

Capital Debt Affordability Committee

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

Agenda

September 5, 2018

1:00 PM

- 1) **Comptroller's Opening Comments**
- 2) **2018 Legislative Session General Assembly Actions**
Department of Legislative Services: Patrick Frank, Manager – 2018 Legislative Session
- 3) **Review of the Size and Condition of Tax Supported Debt:**
 - Summary of fiscal year 2018 bond issuances
 - Amount issued in prior five fiscal years
 - Amount outstanding
 - Amount authorized but unissued
 - Current projections for new issuances
 - Debt service projections
 - Status of refunding potential
 - Status of Affordability Ratios
 - A) **General Obligation Bonds**
State Treasurer's Office: Christian Lund, Director of Debt Management
 - B) **Capital Leases**
State Treasurer's Office: Tanya Mekeal, Lease Administrator
 - C) **GARVEE Bonds**
Maryland Transportation Authority: Allen Garman, Director of Treasury and Debt Management
 - D) **Maryland Stadium Authority**
Maryland Stadium Authority: David Raith, Chief Financial Officer
 - E) **Bay Restoration Bonds**
Maryland Water Quality Financing Administration: Terri Wilson, Director
 - F) **Consolidated Transportation Bonds**
Maryland Department of Transportation, The Secretary's Office: June Hornick, Assistant Director of Debt Management

The next CDAC meeting will be Wednesday, September 12, 2018 at 1pm. The presentations on the agenda are: Capital Programs, Public School Construction, and Debt of the Higher Education Institutions.

2018 Legislative Session General Assembly Action

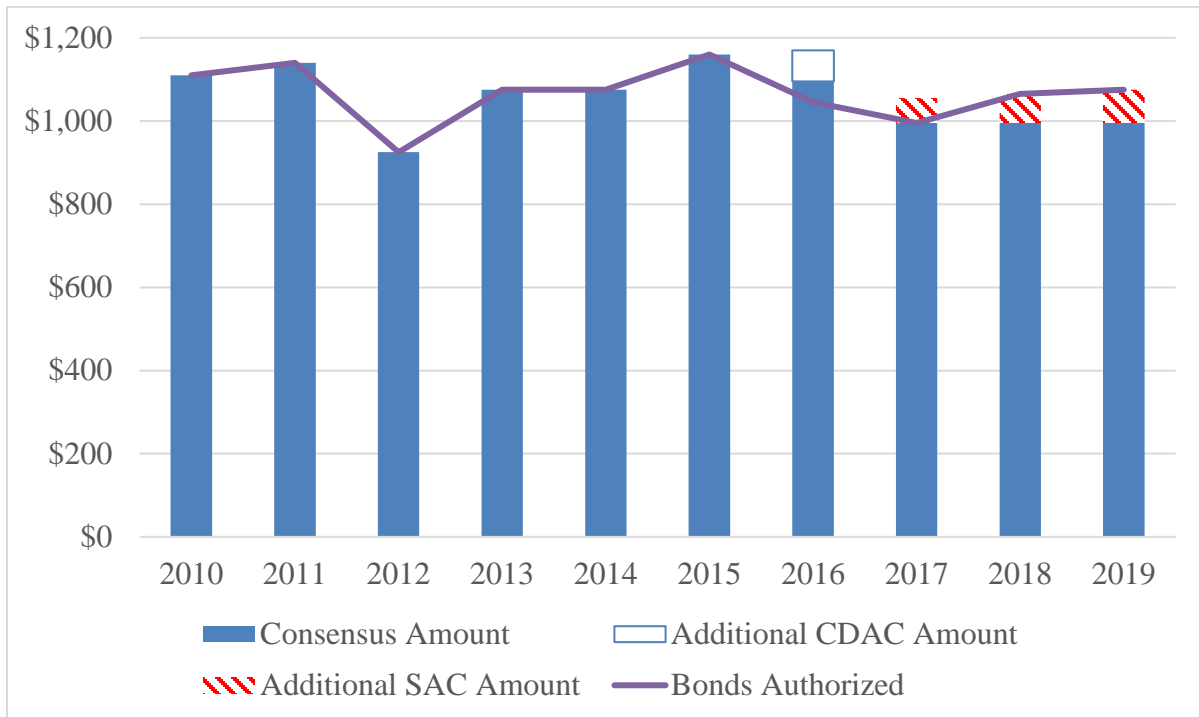
2018 Legislative Session General Assembly Highlights

- **General Assembly Passes Capital Budget that Authorizes \$1,075 Million in Net General Obligation (GO) Bonds:** Senate Bill 186 (Chapter 9) authorizes \$1,075 million in net debt, which includes \$1,091 million in new authorizations that are offset by reducing prior year authorizations by \$16 million. This authorization is within the affordability criteria set by CDAC and the authorization limit set by the Spending Affordability Committee (SAC), but exceeds the authorization level recommended by CDAC.
 - CDAC recommended limiting GO bond authorizations to \$995 million. CDAC policy is to keep authorizations below \$1 billion.
 - SAC recommended limiting authorizations to \$1,075 million. Due to the Committee’s ongoing concern that freezing authorizations without recognition of construction inflation will reduce the purchasing power of the State capital program, SAC policy is to increase annual authorizations 1% from the fiscal 2016 authorization, which totaled \$1,045 million. This rate is less than the projected increase in revenues.
- **General Assembly Authorizes \$68 Million in Proceeds from Bond Sale Premiums for Capital Programs:** The Capital Budget Bill authorized using \$13 million in March 2018 and \$55 million in fiscal 2019 bond sale premiums for capital projects.
 - The March 2018 bond sale realized a \$70 million premium, with \$13 million authorized for capital projects and the remaining \$57 million offsetting fiscal 2019 debt service costs.
 - The August 2018 bond sale realized an \$80 million premium, with \$55 million authorized for capital projects and \$25 million to offset out-year debt service costs.
- **Capital Budget Bill Was Enacted with the Governor’s Signature:** With respect to the capital budget, the Governor can sign the capital budget bill, allow the bill to become law without signing the bill, line-item veto specific paragraphs or subparagraphs, or veto the entire bill. The capital budget bill, Chapter 9, was signed by the Governor.
- **New Academic Revenue Debt Authorization Totals \$24 Million:** CDAC recommended that academic revenue bond debt issued in fiscal 2019 be limited to \$24 million. Senate Bill 1064 (Chapter 553) authorized \$24 million in academic revenue bonds. These bonds are not directly supported with State general funds and are not considered State debt.

