

# Affordability Analysis for the Capital Debt Affordability Committee

September 29, 2017

# Topics of Discussion

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1. Planning Assumptions
2. Three Approaches to Capital Budget Authorizations
3. Tax Supported Debt Affordability Metrics
4. General Obligation Bond Authorization
5. Academic Facilities Bond Authorization

# Planning Assumptions

# CDAC Planning Assumptions

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- The authorization and issuance assumptions used to calculate the CDAC ratios do not include potential future P3s.
- The projected debt service ratios assume a 5% coupon for all maturities with no future refunding savings or use of premium and are subject to change. This makes the estimates somewhat conservative.
- Revenue and debt estimates are provided by the relevant State agencies.

# Three Approaches to General Obligation Bond Authorizations

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- The outlook for the CDAC ratios has improved since the 2016 meeting
  - Transportation revenues revised upwards
  - Method for projecting future bond issues has been refined, leading to a slight downward revision in issuance
  - Two successful refundings in CY 2017
- Due to this improvement, CDAC can examine multiple authorization scenarios

# Three Approaches to General Obligation Bond Authorizations

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- Three approaches:
  - The 2016 CDAC recommendation of \$995 million annually based on the Governor's capital program
  - The Spending Affordability Committee recommendation of \$1,065 million for FY 2018 plus 1% annual growth
  - The traditional CDAC approach, which includes 3% annual growth to account for inflation and increased demand for capital funding

**Note:** the enacted FY 2018 Capital Budget includes \$1,065 million in net general obligation bond authorizations.

# CDAC Authorization Scenarios

(\$ in millions)

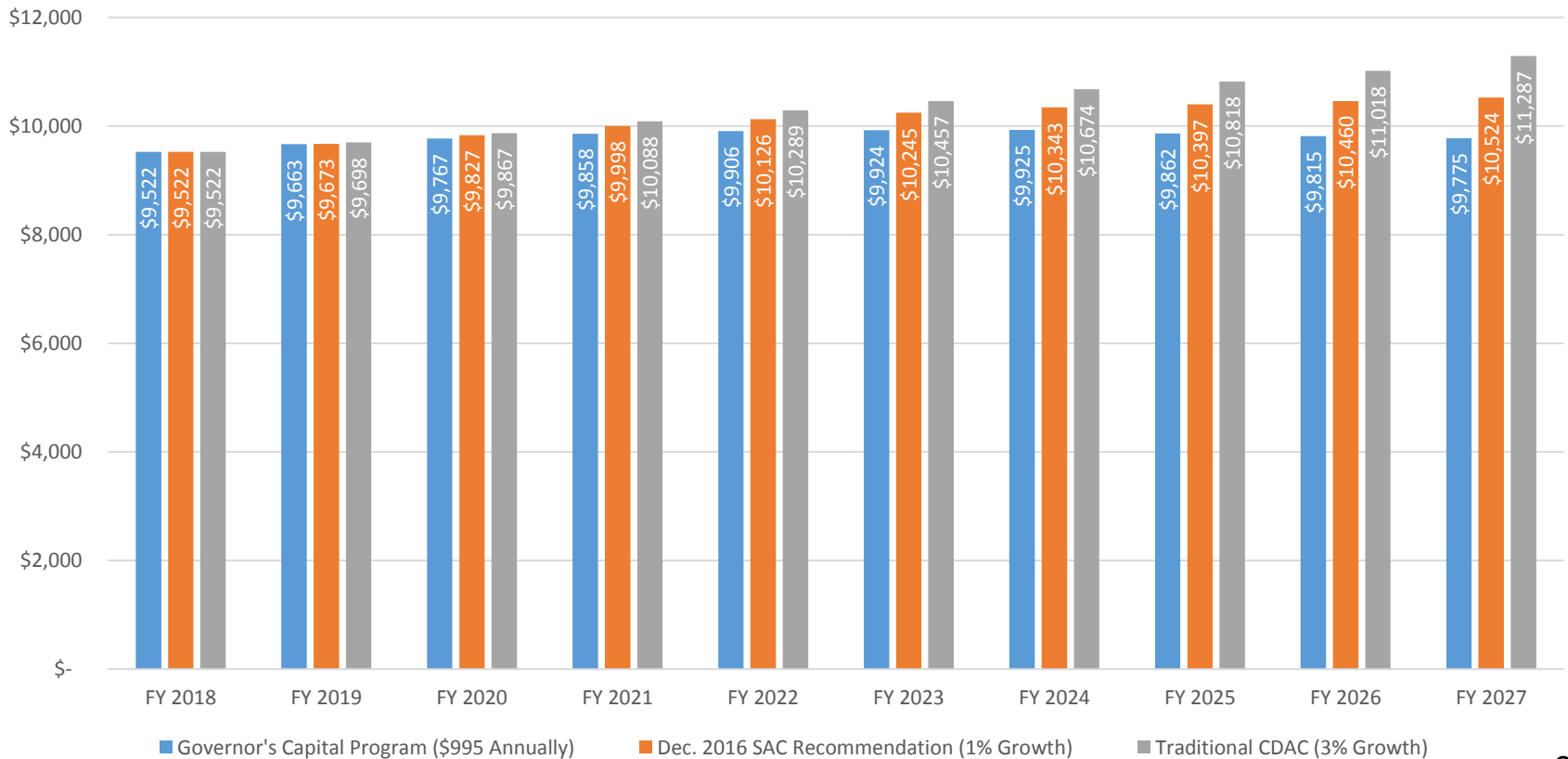
	<b>Governor's Capital Program (\$995 Annually)</b>	<b>Dec. 2016 SAC Recommendation (1% Growth)</b>	<b>Traditional CDAC (3% Growth)</b>
<b>FY</b>	<b>Authorization</b>	<b>Authorization</b>	<b>Authorization</b>
2018 (actual)	1,065	1,065	1,065
2019	995	1,076	1,097
2020	995	1,086	1,130
2021	995	1,097	1,164
2022	995	1,108	1,199
2023	995	1,119	1,235
2024	995	1,131	1,272
2025	995	1,142	1,310
2026	995	1,153	1,349
2027	995	1,165	1,390

All figures are preliminary forecasts as of September 2017 and are subject to change.



