

EXECUTIVE SUMMARY

All data contained in this report is as of June 30, 2020. Both general obligation bonds and revenue bonds were issued during fiscal year 2020. The State of West Virginia and the West Virginia Division of Highways issued \$600,000,000 in general obligation bonds as part of the Roads to Prosperity initiative. The West Virginia Economic Development Authority issued four (4) revenue bonds totaling \$649,141,635 as follows: two (2) issues to HINO Motors totaling \$18,117,333, one (1) issue to CYTEC Willow Island for \$40,943,645 and one (1) issue to Proctor & Gamble for \$590,080,657. The West Virginia University Board of Governors issued three (3) new bonds, including both revenue and refunding revenue bonds totaling \$502,750,000 for University projects. The Marshall University Board of Governors issued two (2) bonds, including both revenue and refunding revenue bonds totaling \$101,995,000 for university projects. The West Virginia Housing Development Funds issued three (3) new revenue bonds totaling \$67,000,000 for both multifamily housing and single-family housing projects.

This Debt Capacity Report is one tool to monitor the fiscal prudence in managing the proceeds along with the state's economy. Pursuant to West Virginia Code §12-6A-6(e), the West Virginia State Treasurer is required to annually submit this Debt Capacity Report to the Governor, the President of the Senate, the Speaker of the House of Delegates, the members of the Joint Committee on Government and Finance, the Legislative Auditor, as well as upon request to any other legislative committee and any other member of the Legislature. Additionally, the Debt Capacity Report is posted on the West Virginia State Treasurer's Office website located at <https://www.wvsto.com/> for inspection by any citizen of the state. West Virginia Code requires this Debt Capacity Report to examine the following:

- the amount of net tax-supported debt outstanding and debt authorized but not issued during the current and next fiscal year and annually for the following ten (10) fiscal years;
- debt service requirements during the current and next fiscal year as well as annually for the following ten (10) fiscal years based upon existing outstanding debt, previously authorized but unissued debt and projected bond authorizations;
- any information available from the Budget Office of the Department of Revenue in connection with projected revenues and anticipated capital expenditures projected for at least the next five fiscal years;
- the amount of debt the state and its spending units may prudently issue;
- what is needed to keep West Virginia within an average-to-low range of nationally recognized debt limits;
- the debt ratios rating agencies and analysts use; and
- the effect of authorizations of new tax-supported debt on each of the considerations in this subsection.

Net tax-supported debt outstanding – To assist in analyzing the amount of the state’s debt capacity, *Table 1 - West Virginia Net Tax-Supported Debt Outstanding as of June 30, 2020* is included on page 3. Table 1 shows the breakdown of the state’s \$2.74 billion in outstanding net tax-supported debt as of June 30, 2020. Net tax-supported debt outstanding includes:

- general obligation (GO) bonds;
- lottery revenue bonds; and
- lease and note payable obligations.

DISCLAIMER

Pursuant to W.Va. Code §12-6A-6, every state spending unit is required to report quarterly on its debt to the West Virginia State Treasurer’s Office. The Treasurer’s Office prepares this Report using information provided by the spending units and information from other sources considered reliable. This report is unaudited and may be amended when updated information is provided to the Treasurer’s Office.

**Table 1 - West Virginia Net Tax-Supported Debt Outstanding
as of June 30, 2020**

Type of Debt		Principal Outstanding June 30, 2020
GENERAL OBLIGATION BONDS		
Safe Road Bonds	\$ 100,830,000	
Roads to Prosperity Bonds	1,364,455,000	
Infrastructure Improvement Bonds	95,487,884	
Total General Obligation Bonds		\$ 1,560,772,884
REVENUE BONDS		
School Building Authority Capital Improvement Bonds	61,921,250	
Economic Development Authority, Lottery Revenue Bonds	269,720,000	
Economic Development Authority, Excess Lottery Revenue Bonds	176,850,000	
Higher Education Policy Commission, Excess Lottery Revenue Bonds	256,650,000	
Higher Education Policy Commission, Excess Lottery Revenue Bonds (BABs)	50,265,000	
School Building Authority, Lottery Revenue Bonds	119,964,500	
School Building Authority, Excess Lottery Revenue Bonds	71,800,000	
School Building Authority, Excess Lottery Revenue Bonds (QSCBs)	150,480,000	
West Virginia Infrastructure & Jobs Development Council, Excess Lottery Revenue Bonds	<u>62,245,000</u>	
Total Revenue Bonds		1,219,895,750
TOTAL LEASE / NOTE OBLIGATIONS		<u>354,387,312</u>
GROSS TAX SUPPORTED DEBT		3,135,055,946
DEDUCTIONS FOR ESCROW/SINKING FUND/RESERVE FUNDS		
Economic Development Authority, Excess Lottery Revenue Bonds	(26,364,190)	
Economic Development Authority, Lottery Revenue Bonds	(135,940,000)	
Higher Education Policy Commission Excess Lottery Revenue Bonds	(79,220,000)	
School Building Authority, Capital Improvement Bonds	(61,921,250)	
School Building Authority, Excess Lottery Revenue Bonds (QSCBs)	<u>(90,645,048)</u>	
Total Deductions		<u>(394,090,488)</u>
NET TAX-SUPPORTED DEBT		<u>\$ 2,740,965,458</u>

The debt service for the \$2.74 billion in net tax-supported debt represents 5.90% of the state’s General Revenue Fund receipts and 4.61% of specified revenue sources for Fiscal Year 2020. This debt service includes both principal and interest payments. The specified revenue sources include the State Road Fund, lottery funds and certain dedicated severance taxes (see *Appendix B - Revenue Information* for more information on the revenues included in this calculation). Both ratios are below the recommended caps.

Another important factor when determining debt capacity and the health of the state’s debt is amortization, or how rapidly the state’s debt is maturing. With all scenarios remaining constant, a 3.90% decrease in net tax-supported debt outstanding could occur within the next year. This analysis does not include the authorized \$200 million to be issued over the next year for the Roads to Prosperity initiative. Please see pages 6-7 of this report for further explanation. The recommended caps noted in the chart below are for the following year for various debt ratios:

Table 2 - Recommended Ratio Caps as of June 30, 2020

Ratio	Recommended Cap	June 30, 2020 Level	Projected Highest Level (FY21-31)
Net tax-supported debt Service as a percentage of the General Revenue Fund	6.00%	5.90%	6.44% (June 30, 2023)
Net tax-supported debt Service as a percentage of revenues	5.00%	4.61%	5.03% (June 30, 2023)
Net tax-supported debt as a percentage of personal income	3.00%	3.35%	3.33% (June 30, 2021)
Net tax-supported debt per capita	\$980	\$1,529	\$1,470 (June 30, 2021)
Net tax-supported debt as a percentage of assessed valuation	2.0%	2.62%	2.47% (June 30, 2021)

Conclusion

The most important indicators of debt capacity include ratios, which account for the state’s revenues, and how much of those revenues are dedicated for payments on the state’s debt burden. With the issuance of \$800 million in GO debt in fiscal year 2018, \$600 million issued in December 2019, and an authorized \$200 million to potentially be issued during fiscal year 2021 for the Roads to Prosperity initiative, state leaders must carefully monitor the state’s ratios and be ready to take action, if necessary, to keep the state within the recommended caps of debt capacity.

Debt Capacity

The purpose of this report is to perform the following tasks:

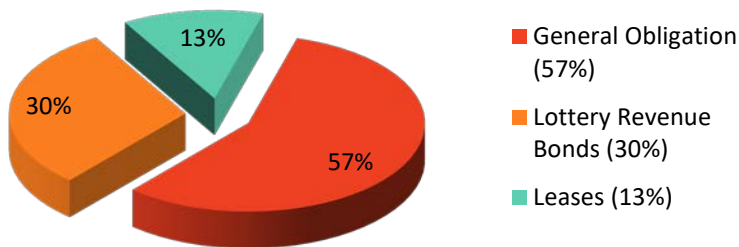
1. determine the amount of net tax-supported debt outstanding;
2. calculate key ratios that are commonly used to examine debt; and
3. make recommendations which will attempt to keep the state within an average-to-low range of national recognized debt limits.

1. Determine the amount of net tax-supported debt outstanding

The calculation of net tax-supported debt is shown in *Table 1 - West Virginia Net Tax-Supported Debt Outstanding as of June 30, 2020*, page 3. This \$2.74 billion figure includes general obligation (GO) bonds, lottery revenue bonds as well as lease and notes payable obligations of state spending units, including state colleges and universities.

The highest quality bonds the state can issue are GO bonds because GO bonds pledge the full faith and credit of the state and are authorized only by a constitutional amendment. Currently, GO bonds constitute the largest portion of the state's net tax-supported debt outstanding at approximately 57% (see chart titled *West Virginia Net Tax-Supported Debt by Type as of June 30, 2020* below).

West Virginia Net Tax-Supported Debt by Type as of June 30, 2020



The second largest type of debt consists of bonds backed by various pledges of revenue generated from the West Virginia Lottery. Revenues from the West Virginia Lottery are anticipated to increase approximately \$67 million for fiscal year 2020 to 2021. Projections show the revenue decreases \$25 million for fiscal year 2021 to 2022, but revenues should remain consistent between fiscal years 2022 to 2031. See *Appendix B - Revenue Information* for revenue projections.

Several state spending units have outstanding revenue bonds at June 30, 2020 (see *Table 3 – Various Revenue Bonds Outstanding*, page 8). These revenue bonds are excluded from the calculation of net tax-supported debt because these bonds are self-supporting revenue bonds. For example, the bonds issued by the Tobacco Settlement Financing Authority of West Virginia are excluded because the debt service is paid from tobacco settlement funds.

Comparison between Actual Debt Service Payments and Estimated Debt Service Payments Assuming the Issuance of the Additional Authorized \$200 million in GO Bonds

While the current net tax-supported debt is \$2.74 billion, this does not include the final \$200 million authorized to be issued as part of the Roads to Prosperity initiative. The authorized amount that has not been issued is as follows: for fiscal year beginning July 1, 2020, an amount not to exceed \$200 million.

