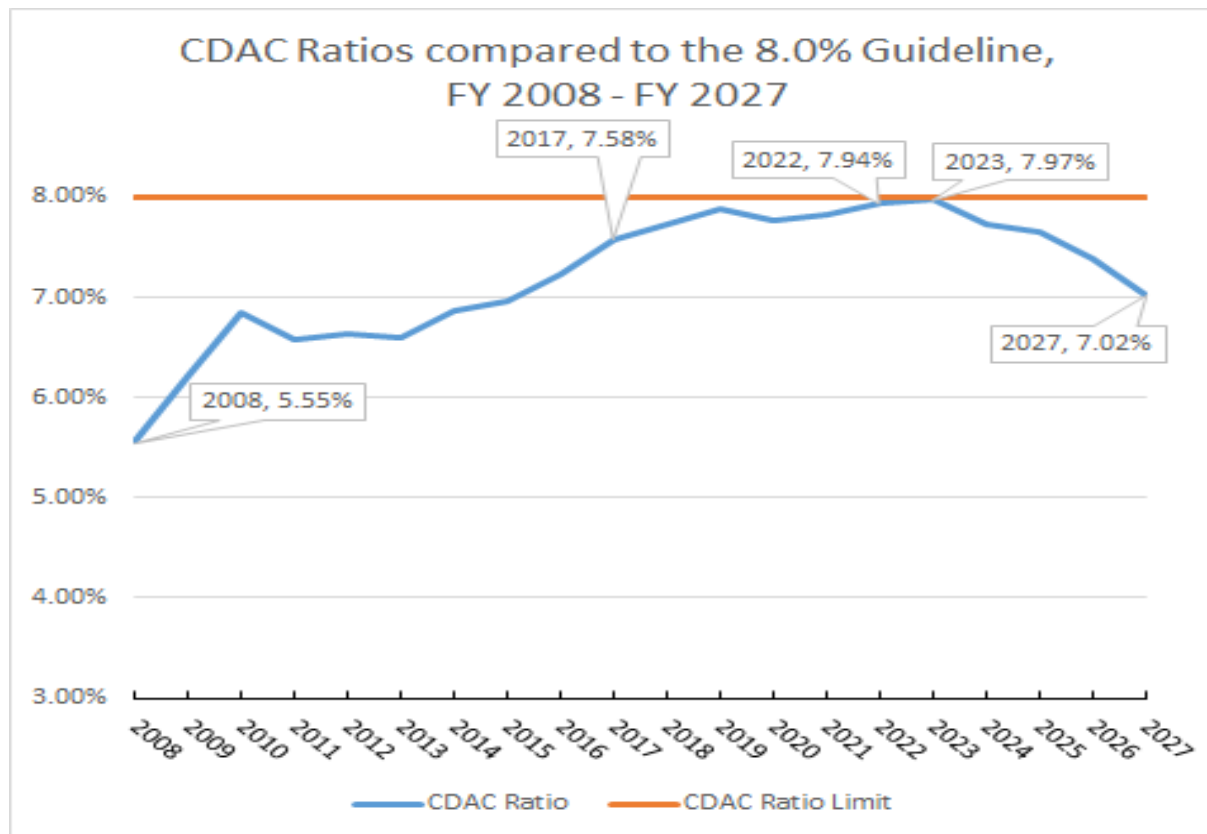
Summary of Governor Hogan's Planned Capital Improvement Program
FY 2019 - FY 2023
(\$ in Millions)

	Total Current and Anticipated Requests	Governor Hogan's Planned Bond Funded Capital Program	Difference between Anticipated Requests and Gov's Planned Funding Level
State-Owned Facilities	3,108	2,020	1,088
Capital Grant Programs	5,257	2,955	2,302
Legislative Initiatives	175	0	175
Totals	8,540	4,975	3,565