# Three Approaches to General Obligation Bond Authorizations

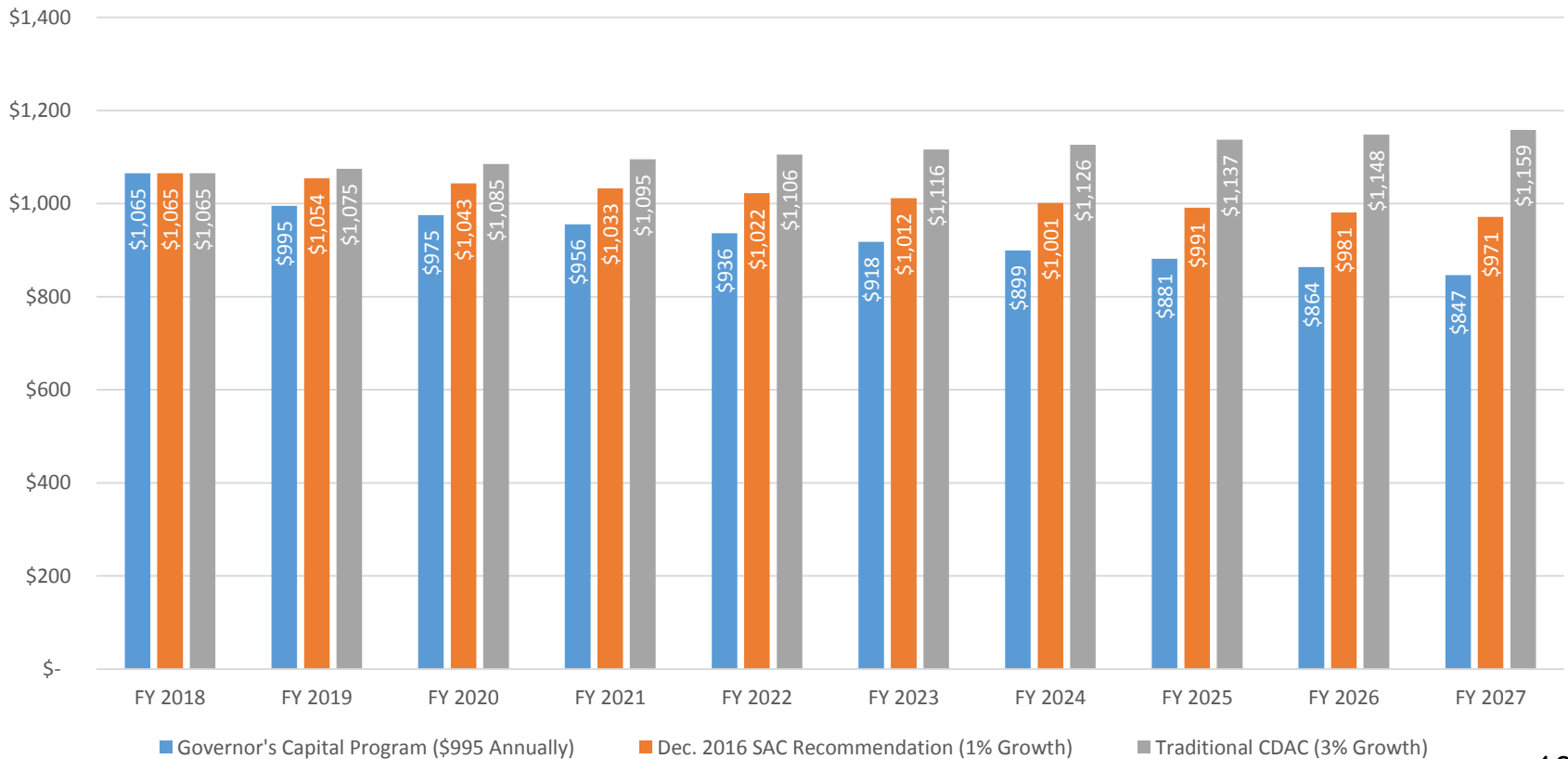
Projected General Obligation Debt Outstanding, FY 2018 – 2027  
(\$ in millions)



All figures are preliminary forecasts as of September 2017 and are subject to change.

# Three Approaches to General Obligation Bond Authorizations

Projected Purchasing Power of Authorizations, FY 2018 – 2027  
Inflation Adjusted Authorizations (\$ in millions)



All figures are preliminary forecasts as of September 2017 and are subject to change. Purchasing power estimated using the Congressional Budget Office's 2017 Consumer Price Index forecast (2.0% annual inflation).