House Concurrent Resolution 104 passed both legislative chambers providing for the issuance of \$600 million during fiscal year 2020, allowing the unissued \$200 million to be carried forward to a future fiscal year. The issuance of the \$600 million in general obligation bonds was completed in fiscal year 2020 and dated December 17, 2019. Currently, \$200 million remains authorized for fiscal year 2021. The GO bonds for Roads to Prosperity are being used for many projects spread across all 55 counties in the state, including new roads and bridges as well as repairs to existing roads and bridges. A list of specific projects can be found at the following website:

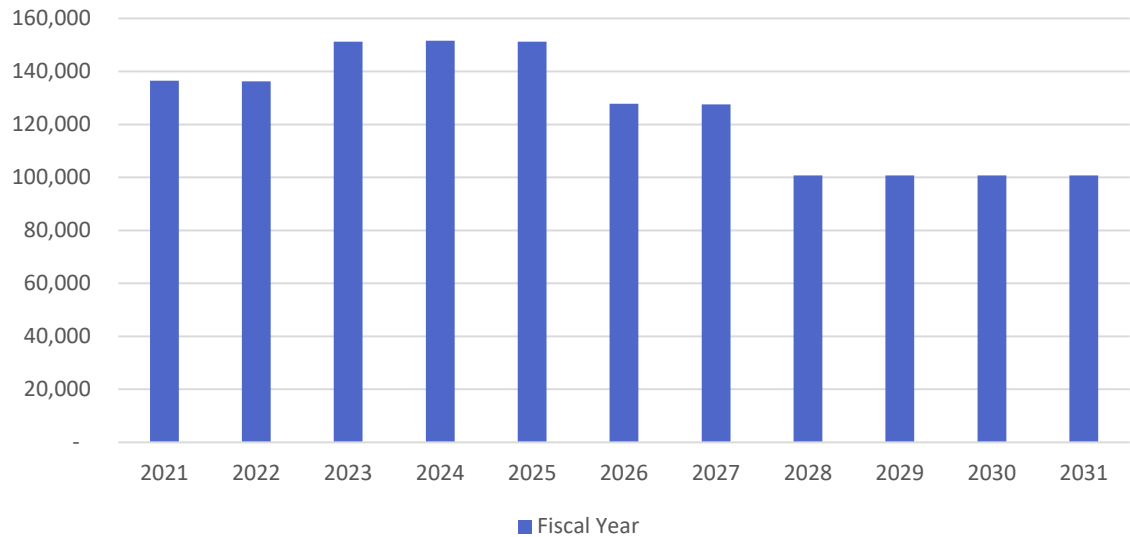
<https://transportation.wv.gov/driveforwardwv/projects/Pages/default.aspx>.

This report gives recommendations to maintain a moderate-to-low debt burden and based on the data provided for this report, the issuance of this debt will most likely put the State of West Virginia outside the recommended ratios.

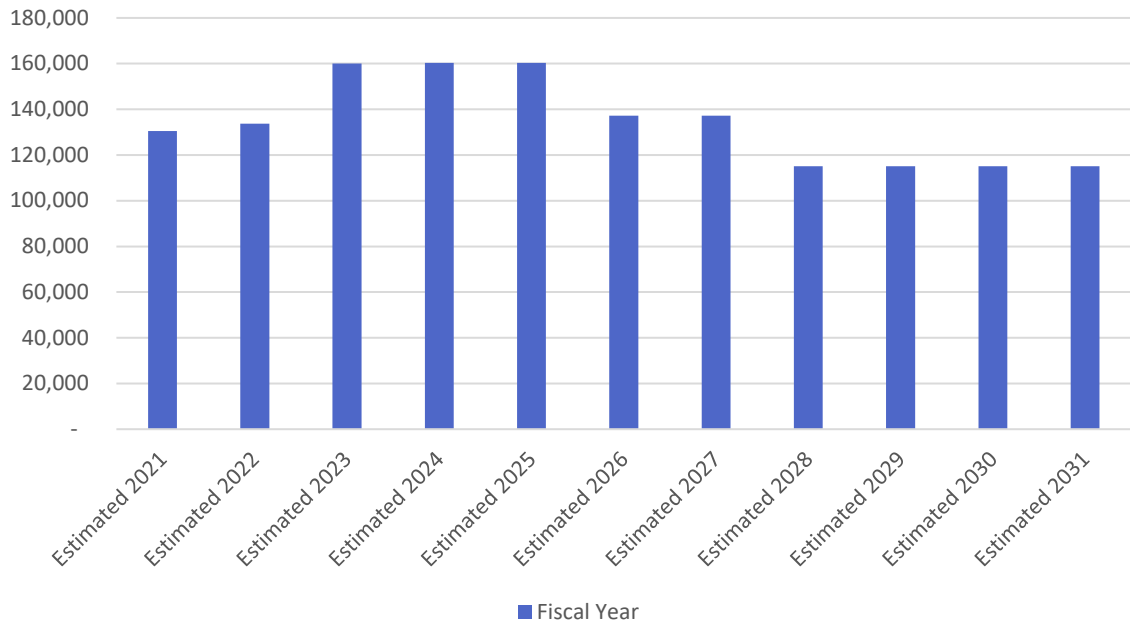
Assuming the issuance of \$200 million in fiscal year 2021, this Debt Capacity Report anticipates an additional \$3.1 million in interest payments in fiscal year 2022. In furtherance on the actual and assumed issuances noted above, this Debt Capacity Report anticipates an additional \$14.3 million in principal and interest payments for fiscal years 2023 through 2031. These assumptions are based on a projected True Interest Cost (TIC) in the range of 3.00% to 4.17%.

The next two graphs, *Actual Debt Service on General Obligation Bonds with Currently Issued Debt (in thousands)* and *Estimated Debt Service on General Obligation Bonds Assuming Additional \$200 million is Issued in FY 2021 (in thousands)*, depict the current debt service requirements as well as the projected debt service requirements assuming the issuance of the entire \$200 million authorized.

**Actual Debt Service on General Obligation Bonds
with Currently Issued Debt (in thousands)**



**Estimated Debt Service on General Obligation Bonds
Assuming Additional \$200 million is Issued in FY 2021
(in thousands)**



Although certain bonds of the West Virginia Water Development Authority and the West Virginia Housing Development Fund are considered moral obligations of the state, these bonds are currently self-supporting and are excluded from the calculation of net tax-supported debt.

**Table 3 – Various Revenue Bonds Outstanding
June 30, 2020**

Entity	Principal Outstanding
Concord University	\$ 14,970,800
Economic Development Authority	3,583,203,080
Fairmont State University	65,258,445
Glenville State College	37,642,354
Higher Education Policy Commission	50,278,836
Highways, Division of	265,720,000
Hospital Finance Authority	2,627,891,087
Housing Development Fund	342,790,000
Infrastructure & Jobs Development Council	89,300,000
Marshall University	101,995,000
Mountwest Community and Technical College	676,146
Parkways Authority	163,540,000
* Regional Jail Authority	16,410,000
Shepherd University	34,757,505
Tobacco Settlement Finance Authority of West Virginia	707,803,000
Water Development Authority	157,015,274
West Liberty University	17,495,482
West Virginia State University	11,245,083
West Virginia University	659,522,645
NON TAX-SUPPORTED DEBT	<u>\$8,947,514,738</u>

* - does not include lease-backed bonds issued by the Economic Development Authority. The lease-backed bonds are included in net tax-supported debt as lease obligations.

Calculations of the net tax-supported debt and debt service of the State of West Virginia for fiscal years 2015 through 2031 are contained in Table 4 and Table 5 (*Table 4 – Net Tax-Supported Debt Outstanding for Fiscal Years 2015-2031* and *Table 5 - Net Tax-Supported Debt Services for Fiscal Years 2015-2031*, pages 10 – 13). Fiscal years 2015 through 2020 are included to show the historical perspective of the actual debt issued and the debt service requirements for those obligations. The most recent and next ten fiscal years, 2021 through 2031, are included to show expected debt levels as existing obligations mature.

Revenue information included in Table 4 and Table 5 (*Table 4 – Net Tax-Supported Debt Outstanding for Fiscal Years 2015-2031* and *Table 5 - Net Tax-Supported Debt Services for Fiscal Years 2015-2031*, pages 10 – 13) was compiled and provided by the West Virginia Department of Revenue and is included in *Appendix B - Revenue Information*. The projected values of personal income were obtained from IHS Markit (“WV Annual Long-Term Forecast” November 2020).

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Table 4. NET TAX SUPPORTED DEBT OUTSTANDING FOR FISCAL YEARS 2015 - 2031

	6/30/2015 FY15	6/30/2016 FY16	6/30/2017 FY17	6/30/2018 FY18	6/30/2019 FY19	6/30/2020 FY20
General Obligation						
Safe Roads of 1996	168,845,000	166,385,000	151,160,000	135,175,000	118,390,000	100,830,000
Roads to Prosperity of 2017	-	-	-	800,000,000	1,382,305,000	1,364,455,000
(1) Infrastructure of 1994	158,633,538	146,294,132	130,360,960	119,905,144	108,002,634	95,487,884
Total General Obligation	327,478,538	312,679,132	281,520,960	1,055,080,144	1,608,697,634	1,560,772,884
Moral Obligations						
Economic Development Authority - Excess Lottery	154,170,000	144,065,000	133,415,000	147,195,000	190,165,000	176,850,000
Economic Development Authority - Lottery	142,360,000	139,230,000	135,940,000	141,560,000	141,560,000	133,780,000
Higher Education Policy Commission - Excess Lottery	219,640,000	211,255,000	203,650,000	192,600,000	186,050,000	177,430,000
Higher Education Policy Commission - Excess Lottery (BABs)	50,265,000	50,265,000	50,265,000	50,265,000	50,265,000	50,265,000
(2) School Building Authority - Appropriation	109,075,000	91,040,000	72,105,000	22,265,000	61,921,250	61,921,250
(2) School Building Authority - Lottery	72,010,000	89,100,000	104,930,000	137,875,000	129,105,000	119,964,500
(3) School Building Authority - Excess Lottery	98,780,000	94,250,000	88,990,000	83,490,000	77,760,000	71,800,000
School Building Authority - Excess Lottery (QSCBs)	150,480,000	150,480,000	150,480,000	150,480,000	150,480,000	150,480,000
West Virginia Infrastructure & Jobs Development Council - Excess Lottery	75,790,000	72,475,000	70,100,000	67,610,000	64,995,000	62,245,000
Total Moral Obligations	1,072,570,000	1,042,160,000	1,009,875,000	993,340,000	1,052,301,250	1,004,735,750
Leases and Notes Payable						
(4) (5) Leases and Notes Payable	316,784,254	353,187,239	340,488,736	334,888,107	312,776,327	354,387,312
Total Leases and Notes Payable	316,784,254	353,187,239	340,488,736	334,888,107	312,776,327	354,387,312
Deductions for debt service reserve accounts						
Economic Development Authority - Excess Lottery	(25,160,499)	(25,192,359)	(19,782,648)	(21,282,185)	(25,012,690)	(26,364,190)
School Building Authority	(23,020,801)	(23,020,801)	(23,020,801)	-	(61,921,250)	(61,921,250)
School Building Authority - Lottery	-	-	-	-	-	-
School Building Authority - Excess Lottery (QSCBs) - debt service sinking fund	(49,267,790)	(58,462,736)	(67,657,682)	(76,852,628)	(86,047,574)	(90,645,048)
Net Tax Supported Debt Outstanding	1,619,383,702	1,601,350,475	1,521,423,565	2,285,173,438	2,800,793,697	2,740,965,458
Assessed value (in thousands)	92,273,972	95,155,186	93,757,123	95,153,945	99,127,881	104,561,931
Net tax supported debt as a percentage of assessed value	1.75%	1.68%	1.62%	2.40%	2.83%	2.62%
Income (in thousands)	68,269,093	67,928,706	70,729,864	74,321,622	75,834,630	81,913,692
Net tax supported debt as a percentage of personal income	2.37%	2.36%	2.15%	3.07%	3.69%	3.35%
Population	1,844,128	1,831,102	1,815,857	1,805,832	1,792,147	1,792,147
Net tax supported debt per capita	878.13	874.53	837.85	1,265.44	1,562.81	1,529.43

Income and Assessed value information and projections provided by the West Virginia Department of Revenue
Population information obtained from the U.S. Census Bureau

- (1) - Cash basis and net of escrowed bonds
- (2) - Reported as paid from the School Building Authority to the Trustee
- (3) - FY17 & FY18 are reported as "net" outstanding due to an advance refunding.
- (4) - Compiled by the Division of Debt Management. Does not match the State's CAFR due to differences in the leases that are included
- (5) - Balances for lease and notes payables beginning in fiscal year 2021 are projections and do not include the implementation of GASB 87. Balances are expected to increase.