Department of Legislative Services

- Debt limits recommended by CDAC and SAC began to diverge in 2013.
 - In its 2013 report, CDAC recommended increasing the GO bond authorization to \$1,160 million by adding \$75 million to each annual authorization beginning in fiscal 2015. SAC adopted the fiscal 2015 recommendation, but recommended against increasing out-year authorizations.
 - In fiscal 2016, CDAC maintained its higher level of authorizations, totaling \$1,170 million. SAC reduced the recommendation to \$1,095 million, keeping with its prior year recommendation. The General Assembly’s authorization was \$1,045 million.
 - Since fiscal 2016, SAC has increased annual authorizations 1% over the actual fiscal 2016 authorization. CDAC has recommended a \$995 million limit.

**General Obligation Bond Authorizations
Fiscal 2010-2019
(\$ in Millions)**



Source: Department of Legislative Services, August 2018

General Obligation Bonds

2018 Update on
Maryland General Obligation Bonds
for the
Capital Debt Affordability Committee

September 5, 2018

Topics of Discussion

- 1) General Obligation (GO) Bond Status Update
- 2) Debt Projections
- 3) Fiscal Year 2019 Capital Budget Authorization History
- 4) Impact of Federal Tax Cuts
- 5) Refunding Potential
- 6) Use of Variable Rate Debt, Derivatives and GICS
- 7) Status of Affordability Ratios

Fiscal Year 2018 GO Bond Issuances

Fiscal Year 2018 General Obligation Bond Issues Totaled \$1.865 Billion

| Series | Dates of Sales | (\$ in millions) | | | | | Overall True Interest Cost (TIC) |
|----------------------|----------------|-----------------------------------|----------------------------------|-----------------------------------|---------|-----------------------------|----------------------------------|
| | | Tax-Exempt: New Money Competitive | Tax-Exempt: New Money Negotiated | Tax-Exempt: Refunding Competitive | Taxable | Taxable: Federal Tax Credit | |
| 2017 Second Series A | 8/16/17 | \$550.0 | | | | | 1.951% |
| 2017 Second Series B | 8/16/17 | | | \$785.3 | | | |
| 2017 QZAB | 12/15/17 | | | | | \$4.8 | 0.000% ^(a) |
| 2018 First Series A | 3/7/18 | \$475.0 | | | | | 2.824% |
| 2018 First Series B | 3/7/18 | | | | \$50.0 | | |

(a) The 2017 Qualified Zone Academy Bonds (QZABs) are special, federally-authorized taxable bonds where the bondholders receive federal tax credits in lieu of interest payments.

Fiscal Year 2019 GO Bond Issuances

Fiscal Year 2019 YTD General Obligation Bond Issues Total \$510 Million

| Series | Dates of Sales | (\$ in millions) | | | | | Overall True Interest Cost (TIC) |
|--------------------|----------------|-----------------------------------|----------------------------------|-----------------------------------|---------|-----------------------------|----------------------------------|
| | | Tax-Exempt: New Money Competitive | Tax-Exempt: New Money Negotiated | Tax-Exempt: Refunding Competitive | Taxable | Taxable: Federal Tax Credit | |
| 2018 Second Series | 8/1/18 | \$510.0 | | | | | 2.814% |

GO Bonds Issued in Prior Five Fiscal Years including FY 2019 YTD

\$8.32 billion in General Obligation Bonds issued since July 1, 2013:

\$8.00 billion in tax-exempt bonds (decrease of \$368.9M from previous 5 years)

- \$5.50 billion in tax-exempt, new money bonds (69%)
- \$2.50 billion in tax-exempt, refunding bonds (31%)

\$313.3 million in taxable bonds (increase of \$16.6M from previous 5 years)

- \$290.0 million in taxable bonds (93%)
- \$23.3 million in taxable, direct subsidy Qualified Zone Academy Bonds (QZABs) (7%)

Outstanding GO Debt and Amounts Authorized but Unissued

General obligation debt outstanding:

- \$9.479 billion was outstanding as of June 30, 2018
 - \$394.7 million retired since June 30, 2018
 - \$510.0 million issued since June 30, 2018
 - **\$9.595 billion outstanding as of September 5, 2018**

\$2.399 billion of general obligation debt was authorized but unissued as of June 30, 2018.

Current Projections for Future Issuances

For planning purposes only, the Committee in 2017 voted 4-1 to maintain authorizations of just under \$1 billion annually through FY 2023. The following authorizations and issuances incorporate that plan:

| <u>Fiscal Year</u> | <u>Authorizations</u> | <u>Issuances</u> |
|--------------------|-----------------------|------------------|
| 2019 | \$995 | \$1,015 |
| 2020 | \$995 | \$1,010 |
| 2021 | \$995 | \$995 |
| 2022 | \$995 | \$995 |
| 2023 | \$995 | \$995 |

Projections as of the 2017 CDAC Report. All dollars in millions. Preliminary and subject to change.

Summary of Projected Debt Activity Under Governor's Plan (\$995 Annually)

The following debt outstanding and debt service is projected for GO Bonds, using the Governor's capital plan assumptions (\$995 million in annual authorizations with no growth to account for inflation or new demand).

| <u>Fiscal Year</u> | <u>Debt Outstanding Start of Year</u> | <u>New Issues</u> | <u>Redeemed</u> | <u>Debt Outstanding End of Year</u> | <u>Debt Service</u> |
|--------------------|---------------------------------------|-------------------|-----------------|-------------------------------------|---------------------|
| 2019 | \$9,522 | \$1,015 | \$874 | \$9,663 | \$1,306 |
| 2020 | \$9,663 | \$1,010 | \$906 | \$9,767 | \$1,337 |
| 2021 | \$9,767 | \$995 | \$904 | \$9,858 | \$1,353 |
| 2022 | \$9,857 | \$995 | \$947 | \$9,906 | \$1,398 |
| 2023 | \$9,906 | \$999 | \$977 | \$9,924 | \$1,430 |
| 2024 | \$9,924 | \$995 | \$994 | \$9,925 | \$1,455 |
| 2025 | \$9,925 | \$995 | \$1,059 | \$9,861 | \$1,474 |
| 2026 | \$9,861 | \$995 | \$1,042 | \$9,814 | \$1,457 |
| 2027 | \$9,814 | \$995 | \$1,034 | \$9,775 | \$1,497 |

Future Issuances assume a 5.0% interest rate.