# Three Approaches to General Obligation Bond Authorizations

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- **Capital program continues to be insufficient to satisfy demand**
  - Lack of capacity to fund requests in Capital Improvement Plan
    - Department of Budget and Management reports that unmet requests through FY 2023 total \$3.6 billion
    - This figure includes repairs and renovations to State-owned buildings, public school construction, and higher education
  - Deferred maintenance backlog across the State
    - State-owned buildings: \$170.4 million
    - Morgan State: \$100.0 million
    - St. Mary's College: \$10.9 million
    - Baltimore City Community College: \$3.0 million
    - Public school construction program and University System of Maryland also have significant backlogs (comparable figures not currently available)

# Tax-Supported Debt Affordability Metrics

# Total Tax-Supported Debt Outstanding\* to Personal Income Ratio

(\$ in millions)

The planning assumptions for authorizations and issuance result in the following projections of personal income to total tax-supported debt outstanding\*:

Fiscal Year	Personal Income	Governor's Capital Program (\$995 Annually)		Dec. 2016 SAC Recommendation (1% Growth)		Traditional CDAC (3% Growth)	
		Total Tax-Supported Debt Outstanding*	Ratio	Total Tax-Supported Debt Outstanding*	Ratio	Total Tax-Supported Debt Outstanding*	Ratio
<b>2018</b>	<b>364,581</b>	<b>13,319</b>	<b>3.57%</b>	<b>13,319</b>	<b>3.57%</b>	<b>13,319</b>	<b>3.57%</b>
2019	381,471	13,751	3.56%	13,761	3.57%	13,786	3.57%
2020	397,541	14,107	3.51%	14,167	3.53%	14,207	3.54%
2021	414,346	14,185	3.40%	14,325	3.43%	14,415	3.45%
2022	430,197	14,247	3.30%	14,466	3.35%	14,630	3.38%
2023	444,962	14,332	3.19%	14,653	3.27%	14,865	3.31%
2024	460,677	14,445	3.11%	14,863	3.20%	15,194	3.27%
2025	477,114	14,638	3.04%	15,173	3.16%	15,595	3.24%
2026	494,832	14,540	2.92%	15,185	3.05%	15,744	3.16%
2027	513,890	14,448	2.80%	15,197	2.94%	15,960	3.09%

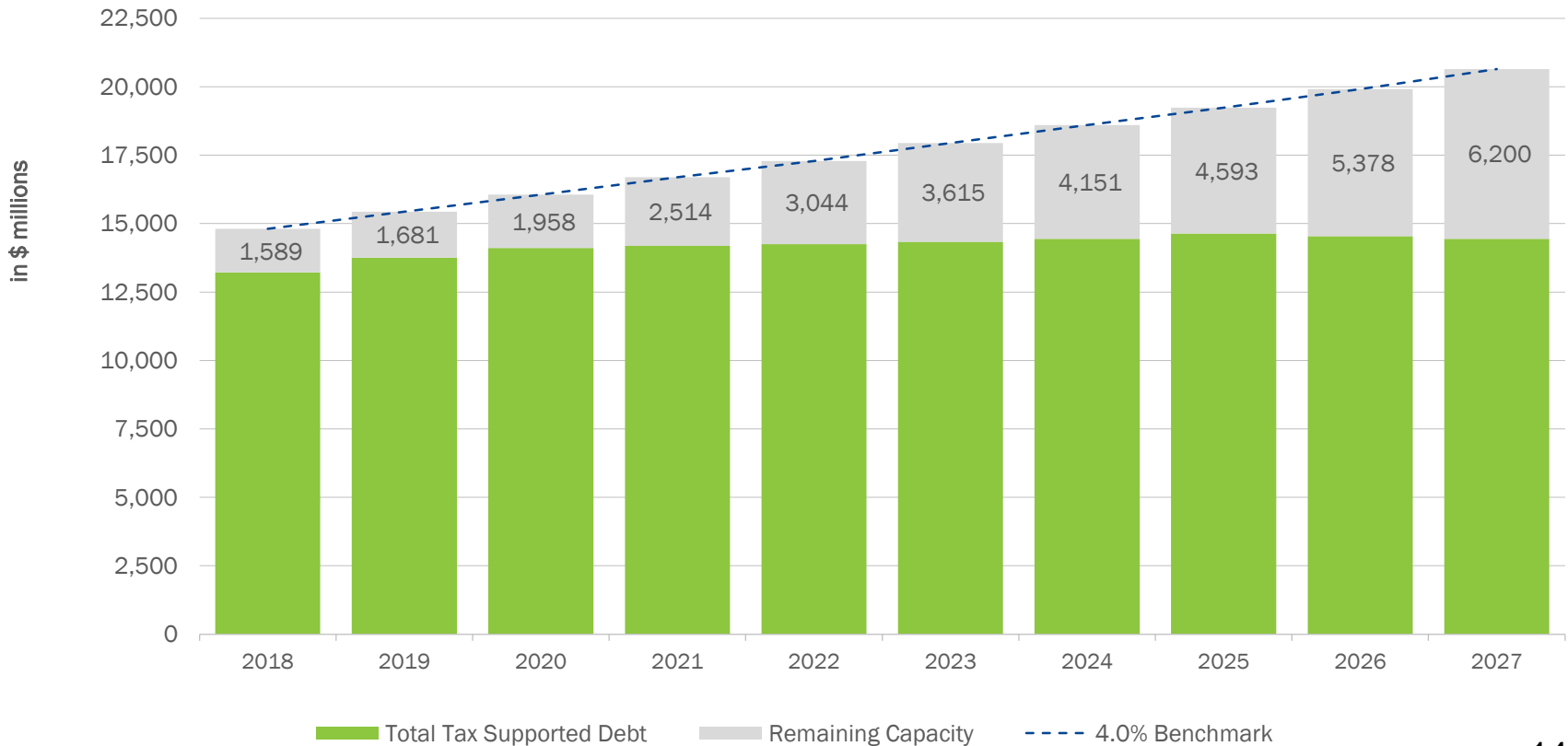
\*Total tax-supported debt outstanding includes all outstanding debt from General Obligation Bonds, Consolidated Transportation Bonds, Bay Restoration Bonds, GARVEEs, most capital leases, and certain debt held by the Maryland Stadium Authority.