6/30/2021 FY21	6/30/2022 FY22	6/30/2023 FY23	6/30/2024 FY24	6/30/2025 FY25	6/30/2026 FY26	6/30/2027 FY27	6/30/2028 FY28	6/30/2029 FY29	6/30/2030 FY30	6/30/2031 FY31
82,460,000	63,240,000	43,130,000	22,090,000	-	-	-	-	-	-	-
1,345,795,000	1,326,475,000	1,290,735,000	1,253,210,000	1,213,795,000	1,172,375,000	1,128,875,000	1,083,175,000	1,035,155,000	984,710,000	931,750,000
<u>82,771,968</u>	<u>69,768,844</u>	<u>56,374,103</u>	<u>42,812,275</u>	<u>28,892,329</u>	<u>14,573,054</u>	-	-	-	-	-
1,511,026,968	1,459,483,844	1,390,239,103	1,318,112,275	1,242,687,329	1,186,948,054	1,128,875,000	1,083,175,000	1,035,155,000	984,710,000	931,750,000
161,080,000	144,495,000	126,935,000	108,340,000	88,645,000	67,790,000	57,640,000	53,965,000	50,105,000	46,050,000	41,795,000
129,595,000	125,200,000	120,585,000	115,740,000	110,650,000	105,310,000	99,700,000	93,810,000	87,630,000	81,140,000	74,320,000
168,430,000	158,990,000	149,090,000	138,700,000	127,790,000	116,350,000	106,715,000	96,610,000	86,000,000	74,865,000	63,255,000
50,265,000	50,265,000	50,265,000	50,265,000	50,265,000	50,265,000	47,755,000	45,120,000	42,360,000	39,465,000	36,430,000
61,921,250	61,921,250	-	-	-	-	-	-	-	-	-
110,374,500	100,334,500	89,804,500	78,729,500	67,129,500	54,989,500	42,300,000	31,585,000	22,770,000	16,015,000	8,920,000
65,550,000	59,005,000	52,135,000	44,925,000	37,365,000	29,435,000	18,700,000	7,430,000	3,805,000	-	-
150,480,000	150,480,000	150,480,000	120,480,000	120,480,000	72,280,000	-	-	-	-	-
<u>59,360,000</u>	<u>56,330,000</u>	<u>53,150,000</u>	<u>49,810,000</u>	<u>46,305,000</u>	<u>42,625,000</u>	<u>38,760,000</u>	<u>34,700,000</u>	<u>30,440,000</u>	<u>25,965,000</u>	<u>21,265,000</u>
957,055,750	907,020,750	792,444,500	706,989,500	648,629,500	539,044,500	411,570,000	363,220,000	323,110,000	283,500,000	245,985,000
<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>
<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>	<u>354,000,000</u>
(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)	(26,364,190)
(61,921,250)	(61,921,250)	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
(99,839,994)	(109,034,940)	(118,229,886)	(98,224,832)	(105,419,778)	(65,878,295)	(6,401,705)	-	-	-	-
<u>2,633,957,284</u>	<u>2,523,184,214</u>	<u>2,392,089,527</u>	<u>2,254,512,753</u>	<u>2,113,532,861</u>	<u>1,987,750,069</u>	<u>1,861,679,105</u>	<u>1,774,030,810</u>	<u>1,685,900,810</u>	<u>1,595,845,810</u>	<u>1,505,370,810</u>
106,664,223	109,330,829	112,064,099	114,865,702	117,737,344	120,680,778	123,697,797	126,790,242	129,959,998	133,208,998	136,539,223
2.47%	2.31%	2.13%	1.96%	1.80%	1.65%	1.51%	1.40%	1.30%	1.20%	1.10%
79,121,627	80,850,365	83,819,406	87,184,290	90,691,439	94,266,500	98,279,485	102,371,181	106,558,625	110,891,085	114,963,306
3.33%	3.12%	2.85%	2.59%	2.33%	2.11%	1.89%	1.73%	1.58%	1.44%	1.31%
1,792,147	1,792,147	1,792,147	1,792,147	1,792,147	1,792,147	1,792,147	1,792,147	1,792,147	1,792,147	1,792,147
1,469.72	1,407.91	1,334.76	1,258.00	1,179.33	1,109.14	1,038.80	989.89	940.72	890.47	839.98

Table 5. NET TAX SUPPORTED DEBT SERVICE FOR FISCAL YEARS 2015 - 2031

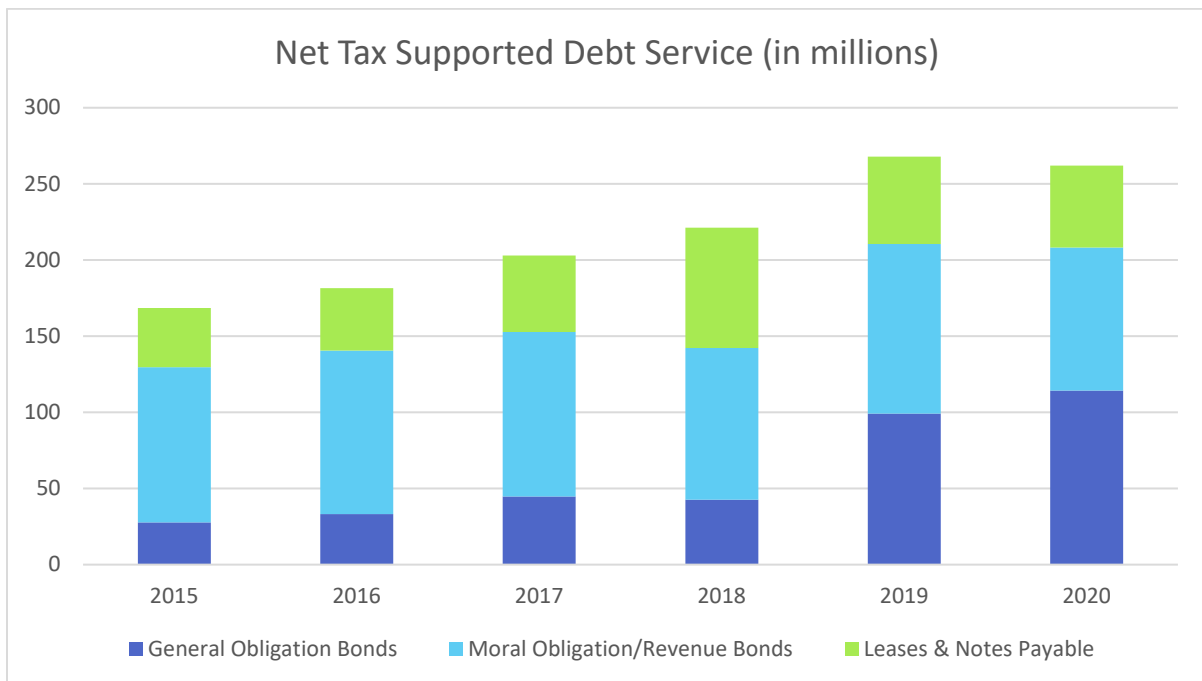
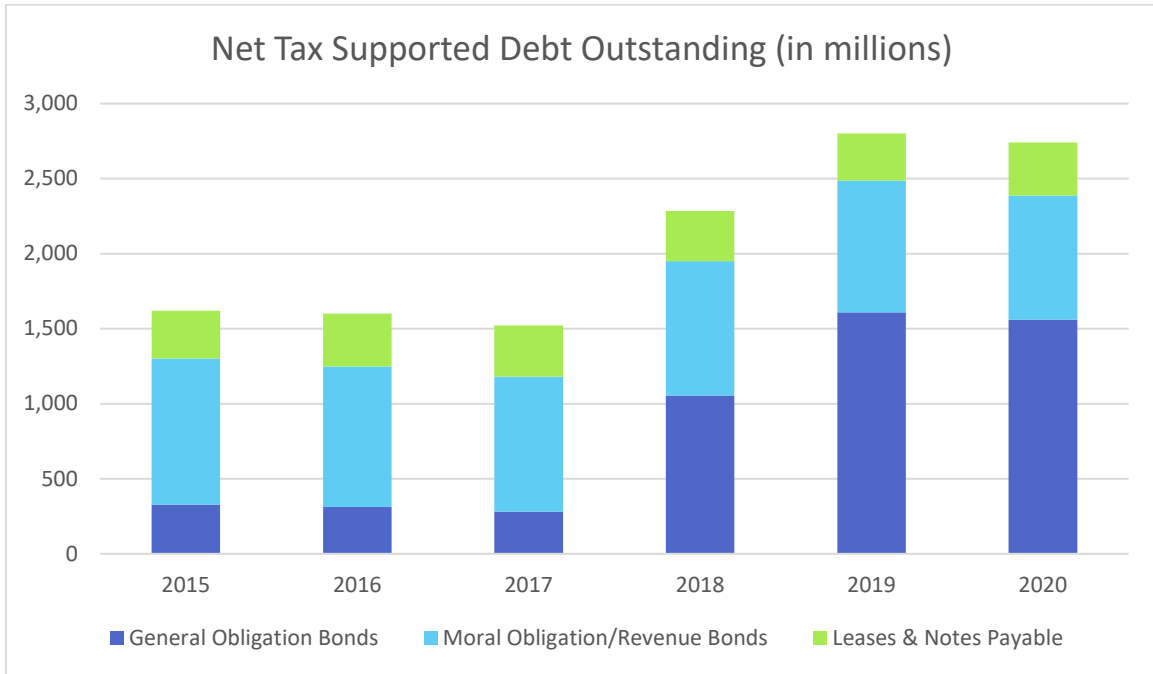
	6/30/2015 FY15	6/30/2016 FY16	6/30/2017 FY17	6/30/2018 FY18	6/30/2019 FY19	6/30/2020 FY20
General Obligation Debt Service						
Safe Roads of 1996	6,040,150	11,163,738	23,192,900	23,191,650	23,192,400	23,193,000
Roads to Prosperity of 2017	-	-	-	-	55,419,152	69,091,698
Infrastructure of 1994	<u>21,616,903</u>	<u>22,068,153</u>	<u>21,656,353</u>	<u>19,377,313</u>	<u>20,556,969</u>	<u>21,947,475</u>
Total General Obligation Debt Service	27,657,053	33,231,891	44,849,253	42,568,963	99,168,521	114,232,173
Moral Obligation Debt Service						
Economic Development Authority - Excess Lottery	18,764,110	18,714,645	18,702,373	19,085,664	22,151,751	23,383,641
Economic Development Authority - Lottery	9,995,513	9,995,113	9,998,613	6,184,369	6,198,400	13,788,650
Higher Education Policy Commission - Excess Lottery	18,784,515	18,652,971	17,466,532	16,136,902	15,632,684	17,354,984
Higher Education Policy Commission - Excess Lottery (BABs)	3,823,673	3,823,673	3,823,673	3,823,673	3,823,673	3,823,673
School Building Authority - Appropriation	23,312,770	23,423,270	23,421,520	17,537,208	23,378,250	-
School Building Authority - Lottery	7,513,455	7,906,094	9,549,613	11,911,709	15,233,863	15,230,663
School Building Authority - Excess Lottery	9,798,831	8,508,661	9,797,513	9,799,888	9,793,800	9,797,850
School Building Authority - Excess Lottery (QSCBs)	9,194,946	9,194,946	9,194,946	9,194,946	9,194,946	4,597,474
State Building Commission - Lottery	-	-	-	-	-	-
West Virginia Infrastructure & Jobs Development Council - Excess Lottery	<u>789,479</u>	<u>7,021,625</u>	<u>5,939,375</u>	<u>5,932,750</u>	<u>5,930,125</u>	<u>5,931,000</u>
Total Moral Obligation Debt Service	101,977,291	107,240,997	107,894,158	99,607,109	111,337,492	93,907,935
Leases and Notes Payable Debt Service						
(1) Leases and Notes Payable	<u>38,905,103</u>	<u>41,109,711</u>	<u>50,307,343</u>	<u>79,144,998</u>	<u>57,374,889</u>	<u>53,764,108</u>
Total Lease and Notes Payable Debt Service	38,905,103	41,109,711	50,307,343	79,144,998	57,374,889	53,764,108
Net Tax Supported Debt Service						
	<u>168,539,448</u>	<u>181,582,599</u>	<u>203,050,753</u>	<u>221,321,070</u>	<u>267,880,902</u>	<u>261,904,216</u>
General revenue fund (expressed in thousands)	4,193,310	4,102,679	4,166,510	4,245,258	4,756,336	4,437,857
Debt service as a percentage of general revenue fund	4.02%	4.43%	4.87%	5.21%	5.63%	5.90%
Revenue (expressed in thousands and as defined in the rule)	5,364,708	5,220,305	5,266,423	5,460,235	6,133,510	5,679,843
Debt as a percentage of revenue (as defined in the rule)	3.14%	3.48%	3.86%	4.05%	4.37%	4.61%

