REPORT

OF THE

STATE DEBT POLICY ADVISORY COMMISSION

2020 Legislative Update

January 28, 2020

TOBIAS READ, Chair
Oregon State Treasurer
Ex-Officio Member

TIMOTHY DUY
Professor of Economics,
University of Oregon
Public Member

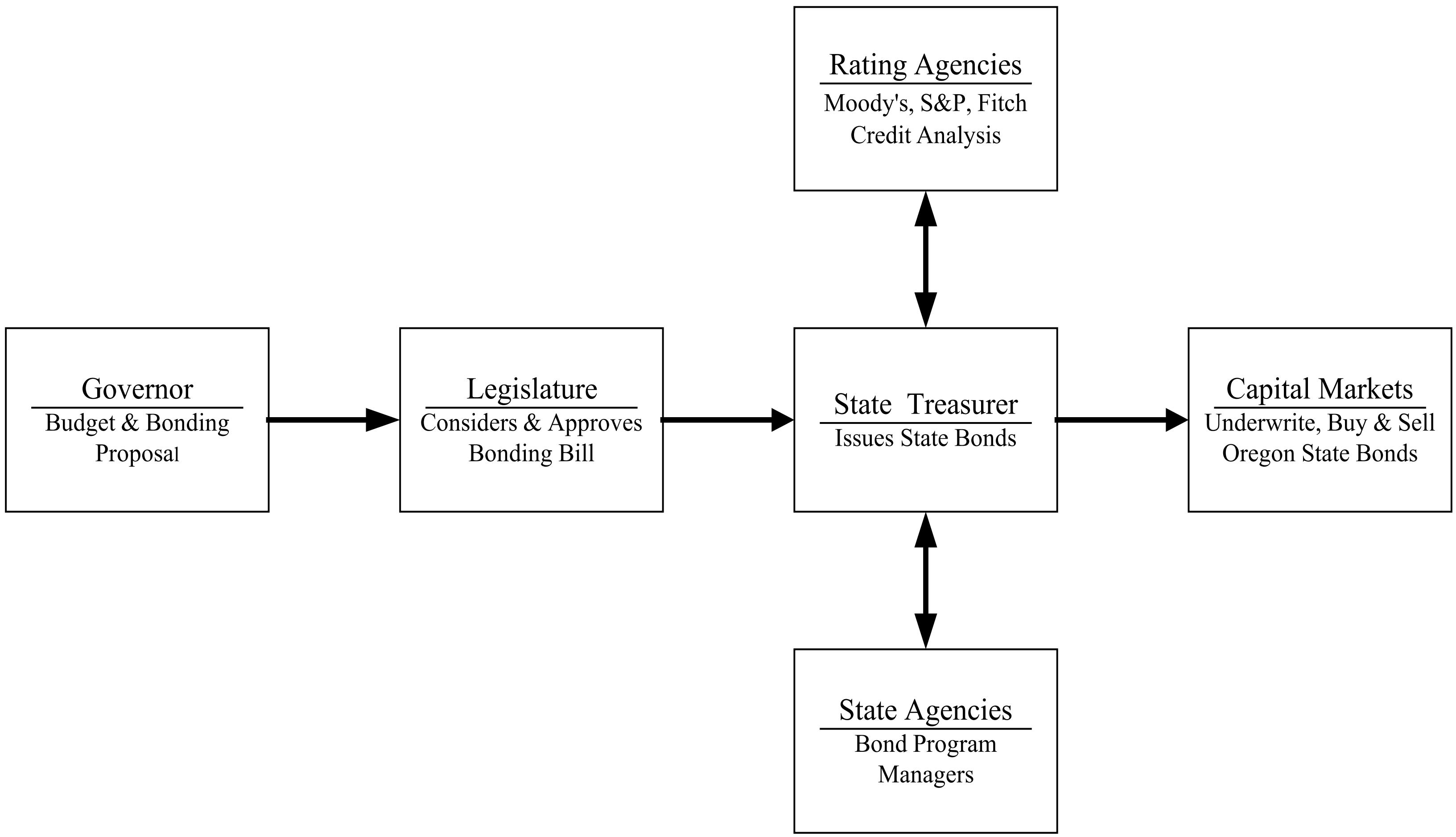
NANCY NATHANSON
Representative, District 13
House of Representatives Appointee

BETSY JOHNSON
Senator, District 16
Senate Appointee

KATY COBA
Director, Department of
Administrative Services
Ex-Officio Member

STAFF
Debt Management Division
Office of the State Treasurer
350 Winter Street NE, Suite 100
Salem, Oregon 97301-3896
Phone: (503) 378-4930
Email: dmd@ost.state.or.us

Oregon Bonding Process



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COMMISSIONER TOBIAS READ, CHAIR
Oregon State Treasurer
COMMISSIONER TIMOTHY DUY
Public Member
COMMISSIONER NANCY NATHANSON
Representative, Oregon House of Representatives
COMMISSIONER BETSY JOHNSON
Senator, Oregon Senate
COMMISSIONER KATY COBA
Director, Department of Administrative Services

STATE DEBT POLICY
ADVISORY COMMISSION
350 WINTER STREET NE, SUITE 100
SALEM, OREGON 97301-3896

(503) 378-4930

STATE DEBT POLICY
ADVISORY COMMISSION

January 28, 2020

Governor Brown and Members of the 2020 Oregon Legislature:

I am pleased to present you with the *2020 Legislative Update* from the State Debt Policy Advisory Commission (the "Commission"), which provides the latest projections of debt capacity, based on current capital market conditions and the impact of bond authorizations by the 2019 Legislature.

The Commission serves to advise the Governor and Legislature on policies related to State debt and long-term capital financing. This report intends to provide policymakers with an overview of the State's long-term bonding capacity and to highlight emerging policy issues of concern in the debt arena.

Highlights of this year's report include:

- Based on the State's most recent long-term general fund revenue forecast which extends out to FY 2029, the $1.15 billion in General Fund supported debt authorized by the 2019 Legislature for the 2019-21 biennium remains well within the Commission's recommended General Fund debt capacity limits. We estimate that the State can authorize up to $315 million this biennium and **$1.5 billion** in additional General Fund-supported debt in each of the next four biennia ($6.3 billion total) while staying within our maximum debt capacity limit of 5% General Fund debt service to General Fund revenue.
- The Commission projects that due to the increased forecast of net Lottery proceeds, Lottery bond capacity for this biennium is $333 million overall, and will grow to **$423 million** in each of the next four biennia (or $1.7 billion total over the forecast period). Since the 2019 Legislature already authorized the issuance of $302.5 million in lottery backed bonds for this biennium, this leaves up to $30.5 million in additional capacity that may be allocated in the interim session in February 2020. The Commission nevertheless cautions that Lottery proceeds remain a highly sought-after resource and that additional Lottery bond authorizations will reduce future lottery resources for other purposes.

Our state's strong financial management practices, including prudent management of debt, history of balanced budgets, and growing budgetary reserves, are all reasons the State receives strong credit ratings and achieve superior results when borrowing in the municipal capital markets. Our new money offerings obtain lower interest rates and the refunding of existing state indebtedness provides substantial cost savings. The State's General Obligation debt is rated AA+/Aa1/AA+ by Standard & Poor's, Moody's Investors Service, and Fitch Investors Service respectively. Our Lottery bond program also continues to garner strong ratings of AAA and Aa2 by Standard & Poor's and Moody's Investors Service respectively.

Looking forward, Oregon will continue to be well served by maintaining our long-standing commitment to fiscal discipline in the authorization and issuance of State bonds. Debt is a powerful tool that can enhance the state's economic development, improve our public institutions, and build the capacity of future generations to compete and flourish. At the same time, it is a tool that has been – and should continue to be – used wisely and as cost-effectively as possible.

An example of a fiscally prudent approach to long-term capital planning and debt management is the expanded use of our debt capacity to fund capital renewal and deferred maintenance at state facilities and public universities, which will help us avoid larger replacement costs in the future.

As you make decisions critical to Oregon's long-term financial health, please consider the Commission and its staff as a resource available to you at any time.

Sincerely,

Tobias J. Read, State Treasurer
Chair, State Debt Policy Advisory Commission

EXECUTIVE SUMMARY

Public borrowing is an important tool in Oregon's efforts to improve the State's infrastructure, educational capacity, and public buildings that impact the state's economy and the quality of life of Oregonians for generations to come. However, public borrowing must be used carefully because the resulting debt repayment becomes a fixed cost in future State budgets and an over-reliance on borrowing can cause deterioration in the State's credit ratings, resulting in higher borrowing costs.

Oregon Revised Statutes 286A.250 to 286A.255 establishes the State Debt Policy Advisory Commission. In accordance with these statutes, the five-member Commission is chaired by the State Treasurer and consists of a public member appointed by the Governor, an appointee from the Senate and the House of Representatives, and the Director of the Department of Administrative Services. The Commission is charged with advising the Governor and the Legislative Assembly regarding policies and actions that will enhance and preserve the State's credit rating and maintain the future availability of low-cost capital financing. In carrying out this function, the Commission is required to prepare an annual report to the Governor and the Legislative Assembly as to the available debt capacity of the State of Oregon.

The Commission's *2019 Commission Report* was published January 25, 2019 and incorporated the impact of the bonding authorizations of the 2017 and 2018 Legislatures (the "2017-19 bond bill') and the December 2018 general fund and lottery revenue projections of the Office of Economic Analysis (OEA) on the state's long-term debt capacity.

In anticipation of the upcoming 2020 legislative session, the *2020 Legislative Update* is intended to provide a comprehensive overview of the State's current debt position, incorporating the actual amount of state debt sold in FY 2019, the most recent long-term revenue projections of OEA, and the impact of new bonding authorizations adopted by the 2019 Legislature in HB 5005 (the "2019-21 bond bill").

The report evaluates debt capacity and debt burden for State bonding programs in four major categories: General Fund-supported debt, Lottery revenue-backed debt, net tax-supported debt, and non-tax supported debt.

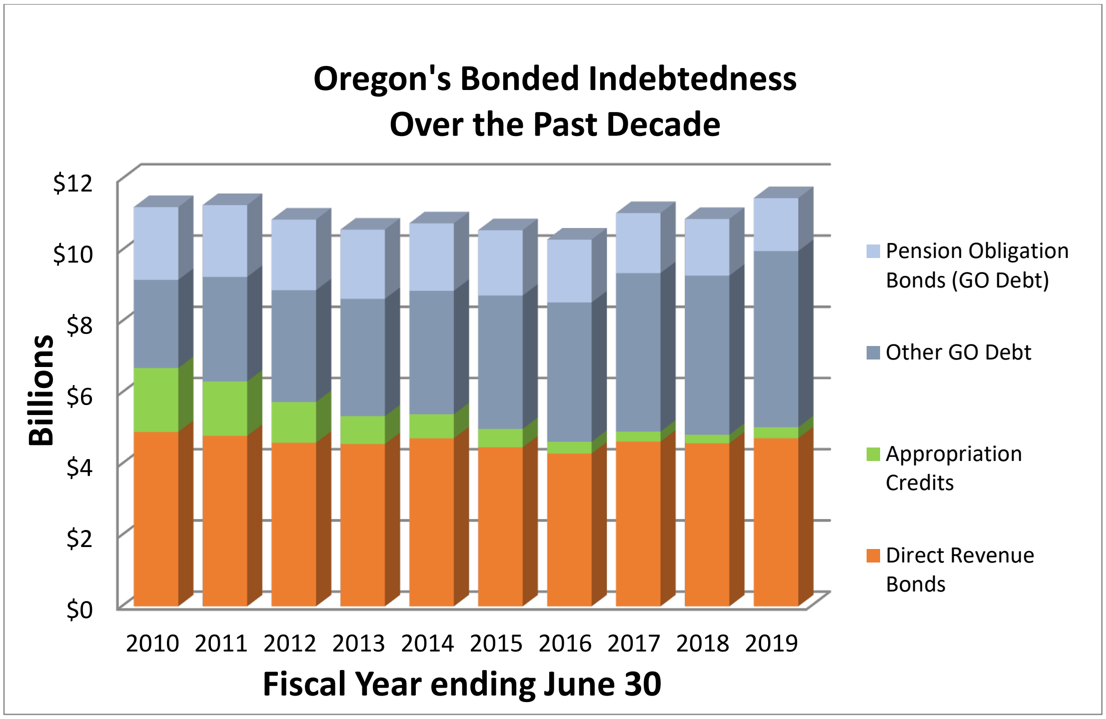
The Commission's findings are briefly outlined below and discussed in detail in the report itself.

<u>Overall State Debt Levels</u>

Oregon's combined long-term general obligation, appropriation and revenue bond debt outstanding was $11.5 billion as of June 30, 2019.[1] This represents an increase of $600 million compared to the end of the 2018 fiscal year.