Comparison of Five Year Planned GO Bond Funding Levels



Projected Debt Levels Remain Near 8% Limit



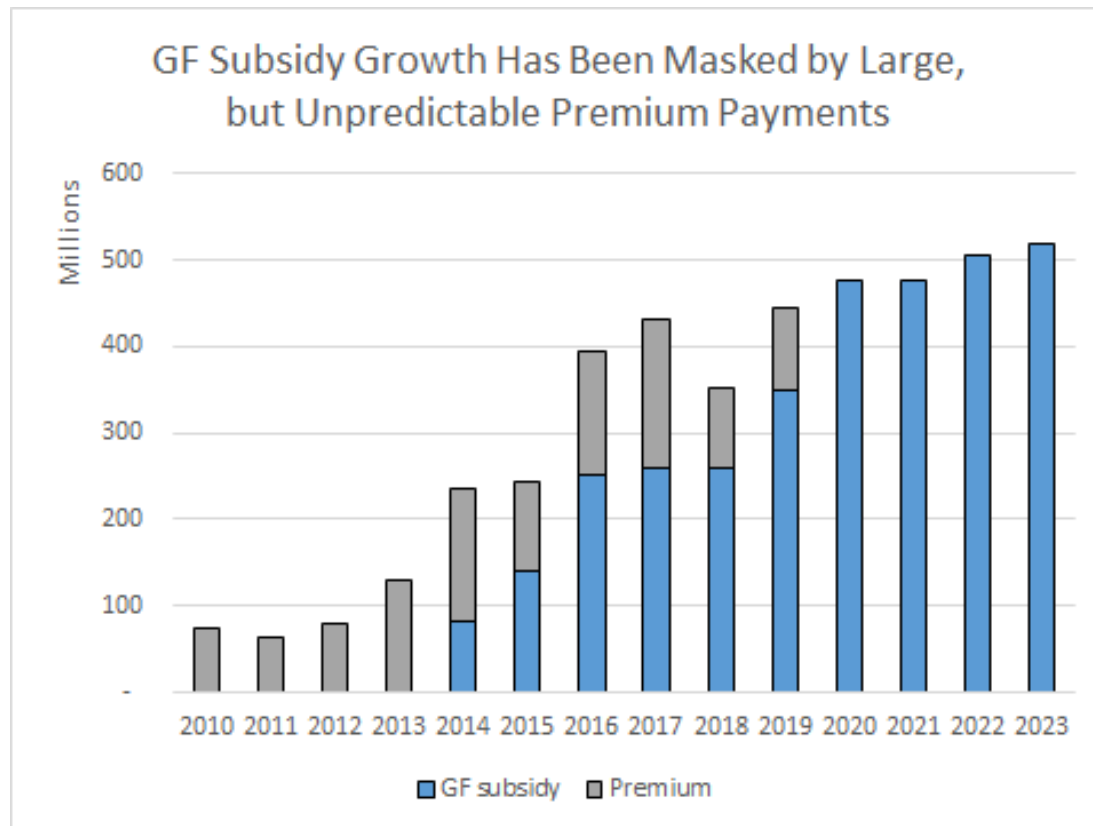
Debt Service Growth is Large

- Debt service growth is a large part of the State's budget shortfall, the FY 2019 general fund debt service is approximate \$350 million
- The FY 2019 general fund subsidy is larger than the total amount allocated for Public School Construction
- In comparison, the general fund debt subsidy was zero as recently as FY 2013



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Sharp Increase in the Use of General Funds to Pay Debt Service



Public School Construction Program



Capital Grant Programs as administered by the Public School Construction Program

Presentation Overview

- Public School Facilities Quick Facts
- Capital Funding and the Capital Need
- Construction Cost Escalation Factors
- IAC Construction Cost
- Projections of Total School Construction Need
- FY 2019 Capital Improvement Program Request