All debt matures within 15 years and principal payments begin in year 3.

All dollars in millions

Projections as of 2017 CDAC Report. Preliminary and subject to change.



Fiscal Year 2019 Capital Budget Authorization History

In September 2017, the CDAC voted 4-1 to recommend an authorization of just under \$1 billion for fiscal year 2019.

In December 2017, the Spending Affordability Committee recommended an authorization of \$1.075 billion for FY 2019, consistent with its policy of including approximately 1.0% annual growth over the FY 2016 authorization.

In January 2018, the Governor proposed a capital budget consistent with the 2017 CDAC recommendation (just under \$1 billion in net authorizations).

The net final authorization amount for the FY 2019 capital budget approved during the 2018 Legislative Session was \$1.075 billion.

Impact of Federal Tax Cuts

The 2017 cuts to corporate and individual federal tax rates impacted the cost of Maryland's general obligation bond program in a few key ways:

- Lower tax rates led to decrease in demand for tax avoidance vehicles, including tax-exempt municipal bonds, which contributed to a roughly 50 bps spike in yields for AAA paper at the beginning of 2018
- Qualified Zone Academy Bond program was eliminated, which will increase the debt service costs of certain school renovation projects
- Tax exemption for advance refunding bonds was eliminated, which makes it more difficult to realize savings on existing debt

All of these changes will increase the cost of the State's capital program moving forward.

Refunding Potential

The State has been aggressive in pursuing refunding savings, resulting in debt service savings totaling \$237 million over the past five fiscal years. These savings were generated primarily by advance refundings. The most recent advance refunding, issued in August 2017, generated \$75.8 million in debt service savings on a net present value (NPV) basis.

Unfortunately, the cost of the 2017 federal tax cuts were partially offset by eliminating the tax exemption on advance refundings, which essentially eliminates the State's ability to perform them. However, the tax exemption for current refundings (bonds refunded no more than 90 days before their call date) remains. As of September 5, 2018, the State's portfolio of callable bonds does not have sufficient current refunding potential.

The Treasurer's Office will continue to monitor the State's debt portfolio and pursue savings whenever it is prudent.

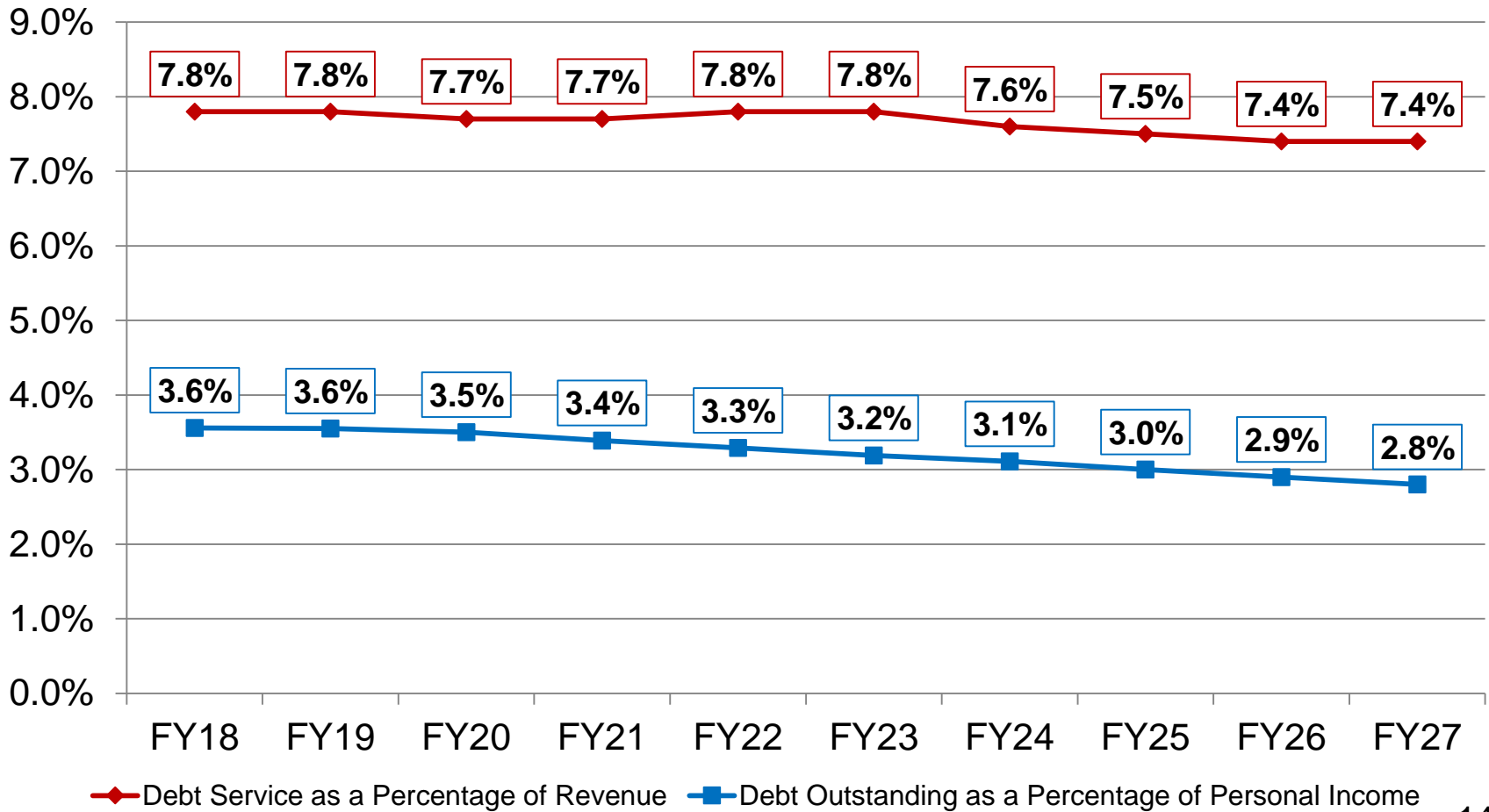
Use of Variable Rate Debt, Bond Insurance, Derivatives, and Guaranteed Investment Contracts (GICS)

The State is authorized to issue variable interest rate bonds in an amount no more than 15% of the outstanding general obligation indebtedness. As of today, the State has not issued any variable rate debt and has not executed any derivatives. The State did not enter into any new GICs related to the issuance of general obligation bonds in FY 2018.