The following chart displays the ten-year trend in overall state indebtedness. While overall state debt levels have not increased much since FY 2010, the mix of debt outstanding has shifted, with the reduction in outstanding appropriation debt replaced with lower cost general obligation bonds. Given the State's long-term commitment to managing its debt capacity in a prudent manner, new debt issuances have been timed for issuance at roughly the same pace and amounts that existing debt has been scheduled for retirement.

[1] Excludes conduit or "pass through" revenue bonds.



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The total debt outstanding for general fund-supported state debt was $4.0 billion as of June 30, 2019. This amount is expected to increase to $4.5 billion by the end of the 2019-21 biennium assuming the retirement of approximately $517 million in existing debt and the issuance of approximately $946 million in new General Fund supported debt, as authorized by the 2019 Legislature. Based on the OEA December 2019 revenue forecast and the planned timing of authorized bond sales over the balance of the biennium, we project that debt service as a percentage of General Fund revenues will not exceed 4.5% in FY 2021, which is well within the Commission's General Fund supported debt capacity target of 5.0%

Using this maximum target debt ratio of 5.0% going forward, the Commission estimates the State has approximately $6.3 billion in additional General Fund-supported debt capacity over the next four biennia in addition to the $946 million in General Fund-supported debt already authorized for sale in this biennium. Of the overall total remaining, there is approximately $315 million in unused 2017-19 General Fund-supported debt capacity that the Legislature may consider allocating at its interim Legislative session in February 2020.

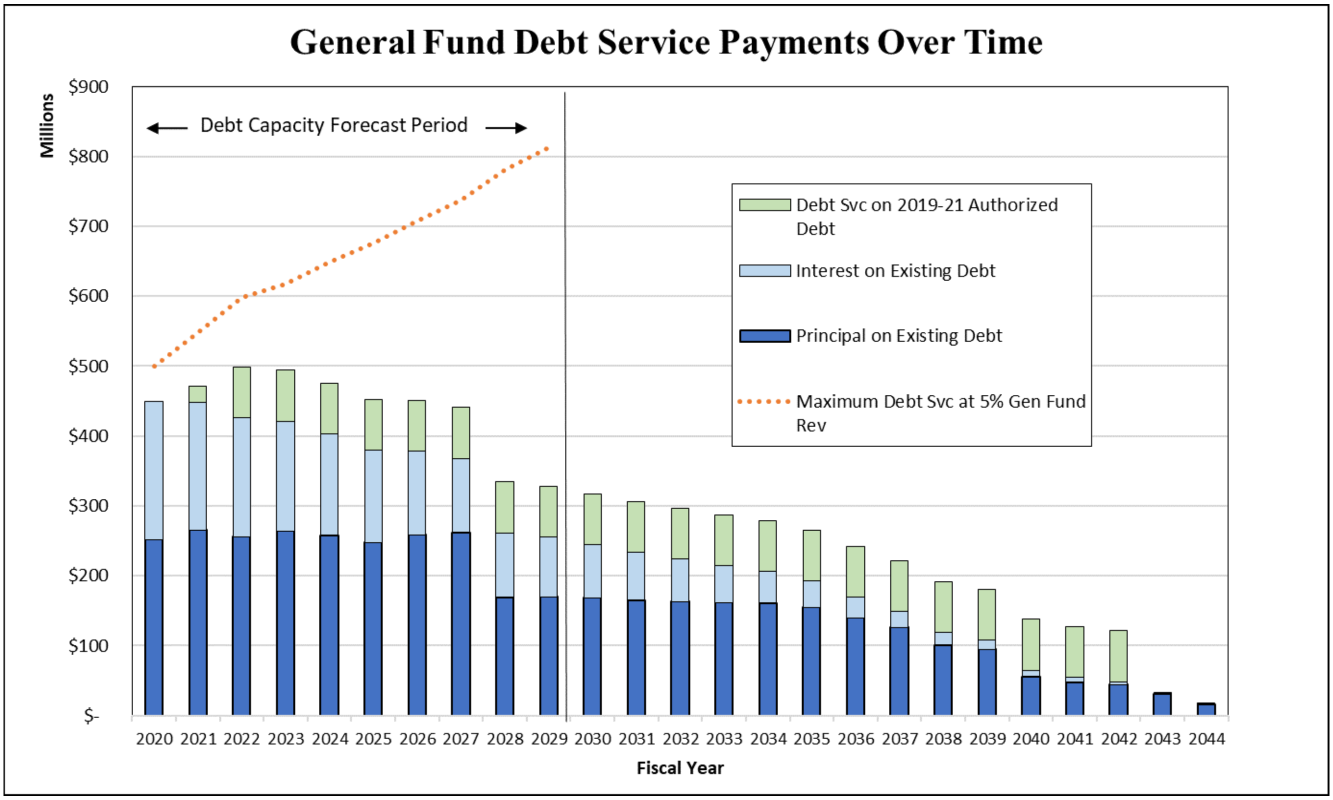
Historically, the Commission has recommended that the State spread out this remaining General Fund debt capacity over time, which would result in a maximum of $1.5 billion per future biennium, as shown below. This "averaging" approach has served the State well over the years, as it has helped mitigate the impact of fluctuations in the State's revenues and long-term interest rates which together can significantly impact the state's long-term debt capacity and allows for more consistent long-term capital planning and budgeting.

Projected Debt Capacity for General Fund Supported Debt Programs*
($ Millions)

Fiscal Year Ending June 30th	Maximum Annual Amount of Debt Issuance within 5% Target Capacity	GF Debt Service as a % of General Fund Revenues	SDPAC's Recommended Maximum Annual Amount of Debt Issuance	GF Debt Service as a % of General Fund Revenues
2020	$ 63.0	4.5%	$ 63.0	4.5%
2021	252.1	4.5%	252.1	4.5%
2022	983.1	5.0%	748.6	4.8%
2023	305.8	5.0%	748.6	5.1%
2024	657.3	5.0%	748.6	5.1%
2025	647.3	5.0%	748.6	5.2%
2026	425.0	5.0%	748.6	5.4%
2027	524.0	5.0%	748.6	5.5%
2028	1,965.7	5.0%	748.6	4.8%
2029	480.8	5.0%	748.6	5.0%
Total	**$6,304.0**		**$6,304.0**	

* Assumes issuance of $946 million in General Fund supported bonds authorized by the 2019 Legislature.

The projected increase in future General Fund debt capacity of approximately $1.5 billion per biennium is significant, as it is roughly $400 million higher than in past biennial budget cycles. As the next graph shows, there is a considerable drop in debt service after FY 2027, which is when the final payment on the State's outstanding 2003 issue of pension obligation bonds (POBs) will be made – even with averaging, the extension of the forecast period to include the two fiscal years after the final POB payment is made opens up significant additional General Fund debt capacity while still remaining within prudent overall debt limits.



LOTTERY REVENUE BOND DEBT

Total Lottery revenue bonds outstanding was $1.19 billion as of June 30, 2019. The covenants in the Lottery revenue bond indenture require a minimum debt service coverage ratio of four times unobligated net Lottery proceeds.

Over the past several years, the Commission made a series of downward revisions to its estimate of the State's future Lottery debt capacity, based on OEA's downward revisions of long-term Lottery revenues due to new gaming competition in Washington State and potential trends in reduced consumer spending on gaming. Recent OEA lottery forecasts, however, have included significant upward revision to the ten-year lottery revenue projections, which in turn has led to healthy increases in the Commission's projection of lottery debt capacity compared to previous SDPAC reports.

The Commission now projects that based on this improved revenue forecast, there is a maximum of $1.7 billion in additional Lottery bond capacity available over the next four biennia, in addition to the $302.5 million in Lottery bonds already authorized for sale in FY 2021. Assuming that approximately $30.5 million in "unused" 2017-19 lottery capacity is authorized this biennium, and that the Legislature continues to spread out Lottery bond capacity evenly over time, the Commission projects that future lottery bond capacity will grow to $423 million per biennium in the future; if the net proceeds from the new sports betting program run by the Oregon Lottery is excluded in the capacity calculation, the overall capacity drops by roughly $84 million or $21 million per biennium.

The Commission nevertheless cautions that net Lottery proceeds are a scarce resource and due to the relatively volatile nature of this revenue source, its use should remain constrained. In addition to funding Lottery bond debt service, net Lottery revenue funds critical educational and economic development programs throughout the state. To the extent lottery revenues are dedicated to repayment of Lottery-backed debt, they are not available for other uses until these bonds are repaid in full. Therefore, the Commission recommends that the Legislature and Governor continue to target the use of Lottery bonding to the most critical state projects so that sufficient Lottery revenue continues to be available to fund the on-going operations of various state programs that rely on Lottery funding.

Projected Debt Capacity for Lottery Revenue Bond Program*

($ Millions)

Fiscal Year Ending June 30th	Maximum Annual Amount of Debt That Can be Issued within Debt Service Coverage Requirements	Debt Ratio Coverage (Times)	Debt Service as a % of Lottery Revenues	SDPAC's Recommended Maximum Annual Amount of Debt That Should Be Issued	Debt Ratio Coverage (Times)	Debt Service as a % of Lottery Revenues
2020	n/a	5.5	18%	n/a	5.5	18%
2021	$ 30.5**	5.5	18%	$ 30.5 **	5.6	18%
2022	452.6	4.0	25%	211.3	4.5	22%
2023	120.5	4.0	25%	211.3	4.0	23%
2024	116.9	4.0	25%	211.3	3.3	24%
2025	104.1	4.0	25%	211.3	2.8	25%
2026	111.7	4.0	25%	211.3	2.3	26%
2027	204.3	4.0	25%	211.3	1.9	26%
2028	322.8	4.0	25%	211.3	1.7	25%
2029	257.6	4.0	25%	211.3	1.4	25%
Total	**$ 1,721.1**			**$ 1,721.1**		

*Assumes issuance of $302.5 million in Lottery revenue bonds as authorized by the 2019 Legislature.
**Balance of biennial Lottery debt capacity not allocated by 2019 Legislature.

NET TAX-SUPPORTED DEBT

While the amount of state indebtedness has remained relatively constant over the past decade, Oregon's Net Tax-Supported Debt (NTSD) per capita is considerably higher than the national average. As a geographically large state with an extensive highway network and a growing population, the State has issued a substantial amount of Highway User Tax, Lottery Revenue, and General Obligation bonds to address deferred maintenance and critical building and infrastructure needs around the state. In addition, the state issued approximately $2.0 billion in pension obligation bonds in 2003 to address its unfunded Public Employee Retirement System (PERS) liability, which significantly increased the state's net tax-supported debt.

At the end of FY 2019, Oregon's outstanding NTSD stood at roughly $8.7 billion. By the end of FY 2021, this amount is projected to increase by $670 million to $9.4 billion, as existing NTSD is retired and new General Obligation, Highway User Tax and Lottery Revenue bonds authorized by the 2019 Legislature are sold to investors. This in turn will increase the State's debt per capita ratio and debt as a percentage of personal income respectively.