Public School Facilities Quick Facts

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

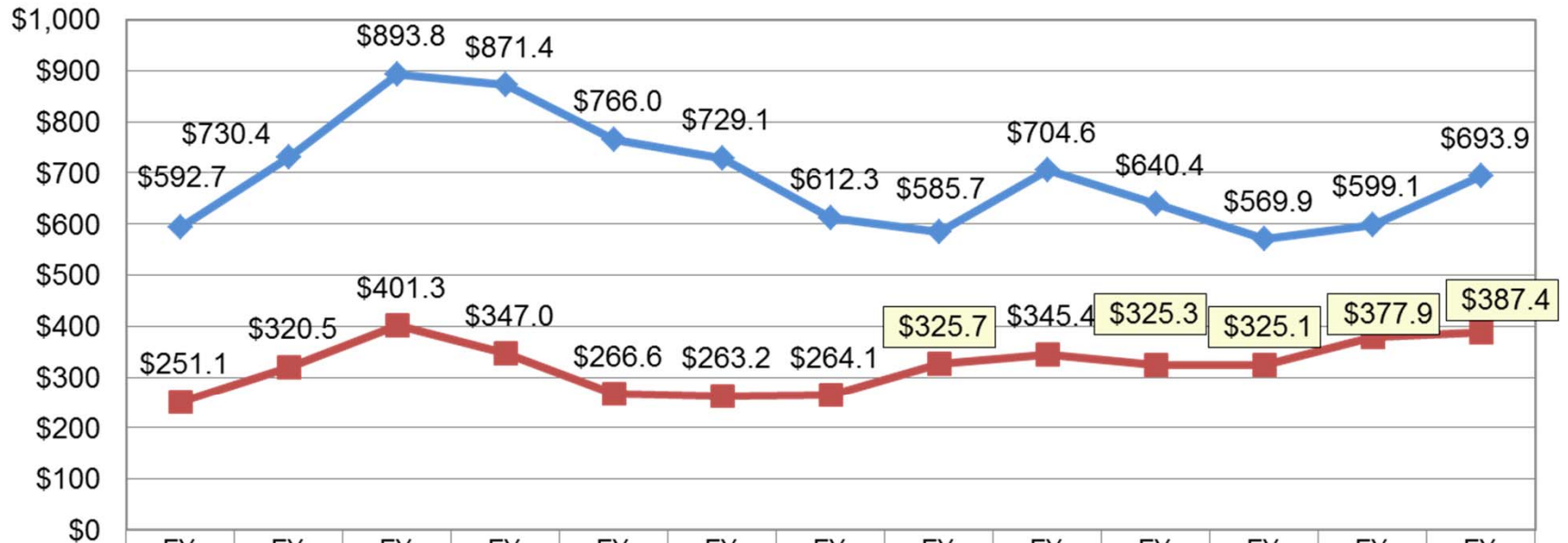
Capital Funding and the Capital Need

- Since FY 2006, the State of Maryland has allocated an average of \$296 million of new funding each fiscal year to public school construction through the capital improvement program.
- The continuity of Maryland's school capital funding stream over many years has allowed local boards of education to develop multi-year capital improvement plans that leverage state participation for local funding support.
- The available funds by source are shown in the chart below.

FY	Bond	EGRC	Paygo	Contingency Reserves	Total CIP Allocations	% CIP Allocation from Bonds	% CIP Allocation from Paygo	% CIP Allocation from Contingency Reserves
FY 2006	234,400		2,400	15,000	251,800	93.09%	0.95%	5.96%
FY 2007	300,669		2,400	19,603	322,672	93.18%	0.74%	6.08%
FY 2008	385,800		2,400	13,628	401,828	96.01%	0.60%	3.39%
FY 2009	327,400			19,582	346,982	94.36%	0.00%	5.64%
FY 2010	260,000			6,653	266,653	97.50%	0.00%	2.50%
FY 2011	250,000			13,724	263,724	94.80%	0.00%	5.20%
FY 2012	240,344			23,739	264,083	91.01%	0.00%	8.99%
FY 2013	326,393			22,775	349,168	93.48%	0.00%	6.52%
FY 2014	300,000			21,876	321,876	93.20%	0.00%	6.80%
FY 2015	275,000			50,255	325,255	84.55%	0.00%	15.45%
FY 2016	280,000	20,000		38,189	338,189	88.71%	0.00%	11.29%
FY 2017	280,000	40,000		44,993	364,993	87.67%	0.00%	12.33%
FY 2018	280,000	62,500		44,900	387,400	88.41%	0.00%	11.59%
Totals	3,740,006	122,500	7,200	334,917	4,204,623	91.86%	0.17%	7.97%

EGRC – Capital Grant Program for Local School Systems with Significant Enrollment Growth or Relocatable Classrooms. Six LEAs were eligible for these funds in FY 16 and FY 17. Five LEAs were eligible in FY 18.