Because of the State's strong credit profile, perception in the market and maintenance of its AAA credit rating, there has been no need for bond insurance.

Status of Affordability Ratios

Status of Affordability Ratios



Capital Leases

Capital Lease Update for the 2018 Capital Debt Affordability Committee

Topics of Discussion

- Capital Lease Overview
- Tax-Supported Leases in the CDAC Analysis
- Tax-Supported Energy Leases that are included in the CDAC Analysis
- Tax-Supported Energy Leases that are not included in the CDAC Analysis
- Capital Equipment and Energy Lease Activity in Fiscal Year 2018
- Projections of Future Tax-Supported Lease Financings

Capital Lease Overview

- STO, on behalf of BPW, determines the size, timing, and method to finance capital assets for State agencies and manages the lease procurement and payment of debt service.
- **Capital Facility Leases** allow facilities to be purchased through a lease with terms ranging from 15 – 25 years. Facility leases are included in the CDAC analysis.
- **Energy Leases** are for energy performance projects at State facilities and are limited to a fifteen year term. If utility savings offset the debt service costs, energy leases are not included in the CDAC analysis.
- **Equipment Leases** allow State agencies to finance capital equipment over a period of time. Terms are limited to 3, 5 or 10 years. These are included in the CDAC analysis.
 - Financed equipment is required to:
 - Have a useful life at least as long as the financing term and the cost should be a material amount;
 - Be repossessable and easily identifiable.

Tax-Supported Capital Leases in the CDAC Analysis

The following table summarizes the current tax-supported capital leases included in the 2018 CDAC Affordability Analysis.

| <i>FY 2018 Tax-Supported Lease Financings Outstanding</i> | | | |
|---|---|---|---------------------------------|
| State Agency | Equipment and Facilities Financed | Principal Amount Outstanding as of 6/30/18 | Debt Service for FY 2018 |
| State Treasurer's Office on behalf of State Agencies | Capital Equipment - Various communications, computers and other equipment | \$15,484,875* | \$5,019,884* |
| State Treasurer's Office on behalf of State Agencies | Energy Performance Projects | 13,637,340* | 2,855,135* |
| Department of Transportation | Headquarters Office Building | 10,095,000 | 2,798,775 |
| Department of General Services | Hilton Street Facility | 230,000 | 240,432 |
| | Prince George's County Justice Center | 14,225,817 | 1,515,793 |
| Transportation Authority | State office parking facility | 17,786,000 | 693,941 |
| Department of Health | Public Health Lab | 136,645,000 | 13,992,063 |
| Total Tax-Supported Leases | | \$210,008,647 | \$27,217,345 |

*Maryland Stadium Authority reports the Stadium Authority Capital leases in their debt.

Tax-Supported Energy Leases included in the CDAC Analysis

The following table summarizes the current energy leases included in the 2018 CDAC analysis. An energy lease is included in the CDAC analysis if it lacks a surety guaranty, meaning debt service **may not** be offset by utility savings.

| <u>Energy lease project</u> | <u>Debt Service for FY 2018</u> | <u>Debt Outstanding as of 6/30/2018</u> |
|---------------------------------|-------------------------------------|---|
| St. Mary's College of Maryland | \$205,295 | \$391,995 |
| Veterans Affairs | 56,638 | 330,353 |
| University of Baltimore | 649,125 | 3,660,581 |
| Stadium Authority (Ravens) | 263,232 | 1,071,976 |
| Stadium Authority (Oriole Park) | 716,432 | 2,781,971 |
| Maryland Port Administration | 964,413 | 5,400,463 |
| Total | \$2,855,135 | \$13,637,340 |

Note: The listing does not include energy leases with a surety guaranty, which ensures that debt service will be fully offset by utility savings.

Capital Equipment and Energy Lease Activity in Fiscal Year 2018

Equipment

| Summary of the Lease Terms for Equipment Financed in Fiscal Year 2018 | |
|---|--------------------|
| 3 year leases | \$2,360,064 |
| 5 year leases | 3,243,775 |
| 10 year leases | 0 |
| Total | \$5,603,839 |

Energy

| Summary of Energy Leases Financed in Fiscal Year 2018 | |
|---|---------------------|
| Department of Health - Holly Center | \$6,298,950 |
| Department of Health - Thomas B. Finan Center | 3,160,173 |
| Maryland Transit Administration - Light Rail & Station Upgrades | 5,250,281 |
| Total | \$14,679,404 |



Projections of Future Tax-Supported Lease Financings in the CDAC Analysis

| <u>Types of Financing</u> | <u>Period</u> | <u>CDAC projections as of June 2018*</u> |
|---------------------------|--------------------------|---|
| Equipment Leases (1) | Fiscal Years 2019 – 2021 | \$24 million for FY 2019, \$ 9 million for FY 2020, and \$8 million in FY 2021. |
| Energy Leases (2) | Fiscal Years 2019 – 2021 | \$0 |

(1) Fiscal Year 2019- 2021 estimates are based on agency surveys.

(2) All of the projected Energy Lease financings include projects that will have surety bond guarantees that equal or exceed the debt service payments through out the term of the lease; therefore, these projects are not included in the CDAC Affordability Analysis. DGS estimates that approximately \$12 million in energy projects will be financed in FY 2019 and \$12 million will be financed in FY 2020.

* Preliminary, subject to change.

Changes to Lease Accounting Coming Next Year

In June 2017, the Governmental Accounting Standards Board (GASB) released GASB Statement No. 87. This new guidance will require operating leases, which are not currently included in the CDAC analysis, to be treated as capital leases, which are currently included. It is effective for reporting periods beginning after December 15, 2019.

During the Maryland General Assembly's 2018 legislative session, the legislature required the Departments of Budget and Management, General Services, and Transportation to jointly submit a report on the impact of the standard on State capital leases by January 15, 2019. CDAC will also need to examine the impact of this standard at its 2019 meetings to determine if CDAC should change how it classifies leases currently considered operating leases, and to determine the impact on the State's affordability ratios, if any.