Revenue information provided by the West Virginia Department of Revenue (see Appendix B).

(1) - Balances for lease and notes payables beginning in fiscal year 2021 are projections and do not include the implementation of GASB 87. Balances are expected to increase.

6/30/2021 FY21	6/30/2022 FY22	6/30/2023 FY23	6/30/2024 FY24	6/30/2025 FY25	6/30/2026 FY26	6/30/2027 FY27	6/30/2028 FY28	6/30/2029 FY29	6/30/2030 FY30	6/30/2031 FY31
23,192,450	23,194,100	23,196,100	23,196,500	23,194,500	-	-	-	-	-	-
85,422,881	85,425,106	100,702,356	100,697,006	100,690,781	100,700,281	100,700,531	100,698,281	100,704,657	100,698,657	100,695,507
<u>21,935,925</u>	<u>21,954,900</u>	<u>21,937,975</u>	<u>22,201,225</u>	<u>22,210,175</u>	<u>22,201,375</u>	<u>22,201,000</u>	-	-	-	-
130,551,256	130,574,106	145,836,431	146,094,731	146,095,456	122,901,656	122,901,531	100,698,281	100,704,657	100,698,657	100,695,507
25,046,984	24,965,727	24,936,770	24,908,558	24,882,126	24,849,012	13,242,328	6,389,125	6,388,875	6,389,250	6,384,875
9,994,400	9,995,150	9,995,400	9,994,650	9,997,400	9,992,900	9,995,900	9,995,400	9,990,900	9,991,900	9,997,400
17,322,234	17,317,821	17,310,971	17,310,471	17,314,576	17,302,420	14,928,070	14,918,920	14,920,625	14,917,000	14,913,775
3,823,673	3,823,673	3,823,673	3,823,673	3,823,673	3,823,673	6,333,673	6,271,678	6,200,370	6,129,750	6,054,073
-	-	-	-	-	-	-	-	-	-	-
15,239,013	15,232,713	15,220,713	15,239,213	15,227,900	15,234,900	15,222,775	12,657,350	10,221,600	7,720,850	7,723,100
9,799,075	9,792,000	9,796,900	9,800,850	9,798,150	9,798,250	12,206,750	12,205,000	3,996,500	3,995,250	-
9,194,946	9,194,946	9,194,946	9,994,946	7,194,946	8,658,517	6,401,705	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
<u>5,925,125</u>	<u>5,922,250</u>	<u>5,917,000</u>	<u>5,914,000</u>	<u>5,907,875</u>	<u>5,903,250</u>	<u>5,899,625</u>	<u>5,896,500</u>	<u>5,888,500</u>	<u>5,885,125</u>	<u>5,880,750</u>
96,345,450	96,244,280	96,196,373	96,986,361	94,146,646	95,562,922	84,230,826	68,333,973	57,607,370	55,029,125	50,953,973
<u>54,000,000</u>	<u>54,000,000</u>	<u>52,000,000</u>	<u>52,000,000</u>	<u>52,000,000</u>	<u>50,000,000</u>	<u>50,000,000</u>	<u>50,000,000</u>	<u>48,000,000</u>	<u>48,000,000</u>	<u>48,000,000</u>
<u>54,000,000</u>	<u>54,000,000</u>	<u>52,000,000</u>	<u>52,000,000</u>	<u>52,000,000</u>	<u>50,000,000</u>	<u>50,000,000</u>	<u>50,000,000</u>	<u>48,000,000</u>	<u>48,000,000</u>	<u>48,000,000</u>
<u>280,896,706</u>	<u>280,818,386</u>	<u>294,032,804</u>	<u>295,081,092</u>	<u>292,242,102</u>	<u>268,464,578</u>	<u>257,132,357</u>	<u>219,032,254</u>	<u>206,312,027</u>	<u>203,727,782</u>	<u>199,649,480</u>
4,574,514	4,505,866	4,566,416	4,762,366	4,925,966	5,091,151	5,218,430	5,348,891	5,482,613	5,619,678	5,760,170
6.14%	6.23%	6.44%	6.20%	5.93%	5.27%	4.93%	4.09%	3.76%	3.63%	3.47%
5,904,222	5,791,932	5,848,275	6,066,122	6,229,731	6,394,907	6,522,186	6,640,446	6,776,168	6,913,233	7,053,725
4.76%	4.85%	5.03%	4.86%	4.69%	4.20%	3.94%	3.30%	3.04%	2.95%	2.83%

Graphs Representing Tables 4 & 5 for the Past Six Years



General Obligation Bonds

Safe Roads Amendment of 1996 and Roads to Prosperity Amendment of 2017

As of June 30, 2020

Principal outstanding: \$1,465,285,000

Authorization remains for \$200,000,000 in "new money."

- FY2021
 - Principal due: \$37,030,000
 - Interest due: \$71,585,331
 - Principal outstanding: \$1,428,255,000
- FY 2022
 - Principal due: \$38,540,000
 - Interest due: \$70,079,206
 - Principal outstanding: \$1,389,715,000
- FY 2023
 - Principal due: \$55,850,000
 - Interest due: \$68,048,456
 - Principal outstanding: \$1,333,865,000
- FY 2024
 - Principal due: \$58,565,000
 - Interest due: \$65,328,506
 - Principal outstanding: \$1,275,300,000
- FY 2025
 - Principal due: \$61,505,000
 - Interest due: \$62,380,281
 - Principal outstanding: \$1,213,795,000
- FY 2026
 - Principal due: \$41,420,000
 - Interest due: \$59,280,281
 - Principal outstanding: \$1,172,375,000
- FY 2027
 - Principal due: \$43,500,000
 - Interest due: \$57,200,531
 - Principal outstanding: \$1,128,875,000
- FY 2028
 - Principal due: \$45,700,000
 - Interest due: \$54,998,281
 - Principal outstanding: \$1,083,175,000
- FY 2029
 - Principal due: \$48,020,000
 - Interest due: \$52,684,656
 - Principal outstanding: \$1,035,155,000

Components of Net Tax-Supported Debt as of June 30, 2020 General Obligation Bonds

Safe Road Amendment of 1996 and Roads to Prosperity

Amendment of 2017 – The Safe Road Amendment of 1996 authorized bonds to be issued in an amount not to exceed \$550 million. All of these bonds will be retired completely by June 1, 2025. The Roads to Prosperity Amendment of 2017 authorized bonds to be issued in an amount not to exceed \$1.6 billion. All of the issued bonds at June 30, 2020, will be retired completely by June 1, 2044.

The Safe Road and Roads to Prosperity bonds are paid from the state's Road Fund. The following table shows the debt service burden on the Road Fund, which will peak during fiscal year 2023. After 2023, the debt service burden is expected to drop from 14.6% in fiscal year 2023 through maturity in fiscal year 2044. This calculation does not include the authorized \$200 million to be issued during the next year. Please see pages 6-7 for further explanation.

Table 6 – Debt Service Burden, State Road Fund as of June 30, 2020

Fiscal Year	Debt Service	Road Fund Revenue	Debt Service as % of
			Road Fund
2015 *	6,040,150	742,998,000	0.81%
2016 *	11,163,738	691,481,000	1.61%
2017	23,192,900	691,645,000	3.35%
2018	23,191,650	797,088,000	2.91%
2019	78,611,552	868,485,000	9.05%
2020	92,284,698	850,856,000	10.85%
2021	108,615,331	871,217,000	12.47%
2022	108,619,206	841,556,000	12.91%
2023	123,898,456	848,366,000	14.60%
2024	123,893,506	870,000,000	14.24%
2025	123,885,281	870,000,000	14.24%
2026	100,700,281	870,000,000	11.57%
2027	100,700,531	870,000,000	11.57%
2028	100,698,281	880,000,000	11.44%
2029	100,704,657	882,000,000	11.42%
2030	100,698,657	882,000,000	11.42%
2031	100,695,507	882,000,000	11.42%

*Does not include amounts paid through refunding.

General Obligation Bonds Continued

General Obligation Bonds

Infrastructure Improvement Amendment of 1994

As of June 30, 2020

Principal outstanding: \$95,487,884

No remaining authorization for "new money" debt.