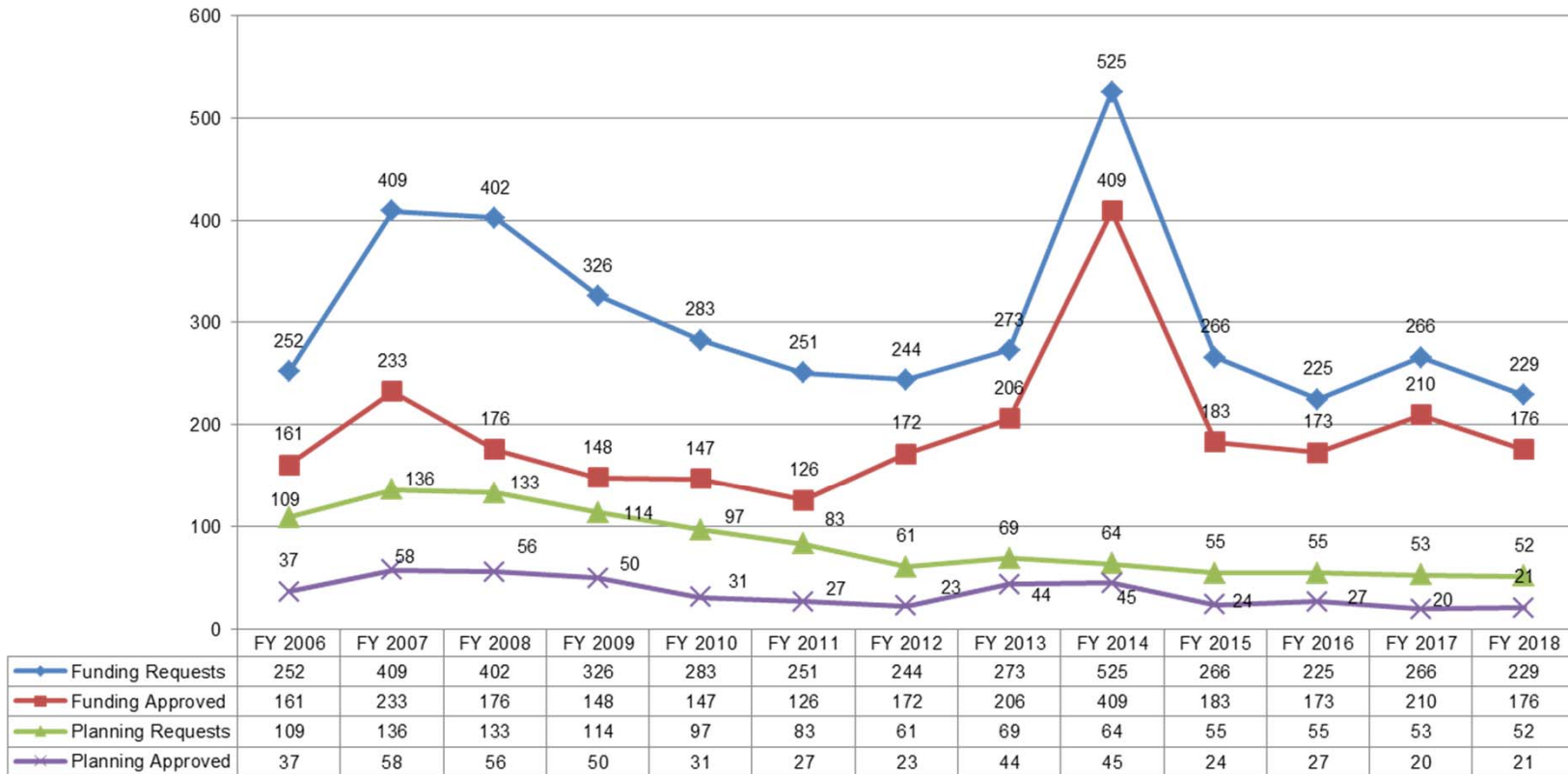
Summary of Annual Capital Improvement Program LEA Funding Requests and State Funding by Fiscal Year FY 2006 – FY 2018 (\$ in Millions)