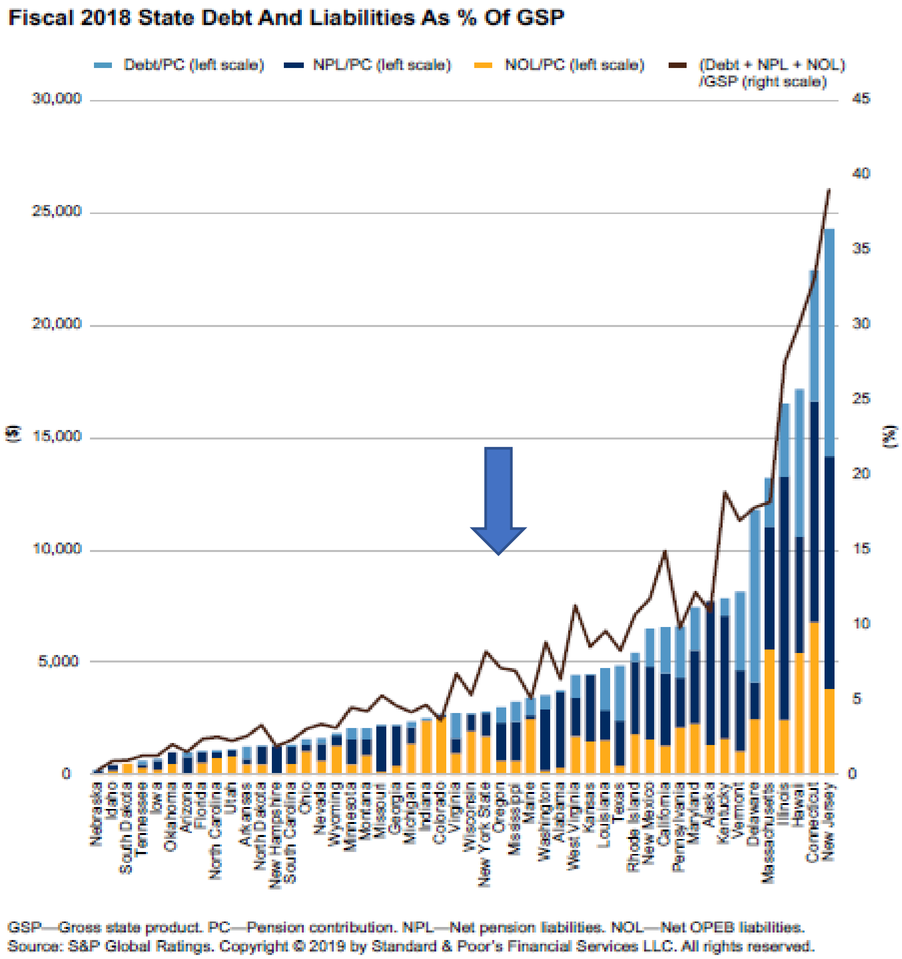
State of Oregon
Net Tax-Supported Debt Ratios

	Fiscal Year Ending June 30th		
	FY 2019 (Actual)	**FY 2020 (Projected)**	**FY 2021 (Projected)**
Net Tax-Supported Debt (Billions)	$ 8.70	$ 8.52	$ 9.37
Population*	4,242,700	4,299,400	4,349,800
Personal Income (Billions)*	$224.4	$234.4	$246.0
NTSD Per Capita	$ 2,051	$ 1,982	$ 2,153
NTSD as a % of Personal Income	3.88%	3.63%	3.81%
Pension Obligation Bonds Excluded			
NTSD Per Capita	$1,701	$1,664	$1,871
NTSD as a % of Personal Income	3.22%	3.05%	3.31%

*Source: Oregon Office of Economic Analysis, December 2019 economic and revenue forecast report.

Rating agencies typically calculate total net tax-supported debt both with and without pension obligation bonds. Consequently, states that issue POBs are not overly penalized when compared to other states with a relatively low debt burden, but have sizable unfunded pension liabilities. When pension obligation bonds are excluded from this NTSD calculation, our projected FY 2021 debt burden drops to $1,871 per capita and 3.3% as a percentage of personal income.

In recent years, the national rating agencies have placed more emphasis on states' overall balance sheet liability (their public net tax-supported debt as well as their unfunded actuarial pension liability and other post-employment benefits or OPEB liability); by this measure, Oregon's overall balance sheet liability per capita and relative to gross state product was near the national median for states in FY 2018, as shown in the next graph:



Source: Standard & Poor's, *U.S. State Pension Reforms Partly Mitigate the Effects of the Next Recession,* Sept 26, 2019. Please note in the chart above, the net pension liability used for each state is based on the amount reported in their Comprehensive Annual Financial Reports as of June 30, 2018, as now required by GASB. "OPEB" means Other Post-Employment Benefits, which generally include retiree health care benefits guaranteed for payment by a state.

FUNDING OF DEFERRED MAINTENANCE FOR STATE FACILITIES

The State of Oregon has current and future capital needs related to maintaining aging, state-owned facilities (the mean age of which is 40 years). The state-owned facility portfolio, including higher education facilities, is approximately 39 million gross square feet (MGSF) located in over 5,100 separate buildings. State buildings and grounds are currently valued at $7.7 billion. Delaying the funding of ongoing maintenance, repairs and timely system replacements to the point that major renovations are required to maintain safe and adequate usage will cost significantly more than if these facilities are well-maintained in the first place. Based on facility assessments conducted on over 70% of the state's agency-owned major buildings and campuses, the capital renewal and deferred maintenance needs for assessed buildings are estimated to cost over $1 billion within the next 10 years. To the extent agency operating budgets are not sufficient to address ordinary maintenance and repairs of state facilities, this unmet need will continue to put pressure on the state's limited debt capacity to catch up on deferred maintenance through extensive and expensive renovation projects. At 2% per biennium, or $154 million, the Department of Administrative Services projects that by FY 2026 the State's investments in addressing the backlog in deferred maintenance would exceed the growth in deferred maintenance costs. Given the strong revenue picture this biennium, the Commission commends the 2019 State Legislature for approving funding of deferred maintenance and capital improvements at 2.95 percent of the current replacement value of state buildings, which will allow the state to address more of its facilities maintenance backlog sooner than initially anticipated.

A recent long-term strategic capital plan published by the Higher Education Coordinating Commission recommends establishing a similar type of funding scheme for the deferred maintenance needs of the state's public universities. The report notes that national higher education facility management "best practice" calls for investing at least 2.5 percent per year of the current replacement value in capital renewal of existing assets, which would translate into approximately $250 million per year.

TIMING OF STATE BOND SALES

In addition to determining the specific projects that will be authorized for bonding in the biennial Bond Bill, the Legislature in recent years has also directed the specific timing of State bond sales by delaying the appropriation of debt service on state funded projects until the following biennium. As a result, the majority of State General Obligation and Lottery Revenue Bonds have been sold during the last few months of the biennium in which they were initially authorized. While this strategy may have been necessary from an overall state budget management perspective in the years following the Great Recession, it has not always resulted in the State being able to achieve optimal interest rates at the time of the sale of these bonds. The clustering of a number of large dollar Oregon bond issues in too short a time frame floods the capital markets to the point where supply exceeds demand, which in turn requires the State to offer bonds at higher interest rates than would otherwise be required to assure their final placement with investors.

Given the strength of the Oregon economy and the improving General Fund and Lottery revenue picture, it would behoove decision-makers to reconsider this delayed debt service budget strategy and allow a larger percentage of approved capital projects to be financed in the first year of the biennium. This approach would spread out the sale of State bonds in a more even fashion and allow for a better balance of supply and demand for our bonds across the entire biennium.

EMERGING ISSUE OF CONCERN – PRIVATE ACTIVITY BOND ALLOCATIONS

Each year, the federal government allocates a limited amount of "private activity" tax-exempt financing authority to each state for their distribution to various qualified economic and community development projects. Historically, the State has allocated its private activity bond (PAB) volume cap primarily to affordable housing construction and rehabilitation, first time homebuyer mortgage programs, and a select number of solid-waste, port, and energy production projects around the state.

While Oregon has historically had an abundance of PAB allocation available for these purposes, it is unlikely that this will be the case in the coming years. There has been a sharp increase in the state's economic and construction activity and a commensurate growth in requests for PAB allocations by various economic development and affordable housing projects. In recognition of the need to accelerate the construction of affordable housing around the state, the 2019 Legislature doubled its previous annual allocations to the Oregon Housing and Community Services Department in the 2019-21 bond bill, which in turn reduced the annual amounts allocated to the PAB Committee. Consequently, obtaining future PAB allocations for local economic development and affordable housing projects through the PAB Committee will likely become a more challenging and contentious process, requiring careful thought and deliberation as to the highest and best uses of this limited financial resource.

CONCLUSION

While the Commission projects increased debt capacity in the next several biennia, it notes that this long-term debt capacity remains modest compared to the wide range of potential new state and local capital projects, seismic and other building improvements, information technology upgrades, and other state infrastructure needs. The Commission continues to recommend that the Legislature and Governor limit their bonding authorizations to only the highest priority essential State capital projects in order to maintain the State's strong credit ratings and overall healthy financial position.

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I. BONDING IN OREGON

Historically, Oregon has operated under a biennial debt review and authorization process. Under that model, each individual bonding program receives specific legislative authorization and is managed by a state government agency. The Oregon State Treasury, as issuer of all State of Oregon bonds, is charged with the responsibility to centrally oversee all long-term debt programs. The State uses four primary types of long-term debt finance obligations: general obligation bonds (GOs), direct revenue bonds, appropriation credits, and conduit revenue bonds. General obligation bond authorized limits are normally expressed as a percentage of statewide value of taxable property. Revenue bonds and appropriation credits are usually limited by the Legislature to a specific dollar amount.

A brief explanation of the bond authorization and issuance process and the debt obligation types and associated State of Oregon bonding programs are provided below.

A. *Authorization and Issuance Process*

State Treasurer

The State Treasurer has been given responsibility and authority with respect to the sale and management of State bonds. The State Treasurer has assigned day-to-day responsibility for the coordinated issuance of all state obligations to the Debt Management Division of the Oregon State Treasury. The Division reviews the structure and security features of each bond and appropriation credit and recommends issuance to the State Treasurer. In addition, the Division coordinates the timing of the various agency bond sales, administers the issuance of bonds, secures credit ratings, prepares transcripts and other documents, provides for the delivery of bonds, assists with the signing and closing of bond issues, and coordinates the State's primary and secondary market disclosure responsibilities as required by regulations promulgated by the Security and Exchange Commission (SEC). In addition, Division staff provides advice to State agencies regarding market developments and makes debt policy and legislation recommendations to the State Treasurer.

Biennial Legislative Limitations

In addition to constitutional and statutory authorities and limitations, Oregon has historically followed a legislative practice of biennially approving bond volume limits. Prior to each biennium, the Governor's budget, in conjunction with advice from the State Treasurer, details program amounts recommended for bonding authority during the upcoming biennium. The budget recommendation considers requests by agencies for capital project needs, as well as grant and loan program needs. The Legislature then conducts a program-by-program review process and approves what it determines to be an appropriate level of issuance. Although this process has been successful, increasing demand for financing state capital needs necessitates a more comprehensive and longer-range approach to capital financing. The purpose of this report is to give the Governor and the Legislature additional advice when considering and approving biennial bond volume limits, as well as to make recommendations the Commission believes would enhance the State's bond ratings and maintain access to low-cost capital financing.

B. *State of Oregon Bonding Authorizations*

General Obligation Bonds

General Obligation (GO) debt is secured by the full faith and credit of the participating issuer, for our purposes, the State of Oregon. Typically, GO debt necessitates constituency approval. In the State's case, each GO bond program was created by a constitutional amendment passed by state voters. Therefore, the People of the State have unconditionally pledged to pay debt service (i.e. principal and interest) payments, over the life of each GO issue. This means that barring the existence of other adequate repayment sources, all unrestricted public revenues must be used as needed to support debt service payments. This may include the levy of a statewide property tax if necessary and allowed by law.

Article XI, Section 7 of the Constitution provides the State with the general authority to issue GO debt. Currently, there are 18 constitutionally authorized GO bond programs.[1] While each of these programs has the potential for drawing on the State's General Fund or other taxing authority, many of the programs are fully self-supporting and are repaid from program revenues, gifts, grants, or other revenue streams.

The constitutionally authorized State of Oregon GO bond programs are listed below.[2]

- General Purpose Bonds – Article XI, Section 7
- State Highway Bonds – Article XI, Section 7
- Veterans Welfare Bonds – Article XI-A
- State Power Development Bonds – Article XI-D
- State Forest Rehabilitation Bonds – Article XI-E
- Higher Education Building Bonds – Article XI-F (1)
- Higher Education Facilities and Community College Bonds – Article XI-G[3]
- Pollution Control Bonds – Article XI-H
- Water Resources Bonds – Article XI-I (1)
- Elderly and Disabled Housing Bonds – Article XI-I (2)
- Alternate Energy Bonds – Article XI-J
- Oregon School Bond Guaranty Program – Article XI-K
- Oregon Opportunity Bonds – Article XI-L
- Seismic Rehabilitation of Public Education Buildings – Article XI-M
- Seismic Rehabilitation of Emergency Services Buildings – Article XI-N

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[1] General Purpose bonds and State Highway bonds are both provided constitutional bonding authority by Article XI, Section 7. Likewise, Article XI-G provides constitutional bonding authority for both Higher Education bonds and Community College bonds.

[2] There is currently no outstanding general obligation debt related to State Power Development, State Forest Rehabilitation, Water Resources, and Oregon School Bond Guaranty Program.

[3] Higher Education Facilities GO bonds were historically issued by the Board of Higher Education, whereas Community College GO bonds were issued by the Board of Education. Higher Education and Community College bond issuance are combined and charged against the total debt authorized by the State Constitution Article XI-G.

- Pension Obligation Bonds – Article XI-O
- Public School Facilities Bonds – Article XI-P
- State Property Bonds – Article XI-Q

Direct Revenue Bonds

Unlike GO bonds, direct revenue program debt is not secured by the State's unlimited pledge to fund debt service with unrestricted public revenues or, where permitted, a statewide ad valorem property tax. Rather, funds to pay debt service are provided by a specific dedicated revenue stream, and normally program revenues are directly associated with the funded project(s). Further, revenue programs typically do not require a vote of the People, but must be authorized by the Legislative Assembly. The State Legislature at all times holds the right to refer program approval to Oregon voters.