- FY2021
 - Principal due: \$12,715,916
 - Interest due: \$9,220,009
 - Principal outstanding: \$82,771,968
- FY 2022
 - Principal due: \$13,003,124
 - Interest due: \$8,951,777
 - Principal outstanding: \$69,768,844
- FY 2023
 - Principal due: \$13,394,741
 - Interest due: \$8,543,234
 - Principal outstanding: \$56,374,103
- FY 2024
 - Principal due: \$13,561,828
 - Interest due: \$8,639,397
 - Principal outstanding: \$42,812,275
- FY 2025
 - Principal due: \$13,919,946
 - Interest due: \$8,290,229
 - Principal outstanding: \$28,892,329
- FY 2026
 - Principal due: \$14,319,275
 - Interest due: \$7,882,100
 - Principal outstanding: \$14,573,054
- FY 2027
 - Principal due: \$14,573,054
 - Interest due: \$7,627,946
 - Principal outstanding: \$0
 -

Infrastructure Improvement Amendment of 1994 – The Infrastructure Improvement Amendment of 1994 authorized bonds to be issued in an amount not to exceed \$300 million for water supply and sewage treatment systems as well as economic development sites. The bonds are secured by the first collections of severance taxes. Beginning in April 2016, the annual dedication of collections is based on an amortization schedule published by the West Virginia State Treasurer’s Office, not to exceed \$22.25 million per year. All of the bonds issued will be retired by November 1, 2026. Table 7 (*Table 7 – Debt Service Infrastructure GO Bonds as of June 30, 2020*) shows the debt service on all Infrastructure GO bonds and the appropriation of dedicated severance tax collections as of June 30, 2020.

Table 7 – Debt Service Infrastructure GO Bonds as of June 30, 2020

Fiscal Year	Debt Service	Annual Appropriation
2015	21,616,903	23,000,000
2016	22,068,153	22,500,000
2017	21,656,353	21,656,000
2018	19,377,313	19,377,000
2019	20,556,969	20,557,000
2020	21,947,475	21,947,000
2021	21,935,925	21,936,000
2022	21,954,900	21,955,000
2023	21,937,975	21,938,000
2024	22,201,225	22,201,000
2025	22,210,175	22,210,000
2026	22,201,375	22,201,000
2027	22,201,000	22,201,000

Authorized but unissued – The Vietnam Veterans Bonus Amendment of 1973, the Veterans Bonus Amendment of 1992 and the Veterans Bonus Amendment of 2004 authorized the sale of bonds of not more than \$40 million, \$4 million and \$8 million, respectively, for the purpose of paying a bonus to the veterans serving in foreign conflicts. General Revenue funds have been used to pay all of these bonuses and no bonds have been issued.

Qualified Veterans Housing Bonds Amendment of 1984 – The Qualified Veterans Housing Bonds Amendment of 1984 authorized the sale of bonds to provide financing for owner-occupied residences for persons determined by the Legislature to be qualified veterans. The amount of bonds issued is limited to bonds in which the annual principal and interest do not exceed a total of \$35 million in any fiscal year.

Revenue Bonds

Revenue Bonds

The remaining authorization for all bonds is dependent upon legislation and available revenues.

Lottery and Excess Lottery Revenue Bonds – Economic Development Authority of West Virginia

Principal outstanding (net):
\$284,265,810

Lottery and Excess Lottery Revenue Bonds – West Virginia Higher Education Policy Commission

Principal outstanding (net):
\$227,695,000

Lottery and Excess Lottery Revenue Bonds – School Building Authority of West Virginia

Principal outstanding (net):
\$251,599,452

Excess Lottery Revenue Bonds – West Virginia Infrastructure & Jobs Development Council

Principal outstanding (net):
\$62,245,000

Lottery Revenue Bonds – Revenue bonds backed by certain funds of the West Virginia Lottery have been issued for various reasons, such as economic development grants and “brick & mortar” projects at various primary and secondary schools as well as colleges and universities throughout West Virginia. Lottery revenue bonds account for approximately 30% of the state’s net tax-supported debt outstanding. The following table shows the debt service burden lottery revenue bonds place on lottery funds. Lottery Fund numbers are provided by the Department of Revenue and are net of transfers to the state’s General Revenue Fund.

Table 8 - Debt Service Burden, Lottery Fund as of June 30, 2020

Fiscal Year	Debt Service	Lottery Fund Revenue	Debt Service as % of
			Lottery Fund
2015	78,664,521	405,400,000	19.40%
2016	83,817,727	403,645,000	20.77%
2017	84,472,638	386,612,000	21.85%
2018	82,069,901	398,512,000	20.59%
2019	87,959,242	488,132,000	18.02%
2020	93,907,935	369,182,000	25.44%
2021	96,345,450	436,555,000	22.07%
2022	96,244,280	411,555,000	23.39%
2023	96,196,373	411,555,000	23.37%
2024	96,986,361	411,555,000	23.57%
2025	94,146,646	411,555,000	22.88%
2026	95,562,922	411,555,000	23.22%
2027	84,230,826	411,555,000	20.47%
2028	68,333,973	411,555,000	16.60%
2029	57,607,370	411,555,000	14.00%
2030	55,029,125	411,555,000	13.37%
2031	50,953,973	411,555,000	12.38%

Lease and Note Payable Obligations

Various Lease and Note Payable Obligations

Principal outstanding: \$354,387,312

Remaining authorization is dependent upon legislation and available revenues.

Top 10 Spending Units with Leases and/or Notes Outstanding (dollar value outstanding) as of June 30, 2020

1. Secretary of Administration: \$106.1 million
2. State Building Commission of West Virginia: \$76.5 million
3. Marshall University: \$59.5 million
4. Shepherd University: \$23.0 million
5. Department of Administration, Travel Management: \$21.3 million
6. West Virginia University: \$14.6 million
7. West Virginia Department of Environmental Protection: \$13.9 million
8. West Virginia Division of Corrections: \$9.7 million
9. Hospital Finance Authority: \$7.3 million
10. Department of Health & Human Resources: \$7.0 million

Components of Net Tax- Supported Debt as of June 30, 2020 Leases and Notes Payable

Approximately \$81.5 million of new leases and notes payable were entered into during fiscal year 2020. This reflects an increase from fiscal year 2019, which had a total of \$23.0 million.¹

¹ The total amount of leases outstanding in this report is \$354.4 million and will differ from the figure reported in the state's Comprehensive Annual Financial Report (CAFR). This is due to several factors, including the materiality levels used.

Components of Net Tax-Supported Debt as of June 30, 2020 Debt Service Reserve & Other Funds

The table below (*Table 9 – Escrow/Sinking Funds/Debt Service Reserve Accounts as of June 30, 2020*) shows debt service reserve, escrow and sinking funds available to pay debt service on various issues part of the state’s net tax-supported debt. These amounts are deducted from the gross tax-supported debt to calculate the net figure detailed in Table 1 (*Table 1 – West Virginia Net Tax-Supported Debt Outstanding as of June 30, 2020, page 3*). All figures are as of June 30, 2020.

Table 9 - Escrow/Sinking Funds/
Debt Service Reserve Accounts
as of June 30, 2020

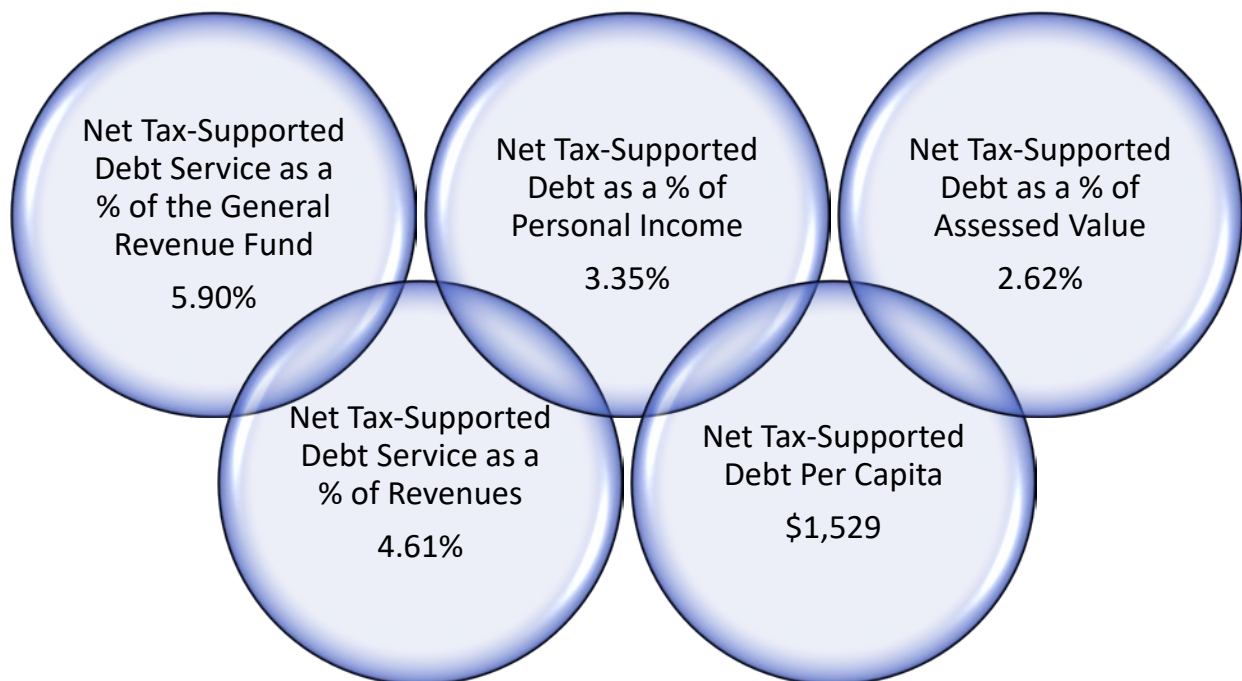
Issue / Spending Unit / Authority	Type of fund	Value at June 30, 2020
West Virginia Economic Development Authority Excess Lottery Revenue	Reserve	\$26,364,190
School Building Authority of West Virginia, Capital Improvement Bonds	Reserve	\$61,921,250
School Building Authority of West Virginia, Excess Lottery Revenue (QSCBs)	Sinking Fund	\$90,645,048
West Virginia Economic Development Authority, Lottery Revenue Bonds	Escrow	\$135,940,000
West Virginia Higher Education Policy Commission, Excess Lottery Revenue Bonds	Escrow	\$79,220,000

2. Calculate key ratios that are commonly used to examine debt

Key ratios establish benchmarks the municipal bond industry and other entities use to provide a measurement of a state's outstanding debt and the servicing (principal and interest payments) of that debt. Ratios are useful tools because they provide quantifiable measurements used when analyzing a state's fiscal position. Ratios can also provide insight into economic trends and a state's reliance on debt financing.

According to calculations based on net tax-supported debt, revenue projections, personal income projections and population estimates, the ratios as of June 30, 2020, are shown below:

Various Debt Ratios as of June 30, 2020

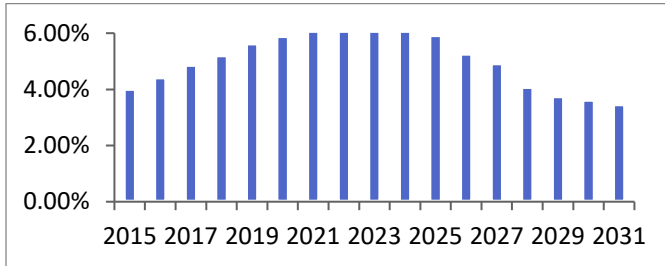


State of West Virginia Credit Ratings:

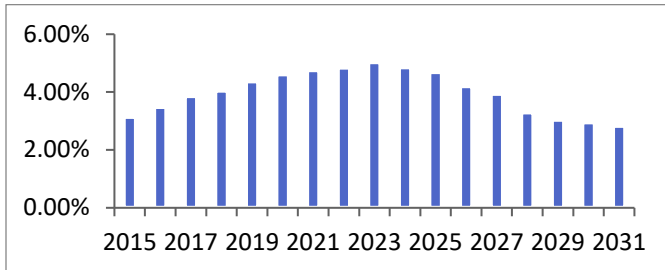
The ratings for the State remain as follows from the December 2019 General Obligation 2019 A Bond issuance.