	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Requests	592.7	730.4	893.8	871.4	766.0	729.1	612.3	585.7	704.6	640.4	569.9	599.1	693.9
Funding	251.1	320.5	401.3	347.0	266.6	263.2	264.1	325.7	345.4	325.3	325.1	377.9	387.4

- CIP requests represent only a partial picture of the capital needs of the local school systems, a continuing commitment by the State to school construction is needed.
- Shown in the chart above are the annual funding requests from the LEAs and the amount of State funding allocated in the last 12 years. State funding allocations have exceeded 50% of the local requests in only five of the last 10 years (FY 2013, 2015, 2016, 2017 and 2018).
- The figure for FY 2016 includes \$6.910 million of the \$20 million EGRC authorization. The FY 2017 figure includes \$52.912 million authorization which includes FY 2016 \$13.090 million and FY 2017 \$39.822 of the Enrollment Growth and Relocatable Classroom (EGRC) Initiative. The remaining \$178,000 was allocated to Dorchester County Public Schools in the FY 18 CIP.

Number of Capital Improvement Program Planning and Funding Requests and Approvals by Fiscal Year FY 2006 – FY 2018



➤ Figures for FY 2014 include: 259 requests and 227 approved projects for the FY 2013 Energy Efficiency Initiative (EEI), and 20 requests and 19 approved projects for the FY 2014 Air Conditioning Initiative (ACI).

Capital Grant Program for Local School Systems with Significant Enrollment Growth or Relocatable Classrooms (EGRC)

- The eligible LEAs are determined based on one or both of the following factors:
 1. Significant Enrollment Growth: Full-Time Equivalent (FTE) enrollment growth has exceeded 150% of the Statewide Average over the past five years; or,
 2. Significant Number of Relocatable Classrooms: An average of more than 300 Relocatable classrooms in a local school system over the past 5 years
- The FY 2019 CIP EGRC Funding Allocations distributions are in proportion to the system's share of the total Full-Time Equivalent (FTE) enrollment for the eligible LEAs as of September 30, 2016.

LEA	5-Year Change	9/30/2016 Total Enrollment	% Total Enrollment	Allocation (Rounded)
Statewide 2.9% 5-Year Change @ 150%	4.4%			
Anne Arundel	4.5%	78,814	15.14%	\$6,056,000
Baltimore County	5.0%	108,131	20.77%	\$8,308,000
Howard	6.5%	54,281	10.43%	\$4,171,000
Montgomery	6.7%	154,586	29.69%	\$11,877,000
Prince George's	5.9%	124,786	23.97%	\$9,588,000
Total		520,598		\$40,000,000

The Full-Time Equivalent enrollment is determined by the Maryland State Department of Education (MSDE) Office of Finance and Administration and published annually within the Foundation Program for the Major State Aid Programs.

Construction Cost Escalation

➤ **New Construction Cost FY 2014 to FY 2019**

- For FY14 through FY16 the IAC used the DBM construction escalation factor of **4% each** per year. To this calculation, for new construction, **12%** was added for site development.
- Based on bid results, 4% proved to be too low and an additional **17%** was added for FY17.
- FY18 CIP began with an adjustment down <6%>, however bids and national trends caused a required adjustment to \$348.67 that including **19%** for site.
- The FY19 CIP will use \$360, an increase of **3%**, included **19%** for site.
- Studying historic trends over the last 20 years, construction has increased 1-1.5% over the US Cost and Pricing Index (CPI).
- Cost volatility is expected to continue in the construction market due on the up-side due to a shrinking skilled labor pool and world competition for materials, and on the down side, from time to time due to technological improvements such as thermoplastic roofing materials.
- The IAC will continue to study market trends. If the trends indicate a need for a change in the cost/square foot number used for FY 2019, then a revised number will be issued.