Oregon Revised Statutes provide for a variety of revenue bond programs. These programs are each considered fully self-supporting, and have no GO backing from the State. However, if program revenues were to become insufficient to support debt service payments, this does not preclude the State from providing a funding stream. Statutorily authorized direct revenue bond programs that are currently active are listed below.

- State Highway User Tax Bonds – ORS 367.620
- Oregon Transportation Infrastructure Fund Bonds – ORS 367.630[1]
- Lottery Revenue Bonds – ORS 286A.560 to 286A.585
- Oregon Bond Bank Revenue Bonds – ORS Chapter 285B.320 to 285B.371
- Single-Family and Multifamily Revenue Bonds – ORS 456.661

Conduit Revenue Bonds

Conduit revenue bonds are securities that are issued by a governmental unit to finance a project for a third party. Debt service payments are the obligation of the third-party borrower and do not constitute a GO debt of the State or the issuing governmental agency. Economic and industrial development revenue bonds are a common type of conduit revenue security.

The State has three authorized and active conduit or "pass-through" revenue bond programs:

- Oregon Facilities Authority (OFA) – ORS Chapter 289.200 to 289.240
- Industrial Development Revenue Bonds – ORS Chapter 285B.320 to 285B.371
- Housing Development Revenue Bonds – ORS 456.692
- Beginning & Expanding Farmer Loan Revenue Bonds – ORS Chapter 285A.420 to 285A.435

Under these programs, the State is considered the issuer, but has no obligation to pay debt service. Payments are made by the entities on whose behalf the bonds were issued.

[1] Various legislative bills have authorized the sale of Transportation Infrastructure Bonds; however, no bonds have been issued to date by this program.

Appropriation Credits

Similar to revenue program debt, appropriation credits are not secured by the State's unlimited pledge to fund debt service with unrestricted public revenues or, where permitted, a statewide ad valorem property tax. The State has historically used two types of appropriation credits:

- Appropriation Bonds – SB 856 – 2003 Legislature
- Certificates of Participation (COPs) – ORS 283.085

These credits are special limited obligations of the State payable solely from funds appropriated or otherwise made available by the State Legislative Assembly. The obligation of the State to provide appropriated moneys and to pay the bonds is subject to future appropriation by the Legislature for the fiscal period in which payments are due. As with State direct revenue bond programs, appropriation credits do not require a vote of the People, but must be authorized by the Legislative Assembly. In 2010, voters approved Constitutional amendment Article XI-Q, which authorizes the State to issue GO Bonds for various State-owned or operated office buildings, facilities and other capital projects. Rather, as market conditions allow, the State has been refunding existing COPs with XI-Q bonds; to date, the State has refunded \$632 million in outstanding COPs with XI-Q GO bonds, saving an estimated \$101.4 million in interest costs on a present value savings basis.

EXHIBIT I.1
STATE OF OREGON OUTSTANDING LONG-TERM FINANCIAL OBLIGATIONS AND CONSTITUTIONAL AND STATUTORY PROVISIONS

As of June 30, 2019 [1]

Program	Legal Provision	Constitutional Debt Limit %	Constitutional Debt Limit $	Debt (Principal) Outstanding	Constitutional Authorization Remaining
General Obligation Bonds					
General Purpose (4)	ARTICLE XI SEC 7		$50,000		$50,000
Transportation: State Highway	ARTICLE XI SEC 7	1.0000%	$6,768,751,187	$28,755,000	$6,739,996,187
Veterans' Welfare (5)	ARTICLE XI-A	8.0000%	$54,150,009,497	$370,720,000	$53,779,289,497
State Power Development	ARTICLE XI-D	1.5000%	$10,153,126,781		$10,153,126,781
Forest Rehabilitation	ARTICLE XI-E	0.1875%	$1,269,140,848		$1,269,140,848
Higher Education XI-F (5)	ARTICLE XI-F(1)	0.7500%	$5,076,563,390	$1,079,174,165	$3,997,389,225
Community College	ARTICLE XI-G			$215,800,000	
Higher Education XI-G (5)	ARTICLE XI-G	0.7500%	$5,076,563,390	$731,909,339	$4,128,854,051
Pollution Control (6)	ARTICLE XI-H	1.0000%	$6,768,751,187	$34,662,000	$6,734,089,187
Housing: Elderly & Disabled	ARTICLE XI-I(2) and ORS 456.519	0.5000%	$3,384,375,594	$39,935,000	$3,344,440,594
Alternate Energy Projects (6)	ARTICLE XI-J	0.5000%	$3,384,375,594	$139,535,000	$3,244,840,594
Oregon School Bond Guarantee	ARTICLE XI-K	0.5000%	$3,384,375,594		$3,384,375,594
Oregon Opportunity Bonds (OHSU) (7)	ARTICLE XI-L	0.5000%	$3,384,375,594	$62,815,000	$3,321,560,594
Seismic Rehab - Public Education Bldgs	ARTICLE XI-M	0.2000%	$1,353,750,237	$242,472,500	$1,111,277,737
Seismic Rehab - Emergency Service Bldgs.	ARTICLE XI-N	0.2000%	$1,353,750,237	$58,342,500	$1,295,407,737
Pension Obligations (6)	ARTICLE XI-O	1.0000%	$6,768,751,187	$1,487,285,000	$5,281,466,187
School District Capital Costs	ARTICLE XI-P	0.5000%	$3,384,375,594	$183,685,000	$3,200,690,594
State Real or Personal Property	ARTICLE XI-Q	1.0000%	$6,768,751,187	$1,755,915,000	$5,012,836,187
				$6,431,005,504	
Direct Revenue Bonds					
Economic Development - Bond Bank	ORS 285B			$44,590,000	
Lottery Bond Program(s)	ORS 296A.560 - 585			$1,194,890,000	
Transportation Infrastructure Bank	ORS 367.030				
Transportation: Highway User Tax	ORS 367.620			$2,359,470,000	
Housing: Single & Multi-Family Programs	ORS 456.645 and ORS 456.661			$1,121,325,000	
				$4,720,275,000	
Appropriation Credits					
Certificates of Participation	ORS 283 & 286A			$311,450,000	
Oregon Appropriation Bonds	SB 856 - 2003 Legislature				
				$311,450,000	

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{3} Excludes refunded and defeased Bonds and Notes issued for less than 13 months. {4} The State of Oregon may not incur indebtedness exceeding $50,000 without a constitutional amendment approved by the voters. {5} Outstanding Department of Veterans' Affairs and State Board of Higher Education general obligation debt reflect the proceeds amount of original issue discounted and deferred interest bonds. {6} The amount of General Fund debt service support will vary over time depending on the amoritization and budgeted allocation of debt service on each bond, Department of Environmental Quality (DEQ) Pollution Control debt is reported as 44% General Fund supported and 56% self-supporting. ORS 468.195 limits the amount of DEQ debt outstanding at any one time to $260 million. Alternate Energy debt is reported at 40% General Fund supported and 60% self-supporting. Pension Bonds were approved by the voters September 16, 2003. 35% of Pension Bonds are General Fund Supported, 65% are paid from non-General Fund Sources. COP obligations are reported at 92% General Fund supported and 8% self-supporting. {7} Oregon Opportunity Bonds (OHSU) were authorized to finance capital costs of Oregon Health and Science University in an aggregate principal amount that produces net proceeds in an amount that does not exceed $200 million. Authorized debt may not exceed 1/2 of 1 percent RMV of all taxable real property in the State.

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C. *General Fund Supported and Net Tax-Supported Debt*

The municipal credit rating industry uses a number of different measurements and indicators to evaluate a government's debt burden. Two of those measurements include *"general fund-supported debt"* and *"net tax-supported debt."*

A significant proportion of the State's overall long-term debt obligations are fully self-supporting with the source of bond debt service payments coming from resources other than General Fund appropriations or other tax revenue. Bonding programs that do not require State appropriated General Fund support or other direct State tax revenue support would not be included in either General Fund or net tax-supported debt measurements. However, in keeping with rating agency practice, some programs in which debt service payments are made with dedicated funds or special-tax revenue sources may still be viewed as General Fund or net tax-supported debt depending on the interpretation of the funding source(s). Examples of bond programs that do not require State tax revenues or General Fund appropriations to pay debt service include the Veterans' Welfare GO bond housing program, the Single and Multifamily Housing revenue bond program and all conduit revenue bonds.

General Fund Supported Debt is classified as long-term obligations whose debt service is paid primarily from General Fund appropriations made by the State Legislature. Examples include Higher Education Facility and Community College (Article XI-G) GO bonds, State Property Bonds (Article XI-Q) GO bonds, and Certificates of Participation (COPs).

Net Tax-Supported Debt is defined as all debt serviced by tax revenues of the State. This definition includes all General Fund supported-debt and other long-term obligations supported by specific State taxes. Highway User Tax Revenue bonds are an example of long-term debt that is net tax-supported, even though it does not pledge any General Fund appropriations towards repayment of the bonds. These bonds do not constitute a GO debt of the State but are instead payable solely from revenues received from highway user taxes. Furthermore, in accordance with the Oregon Constitution, highway user tax revenues must be used exclusively for public highways, roads, streets and rest areas of the state and the retirement of bonds for which such revenues have been pledged.

The three major national rating agencies, Fitch, Moody's, and Standard & Poor's, differ somewhat in their assumptions and definitions of General Fund and net tax-supported debt with respect to the State of Oregon. For purposes of this report, the Commission has chosen to follow the Moody's model in determining both General Fund and net tax-supported debt. This decision was based primarily on Moody's historical gathering and publishing of key debt ratios for the fifty states, and the recognition of their annual state debt report as an accepted industry model.

As part of the development of this report, staff of the Office of the State Treasurer and the Department of Administrative Services periodically reviews all outstanding debt of the state with the goal of providing a more precise estimate of the amount of State debt that is actually supported by general fund revenues. Based on this review, the *2020 Legislative Update* adjusts downward the percentage of debt that is designated as General Fund-supported in relation to the GO bonds issued by the State to fund pension obligations, COPs, and Article XI-Q GO bonds. The report also incorporates a portion of the self-supporting GO debt issued by the Department of Environmental Quality and the Oregon Department of Energy to the extent that General Fund dollars are appropriated biennially for the following two years of debt service on these programs. Based on these adjustments, this report includes the debt of the following bond programs in its assumptions of General Fund-supported debt:

- State Highway Bonds (Article XI, Section 7)
- Higher Education Facility & Community College Bonds (Article XI-G)
- Pollution Control Bonds (Article XI-H) (44% of total program debt)
- Alternate Energy Bonds (Article XI-J) (40% of total program debt)
- Oregon Opportunity Bonds (Article XI-L);
- State Pension Obligation Bonds (Article XI-O) (35% of total program debt)
- Seismic Rehabilitation Bonds for Public Education Buildings (Article XI-M)
- Seismic Rehabilitation Bonds for Emergency Services Buildings (Article XI-N)
- Public Safety Buildings (Article XI-N);
- Public School Facility Bonds (Article XI-P)
- State General Purpose Bonds (Article XI-Q) (93% of total program debt)
- Certificate of Participation Obligations (ORS 283.085 to 283.092) (92% of total program debt)

Net tax-supported debt includes the above-listed General Fund supported programs in addition to the following:

- Balance of State Pension Obligation Bonds, State General Purpose Bonds, and Certificates of Participation;
- Lottery Revenue Bonds (ORS 286A.560-585)
- Highway User Tax Revenue Bonds (ORS 367.620)

Exhibit I.2 below provides a comparison of total outstanding gross debt; General Fund-supported debt and net tax-supported debt as of June 30, 2019.