All figures are preliminary forecasts as of September 2017 and are subject to change.

# Total Tax-Supported Debt Outstanding\* to Personal Income Ratio

(Governor's Capital Program - \$995 Annually)

Tax Supported Debt Outstanding to Personal Income  
Available Debt Capacity using the 4.0% Benchmark  
FY2018 - FY2027

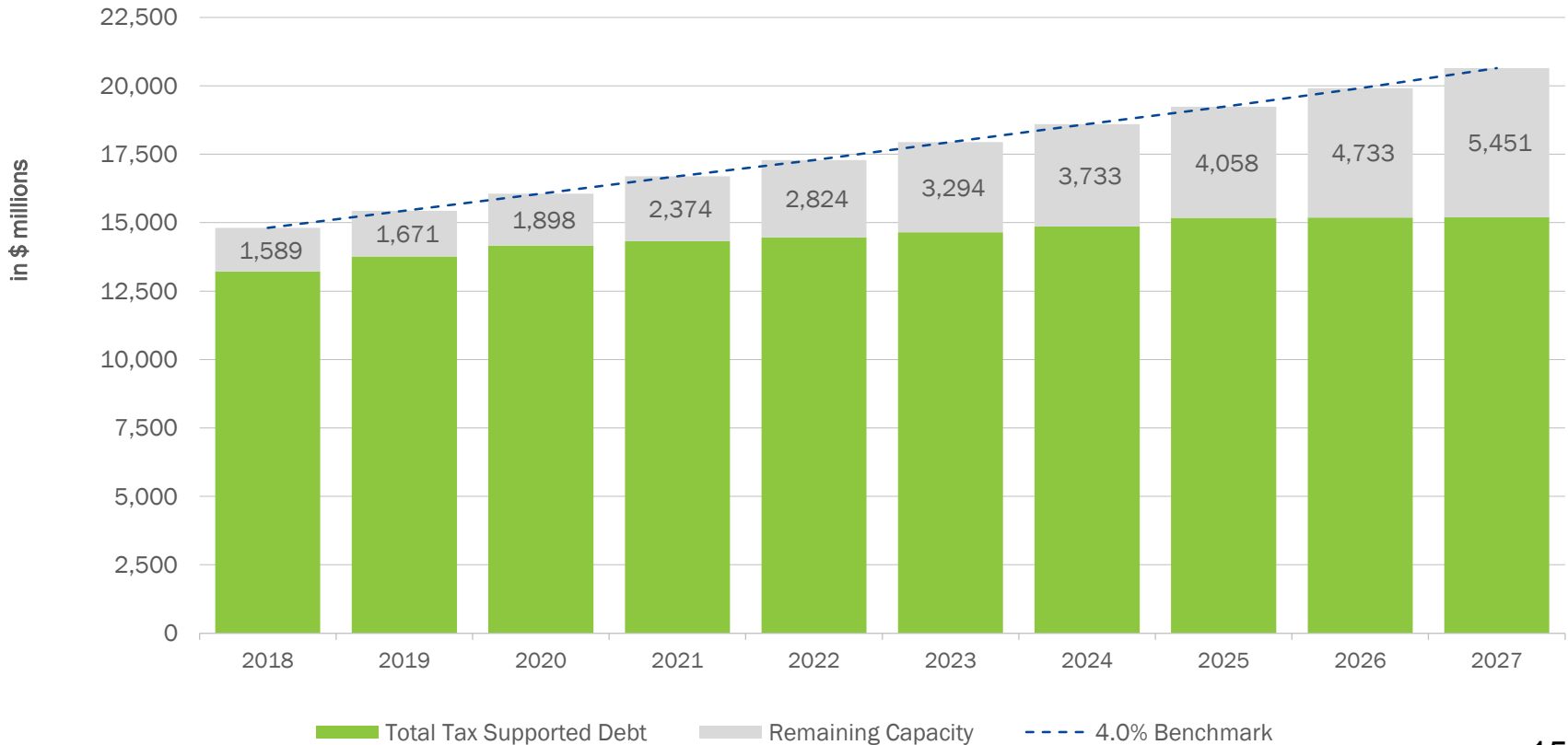


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# Total Tax-Supported Debt Outstanding\* to Personal Income Ratio

(Dec. 2016 SAC Recommendation – 1% Growth)