Bid Date	Building only	Construction with Site	% of change from Prior Year
2013 (FY 2014)	\$215.00	\$240.80	4%
2014 (FY 2015)	\$224.00	\$250.88	4%
2015 (FY 2016)	\$233.00	\$260.96	4%
2016 (FY 2017)	\$282.00	\$335.58	21%
2017 (FY 2018)	\$293.00	\$348.67	4%
2018 (FY 2019)	\$302.00	\$360.00	3%

IAC Construction Cost Figure

- The IAC construction cost figure per square foot is a factor used in the calculation to determine state participation in an eligible project and is uniformly applied to all LEAs regardless of actual construction cost.
- Costs not included in the figure and are not eligible for state share funding are early planning, design, and the furniture, fixtures, and equipment (FF&E) required in all schools. The actual gross square foot cost that the State participates can be lower than the calculated figure.
- This figure is of particular importance to less-wealthy jurisdictions that depend heavily on State funding. If the State allocation is short a project or projects may not proceed.
- Bidders do not set their costs artificially based on the State's number, but rather on a complex set of factors that include competitively bid materials, profits, and sometimes components of labor. Bidders also assess risks such as the quality of bid documents and prompt payment.
- If a project bids below budget, excess State funds will be returned to that LEA's contingency account to be used within two years. Projects that may use contingency funds are other eligible projects in the CIP that were partially funded, deferred due to fiscal constraints, or may be held in reserve for the next fiscal year's CIP requests.

Some Cost Escalation Factors

Based on discussions with architects, engineers, and constructors, as well as review of industry literature, escalation in construction cost continues for some of the following reasons:

Market conditions

Reduced competition resulting from increased opportunities available to bidders in the private sector and from other governmental entities; reduced number of contractors and plant capacity as a result of the economic recession; shortage of labor, particularly skilled.

Regulations/Codes /Standards

Storm water management, high performance building standards, HVAC and energy codes, prevailing wage rates, and emergency electrical power regulations; contractors show a preference to bid in less regulated environments, reducing competition.¹