SDPAC - Exhibit I.2
State of Oregon
Comparison of Long-Term Debt Outstanding
As of 6/30/2019

Type & Purpose	Legal Provision	General Fund Supported Debt	Net Tax-Supported Debt	Total Gross Debt Outstanding
General Obligation				
General Fund Supported				
General Purpose	ARTICLE XI SEC 7	$ -	$ -	$ -
State Highway	ARTICLE XI SEC 7	28,755,000	28,755,000	28,755,000
Community College Bonds	ARTICLE XI-G	215,800,000	215,800,000	215,800,000
Higher Education Institutions & Activities	ARTICLE XI-G	731,909,339	731,909,339	731,909,339
Pollution Control Bonds	ARTICLE XI-H	15,251,280	15,251,280	15,251,280
Alternate Energy Bonds	ARTICLE XI-J	55,814,000	55,814,000	55,814,000
DAS Oregon Opportunity Bonds	ARTICLE XI-L	62,815,000	62,815,000	62,815,000
Seismic Rehab - Public Education Bldgs	ARTICLE XI-M	242,472,500	242,472,500	242,472,500
Seismic Rehab - Emergency Service Bldgs	ARTICLE XI-N	58,342,500	58,342,500	58,342,500
State Real or Personal Property	ARTICLE XI-Q	1,633,000,950	1,633,000,950	1,633,000,950
DAS Pension Obligation Bonds (1)	ARTICLE XI-O	520,549,750	520,549,750	520,549,750
School District Capital Costs	ARTICLE XI-P	183,685,000	183,685,000	183,685,000
Total General Fund Supported		$ **3,748,395,319**	**$ 3,748,395,319**	**$ 3,748,395,319**
Dedicated Fund Supported				
Veterans' Welfare Bonds	ARTICLE XI-A	-	-	370,720,000
Higher Education Building Projects	ARTICLE XI-F(1)	-	-	1,079,174,165
Pollution Control Bonds	ARTICLE XI-H	-	-	19,410,720
Elderly & Disabled Housing Bonds	ARTICLE XI-I(2) and ORS 456.51	-	-	39,935,000
Alternate Energy Project Bonds	ARTICLE XI-J	-	-	83,721,000
State Real or Personal Property	ARTICLE XI-Q	-	122,914,050	122,914,050
DAS Pension Obligation Bonds (1)	ARTICLE XI-O	-	966,735,250	966,735,250
Total Dedicated Fund Supported		$ **-**	**$ 1,089,649,300**	**$ 2,682,610,185**
Total General Obligation		**$ 3,748,395,319**	**$ 4,838,044,619**	**$ 6,431,005,504**
Revenue Bonds				
Direct Revenue Bonds				
Lottery Revenue Bond Program(s)	ORS 296A.560 - 585	-	1,194,890,000	1,194,890,000
Highway User Tax Revenue Bonds	ORS 367.620	-	2,359,470,000	2,359,470,000
Single-Family & Multi-Family Housing	ORS 456.645 and ORS 456.661	-	-	1,121,325,000
Economic Development - Bond Bank	ORS 285B	-	-	44,590,000
Total Direct Revenue Bonds		$ **-**	**$ 3,554,360,000**	**$ 4,720,275,000**
Conduit or Pass Through Revenue Bonds				
Economic & Industrial Development	ORS 285	-	-	652,304,667
Beginning & Expanding Farmer Loans	ORS 285A.420-435	-	-	-
Oregon Facilities Authority	ORS 289	-	-	2,191,753,937
Multi-Family Housing Programs	ORS 456.645 and ORS 456.692	-	-	663,017,584
Total Conduit or Pass Through Revenue Bonds		$ -	$ -	$ 3,507,076,187
Total Revenue Bonds		**$ -**	**$ 3,554,360,000**	**$ 8,227,351,187**
Appropriation Credits				
Certificates of Participation (COPs)	ORS 283 & 286A	286,534,000	311,450,000	311,450,000
Oregon Appropriation Bonds	SB 856 - 2003 Legislature	-	-	-
Total Appropriation Credits		**$ 286,534,000**	**$ 311,450,000**	**$ 311,450,000**
Total Gross Debt				**$ 14,969,806,691**
Total Debt - Less Conduit Revenue Bonds		**$ 4,034,929,319**	**$ 8,703,854,619**	**$ 11,462,730,504**

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(1) To conform to rating agency methodologies Pension Obligation Bonds are considered net tax-supported debt.

D. *Pension Obligation Bonds*

On September 16, 2003, the citizens of the State approved the issuance of State general obligation bonds to finance part of the State's unfunded actuarial liability (UAL) to the Oregon Public Employees Retirement System (OPERS). The UAL is the difference between the liability of PERS to retirees and the actuarially determined value of the assets available to pay the liability. Calculated at an actuarial assumed rate of 8.0%, the State's portion of the pension liability was estimated to be over $2 billion.

In October 2003, the State issued $2 billion in taxable Pension Obligation Bonds (POBs). Because the POBs were sold at an average interest rate of 5.8%, which was 2.2% below the actuarially assumed rate of 8% then in use by OPERS, the State anticipated receiving significant budgetary savings from the reduced cost of funding its UAL, despite the fact that this bond issue increased the state's outstanding net tax-supported debt and its debt ratios substantially.

The ultimate savings that will be achieved through the issuance of POBs depends on the overall future asset returns on the POB bond proceeds deposited in a side account at OPERS. While the costs of the POBs were known and fixed at the time of issuance, investment returns over the term of the bonds cannot be known in advance. Based on assumptions regarding the long-term rate of return of the PERS system made at the time of issuance in 2003, it was estimated that the POBs would provide nominal General Fund savings of approximately $900 million over the life of the bonds. The actual amount of savings will not be known, however, until the POB bonds are fully retired in FY 2027.

E. *Private Activity Bond Allocations*

Under Federal tax law, tax-exempt bonding is generally limited to the financing of capital projects, which are deemed to benefit the general public rather than private parties per se, although it does allow a limited amount of tax-exempt financing for "private activity" projects. Section 146 of the IRS Tax Code defines which projects qualify as "private activity", and authorizes by formula (state population x $105) each state's annual private activity tax-exempt bonding volume cap (PAB).

In CY 2019, Oregon's overall PAB was $440 million, of which the 2017 Legislature allocated $170 million to state agencies ($125 million to the Oregon Housing and Community Services Department (OHCSD) for affordable housing; $40 million to the Oregon Business Development Department (OBDD) for Industrial Development Bonds; and $5 million to OBDD for the Beginning and Emerging Farmers loan program), with the balance of $270 million allocated to the Private Activity Bond Committee (PAB Committee). This Committee, as established in state law (ORS 286A.615), meets quarterly to review applications for the allocation of PAB to state or local projects that seek tax-exempt financing for their proposed private activity projects.

In CY 2019, the Committee allocated $125 million in PAB to provide tax-exempt financing for two environmentally desirable projects -- $120 million towards the overall $600 million Intel Corporation wastewater recycling project undertaken in connection with their new chip fabrication facility in Hillsboro and $5 million for a waste-to-energy project at Three Mile Dairy in Eastern Oregon.

Unallocated and unused PAB allocations for a given year are allocated as "carryforward" by the PAB Committee each January to projects or categories of projects dictated as private activity under IRS Section 146. This PAB carryforward must be used within three years for the allocated purpose or it is permanently lost to the State, as it cannot be reallocated to another purpose once the carryforward election is made. Historically, the vast majority of PAB carryforward (which has generally been in the $200 - $250 million per year range) was allocated to OHCSD, who applied the allocations either to the First Time Homebuyer mortgage revenue bond or the multifamily affordable housing program.

It is anticipated that the Committee will have approximately $248 million in carryforward available to allocate at its meeting in late January 2020, with 2019 carryforward requests totaling $280 million. Given the passage by Metro area voters of over $700 million in local general obligation bonds to provide "gap" funding for affordable housing, it is anticipated that competition for future PAB Committee allocations will be stiff, as the various affordable multi-family housing projects now in the planning stage must collectively rely upon the issuance of tax-exempt bonds to provide a 50% match the federal 4% tax credit which provides the majority of equity in each transaction (with GO "gap" funding filling in the balance of the costs on a project).

In recognition of the statewide need for affordable housing, the 2019-21 bond bill increased the 2020 and 2021 PAB allocations to OHCSD from $125 million to $250 million each year, which will reduce the amounts allocated to the PAB Committee accordingly. This $125 million annual reduction will make allocation decisions between competing economic development and local affordable housing projects a more challenging process in the coming years, requiring careful thought and deliberation as to the highest and best uses of this valuable, yet limited financial resource; to that end, the Committee has voted to spread out its legislatively allocated PAB in equal amounts over the course of each calendar year, with any unallocated quarterly portions added to the next quarterly amount available to requesting communities.

II. CURRENT DEBT PICTURE IN OREGON

A. Outstanding Debt

Prior to the late 1990s, the majority of State debt outstanding was linked to the bonds issued by the Department of Veterans' Affairs (ODVA) for veterans' mortgages. Since that time, the State's debt financing has been increasingly employed as the main vehicle to fund certain State programmatic needs as well as a huge backlog of infrastructure and capital needs linked to the deferred maintenance of state and higher educational facilities. Debt issuance for state highway improvements has substantially grown over the past decade, as has the amount of indebtedness linked to construction and renovation of state facilities, economic development efforts, and higher education projects.

In 2003, the Legislature authorized several major new bonding programs, including $2.1 billion in pension obligation bonds to fund the State's Public Employees Retirement System (PERS) liability, $432 million in appropriation deficit bonds, and $1.9 billion in new Oregon Department of Transportation (ODOT) highway user tax bonds to address statewide bridge and highway modernization needs. In 2009, the Legislature authorized the issuance of an additional $840 million in ODOT bonds to address highway congestion and safety issues.

The following exhibits reflect more recent trends in outstanding State general obligation bonds, direct revenue bonds and appropriation credit obligations. These exhibits offer a historical perspective on the underlying factors that determine the State's overall debt position.

Exhibit II.1 shows a 10-year history of the State's total outstanding obligations by major category from fiscal years ending 2010 to 2019.[1] This exhibit shows that overall state debt has remained relatively constant over the past decade, as new general obligation and revenue state bonds were issued at roughly the same pace as outstanding general obligation and revenue state debt was retired. The components of overall state debt have changed during this ten-year time frame, however, with general obligation debt replacing appropriation credit debt as the source of financing for most state capital projects.

[1] Does not include conduit or pass-through revenue bonds.