The full text of GASB Statement No. 87 can be found here:

https://www.gasb.org/jsp/GASB/Document_C/DocumentPage?cid=1176169170145

GARVEE Bonds

Grant and Revenue Anticipation (“GARVEE”) Bonds

Purpose

Grant and Revenue Anticipation Vehicle (GARVEE) bonds are authorized by state statute to leverage federal aid to finance the cost of transportation projects. In addition to MDTA toll revenue backed municipal financings, a federal TIFIA loan, and cash, GARVEEs were used as a part of the funding plan for the Intercounty Connector (“ICC”) project. The use of GARVEEs for the ICC allowed the project to be constructed sooner than otherwise would have been possible and with less reliance on the State of Maryland’s general funds.

Security

GARVEE bonds are secured by a pledge of federal transportation funds received by the state. In addition, the bonds are backed by a subordinate pledge of certain State Transportation Trust Fund (“TTF”) tax sources. The GARVEEs were initially structured to include debt service reserve funds for additional security.

Limitations to Debt Issuance

Statute limits the total amount that can be issued for GARVEEs to an aggregate principal amount of \$750.0 million, with a maximum maturity of 12 years. Under State law, the proceeds could only be used for the ICC. Legislation enacted by the 2005 General Assembly specified that GARVEE bonds be considered tax-supported debt.

Current Status:

Debt Outstanding as of June 30, 2018: \$129,680,000

Ratings

GARVEEs are currently rated AAA by S&P, Aa1 by Moody’s and AA+ by Fitch.

Use of Variable Rate Debt, Bond Insurance, Derivatives and Guaranteed Investment Contracts

Due to the strong credit quality derived from the pledged federal grant revenue, subordinate lien on the TTF, and debt service reserve funds, the GARVEE bonds were issued without bond insurance. MDTA did not utilize derivatives or guaranteed investment contracts and the bonds have fixed rates.

Trends in GARVEE Debt

A total of \$750 million in GARVEE bonds have been issued by the Maryland Transportation Authority. The first issuance occurred in May 2007 and totaled \$325 million with a true interest cost of 3.99%. In December 2008, the Authority sold the remaining \$425 million of GARVEE bonds with a true interest cost of 4.31%. GARVEE debt outstanding and remaining debt service are shown in **Table 4.1**. On August 9, 2017, the Series 2007 GARVEE Bonds were refinanced through the issuance of a Series 2017 GARVEE Refunding Bond. The final GARVEE bond matures on March 1, 2020 and no additional new money issuances are permitted, though a refinancing opportunity for the remaining Series 2008 bonds will occur on the upcoming March 1, 2019 call date.

Table 4.1

GARVEE Series 2017 and 2008

| | Principal | Interest | P&I | Annual Debt Service | Outstanding |
|----------|------------------|-----------------|----------------|----------------------------|--------------------|
| 9/1/2018 | - | 2,681,793 | 2,681,793 | | 129,680,000 |
| 3/1/2019 | 80,815,000 | 2,681,793 | 83,496,793 | 86,178,586 | 48,865,000 |
| 9/1/2019 | - | 1,249,919 | 1,249,919 | | 48,865,000 |
| 3/1/2020 | 48,865,000 | 1,249,919 | 50,114,919 | 51,364,838 | - |
| | 129,680,000 | 7,863,424 | 137,543,424 | 137,543,424 | |



MARYLAND TRANSPORTATION AUTHORITY Refunding of the Grant and Revenue Anticipation “GARVEE” Bonds, Series 2007

Background

The Maryland Transportation Authority issued \$67,150,000 of a Grant and Revenue Anticipation Refunding Bond on August 9, 2017 to refund the Series 2007 Bonds. In June 2017, Public Financial Management LLC, the Maryland Department of Transportation’s financial advisory firm, issued a Request for Proposals to determine if a direct bank loan would be the most efficient way to refund the Series 2007 Bonds for debt service savings. A bid by Wells Fargo Bank, N.A. was deemed to be very competitive and in the best interests of the Department. The direct bank loan was done on an expedited basis with lower issuance costs and at a very attractive interest rate. The Series 2017 Refunding Bond was sold on July 27, 2017, and the Series 2007 Bonds were redeemed on August 9, 2017.

Refunding Results

| | |
|--|-------------------------|
| <i>Refunding Bonds issued on August 9, 2017:</i> | \$67,150,000 |
| <i>True Interest Cost (TIC):</i> | 1.24% |
| <i>Par Amount of Series 2007 Bonds redeemed:</i> | \$67,150,000 |
| <i>Average Coupon of Series 2007 Bonds:</i> | 4.95% |
| <i>NPV Savings:</i> | \$2,545,039 |
| <i>Percentage Savings:</i> | 3.79% of refunded bonds |
| <i>Final Maturity:</i> | March 1, 2019 |

Structure: The Refunding Bond is fixed rate with serial principal payments. Due to the combined credit strength of the pledged federal grant revenue and subordinate lien on MDOT’s revenues, no debt service reserve was required as part of the refinancing.

Ratings: Unrated

Maryland Stadium Authority



Maryland Stadium Authority Briefing

Capital Debt Affordability Committee

September 5, 2018

Maryland Stadium Authority

- Debt Issued over the past five years

| Fiscal Year | Amount | Purpose |
|-------------|---------------|---|
| 2014 | \$8,635,000 | Refund the Series 2010 Revenue Bond for Oriole Park Improvements |
| 2015 | \$9,535,000 | Refund the Series 2011 Revenue Bond for Oriole Park Improvements, reduce the outstanding balance refunded by \$500,000 by negotiating a lower debt service reserve |
| 2016 | \$320,000,000 | First series of bonds issued for Baltimore City Public Schools. Revenue bond with the pledge being lottery, Baltimore City Beverage taxes, a percentage of the casino facility rental fee, a portion of table game proceeds, and funds from the education grant from Baltimore City Public Schools. |
| 2017 | \$0 | |
| 2018 | \$426,440,000 | First series of bonds issued for Baltimore City Public Schools. Revenue bond with the pledge being lottery, Baltimore City Beverage taxes, a percentage of the casino facility rental fee, a portion of table game proceeds, and funds from the education grant from Baltimore City Public Schools. |

Maryland Stadium Authority

- FY 2018 Issuance
 - Baltimore City Public Schools Construction and Revitalization Revenue Bonds, Series 2018A
 - Par amount of \$426.44 million
 - Interest was a 5% coupon for all maturities
 - \$70.0 million in bond premium
 - 30 year bonds
 - Average annual debt service - \$27.3 million
 - True interest cost – 3.71%