Schedule

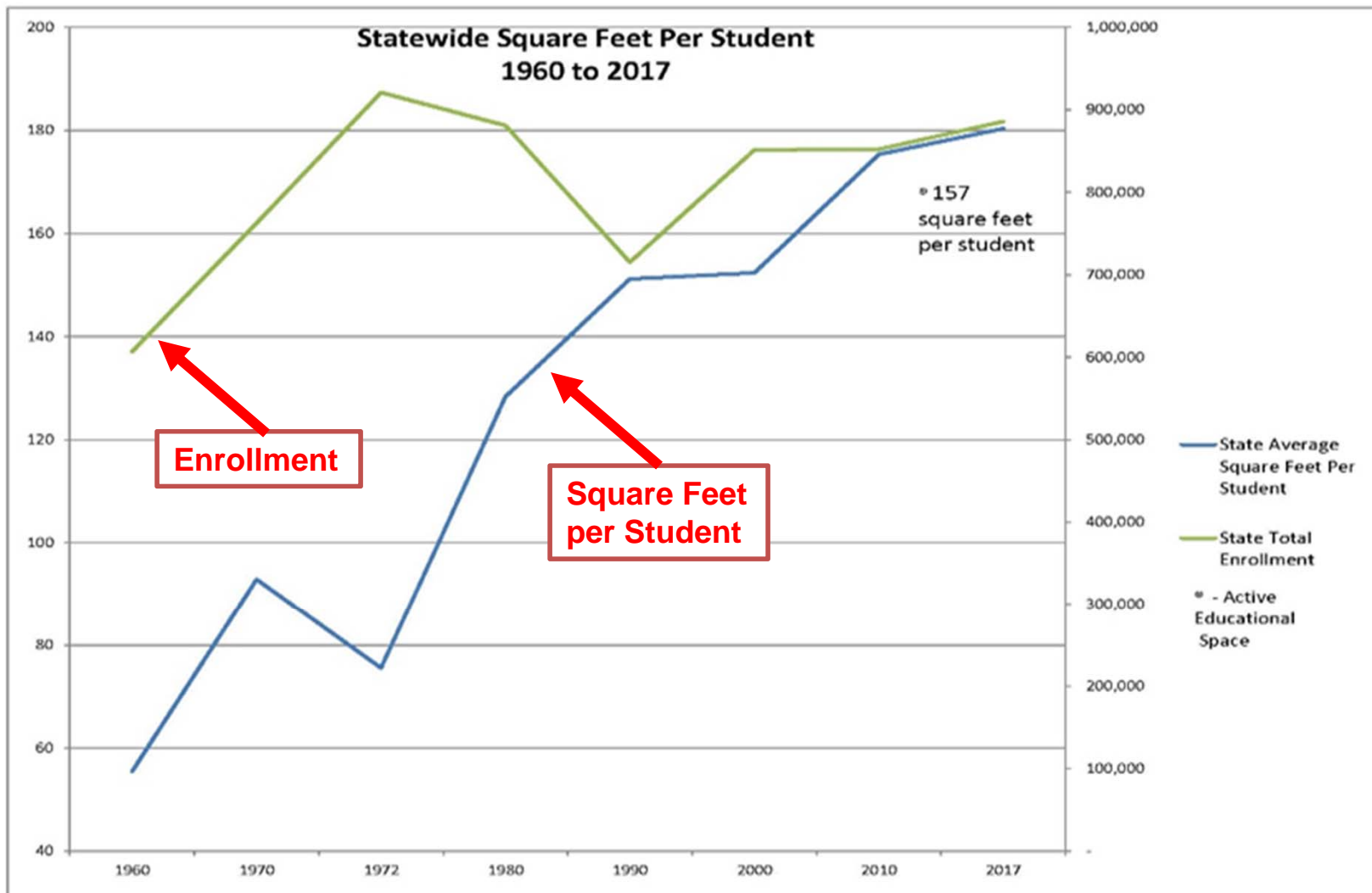
Longer government processing times required for permits and regulation reviews reduce the time available to complete the projects and resulting in higher costs due to acceleration of construction activities.

Sites

High development costs for sites that are less than ideal, requiring soil mitigation or extensive import/export of soils, combined with the increased cost of storm water management to meet Maryland's regulatory requirements in effect since 2011.

¹ Based on a sample of 240 side-by-side bids (i.e., both with and without prevailing wage rates) between January 2012 and March 2015, the average cost increase attributable to prevailing wage rates was 11.27%. The sample included 65 separate trade packages at 22 school construction projects in four LEAs. For mechanical systems, the average increase attributable to prevailing wage rates was 12.47% (28 bids on seven separate packages). For roofing, the average increase was 8.28% (66 bids on 13 separate packages).

Cost Escalation Due to Size



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

Projections of Total School Construction Need

Task Force to Study Public School Facilities: \$7.8 Billion

- In the summer of 2003, a study of the cost to bring all Maryland schools to minimum standards of performance indicated a need for a **\$3.85 billion** total expenditure. If a similar study were undertaken today and the same or equivalent deficiencies were found, the total cost to correct the deficiencies beginning in the summer of 2017 would increase to almost **\$8.4 billion**.²
- The Public School Facilities Act of 2004 established **\$2 billion** or eight-year at **\$250M** State funding goal. Adjusted to actual cost of construction, but excluding increases in gross square feet (GSF), this number today would be approximately **\$4.4 billion**, or about **\$546 million** per year. If GSF escalation were also included, the total necessary annual today would be **\$671 million** (1.6% growth factor compounded for 13 years = 23% increase)

²This estimate is based on the increase of the IAC construction cost from \$138.75/s.f. in the summer of 2003 to \$302.00/s.f. in the summer of 2018. Since most of the deficiencies noted in the Kopp Commission survey affected the interior of schools, only the increased cost of building is used in this calculation.