Moody's: Aa2; Standard and Poor's: AA-; and Fitch: AA

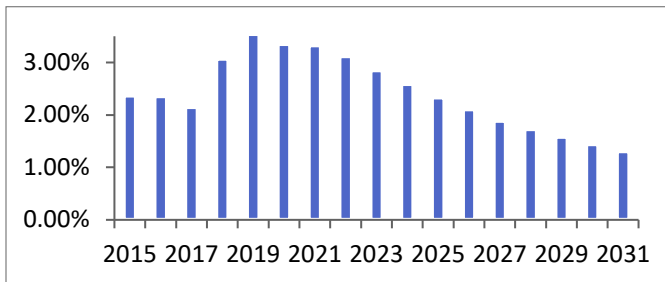
With the 2018 issuance of \$800 million and the 2019 issuance of \$600 million in GO debt, the ratios reached their peak in fiscal year 2023 for the first two charts and fiscal year 2020 for the second two charts below. In the years following, there is a decrease as the debt service payments are made. This does not account for the authorized \$200 million in GO bonds or revenue bond debt and assumes lease obligations outstanding for fiscal years 2021 to 2031 remaining constant. See pages 6-7 for further explanation. The following charts show the historical and future projections of these ratios.



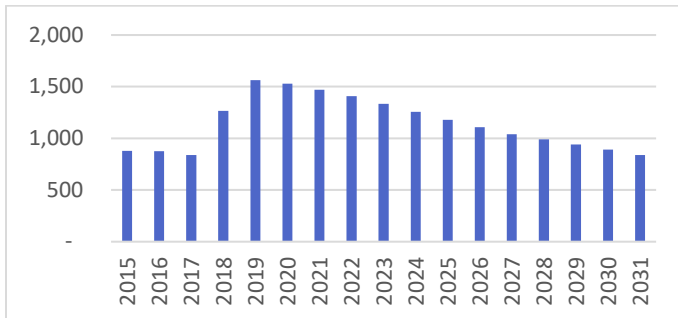
Net Tax-Supported Debt Service as a Percentage of General Revenue Fund
Current Percentage: 5.90%



Net Tax-Supported Debt Service as a Percentage of Revenues
Current Percentage: 4.61%



Net Tax-Supported Debt as a Percentage of Personal Income
Current Percentage: 3.35%



Net Tax-Supported Debt Per Capita
Current Level: \$1,529

3. Make recommendations which will attempt to keep the state within an average to low range of nationally recognized debt limits.

The final step in this analysis is making recommendations based on keeping the state within a certain range of debt ratios. Most ratios are easily accessible; therefore, making comparisons to other states and making recommendations of keeping the state in the average to low range is relatively easy. There are also certain industry practices recognized as prudent fiscal management. For example, many states have constitutional or statutory caps on how much of their General Fund can be obligated toward debt repayment; other states use a combination of ratios with various parameters.

Each year, Moody’s Investors Service produces a report ranking states according to various debt ratios. The 2020 report, titled *State Government – US – Medians – State Debt Declined in 2019 but Likely to Grow in Coming Years*, shows the average (or “mean”), the high and the low for two of the ratios examined in this report. This comparison is made to West Virginia ratios to carry out the legislative intent of this report, which is to make recommendations with the aim of keeping the state in the “average to low range of national recognized debt limits.” The average debt per capita of the 50 states for 2020 was \$1,506. The average debt as a percentage of personal income was 2.6%.

Table 10 – Various Statistics from Moody’s 2020 Publication, State Government – US - Medians – State Debt Declined in 2019 but Likely to Grow in Coming Years

Ratio	Average	Highest	Lowest	West Virginia Ranking*
Net-Tax Supported Debt (NTSD) per capita	\$1,506	\$6,637	\$19	\$1,700
		Connecticut	Nebraska	#15
NTSD as a % of Personal Income	2.6%	9.6%	0.0%	4.0%
		Hawaii	Nebraska	#11
Total NTSD	\$10.5billion	\$84.9 billion California	\$16.3 million Wyoming	\$3.0 billion #30

** As reported by Moody’s in May 2020. These figures do not necessarily match the amounts stated in this report by the West Virginia State Treasurer’s Office, generally due to timing and the inclusion of certain obligations. For specific calculations of the West Virginia State Treasurer’s Office, see tables 4 and 5, pages 10 through 13.*

Net Tax-Supported Debt Service as a Percentage of the General Revenue Fund

At June 30, 2020, the net tax-supported debt service as a percentage of the General Revenue Fund was 5.90%, which is below the recommended cap of 6.00%. This report recommends a cap on this particular ratio each year. The following are the recommended caps in past reports and actual levels at the time the report was issued:

2015
Recommended cap: 6.00%
Actual ratio: 4.02%

2016
Recommended cap: 6.00%
Actual ratio: 4.43%

2017
Recommended cap: 6.00%
Actual ratio: 4.87%

2018
Recommended cap: 6.00%
Actual Ratio: 5.21%

2019
Recommended cap: 6.00%
Actual Ratio: 5.63%

2020
Recommended cap: 6.00%
Actual Ratio: 5.90%

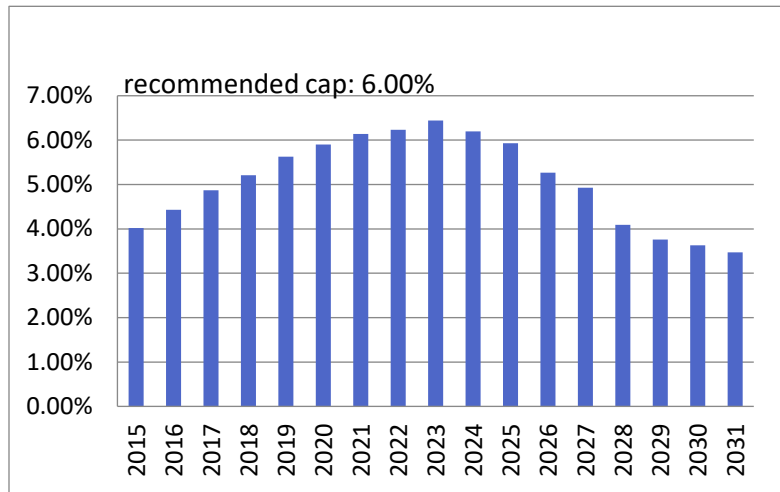
Net Tax-Supported Debt Service as a Percentage of the General Revenue Fund

The net tax-supported debt service as a percentage of the General Revenue Fund is perhaps the most important ratio measurement since it shows the potential strain on the General Revenue Fund if, for some reason, all other funds are insufficient to pay debt service.

Keeping the potential debt service burden on the state’s General Revenue Fund below 6.00% is prudent fiscal management.

The current percentage does not include the authorized additional \$200 million to be issued over the year. Please see pages 6-7 for further explanation.

Net Tax-Supported Debt Service as a Percentage of the General Revenue Fund Fiscal Years 2015-2020 (actual), 2021-2031 (projected) as of June 30, 2020



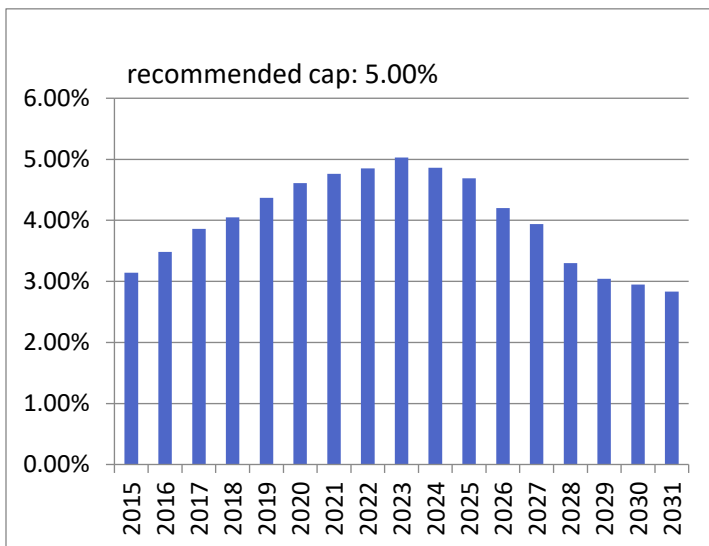
Net Tax-Supported Debt Service as a Percentage of Revenues

The definition of revenues includes not only the General Revenue Fund, but also the state’s Road Fund, Lottery Fund and the dedicated stream of the state’s coal severance tax collections. The annual dedication of collections for the Infrastructure General Obligation bonds is based on an amortization schedule published by the West Virginia State Treasurer’s Office, not to exceed \$22.25 million per year. The current and projected revenues are contained in *Table 5 - Net Tax-Supported Debt Services for Fiscal Years 2021-2031*, pages 12 and 13, and in *Appendix B - Revenue Information*.

The recommended level for this year’s report remains at 5.00%. As mentioned in previous reports, the amount of bonds backed by a pledge of lottery revenue remains at a high level. As mentioned on page 5 of this report, the Legislature approved statutory changes addressing adequate debt service coverage ratio limits on the Excess Lottery Fund and provided a cross-collateral mechanism for Lottery Revenue Bonds.

The debt service on existing Lottery Revenue Bonds will peak at \$97 million during fiscal year 2024. The debt service is \$94 million for fiscal year 2020. After 2024, the debt service decreases.

Net Tax-Supported Debt Service as a Percentage of Revenues
Fiscal Years 2015-2020 (actual), 2021-2031 (projected)
as of June 30, 2020



Net Tax-Supported Debt Service as a Percentage of Revenues

Recommended Caps:

Recommended Caps:

At June 30, 2020, the net tax-supported debt service as a percentage of Revenues was 4.61%, which is below the recommended cap of 5.00%. This report recommends a cap on this particular ratio each year. The following are the recommended caps in past reports and actual levels at the time the report was issued:

2015
Recommended cap: 5.00%
Actual Ratio: 3.14%

2016
Recommended cap: 5.00%
Actual Ratio: 3.48%

2017
Recommended cap: 5.00%
Actual Ratio: 3.86%

2018
Recommended cap: 5.00%
Actual Ratio: 4.05%

2019
Recommended cap: 5.00%
Actual Ratio: 4.37%

2020
Recommended cap: 5.00%
Actual Ratio: 4.61%

Net Tax-Supported Debt as a Percentage of Personal Income

Recommended Caps:

At June 30, 2020, the net tax-supported debt as a percentage of Personal Income was 3.35% which is above the recommended cap of 3.00%. This report recommends a cap on this particular ratio each year. The following are the recommended caps in past reports and actual levels at the time the report was issued:

2015 (personal income figures revised)
Recommended cap: 3.10%
Actual Ratio: 2.37%

2016 (personal income figures revised)
Recommended cap: 3.00%
Actual Ratio: 2.36%

2017 (personal income figures revised)
Recommended cap: 3.00%
Actual Ratio: 2.15%

2018 (personal income figures revised)
Recommended cap: 3.00%
Actual Ratio: 3.07%

2019 (personal income figures revised)
Recommended cap: 3.00%
Actual Ratio: 3.69%

2020 (personal income figures revised)
Recommended cap: 3.00%
Actual Ratio: 3.35%

Net Tax-Supported Debt as a Percentage of Personal Income

This ratio has historically plagued the State of West Virginia because the measurement of personal income of West Virginia residents has been below the national average. According to figures supplied from the West Virginia State Budget Office, with further reference to an IHS Markit report, West Virginia's personal income is forecasted to decrease approximately 3.41% from 2020 to 2021, and increase 2.18% from 2021 to 2022, and increase 3.67% from 2022 to 2023.