Maryland Stadium Authority

- Amount of Outstanding Debt and Revenues

| Fiscal Year | Amount Outstanding | Tax Supported Bonds and Equipment | Revenue Bond | Energy (tax supported debt) | Debt Service for Tax Supported and Equipment | Revenues (Lottery/ Camden Yards Operating Revenue and \$2 ticket charge) |
|-------------|--------------------|-----------------------------------|---------------|-----------------------------|--|--|
| 2014 | \$185,442,082 | \$168,862,603 | \$10,010,000 | \$6,569,479 | \$32,760,702 | \$23,440,000 |
| 2015 | \$168,421,865 | \$145,021,979 | \$17,455,000 | \$5,944,886 | \$31,447,251 | \$21,851,391 |
| 2016 | \$466,291,738 | \$125,181,285 | \$335,825,000 | \$5,285,453 | \$26,394,035 | \$21,837,615 |
| 2017 | \$439,642,623 | \$105,883,444 | \$329,170,000 | \$4,589,179 | \$26,520,012 | \$21,893,973 |
| 2018 | \$829,883,947 | \$84,790,000 | \$741,240,000 | \$3,853,947 | \$24,413,865 | \$21,817,415 |
| 2019 | \$795,617,515 | \$64,760,000 | \$727,780,000 | \$3,077,515 | \$23,954,023 | \$21,359,802 |
| 2020 | \$759,852,509 | \$43,910,000 | \$713,685,000 | \$2,257,509 | \$23,854,019 | \$21,258,143 |
| 2021 | \$736,236,417 | \$35,920,000 | \$698,925,000 | \$1,391,417 | \$10,328,763 | \$7,193,770 |
| 2022 | \$711,471,576 | \$27,520,000 | \$683,475,000 | \$476,576 | \$10,342,102 | \$7,201,477 |
| 2023 | \$687,565,000 | \$20,275,000 | \$667,290,000 | \$0 | \$8,766,383 | \$7,211,633 |
| 2024 | \$662,955,000 | \$12,615,000 | \$650,340,000 | \$0 | \$8,775,074 | \$7,215,824 |
| 2025 | \$639,665,000 | \$6,080,000 | \$633,585,000 | \$0 | \$7,434,296 | \$7,434,296 |
| 2026 | \$617,130,000 | \$0 | \$617,130,000 | \$0 | \$6,432,378 | \$7,434,296 |
| 2027 | \$599,855,000 | \$0 | \$599,855,000 | \$0 | \$0 | \$0 |
| 2028 | \$581,715,000 | \$0 | \$581,715,000 | \$0 | \$0 | \$0 |

Maryland Stadium Authority

- Fixed Rate Debt Ratings

| Series | S&P | Moody's | Fitch |
|---------------|----------------|----------------|--------------|
| 2004 | AA+ | Aa2 | AA |
| 2011 | AA+ | Aa2 | AA |
| 2012 HPAC | AA+ | Aa2 | AA |
| 2012 MCCC | AA+ | Aa2 | AA |
| 2016 | AA- | Aa3 | AA |
| 2018A | AA- | Aa3 | AA |

Maryland Stadium Authority

| Maryland Stadium Authority Summary of Swaps and Variable Rate Demand Bonds as of June 30, 2018 | |
|---|---|
| | Sports Facilities Lease Revenue Refunding Bonds Football Stadium Issue |
| Series Name | Series 2007 |
| Tax Status | Tax-Exempt |
| Dated Date | 2/8/2007 |
| Original Issue Par | 73,500,000 |
| Current Outstanding | \$40,325,000 |
| Maturity | 3/1/2008 – 2026 |
| Remarketing Agent | Goldman Sachs & Co. |
| Current Remarketing Rate | 5 Basis Points |
| Liquidity/LOC Provider | SBPA: Sumitomo |
| LOC Expiration | 3/15/2019 |
| Current LOC Fee | 36 Basis Points |
| Current Reset Frequency | 7-Day |
| Date of Last Reset | 8/22/2017 |
| Reset Rate | 1.56% |
| Hedges | Synthetic Fixed Rate (MSA paid Fixed Amounts = 5.69% - 5.8%, receives SIFMA) |
| Counterparty | Barclays |

Maryland Stadium Authority

- Variable Rate Debt Ratings

| Series | S&P | Moody's | Fitch |
|-----------------|----------------|----------------|--------------|
| 2007 Short Term | A-1+ | VMIG 1 | F1+ |
| 2007 Long Term | AA+ | Aa2 | AA |

Maryland Stadium Authority

- Current projections for new issuances
 - FY 2019
 - Issue approximately \$55 million in Camden Yards Facilities Lease-Back Revenue Bonds, Series 2019
 - Proceeds to be used for various renovation projects at the Camden Yards Complex
 - \$22.5 million for M & T Bank Stadium
 - \$23.0 million for the warehouse
 - \$ 9.5 million for parking lots and walkways
 - Tax-supported debt
 - 20 year bond
 - Estimated debt service is \$4.5 million
 - FY 2020
 - Issue between \$14.0 million and \$22.0 million in Ocean City Convention Center Lease-Back Revenue Bonds, Series 2019
 - Approximately \$20.0 million will be used for the expansion of the Ocean City Convention Center
 - Tax-supported debt
 - 20 year bond
 - Estimated debt service is \$1.0 million and \$1.5 million
 - Issue the third and final series of approximately \$105 million in Baltimore City Public School Revenue Bonds
 - Proceeds to be used for the balance of the Year 2
 - Approximately average debt service of \$6.0 million
 - Structured the same way as the first two series
 - 30 year bond
 - Non-tax supported debt

Bay Restoration Bonds



Maryland
Department of
the Environment

**Bay Restoration Fund (BRF)
Capital Debt Affordability Committee Briefing
September 5, 2018**

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Bay Restoration Fund

Debt Issued in Prior Fiscal Years

| FY | Amount (\$ Million) | Primary Purpose |
|-------|---------------------|---|
| 2008 | \$ 50.00 | Provide grants for the Enhanced Nutrient Removal (ENR) upgrades at the 67 major Waste Water Treatment Plants (Estimated Total ENR Capital Cost \$1.2 billion) |
| 2009 | - | |
| 2010 | - | |
| 2011 | - | |
| 2012 | - | |
| 2013 | - | |
| 2014 | \$100.00 | |
| 2015 | - | |
| 2016 | \$180.00 | |
| 2017 | - | |
| 2018 | - | |
| Total | \$330.00 | |