LEA CIP Projections, FY 2018 – 2023: \$9 Billion

The total need for State funding projected by school systems in the **FY 2018 – FY 2023 CIP** was \$3.97 billion, or an average of \$662 million per year. This equates to a total construction value of about \$9 billion.

LEA	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	TOTAL
Allegany	12,873	4,841	1,139	1,004	1,000	3,529	24,386
Anne Arundel	71,070	52,012	62,241	40,148	64,799	46,666	336,936
Baltimore County	120,730	60,372	30,050	30,050	30,050	31,050	302,302
Calvert	14,575	12,734	5,491	1,298	10,666	3,522	48,286
Caroline	1,646	-	10,440	16,350	6,263	9,383	44,082
Carroll	3,853	13,163	26,474	27,677	7,890	7,120	86,177
Cecil	6,733	9,127	10,166	16,518	16,120	9,351	68,015
Charles	16,995	35,607	34,560	7,496	21,553	29,668	145,879
Dorchester	10,975	14,957	5,959	3,354	7,346	5,913	48,504
Frederick	38,714	11,026	18,002	14,738	24,094	29,817	136,391
Garrett	1,567	535	985	1,850	2,715	2,947	10,599
Harford	19,200	16,310	24,743	4,730	19,267	24,494	108,744
Howard	39,083	32,735	32,667	38,316	37,461	39,028	219,290
Kent	-	1,650	-	3,352	3,000	2,581	10,583
Montgomery	119,094	72,359	95,050	58,375	61,217	81,511	487,606
Prince George's	91,479	140,936	184,169	131,418	122,425	118,914	789,341
Queen Anne's	2,455	550	6,780	1,800	10,986	9,900	32,471
St. Mary's	815	4,665	10,779	9,348	4,224	1,504	31,335
Somerset	14,720	14,720	2,560	8,685	8,685	1,082	50,452
Talbot	-	12,000	7,617	400	-	-	20,017
Washington	2,592	11,837	9,381	4,729	8,838	10,797	48,174
Wicomico	17,731	16,439	23,854	37,867	22,422	10,178	128,491
Worcester	-	3,769	3,768	2,539	1,569	1,677	13,322
Baltimore City	75,232	82,286	62,787	51,795	49,751	51,911	373,762
Maryland School for the Blind	11,726	13,879	17,761	7,459	-	-	50,825
TOTAL STATE	693,858	638,509	687,423	521,296	542,341	532,543	3,615,970
TOTAL ADJUSTED STATE	693,858	664,049	743,517	586,387	634,462	647,920	3,970,193

TOTAL STATE: Estimated based on FY 2018 requests with no adjustment for inflation.

TOTAL ADJUSTED STATE: Adjusted for inflation based on FY 2018 requests compounded at 4 percent per year.

FY 2019 Capital Improvement Program Request

In the fall of 2016, the Governor proposed a school construction budget of \$280 million for the FY 2018 Capital Improvement Program. The General Assembly approved this figure, and in addition provided \$62.5 million for the EGRC program, bringing the total of new allocation to \$342.5 million. The IAC proposes that the FY 2019 CIP allocation be established at a minimum of \$320 million.

➤ FY 2019 Capital Request

The IAC requests the following allocations in the **FY 2019 Capital Budget**:

<i>Target FY 2019 CIP Allocation:</i>	<i>\$280,000,000</i>
<i>Target FY 2019 CIP EGRC Allocation:</i>	<i>\$40,000,000</i>
<i>Target FY 2019 ASP Allocation:</i>	<i>\$6,109,000</i>
<i>Target FY 2019 QZAB Allocation:</i>	<i>\$4,823,000</i>
<i>Total Target FY 2019 Capital Allocation:</i>	<i>\$330,932,000</i>

University System of Maryland