According to a Moody's Investors Service report, the average of this particular ratio is 2.6%, with the median being 2.0%. Comparing states that have a similar Moody's rating to that of West Virginia (Aa2), West Virginia was the sixth highest within the average range of this particular ratio as detailed in Table 11 *Debt as a Percentage of Personal Income (similarly rated states) as Presented in a 2020 report by Moody's Investors Service on page 26.*

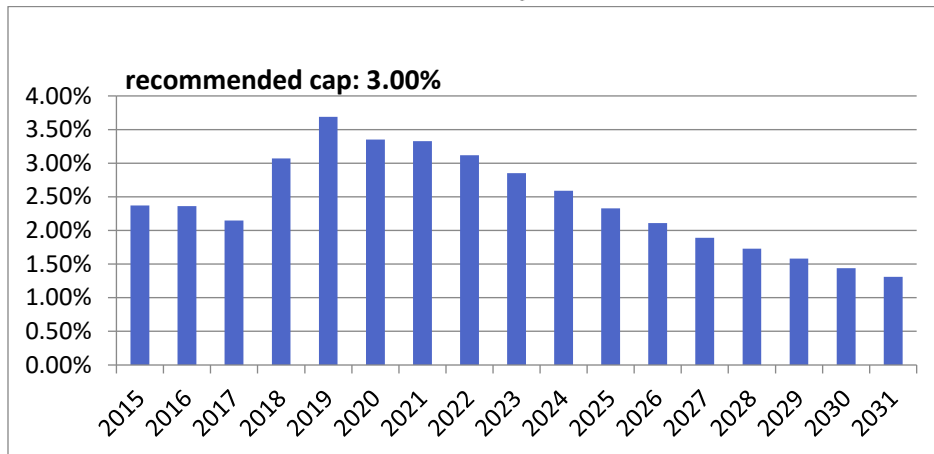
Historically, this report has recommended a cap of 3.00% for this particular ratio. It is recommended the cap for this year remain at 3.00%. Until the State of West Virginia can realize a greater increase in its personal income, careful attention should be paid to this important economic indicator.

Table 11 - Debt as a Percentage of Personal Income (Similarly Rated States) as Presented in a 2020 Report by Moody's Investors Service

State	Debt as a % of Personal Income*
Oklahoma	0.7%
Maine	1.9%
New Mexico	2.5%
Kansas	2.8%
California	3.2%
West Virginia	4.0%
Rhode Island	4.1%
Mississippi	4.8%

* As reported by Moody's in May 2020. These figures do not necessarily match with the amounts stated in this report by the West Virginia State Treasurer's Office, generally due to timing and the inclusion of certain obligations. For the specific calculations of the West Virginia State Treasurer's Office, see Table 4 and Table 5, pages 10 through 13.

**West Virginia Debt as a Percentage of Personal income
Fiscal Years 2015-2020 (Actual), 2021-2031 (Projected)
as of June 30, 2020**



Net Tax-Supported Debt Per Capita

Recommended Caps:

At June 30, 2020, the net tax-supported debt per capita was \$1,529, which is above the recommended cap of \$980. This report recommends a cap on this particular ratio each year. The following are the recommended caps in past reports and actual levels at the time the report was issued:

2015

Recommended cap: \$1,100

Actual Ratio: \$878

2016

Recommended cap: \$1,100

Actual Ratio: \$875

2017

Recommended cap: \$1,100

Actual Ratio: \$838

2018

Recommended cap: \$980

Actual Ratio: \$1,265

2019

Recommended cap: \$980

Actual Ratio: \$1,563

2020

Recommended cap: \$980

Actual Ratio: \$1,529

Net Tax-Supported Debt Per Capita

West Virginia's net tax-supported debt per capita as calculated by the West Virginia State Treasurer's Office is \$1,529. This figure is similar to the national average of \$1,506 listed in the Moody's Investors Service report.

Population figures are good economic measurements in this analysis. For example, the ratio of net tax-supported debt per capita indicates the possible debt burden on each West Virginia citizen based on a population analysis. According to estimates from the United States Census Bureau, West Virginia's population in 2020 was 1.792 million, remaining the same as 2019. The continued downward population trend is not a positive indicator for the State of West Virginia because the potential debt burden increases on the remaining population. It is also important to note West Virginia's median age averages 42.8, making it a state with one of the oldest populations in the United States.

The state's population may see growth as more jobs are anticipated with an influx of investment in infrastructure development. However, until this shift in declining population is realized, the recommended cap of net tax-supported debt per capita should be \$980 as of June 30, 2020. This recommendation is below the national average of \$1,506. According to Moody's, the net tax-supported debt per capita for West Virginia was \$1,700, the fifth highest ratio among other states with a Moody's rating of Aa2. This figure is different than the figure calculated by the West Virginia State Treasurer's Office (see note on page 28).

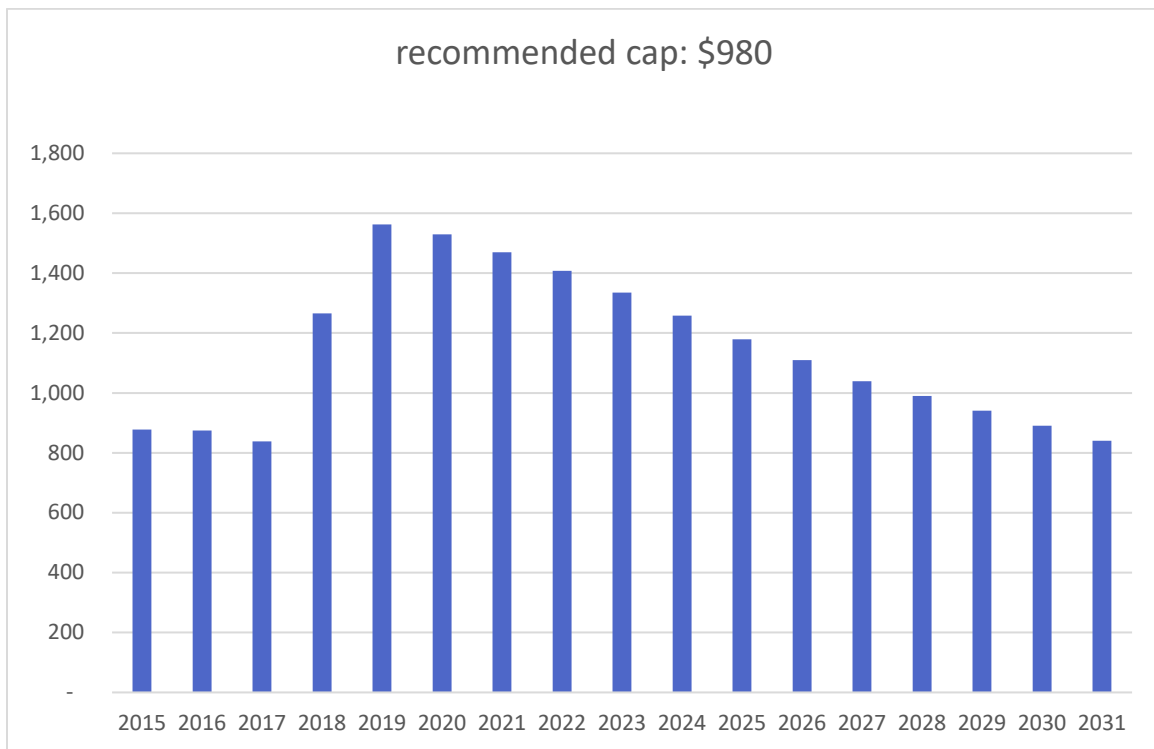
This analysis does not include the authorized additional \$200 million to be issued over the next year. Please see pages 6-7 for further explanation.

Table 12 - Debt Per Capita
(Similarly Rated States)
as Presented in a 2020 report by Moody's Investors Service

State	Debt Per Capita*
Oklahoma	\$337
Maine	\$958
New Mexico	\$1,117
Kansas	\$1,491
West Virginia	\$1,700
Mississippi	\$1,901
California	\$2,147
Rhode Island	\$2,308

** As reported by Moody's in May 2020. These figures do not necessarily match with the amounts stated in this report by the West Virginia State Treasurer's Office generally due to timing and the inclusion of certain obligations. For the West Virginia State Treasurer's Office specific calculations, see Table 4 and Table 5, pages 10 through 13.*

West Virginia Debt Per Capita
Fiscal Years 2015-2020 (Actual), 2021-2031 (Projected) as of June 30, 2020



Other Debt Ratios

Net tax-supported debt as a Percentage of the Assessed Value of Taxable Property - Historically, the Debt Capacity Report has suggested a cap of 2.00% for this particular ratio. This recommendation has not been based on any particular research, but rather on the relationship to the other current debt ratios of the state. At June 30, 2020, the ratio was 2.62%.