Exhibit II.1

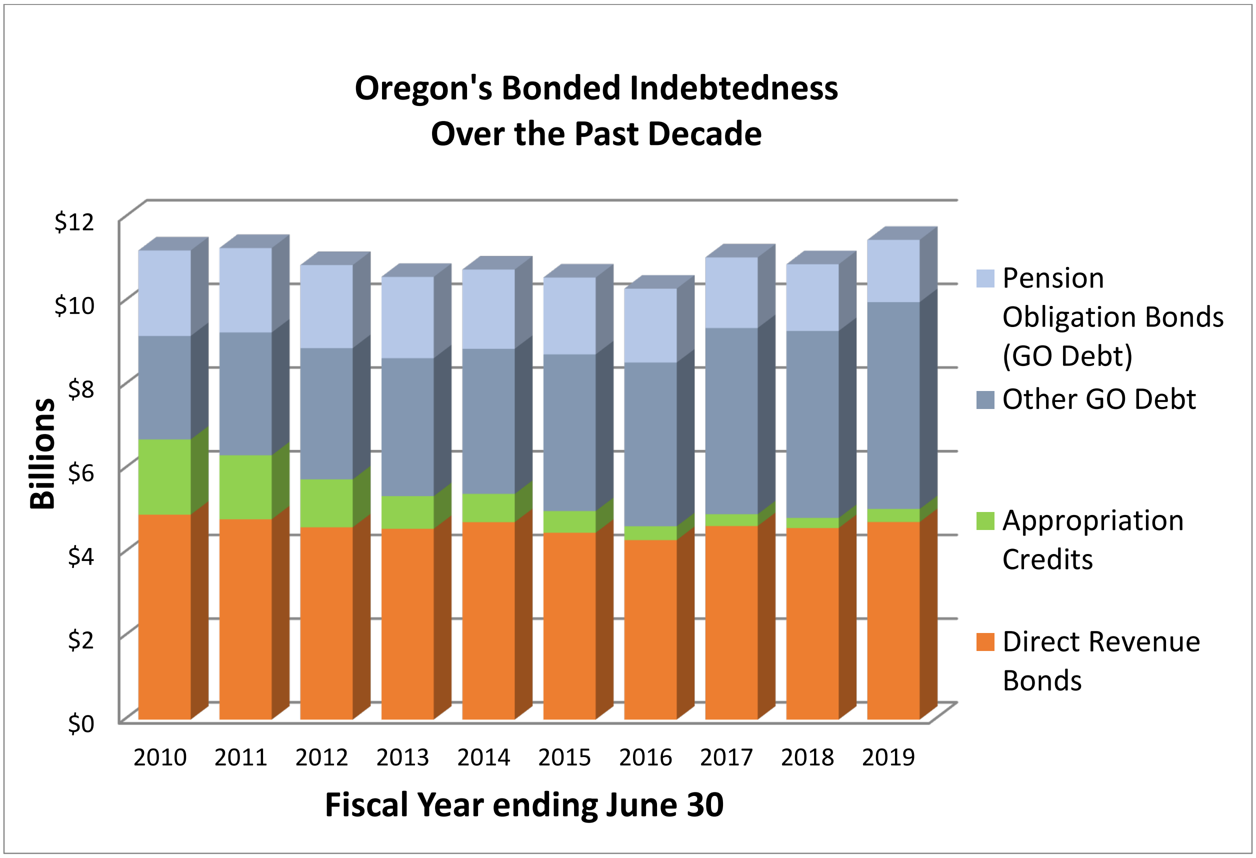


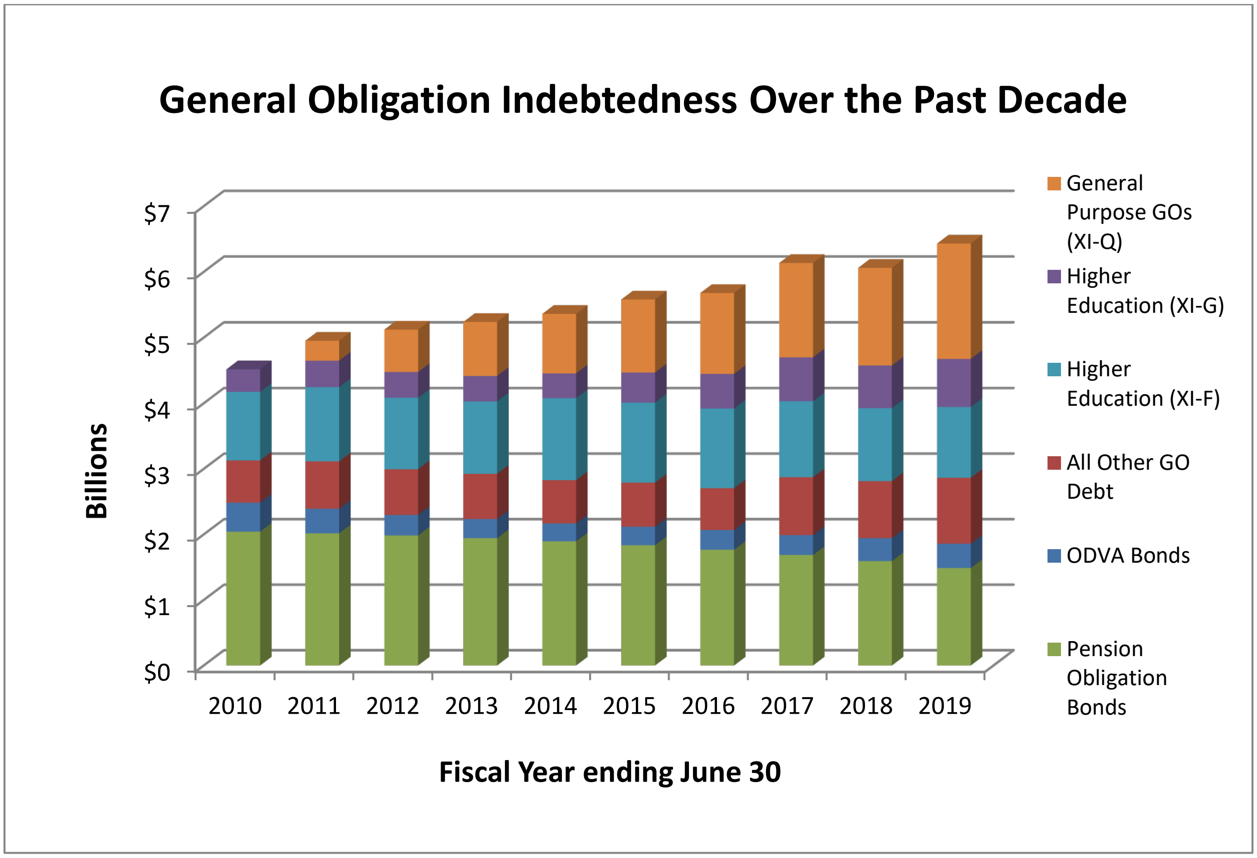
Exhibit II.2 provides more detail on the underlying components of this growth in State general obligation indebtedness. Overall outstanding State general obligation indebtedness totaled $6.4 billion at the end of FY 2019, representing an increase of approximately $1.9 billion over the levels reported ten years ago.

The largest growth area in terms of State GO bonded indebtedness is related to the establishment of the Article XI-Q GO bond program. In November 2010, Oregon voters authorized the sale of XI-Q general obligation bonds for state buildings, facilities and other capital projects as an alternative to the costlier financing of these projects through Certificates of Participation (COPs). It was anticipated at the time of passage of this new bond program that the State would over time refinance most of its outstanding COPs with these higher-rated, lower cost GO bonds.

To date, the State has refunded $632 million in COPs with the new XI-Q GO bonds, saving an estimated $101.4 million in interest costs on a present value savings basis. In addition, since FY 2011, most new state property projects have been financed with XI-Q GO bonds. As of June 30, 2019, there was $1.7 billion in XI-Q GO bonds outstanding, with only $311 million in COPs remaining.

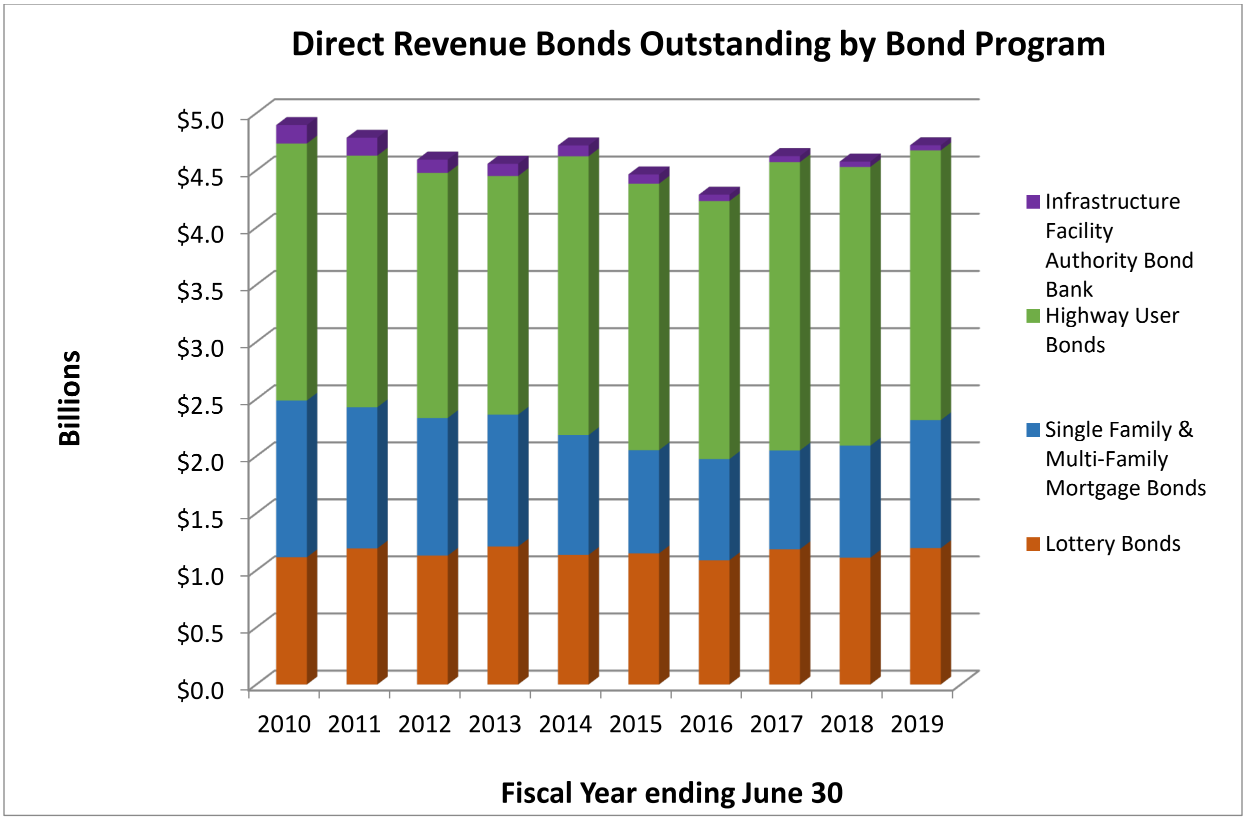
There has also been a steady increase over the decade in the issuance of Higher Education GO bonds (both Article XI-G and XI-F (1) bonds) which fund public university capital projects; on a combined basis, higher education indebtedness has grown from $1.4 billion in FY 2010 to $1.8 billion in FY 2019.

Exhibit II.2



As seen in *Exhibit II.3*, both the overall and individual components State direct revenue bonds outstanding have not increased over the past ten years, as existing revenue debt has been extinguished at about the same rate as new revenue debt has been issued. Over this time frame, outstanding revenue bonds for lottery-backed bonds remained constant, reflecting the balanced state approach of issuing new lottery bonds in amounts roughly equal to the amount of lottery debt that is retired each year.

Exhibit II.3



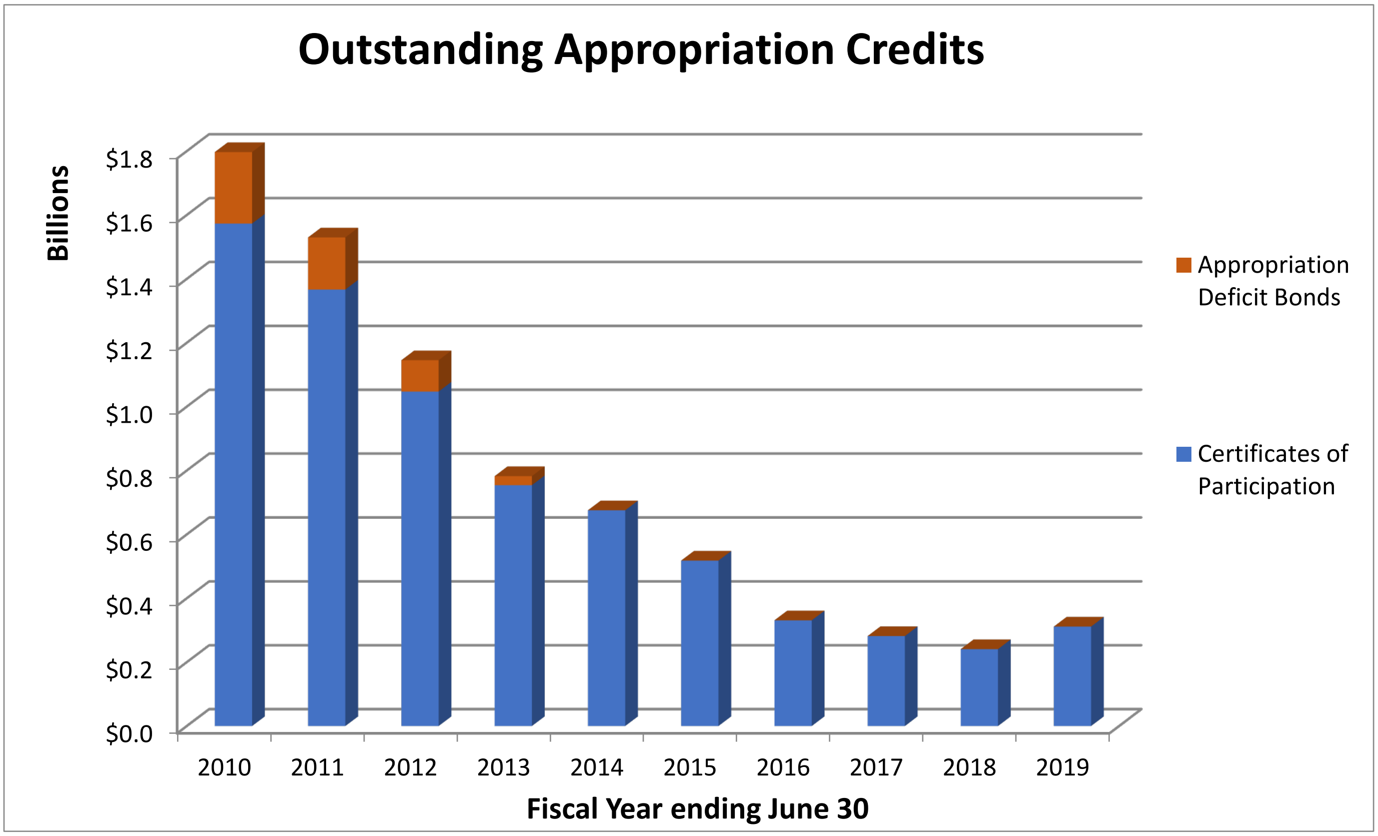
Appropriation obligations include both COPs and Appropriation bonds. The amount of appropriation obligations that can be issued is determined by the legislature each biennium. *Exhibit II.4* illustrates appropriation credit issuance history through fiscal year ending June 30, 2019.