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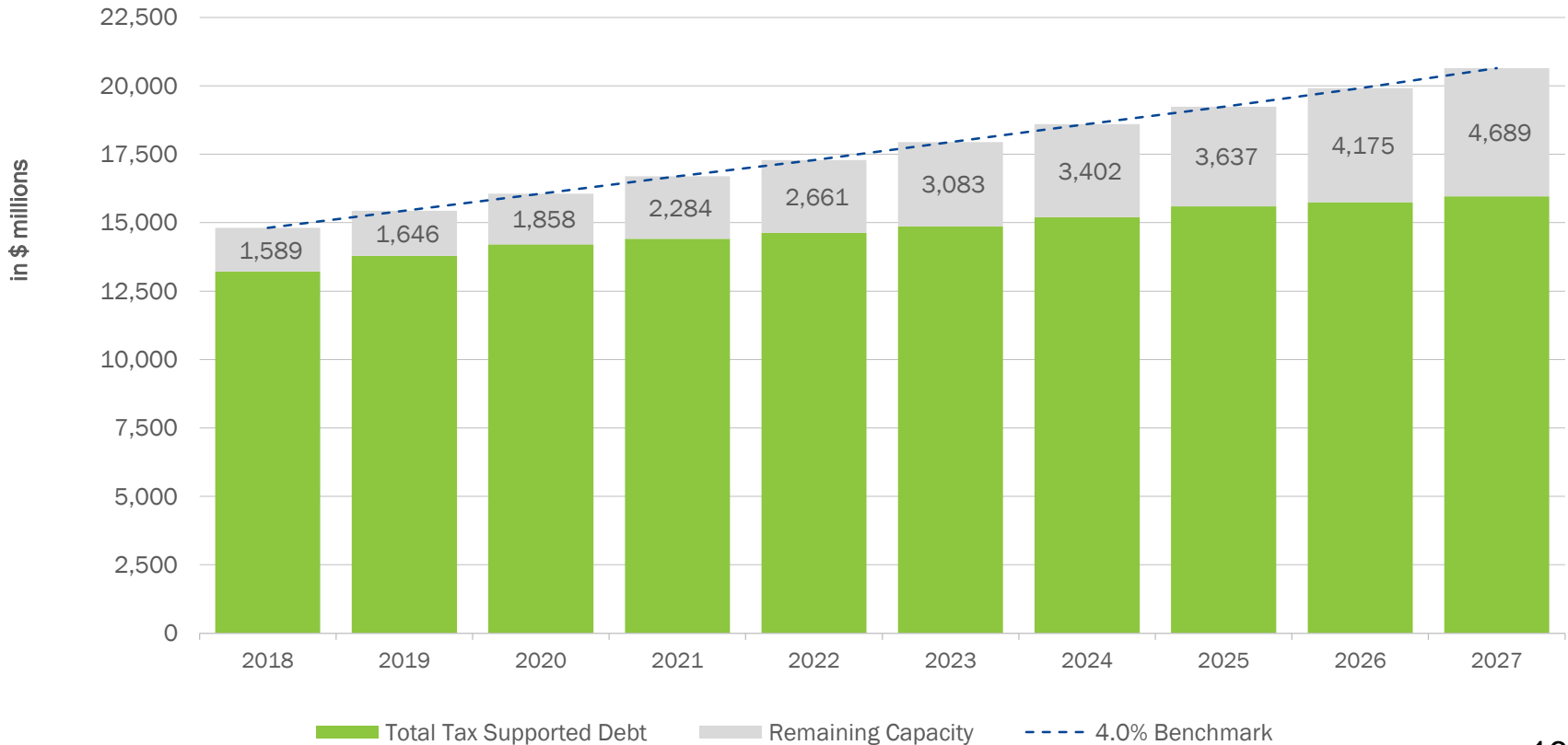
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# Total Tax-Supported Debt Outstanding\* to Personal Income Ratio

(Traditional CDAC – 3% Growth)

Tax Supported Debt Outstanding to Personal Income  
Available Debt Capacity using the 4.0% Benchmark  
FY2018 - FY2027



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# Total Tax-Supported Debt Service\* to Revenue Ratio

(\$ in millions)

The planning assumptions for authorizations and issuance result in the following projections of total tax-supported debt service\* to revenues:

Fiscal Year	Revenues	Governor's Capital Program (\$995 Annually)		Dec. 2016 SAC Recommendation (1% Growth)		Traditional CDAC (3% Growth)	
		Total Tax-Supported Debt Service*	Ratio	Total Tax-Supported Debt Service*	Ratio	Total Tax-Supported Debt Service*	Ratio
2018	22,593,291	1,750,846	7.75%	1,750,846	7.75%	1,750,846	7.75%
2019	23,157,818	1,812,907	7.83%	1,813,033	7.83%	1,813,347	7.83%
2020	23,865,062	1,830,548	7.67%	1,831,673	7.68%	1,833,110	7.69%
2021	24,115,957	1,849,754	7.67%	1,853,759	7.69%	1,856,388	7.70%
2022	24,949,787	1,952,975	7.83%	1,961,536	7.87%	1,968,366	7.89%
<b>2023</b>	<b>25,740,076</b>	<b>2,019,306</b>	<b>7.84%</b>	<b>2,034,956</b>	<b>7.91%</b>	<b>2,046,055</b>	<b>7.95%</b>
2024	26,577,524	2,015,274	7.58%	2,040,617	7.68%	2,057,934	7.75%
2025	27,480,575	2,073,348	7.54%	2,108,696	7.68%	2,136,113	7.78%
2026	28,400,489	2,086,477	7.35%	2,134,155	7.52%	2,169,977	7.64%
2027	29,357,773	2,170,618	7.39%	2,230,626	7.60%	2,281,830	7.78%