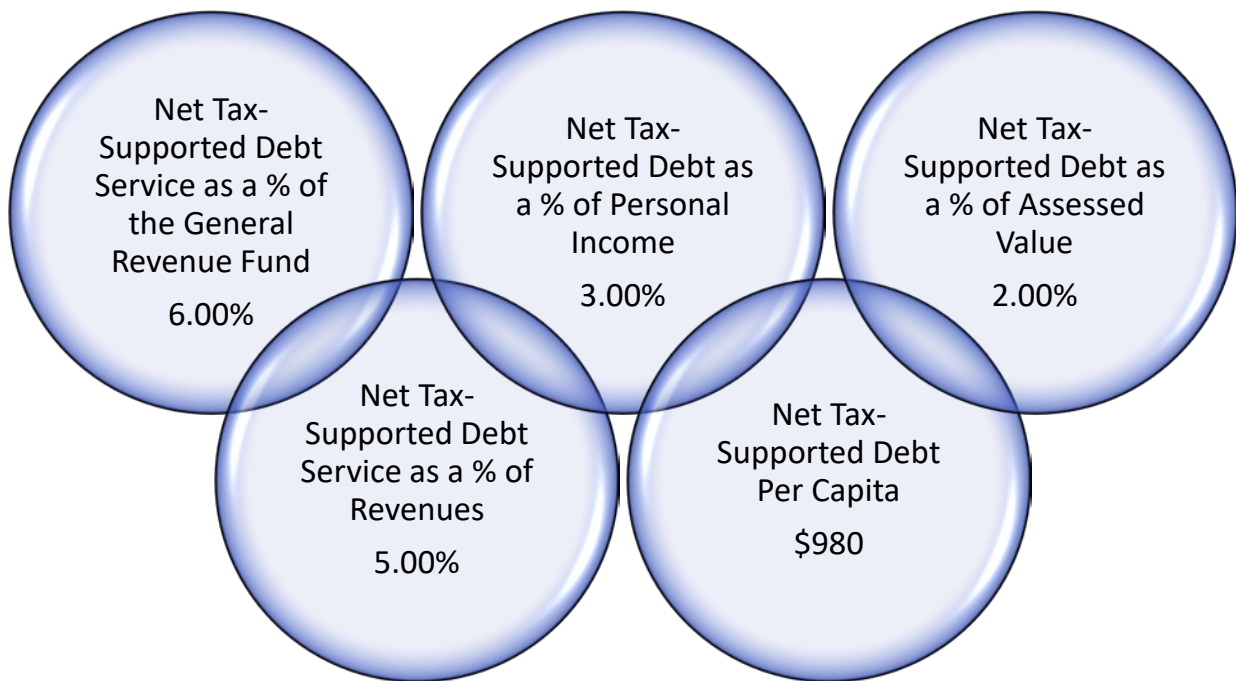
Summary

The goal of this report is to continue the State of West Virginia's practice of fiscal conservatism by making recommendations to help the state maintain a "moderate-to-low" debt burden. This burden does not consider the state's "soft" debts, such as pension liabilities or other post-employment benefits, but it does consider those debt issuances the state's citizens and its lawmakers have authorized.

The State of West Virginia is below two of the five recommended caps on the ratios examined in this report. As previously discussed, the state has issued \$1.4 billion in new GO bonds as of June 2020. Further, the State of West Virginia can issue an additional \$200 million in GO debt. This investment in the state's future must be carefully monitored to ensure it pays the expected dividends of long-term income and population growth for the State of West Virginia and its citizens. Maintaining a fiscally conservative approach will guide the State of West Virginia on the road to prosperity.

Summary of Recommended Caps

as of June 30, 2020



Appendix A

West Virginia State Code §12-6A-1, *et. seq.*

The Debt Management Act

ARTICLE 6A. THE DEBT MANAGEMENT ACT

§12-6A-1. Short title.

This article shall be known and may be cited as “The Debt Management Act”.

§12-6A-2. Legislative findings and declaration of public necessity.

The Legislature hereby finds and declares that in order to maintain the strong financial management of the state, to meet the fiscal needs of state government and to facilitate financing essential capital projects at the lowest possible cost to the citizens of the state, the state must regularly monitor the amount of debt issued by the state and its spending units, ensure the state and its spending units meet all debt service requirements, monitor the credit rating of the state and analyze the acceptance of debt issued by the state and its spending units. The Legislature further finds that in order to meet these important goals, the Division of Debt Management needs to be continued.

§12-6A-3. Division of Debt Management continued; director.

(a) The Division of Debt Management is continued in the office of the State Treasurer.

(b) The Division shall serve as a central information source concerning the incurrence, recording and reporting of debt issued by the state and its spending units, and shall prepare reports pertaining to the capacity of the state and its spending units to issue debt.

(c) The Treasurer shall appoint a director, qualified by reason of exceptional training and experience in the field of activities of his or her respective Division, and who shall serve at the will and pleasure of the Treasurer.

§12-6A-4. Definitions.

For the purpose of this article:

“Debt” means bonds, notes, certificates of participation, certificate transactions, capital leases, debentures, lease purchases, mortgages, securitizations and all other forms of securities and indebtedness obligations evidencing specific amounts owed and payable on demand or on determinable dates.

“Debt impact report” means a report prepared by the division which includes information pertaining to a proposed issuance of debt by the state or its spending units.

“Division” means the Division of Debt Management.

“Moral obligation bond” means a debt obligation for which the state or a spending unit has made a nonbinding covenant to make up any deficiency in debt service.

“Net tax-supported debt” means the amount of tax supported debt less any applicable refundings, defeasances, escrow accounts, reserve requirements and sinking funds.

“State” means the State of West Virginia.

“Spending unit” means a state department, agency, board, commission, committee, authority or other entity of the state with the power to issue and secure debt. Spending unit does not include local political subdivisions.

“Tax-supported debt” means: (1) General obligation bonds of the state; (2) moral obligation bonds of the state or a spending unit; (3) capital leases, installment purchases, lease purchases, mortgages, certificates of participation and any other similar debt financing transaction extending beyond one year issued by the state or its spending units; and (4) any other debt issued by the state or a spending unit which is not self-supporting. Debt issued by the West Virginia housing development fund, economic development authority, hospital finance authority, parkway authority, public energy authority, solid waste management board and water development authority, with the exception of debt secured by lottery revenues or secured by a lease with the Secretary of Administration, is not tax-supported debt.

§12-6A-5. Powers and duties.

The Division of Debt Management shall perform the following functions and duties:

(1) Continuously evaluate the current and projected debt and debt service requirements of the State and its spending units.

(2) Evaluate cash flow projections relative to proposed and existing revenue bond issues.

(3) Issue a debt impact report if requested by the Governor, the President of the Senate or the Speaker of the House of Delegates. The Division may request any additional information needed to issue a debt impact report. A debt impact report shall in no way restrict the Governor, the Legislature or the spending unit.

(4) Act as liaison with the Legislature on all debt matters, including, but not limited to, new debt issues and the status of debt issued by the State and its spending units.

(5) Assist the State and its spending units regarding the issuance of debt if requested.

(6) Establish reporting requirements for the issuance of debt by the State and its spending units pursuant to the provisions of this article.

(7) Monitor continuing disclosure requirements and post-issuance compliance issues with federal and state tax and securities law, including, without limitation, arbitrage, rebate and remedial measures.

(8) Make and execute contracts and other instruments and pay the reasonable value of services or commodities rendered to the division pursuant to those contracts.

(9) Contract, cooperate or join with any one or more other governments or public agencies, with any political subdivision of the State, or with the United States, to perform any administrative service, activity or undertaking which the contracting party is authorized by law to perform, charge for providing services and expend any fees collected.

(10) Do all things necessary or convenient to effectuate the intent of this article and to carry out its powers and functions.

§12-6A-6. Reporting.

(a) Within fifteen days following the end of each calendar quarter, each state spending unit shall provide the division and the Legislative Auditor, in the manner provided by this article and in such form and detail as the State Treasurer may require, a report including, but not limited to, the name of the state spending unit, the amounts and types of debt incurred during the calendar quarter and outstanding at the end of the calendar quarter, the cost and expenses of incurring the debt, the maturity date of each debt, the terms and conditions of the debt, the current debt service on the debt, the interest rate on the debt, the source of the proceeds utilized for repayment of the debt, the amounts of repayment during the calendar quarter, the repayment schedule and the security for the debt. A state spending unit having no outstanding debt shall not be required to provide the quarterly report but shall file an annual report, on forms established by the Division of Debt Management: *Provided*, That the state spending unit shall immediately notify the Division of Debt Management of any change in the spending unit's outstanding debt or financial condition.

(b) Not less than thirty days prior to a proposed offering of debt by the state or a state spending unit, written notice of the proposed offering and the terms thereof shall be given to the Division by the state spending unit in the form as the Division may require.

(c) Within thirty days after closing on an offering, the responsible spending unit shall report to the division the information pertaining to the offering required by the division in the form the division may require.

(d) On or before January 31 and July 31 of each year, the division shall prepare and issue a report of all debt of the State and its spending units and of all proposed debt issuances of which the division has received notice and shall furnish a copy of the report to the Governor, the President of the Senate, the Speaker of the House of Delegates, the members

of the Joint Committee on Government and Finance, the Legislative Auditor and upon request to any other legislative committee and any member of the Legislature. The report shall be kept available for inspection by any citizen of the state. The division shall also prepare updated reports of all debt of the state and its spending units as of March 31 and September 30 each year, which shall be available for inspection at the office of the state Treasurer within thirty days of the end of the respective calendar quarter.

(e) On or before January 15 each year, the division shall report to the Governor and to the Legislature on the capacity of the state to issue additional debt. In preparing its annual review and estimate, the division shall, at a minimum, consider:

(1) The amount of net tax-supported debt outstanding and debt authorized but not issued during the current and next fiscal year and annually for the following ten fiscal years;

(2) Debt service requirements during the current and next fiscal year and annually for the following ten fiscal years based upon existing outstanding debt, previously authorized but unissued debt and projected bond authorizations;

(3) Any information available from the budget office of the department of revenue in connection with projected revenues and anticipated capital expenditures projected for at least the next five fiscal years;

(4) The amount of debt the state and its spending units may prudently issue;

(5) What is needed to keep West Virginia within an average to low range of nationally recognized debt limits;

(6) The debt ratios rating agencies and analysts use; and

(7) The effect of authorizations of new tax supported debt on each of the considerations in this subsection.

§12-6A-7. Promulgation of rules.

The Treasurer shall propose rules for legislative approval relating to the reporting requirements and duties under this article in accordance with the provisions of article three, chapter twenty-nine-a of this code.

Appendix B

Revenue Information

Revenue & Revenue Projections
(thousands)
2020-2031 (projected)

<u>Year</u>	<u>General Revenue</u>	<u>Road Fund</u>	<u>Lottery**</u>	<u>Severance</u>	<u>Total</u>
2015	4,193,310	742,998	405,400	23,000	5,364,708
2016	4,102,679	691,481	403,645	22,500	5,220,305
2017	4,166,510	691,645	386,612	21,656	5,266,423
2018	4,245,258	797,088	398,512	19,377	5,460,235
2019	4,756,336	868,485	488,132	20,557	6,133,510
*2020	4,437,857	850,856	369,182	21,947	5,679,843
*2021	4,574,514	871,217	436,555	21,936	5,904,222
*2022	4,505,866	841,556	411,555	32,955	5,791,932
*2023	4,566,416	848,366	411,555	21,938	5,848,275
*2024	4,762,366	870,000	411,555	22,201	6,066,122
*2025	4,925,966	870,000	411,555	22,210	6,229,731
*2026	5,091,151	870,000	411,555	22,201	6,394,907
*2027	5,218,430	870,000	411,555	22,201	6,522,186
*2028	5,348,891	880,000	411,555	-	6,640,446
*2029	5,482,613	882,000	411,555	-	6,776,168
*2030	5,619,678	882,000	411,555	-	6,913,233
*2031	5,760,170	882,000	411,555	-	7,053,725

Notes: Revenue information provided by the West Virginia Budget Office
Federal funds are excluded from the revenue totals
Lottery fund does not include any revenue added to General State Revenue Fund
Miscellaneous Receipts included in State Road Fund beginning in FY2019

* Estimates

** Fiscal Year 2019 collections do not include \$104.201 million in appropriated funds
from General Revenue

*** Net of transfers to the General Revenue Fund