Maryland
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the Environment

Bay Restoration Fund

Existing Bonds/Refunding Potential

| | <u>Series 2008</u> | <u>Series 2014</u> | <u>Series 2015</u> |
|----------------------------|---|---------------------------|---------------------------|
| Debt Issued: | \$50,000,000 | \$100,000,000 | \$180,000,000 |
| Issue Date: | 4/29/2008 | 5/14/2014 | 12/03/2015 |
| Ratings: | Aa2 (Moody's) | Aa2 (Moody's) AA (S&P) | Aa2 (Moody's) AA (S&P) |
| True Interest Cost: | 4.03% | 2.55% | 2.59% |
| Interest: | Fixed Rate | Fixed Rate | Fixed Rate |
| Final Bond Maturity: | 3/1/2023 | 3/1/2029 | 3/1/2030 |
| Security: | BRF (WWTP)Fee | BRF (WWTP)Fee | BRF (WWTP) Fee |
| Debt Service Reserve: | None | None | None |
| Optional Redemption After: | 3/1/2018 | 3/1/2024 | 3/1/2024 |
| Refunding Potential: | Yes/will consider refunding with next bond sale | No/Low Savings | No/Low Savings |



BRF Current Outstanding Debt & Annual Debt Service (\$ Million)

| <u>Fiscal Year Ending</u> | <u>Outstanding Debt</u> | <u>Annual Debt Service</u> |
|---------------------------|-------------------------|----------------------------|
| 2008 | 50.000 | 0.000 |
| 2009 | 46.825 | 4.655 |
| 2010 | 44.185 | 4.710 |
| 2011 | 41.560 | 4.616 |
| 2012 | 38.820 | 4.614 |
| 2013 | 35.995 | 4.617 |
| 2014 | 133.055 | 4.614 |
| 2015 | 129.980 | 8.248 |
| 2016 | 301.615 | 14.330 |
| 2017 | 292.880 | 23.431 |
| 2018 | 273.590 | 31.756 |
| 2019 | 253.375 | 31.717 |
| 2020 | 232.075 | 31.827 |
| 2021 | 209.715 | 31.829 |
| 2022 | 186.245 | 31.823 |
| 2023 | 161.605 | 31.824 |
| 2024 | 140.360 | 27.216 |
| 2025 | 118.055 | 27.214 |
| 2026 | 94.715 | 27.134 |
| 2027 | 70.375 | 27.297 |
| 2028 | 44.905 | 27.697 |
| 2029 | 18.250 | 28.049 |
| 2030 | 0.000 | 18.798 |
| 2031 | 0.000 | 0.000 |



Bay Restoration Fund

Total Debt Authorized and Amount Unissued

| | |
|---|----------------------|
| Debt Authorized through FY 2019 budget: | \$590,000,000 |
| Debt Issued through end of FY 2018: | <u>\$330,000,000</u> |
| Future Authorized Debt Issuance: | \$260,000,000 |
| | |
| Projected Future Debt Issuance (FY 2022): | \$100,000,000 |

Assumptions for future debt issuance

- Wt. Avg. Coupon Rate of 4.50% per year
- Annual Level Debt Service
- Maximum 10-Year Bond Term
- Final Debt Service Payment by FY 2030



Maryland
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Projected Debt Issuance, Debt Service Payments & Annual Revenue (\$ Millions)

| Fiscal Year | New Issues | Debt Outstanding as on 6/30/Yr | Debt Service Payment for FY | Revenue (Cash) | |
|-------------|----------------|--------------------------------|-----------------------------|----------------|-------------------|
| 2008 | 50.000 | 50.000 | 0.000 | 55.068 | actual |
| 2009 | 0.000 | 46.825 | 4.655 | 53.356 | actual |
| 2010 | 0.000 | 44.185 | 4.710 | 54.818 | actual |
| 2011 | 0.000 | 41.560 | 4.616 | 54.598 | actual |
| 2012 | 0.000 | 38.820 | 4.614 | 54.552 | actual |
| 2013 | 0.000 | 35.995 | 4.617 | 92.767 | << Fee Increase |
| 2014 | 100.000 | 133.055 | 4.614 | 108.466 | actual |
| 2015 | 0.000 | 129.980 | 8.248 | 111.785 | actual |
| 2016 | 180.000 | 301.615 | 14.330 | 123.708 | actual |
| 2017 | 0.000 | 292.880 | 23.431 | 112.678 | actual |
| 2018 | 0.000 | 273.590 | 31.756 | 113.530 | actual |
| 2019 | 0.000 | 253.375 | 31.717 | 114.665 | est. 1% growth/yr |
| 2020 | 0.000 | 232.075 | 31.827 | 115.812 | |
| 2021 | 0.000 | 209.715 | 31.829 | 116.970 | |
| 2022 | 100.000 | 286.245 | 31.823 | 118.140 | |
| 2023 | 0.000 | 250.944 | 46.985 | 119.321 | |
| 2024 | 0.000 | 218.558 | 42.377 | 120.514 | |
| 2025 | 0.000 | 184.611 | 42.375 | 121.720 | |
| 2026 | 0.000 | 149.105 | 42.295 | 122.938 | |
| 2027 | 0.000 | 112.052 | 42.458 | 124.166 | |
| 2028 | 0.000 | 73.296 | 42.858 | 125.408 | |
| 2029 | 0.000 | 32.758 | 43.209 | 126.662 | |
| 2030 | 0.000 | 0.000 | 33.958 | 127.928 | |
| 2031 | 0.000 | 0.000 | 0.000 | 63.964 | << Fee Decrease |



Consolidated Transportation Bonds



**MARYLAND DEPARTMENT
OF TRANSPORTATION**

Consolidated Transportation Bonds

Presented by

June R. Hornick

Assistant Director of Finance

Debt Management

September 5, 2018

Structure:

- Fixed rate
- Interest only first 2 years
- As required by statute
 - Maximum maturity of 15 years
 - Level debt service payments

Additional Bonds Test:

- Pledged taxes at least 2.0x maximum annual Debt Service
- Net revenue at least 2.0x maximum annual Debt Service

Management Practice:

- Pledged Taxes at least 2.5x maximum annual Debt Service
- Net Revenue at least 2.5x maximum annual Debt Service