The State's original use of COPs was related to the passage of Ballot Measure 11 in 1994. Measure 11 created mandatory minimum penalties for specified crimes and required that juveniles charged with certain violent crimes be tried and sentenced as adults. At the time, there was not a constitutional provision that allowed for the issuance of GO bonds to fund general purpose state facilities. Therefore, COPs were used to fund the construction of adult and juvenile prisons and correctional facilities mandated by Measure 11. COPs were later used to fund the replacement of the aging Oregon State Hospital in Salem.

In 2010, the Oregon electorate approved the issuance of lower cost Article XI-Q general obligation bonds for State real or personal property projects. Since that time, $632 million of COPs have been refunded as Article XI-Q GO bonds, saving the State $101.4 million in interest costs on a present value savings basis over the remaining life of these obligations. It is unlikely the state will issue COPs much in the future other than in specific circumstances where the issuance of GO bonds is not legally feasible, as was the case in March 2019 when $100 million in new COPs were sold to fund the partial decoupling of the Elliott State Forest from the Common School Fund.

The first and only authorized issue of State of Oregon Appropriation Bonds occurred in April 2003 in the amount of $431.6 million. The bonds were authorized by Senate Bill 856 (2003) and enacted by the 2003 Legislature Assembly for the purpose of financing a portion of the State's budget deficit which occurred towards the end of the 2001-03 biennium. These bonds were structured with a ten-year term and were paid off in full in September 2013.

Exhibit II.4



Outstanding Appropriation Credits
Billions
$1.8
$1.6
$1.4
$1.2
$1.0
$0.8
$0.6
$0.4
$0.2
$0.0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Fiscal Year ending June 30
Appropriation Deficit Bonds
Certificates of Participation

B. Future Capital Needs of the State of Oregon

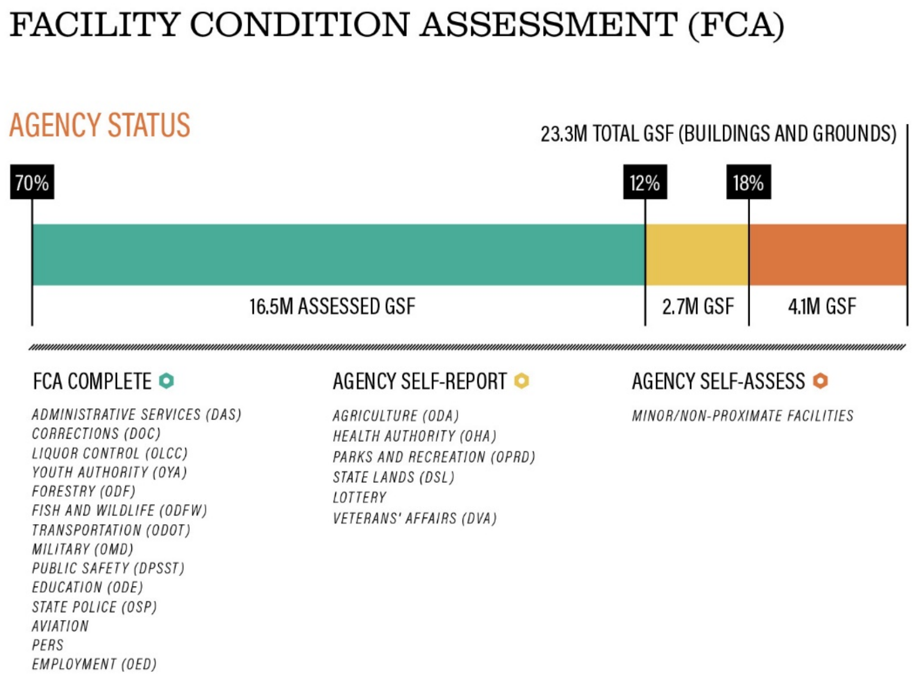
As this report demonstrates, there is approximately $1.5 billion in General Fund debt capacity available in each of the next four biennia. In addition, there will be on average approximately $423 million in Lottery bond capacity available over each of the next four biennia. Given the many competing demands for project funding throughout the state, the Commission continues to recommend that the Governor and Legislature carefully evaluate how to best allocate this future debt capacity.

The State of Oregon has current and future capital needs related to maintaining aging, state-owned facilities (the mean age is 40 years). The state-owned facility portfolio, including higher education facilities, is approximately 39 million gross square feet (MGSF) located in over 5,100 separate buildings. State agencies are housed in 23.3 MGSF of this space and grounds in approximately 4,600 buildings and facilities valued at $7.7 billion. Delaying ongoing maintenance, repairs and timely system replacements to the point that major renovations are required to maintain safe and adequate usage will cost significantly more. To the extent agency operating budgets are not sufficient to address ordinary maintenance and repairs of state facilities, this unmet need will continue to put pressure on the state's limited debt capacity to catch up on deferred maintenance through extensive and expensive renovation projects.

ORS 276.227 requires the Department of Administrative Services to establish a statewide planning process to evaluate the needs of the state's facilities, provide information on the condition of such facilities, establish guidelines for acquiring and maintaining facilities and provide financing and budgeting strategies to allocate resources to facilities' needs. In addition, state agencies are charged with implementing long-range maintenance and management plans to ensure that facilities are maintained in good repair and the useful lives of facilities are maximized. To assist agencies and the Legislature in prioritizing investment to steward the state's real estate assets, the Department of Administrative Services (DAS) implemented an initiative to collect detailed conditions information, including seismic and natural hazard risk assessments, on state-owned facilities. Using a statewide, programmatic approach, facility condition assessment (FCA) services were offered in the 2013-2015 and 2015-2017 biennia to agencies in an effort to ensure a consistent assessment methodology and uniform measure of facilities condition. In 2017-2019 biennium and in 2019 four agencies self-funded their FCA's.

As shown in *Exhibit II.5* below, by the end of FY 2019, a total of 14 state agencies, compromising over 70 percent of agency-owned facility and grounds gross square footage, have completed their facility conditions assessments of major buildings and campuses. Based on these facility assessments, the capital renewal and deferred maintenance needs for assessed buildings are estimated to cost over $1 billion within the next ten years.

Exhibit II.5



Source: Department of Administrative Services

The FCA process has also revealed that there is a great deal of variation in the current condition of state buildings and facilities by agency, as shown below in *Exhibit II.6*, with DAS, Public Safety and Transportation agency buildings ranked in good condition based on the Facility Condition Index (FCI) methodology shown below, with the balance of state agencies' buildings and infrastructure ranked in fair to poor condition. The FCI rating is based on a calculation of the cost of deferred maintenance and capital renewal needed for a given building compared to its current replacement value. The table below lists how each building's FCI is calculated:

FCI (%) = Facility Need (Capital Renewal and Deferred Maintenance Cost) / Current Replacement Value

0% to 5%	Good condition
5% to 10%	Fair condition
10% to 60%	Poor condition
Greater than 60%	Very poor condition

The FCA analysis conducted by DAS also suggests that if additional resources are not dedicated over the course of the coming decade to the on-going funding of capital renewal and deferred maintenance, with the exception of ODOT, all state agencies' buildings and infrastructure will decline to the poor condition FCI level by FY 2029.

Exhibit II.6

FACILITY CONDITION ASSESSMENT (FCA)

AGENCY FCI

AGENCY*	2019 FCI	2019 CONDITION	2029 FCI	2029 CONDITION
ADMINISTRATIVE SERVICES (DAS)	8.6%	FAIR	16.1%	POOR
AVIATION	12.6%	FAIR	14.3%	POOR
CORRECTIONS (DOC)	8.88%	FAIR	16.6%	POOR
EDUCATION (ODE)	20.1%	POOR	34.3%	POOR
EMPLOYMENT (OED)	23.4%	POOR	44.8%	POOR
FISH & WILDLIFE (ODFW)	10.9%	POOR	19.6%	POOR
FORESTRY (ODF)	13%	FAIR	24.7%	POOR
LIQUOR CONTROL (OLCC)	8.1%	FAIR	28.1%	POOR
MILITARY (OMD)	5.7%	FAIR	12.6%	POOR
PERS	4.3%	GOOD	4.5%	GOOD
PUBLIC SAFETY (DPSST)	1%	GOOD	18.2%	POOR
STATE POLICE (OSP)	3.1%	GOOD	13.3%	POOR
TRANSPORTATION (ODOT)	2.5%	GOOD	7.8%	FAIR
YOUTH AUTHORITY (OYA)	13.3%	POOR	22.8%	POOR

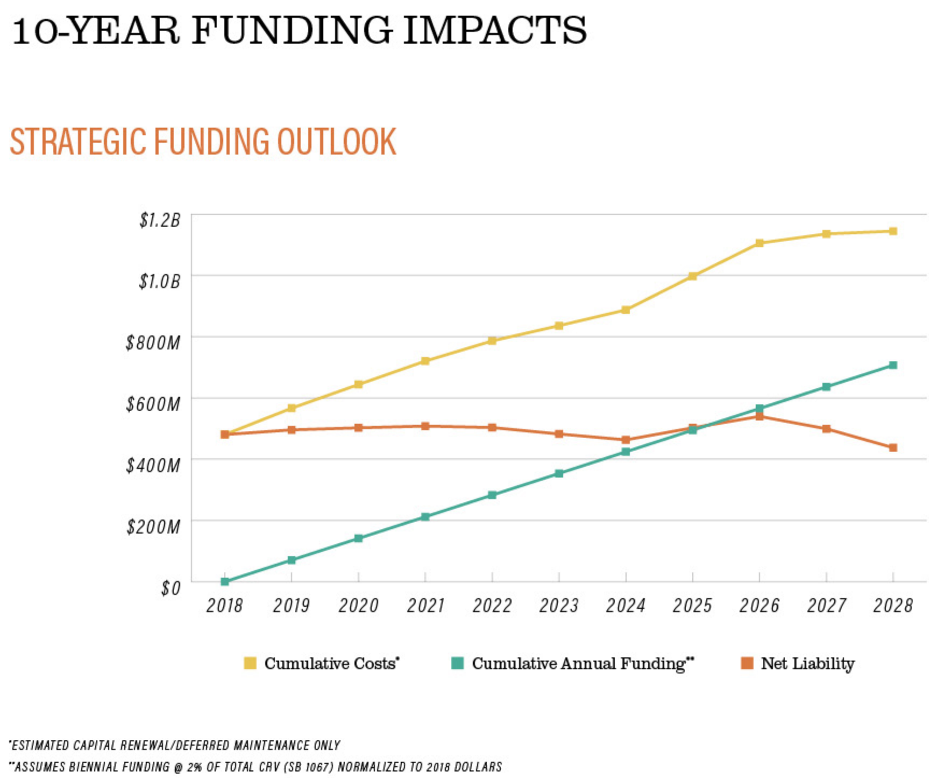
*FCA AGENCIES ONLY

Source: Department of Administrative Services

Given the results of the FCA analysis and the long-term savings that can be achieved by the state through the annual funding of on-going maintenance and repair of existing State facilities, the Commission applauds the 2017 Legislature for the passage of SB 1067, which will help the state take a more proactive approach to addressing the projected $1 billion in deferred maintenance funding needed over the coming decade. SB 1067 requires that future Governors' Budgets include funding of deferred maintenance and capital improvements on existing state-owned buildings and infrastructure, with minimum funding set at two percent of their current replacement value. As used in this context, the bill's definition of "state-owned buildings and infrastructure" excludes buildings and infrastructure owned or used by public universities and community colleges or the state's transportation infrastructure, such as its roads and bridges.

The 2019 State Legislature approved funding deferred maintenance and capital improvements at 2.95 percent of the current replacement value of state-owned buildings and infrastructure for the biennium. Based on this 2% per biennium formula and the current replacement value of $7.7 billion for state-owned buildings and infrastructure, DAS projects that at a minimum funding level of $154 million per biennium, or $77 million per year, the state investment would exceed the net growth in deferred maintenance by FY 2026, as shown in *Exhibit II.7*.

Exhibit II.7



Source: Department of Administrative Services

Seismic and flood risk analyses have been completed for over 115 select DAS, Oregon Youth Authority, and Oregon Liquor Control Commission buildings. For the remaining eleven assessed agencies, the FEMA Rapid Visual Screening portion of facility risk assessments are complete. The benefit-cost analysis, recommended rehabilitation or replacement approach, and other mitigation prioritization, will require additional technical expertise to complete, and will occur as funding is provided by the Legislature. Additional funding of FCA analyses over time, at roughly $1 million per biennium, would allow the state to more actively continue to monitor its $7.7 billion in state buildings and infrastructure.