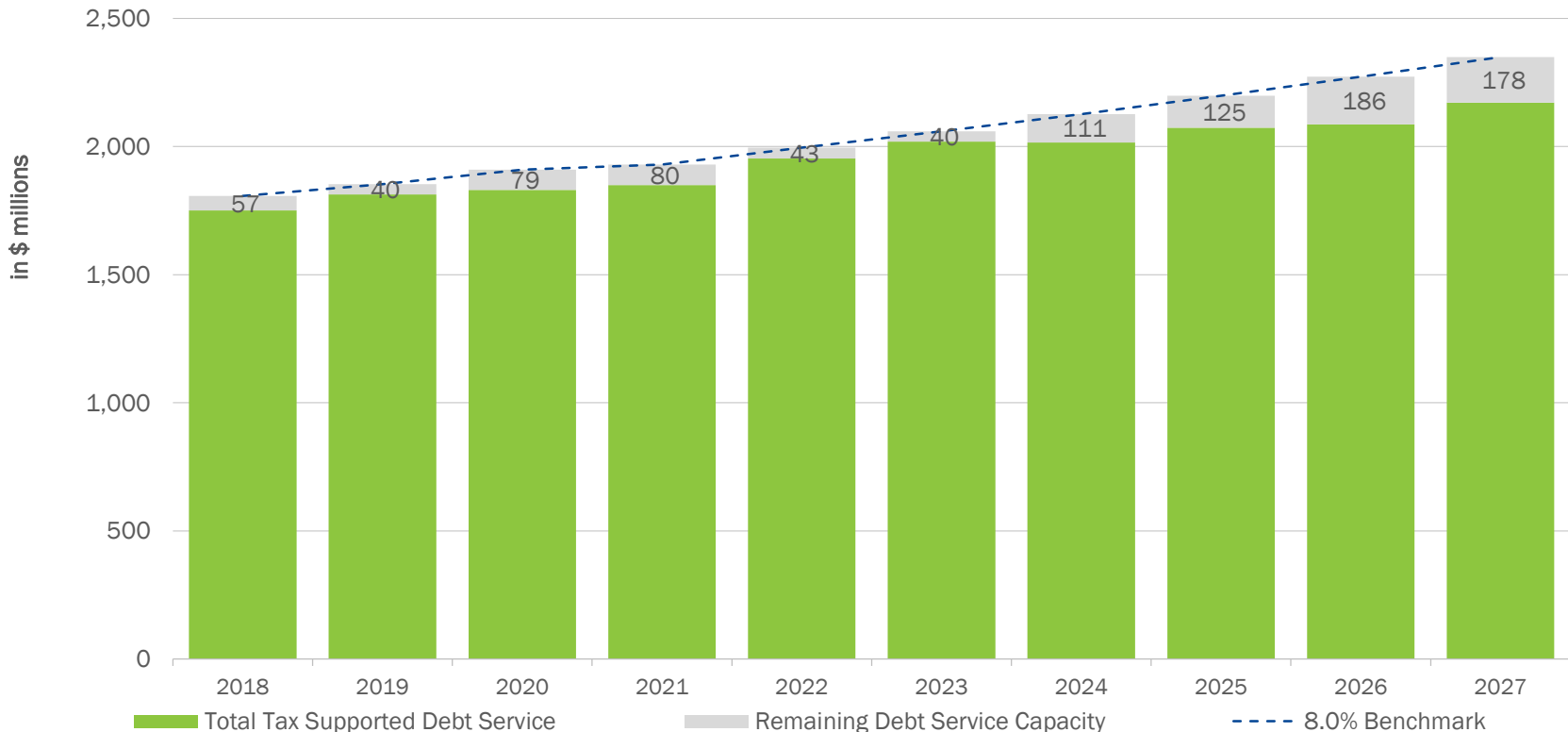
\*Total tax-supported debt service includes debt service on all General Obligation Bonds, Consolidated Transportation Bonds, Bay Restoration Bonds, GARVEEs, most capital leases, and on certain debt held by the Maryland Stadium Authority.

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# Total Tax-Supported Debt Service\* to Revenue Ratio

(Governor's Capital Program - \$995 Annually)

Tax Supported Debt Service to Revenues  
Available Capacity using the 8.0% Benchmark  
FY2018 - FY2027