Fiscal Year 2018 Estimated :

- Pledged taxes coverage 5.5x
- Net revenue coverage 3.5x

Amount issued in prior 5 fiscal years:

- \$2.231 billion new construction
- \$ 502.2 million refunding

(\$ in millions)

| Series | Sale Date | New Money | Refunding | True Interest Cost (TIC) |
|--------------------------|------------|-----------|-----------|--------------------------|
| Series 2018 | 5/9/2018 | \$130.0 | | 2.776% |
| Series 2017 (2) | 9/13/2017 | \$425.0 | | 2.283% |
| Series 2017 | 4/26/2017 | \$265.0 | | 2.641% |
| Series 2016 | 10/26/2016 | \$385.0 | | 2.310% |
| Series 2016 Refunding | 10/26/2016 | | \$242.5 | 1.556% |
| Series 2015 Third Issue | 12/2/2015 | \$300.0 | | 2.47% |
| Series 2015 Second Issue | 6/3/2015 | \$136.0 | | 2.75% |
| Series 2015 Refunding | 6/3/2015 | | \$259.7 | 1.85% |
| Series 2015 | 2/11/2015 | \$265.5 | | 2.59% |
| Series 2014 | 6/11/2014 | \$100.0 | | 2.66% |
| Series 2013 Second Issue | 11/20/2013 | \$225.0 | | 2.90% |
| Total | | \$2,231.5 | \$502.3 | |

Amount outstanding:

- FY18 - \$2.9 billion
- Legislative debt ceiling \$4.5 billion

Amount authorized but unissued:

- FY18 - \$3.0 billion authorized
- FY18 - \$ 110 million unissued

Variable rate debt, swaps and bond insurance:

- None

Bond Insurance:

- Not needed because of MDOT's stable credit profile

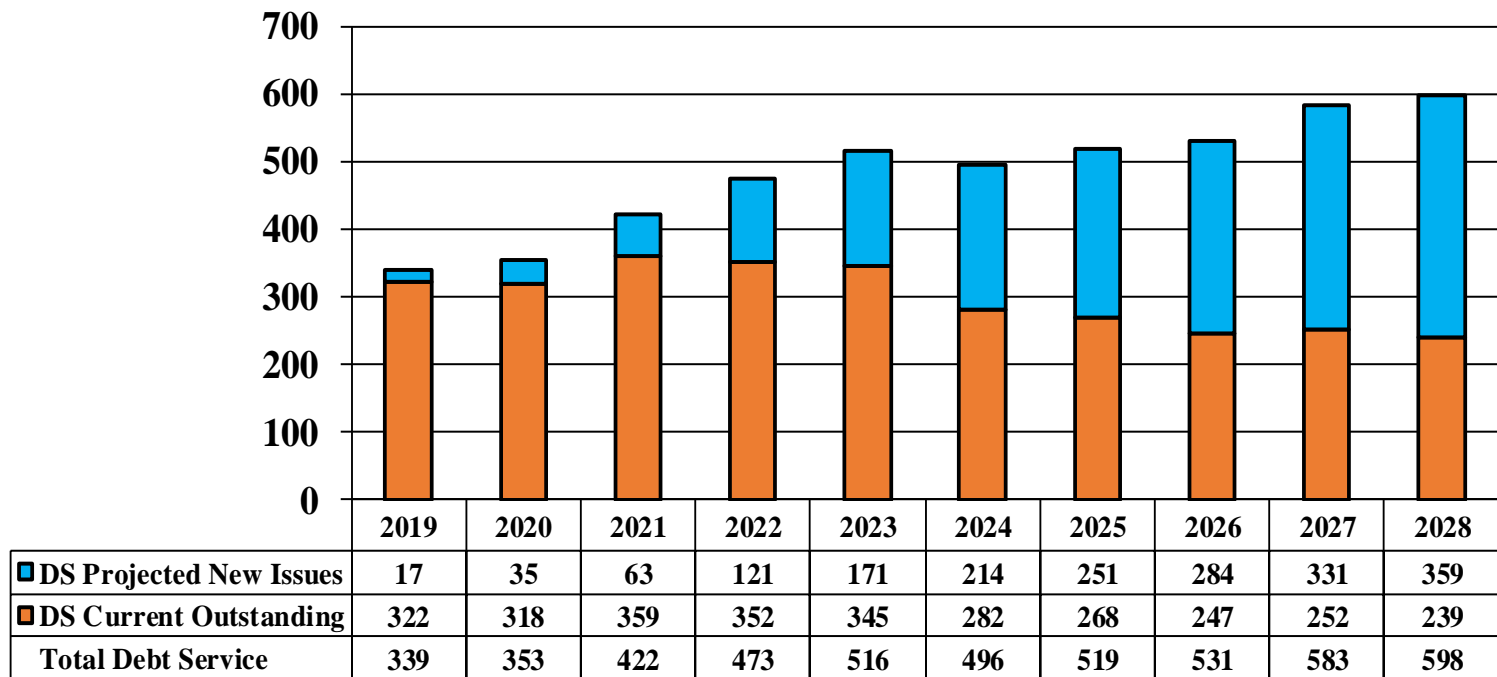
Preliminary projections for new issuances

| Fiscal Year | Debt Outstanding at Beginning of Year | New Issues | Redeemed | Debt Outstanding at End of Year |
|-------------|--|---------------|----------|--|
| 2019E | \$2,911 | \$675 | \$199 | \$3,387 |
| 2020E | \$3,387 | \$590 | \$205 | \$3,772 |
| 2021E | \$3,772 | \$465 | \$255 | \$3,982 |
| 2022E | \$3,982 | \$415 | \$302 | \$4,095 |
| 2023E | \$4,095 | \$375 | \$343 | \$4,127 |
| 2024E | \$4,127 | \$500 | \$317 | \$4,310 |
| 2025E | \$4,310 | \$25 | \$344 | \$3,991 |
| 2026E | \$3,991 | \$460 | \$364 | \$4,087 |
| 2027E | \$4,087 | \$505 | \$407 | \$4,185 |
| 2028E | \$4,185 | \$530 | \$418 | \$4,297 |

(E = based on August 2018 Estimate)

Debt service preliminary projections for the next 10 years

(\$ in millions)



Rating Agency Updates

- Standard & Poor's – AAA
- Moody's – Aa1
- Fitch – AA+

as of April, 2018

Next rating expected September 6, 2018