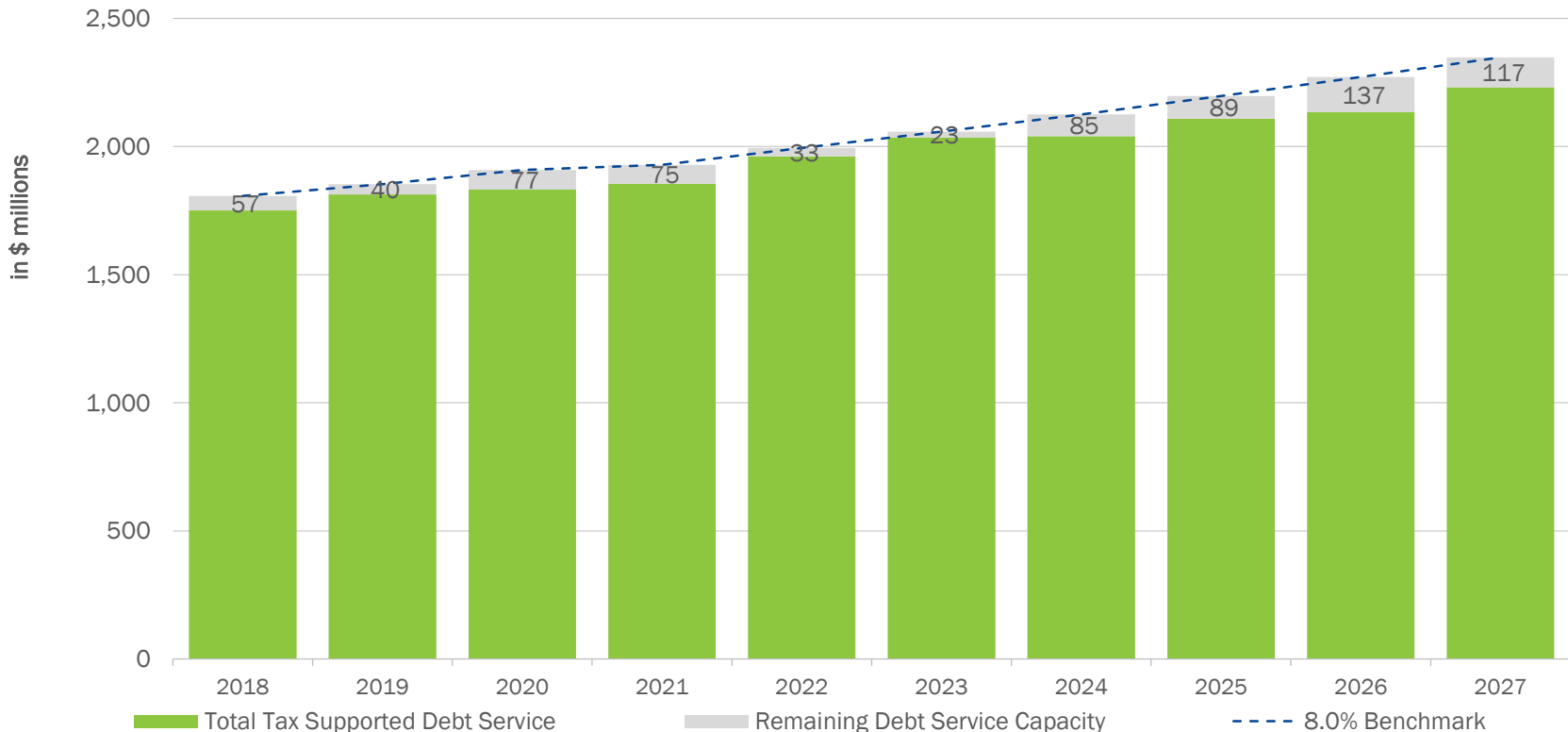
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# Total Tax-Supported Debt Service\* to Revenue Ratio

(Dec. 2016 SAC Recommendation – 1% Growth)

Tax Supported Debt Service to Revenues  
Available Capacity using the 8.0% Benchmark  
FY2018 - FY2027



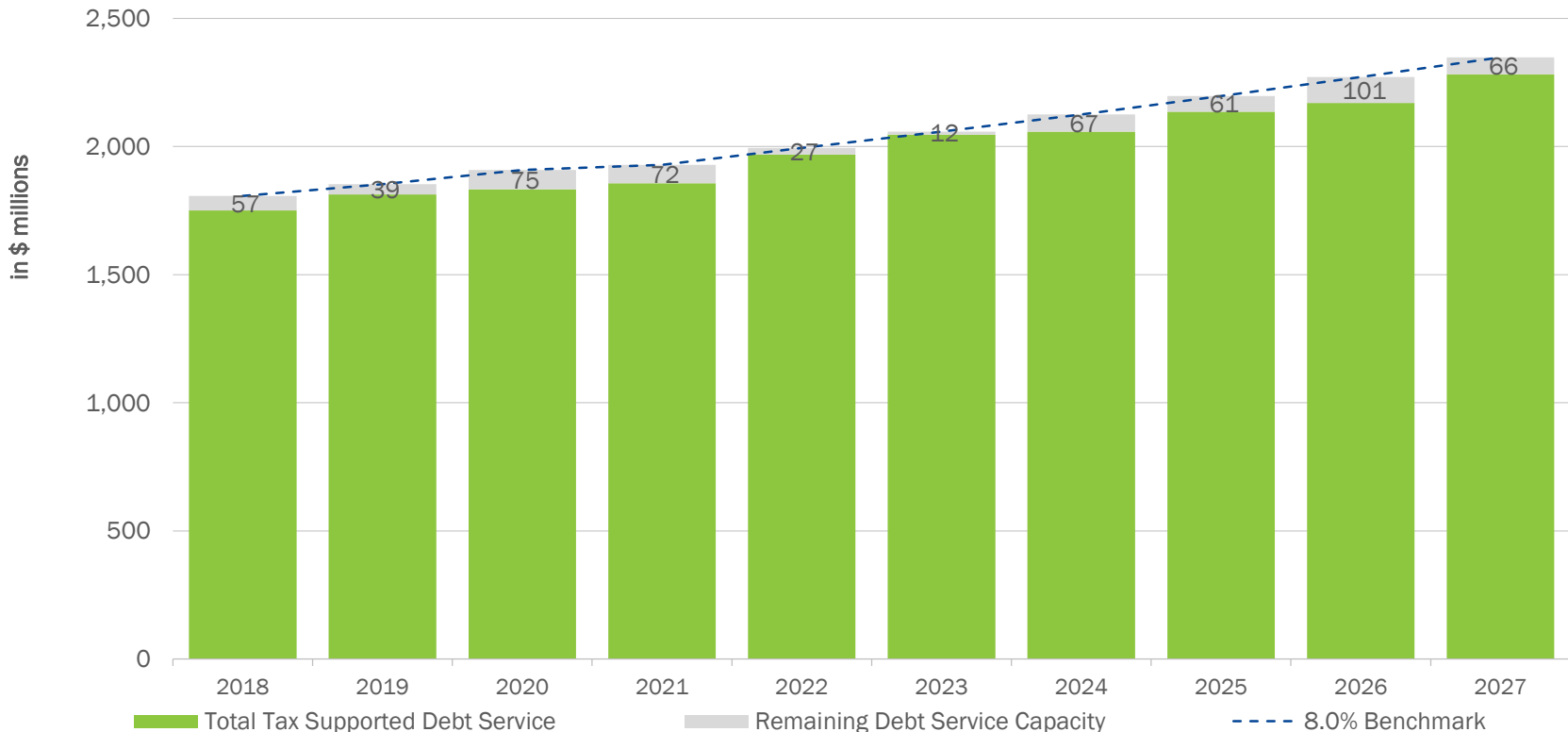
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# Total Tax-Supported Debt Service\* to Revenue Ratio

(Traditional CDAC – 3% Growth)

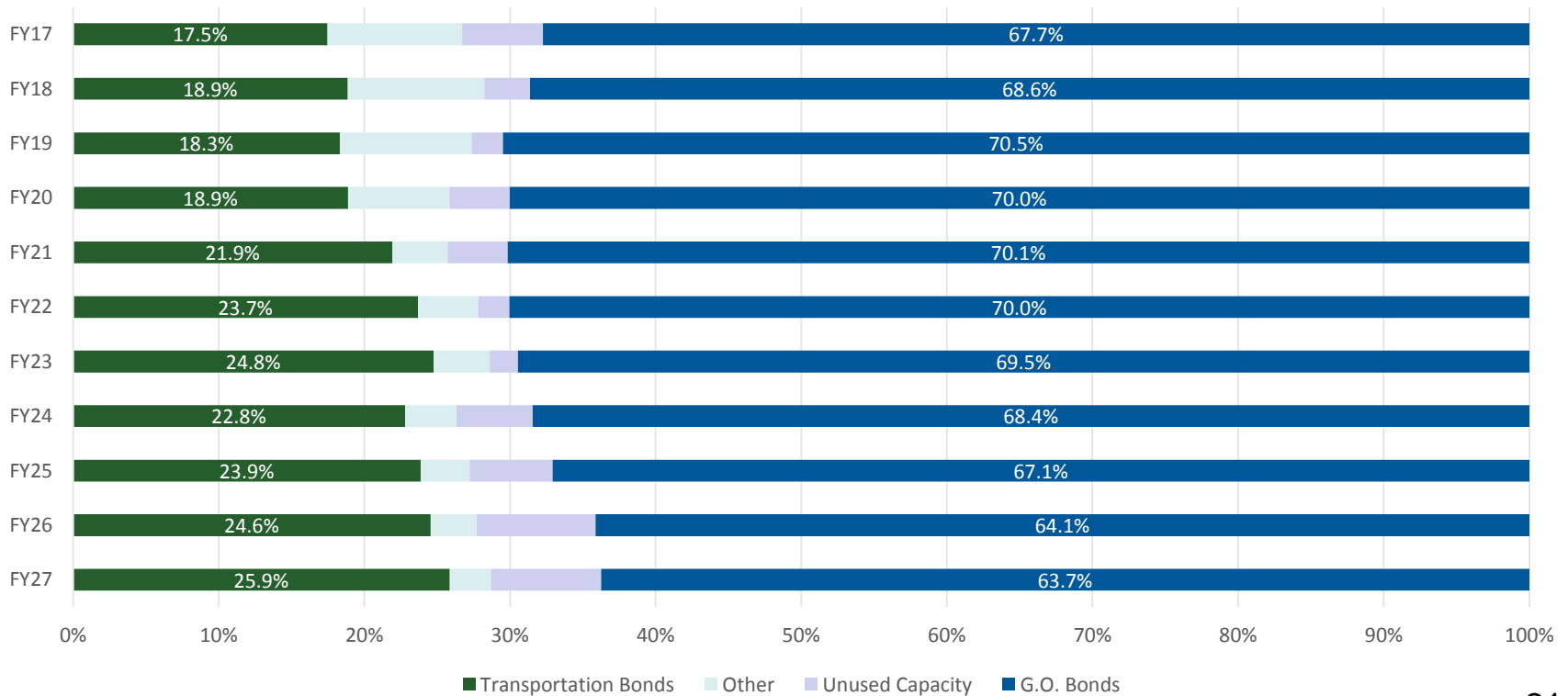
Tax Supported Debt Service to Revenues  
Available Capacity using the 8.0% Benchmark  
FY2018 - FY2027



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# Transportation Debt is Absorbing an Increasing Amount of State's Debt Capacity Under 8% Limit

Share of Total Tax-Supported Debt Service-to-Revenues Capacity by Type  
(Assumes Governor's Capital Program)  
FY 2017 - 2027



All figures are preliminary forecasts as of September 2017 and are subject to change.

# General Obligation Bond Authorization



# 2017 CDAC General Obligation Bond Authorization

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- CDAC needs to vote on its recommendation for a General Obligation Bond authorization for FY 2019.
- CDAC votes on the upcoming fiscal year's authorization (FY 2019). Assumed authorizations for FY 2020 – 2027 are for planning purposes only and subject to change.

# Academic Facilities Bonds Authorization





# Recommendation of Amount of New Bonds for Academic Facilities for Fiscal Year 2019

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Amount of new bonds for academic facilities for fiscal year 2019 requested by institution:

University System of Maryland:	\$24.0 million
Morgan State University:	\$0
St. Mary's College of Maryland:	\$0
Baltimore City Community College:	<u>\$0</u>
Total Requested	\$24.0 million