In addition to upgrading state buildings, in recent years, the State Legislature has established new grant programs funded with State bonds to incentivize Oregon local governments to address a myriad of their deferred maintenance and unmet capital needs (e.g. seismic retrofit of public school and public safety buildings, the creation of more affordable housing, county courthouse renovation and/or replacement, the development of new agricultural water infrastructure, and K-12 school capital improvements). While highly important to the State's long-term economic viability, potential growth in these bond-funded grant programs will also put pressure on the State's limited debt capacity.

Below is a list of some of the most pressing capital needs that have been identified as of the date of this report that were either funded in the 2019-21 biennium and/or will likely require funding in the future.

Public Safety

Both the Oregon Youth Authority (OYA) and the Department of Corrections (DOC) have significant backlogs of deferred maintenance on their facilities, for which a combined $60 million of Article XI-Q bonds was authorized in the 2019-21 biennium.

OYA is in the process of updating its 10-year strategic facilities plan that identified facility maintenance/renovation needs estimated at over $50 million in 2018. This two-phase plan addresses the age and condition of OYA's facilities; environmental issues; needed seismic upgrades; and handicap access to the appropriate types of space for OYA programs related to treatment, recreation, housing, visitation, education and vocational training. OYA's 2014 Facilities Condition Assessment (FCA) report identified immediate as well as long term facility needs over a 10-year horizon. These findings along with a programmatic transformation in how youth are housed, informed OYA's future facility disposition and consolidation strategy.

At over 5.5 MGSF, DOC has the largest facility portfolio of all state agencies. Many of these critical facilities are very old and in poor condition, despite a rigorous program of maintenance within the context of limited resources. DOC's deferred maintenance and capital renewal needs assessed at $150 million in 2018, and without action are projected to reach nearly $300 million by 2028. DOC will need significant on-going funding to address accumulated deferred maintenance and capital renewal needs, as well as strategic seismic retrofits to many of its facilities. Given this, DOC must complete a strategic facility plan that prioritizes funding to effectively address the sheer magnitude of these needs.

The Oregon Military Department (OMD) has identified over $100 million in deferred maintenance and capital renewal needs in 2018, compromising both new construction and maintenance/renovation projects at armories, readiness centers and other OMD facilities located throughout the state. The 2019 Legislature authorized issuance of $22 million of XI-Q bonds to match with federal funds to construct and upgrade facilities across the state.

In 2015-17, the Oregon State Police (OSP) received authority to own and operate real estate. OSP is developing a strategic plan to address their patrol officer work force expansion which is expected to double over a ten-year period. The plan will also address deferred maintenance and functional obsolescence of some current facilities. For example, Phase One of the plan proposes replacement facilities for the Springfield forensics lab and area command center and deferred maintenance and capital improvements for its Central Point command center.

Education

Oregon's public universities have significant projected capital needs that include construction of new classrooms, dorms, and other educational facilities, as well as deferred maintenance at existing facilities. All seven public universities are governed by independent boards that are autonomous from State government and have legislative authority to issue revenue bonds to fund their capital needs. However, given the State's financial resources and superior credit rating, it is likely that a significant portion of the future capital improvements at Oregon's independent universities will continue to be funded through the issuance of State General Obligation (GO) bonds to fund a combination of grants and loans from the Higher Education Coordinating Commission (HECC) to the universities. To the extent that grants, rather than loans, are provided by the State, the capital needs of universities will continue to use a significant portion of available General Fund debt capacity.

HECC recently completed a first-ever 10-year strategic capital plan for Oregon's public universities that took into account both long-term demographic trends and the state's educational attainment goals for its citizens. The resulting plan provides strategic guidance for maintaining and upgrading the public university capital asset portfolio through 2029 and will be helpful to both HECC and the Legislature in their future decision-making regarding the prioritization of bonding and capital budget recommendations. The most significant recommendation of this report is to prioritize the improvement and renewal of existing higher education capital assets, as demographic trends suggest limited future enrollment growth at all but a few public universities in Oregon. The report notes that national facility management "best practice" calls for investing at least 2.5 percent of the current replacement value per year in capital renewal of existing assets, which would translate into approximately $250 million per year for the Oregon public university capital asset portfolio.

For the 2019-21 biennium, approximately $79 million of General Fund supported GO bonds were authorized to fund grants for public university capital projects. In addition, the 2019 Legislature authorized approximately $75 million in General Fund-supported Article XI-G bonds and $7 million in Lottery Revenue bonds for community college construction projects. Given the findings of the above-referenced report, and the balance of general fund debt capacity still available this biennium, there are likely to be multiple additional requests from various public universities for bonding and capital project authorization as part of this 2020 Interim Legislative session.

The issuance of $126 million of general obligation bonds under Article XI-P was authorized for the 2019-21 biennium to provide matching funds to finance the capital costs of school districts. Capital costs include costs associated with acquisition, construction, improvement, maintenance or furnishing school facilities. The grant program is administered by the Department of Education in accordance with established grant eligibility and award requirements. Given the current condition of many school district facilities and the anticipated demand for matching grant monies, this program will likely need a significant portion of the state's General Fund debt capacity in future biennia.

Economic and Community Development

The Oregon Business Development Department (OBDD) administers the Seismic Rehabilitation grant program for seismic upgrade of public schools and public emergency services facilities around the state. The 2019 Legislature authorized the issuance during the 2019-21 biennium of $101 million in Article XI-M Seismic Rehabilitation GO bonds for public school seismic projects and $20 million of Article XI-N Seismic Rehabilitation GO bonds for emergency services facilities. It should be noted that based on preliminary findings of the Oregon Department of Geology and Mineral Industries, there is a pressing need for the seismic retrofit of a significant number of Oregon's public schools and public safety facilities around the state, with an estimated cost of several billion dollars.

OBDD also administers the Special Public Works Fund (SPWF). For the 2019-21 biennium, the Legislature authorized $33 million in Lottery Revenue Bonds to recapitalize the SPWF to provide grants or low interest loans to local governments for qualifying water related infrastructure projects and an additional $17 million in Lottery Revenue Bonds specifically for levee improvement projects.

Given the shortage of affordable housing in Oregon, the 2019 Legislature authorized the issuance of Article XI-Q bonds to provide $202 million for low income housing projects through Oregon Housing and Community Services and $44 million of Lottery Bonds. This represents a significant increase over amounts authorized for this purpose in prior biennia.

Natural Resources

Water is essential for economic growth, environmental health, and the welfare of all Oregonians. Traditionally, the State of Oregon has left the development of water supply infrastructure to local entities and the federal government. In recognition of declining federal support and a rapidly increasing need for water infrastructure to meet Oregon's current and future instream and out-of-stream water needs, SB 839 (2013) established the foundation for a state grant and loan program for integrated water resources development in Oregon. This program was initially capitalized with the issuance of Lottery bonds during the 2013-15 biennium. The 2019 Legislature authorized $17 million in Lottery bonds for water supply development projects during the 2019-21 biennium.

The buildings and infrastructure of natural resource agencies is specialized and widely dispersed and aging. Both Oregon Department of Fish and Wildlife (ODFW) and Department of Forestry have completed the FCA's of all their major facilities and those proximate to those facilities. Forestry's six regions have deferred maintenance of $21 million and $46 million in capital renewal needs by 2028. ODFW's buildings' deferred maintenance and capital renewal needs are $16 million (2018) and $30 million (2028) respectively; adding in their civil infrastructure (fish ladders, tanks, etc.) are expected to double these costs, however.

Judicial

The Oregon Judicial Department administers a grant program funded through the issuance of Article XI-Q GO bonds to finance costs related to acquiring, constructing, remodeling, repairing or furnishing county courthouses that are owned or operated by the State of Oregon. For the 2019-21 biennium, approximately $145 million in XI-Q bonds were authorized to fund four courthouse projects, including $88 million for construction of the new Lane County courthouse. There is likely to be continued demand for state debt capacity for courthouse projects, particularly for replacement projects in which construction may span multiple biennia. An additional $28 million of XI-Q bonds was approved by the 2019 Legislative Assembly for renovations to the Oregon Supreme Court building.

Other Capital Needs

In addition to the projects already mentioned above, $185 million of Lottery bonds were authorized to provide proceeds to fund regional and community projects across Oregon. In recent biennia, the Legislative Assembly authorized the issuance of Lottery bonds to fund a wide range of Oregon regional and community economic development needs, including dredging and other port improvements, trade centers, planning for aquifer recharge and new irrigation systems, forest land acquisition, transit system expansions, parking garages, levee improvements, matching funds for federal disaster assistance, and public television infrastructure. Often, these types of projects are not financially feasible without the Legislature's allocation of Lottery bond proceeds for these purposes; thus, continued demand for these community needs can be expected in future biennia.

In addition, approximately $10 million of Article XI-Q GO bonds were authorized by the 2019 Legislature to finance capital improvements to Oregon State Fair facilities. Other bonding needs include the funding of large-scale IT system development and upgrades. These systems include the Department of Human Services' ONE Integrated Eligibility and Medicaid Eligibility System, the Department of Environmental Quality Data Management System, and the Legislative Administration Committee's Document Publishing and Management System. All of these projects were at least partially funded in 2019-21 through a total of $52 million in Article XI-Q GO bonds; if implementation is not completed by the end of the biennium, these projects will likely require continued state debt financing during the 2021-23 biennium.

Other Potential Impacts on State Debt Capacity

To date, the use of bond proceeds has not been authorized by the legislature to assist in the structured settlement of large lawsuits against the State of Oregon. However, there are examples of other jurisdictions around the country issuing "judgment obligation" bonds for this purpose. Since the Oregon Constitution restricts general obligation bond issuance to a limited range of voter-approved purposes, the use of bonding for large lawsuit settlements would be restricted to appropriation-based debt.

If a significantly large enough lawsuit against the State was won by a plaintiff, this long-term liability would likely be considered by rating agencies and others as part of the State's general fund "indebtedness" and should be counted against its debt capacity. The $1.065 billion verdict in the lawsuit brought by several Oregon counties and special districts regarding unrealized forest revenues is an example of a large lawsuit that would qualify as meeting the above criteria. Even though the case will be appealed, it would behoove the State to reserve future debt capacity for its settlement. It also behooves the Legislature and Governor to remain mindful of these potential types of events and the long-term budget implications that lawsuits of this nature can have on the State's General Fund-supported debt capacity.

C. *Timing of State Bond Sales*

In addition to determining the specific projects that will be authorized for bonding in the biennial Bond Bill, the Legislature in recent years has also directed the specific timing of State bond sales by delaying the appropriation of debt service on state funded projects until the following biennium. As a result, the majority of State General Obligation and Lottery Revenue Bonds have been sold during the last few months of the biennium in which they were initially authorized. While this strategy may have been necessary from an overall state budget management perspective in the years following the Great Recession, it has not always resulted in the State being able to achieve optimal interest rates at the time of the sale of these bonds. The clustering of a number of large dollar Oregon bond issues in too short a time frame floods the capital markets to the point where supply exceeds demand, which in turn requires the State to offer bonds at higher interest rates than would otherwise be required to assure their final placement with investors.

Given the strength of the Oregon economy and the improving General Fund and Lottery revenue picture, it would behoove decision-makers to reconsider this delayed debt service budget strategy and allow a larger percentage of approved capital projects to be financed in the first year of the biennium. This approach would spread out the sale of State bonds in a more even fashion and allow for a better balance of supply and demand for our bonds across the entire biennium.

III. GENERAL FUND-SUPPORTED DEBT CAPACITY

A. *Debt Burden*

The key indicators most commonly used by the rating agencies and municipal analysts to evaluate a state’s debt burden include debt per capita, debt to personal income and debt service to revenues. We measure our state’s debt burden and capacity based on the percentage of debt service (i.e. principal and interest) to revenues. In this section, we compare debt service for General Fund-supported debt as a percent of General Fund revenues, or;

$$\frac{\textbf{Debt Service for General Fund-supported Debt}}{\textbf{General Fund Revenues}}$$

States recognized as having sound debt management practices typically use a range between 5% and 8% of revenues in determining their capacity measurements, with 5% as a frequent commitment. As an example, South Carolina, rated Aaa by Moody’s, limits general obligation debt, excluding State Highway bonds, to 5.5% of General Fund revenues, while North Carolina’s overall debt limit is 4% of General Fund revenues.

Twenty-seven states now conduct debt affordability studies. Of these, nine – Florida, Georgia, Maryland, Massachusetts, New Hampshire, North Carolina, Oregon, Texas, and Virginia – lead the way by producing studies that give policymakers a clear understanding of their states’ debt levels through, among other things, careful projections, smart benchmarking comparisons, multiple descriptive metrics, and analysis. The states that produce affordability studies also vary in how they structure their debt. Some have highly centralized debt structures, while others delegate a higher share of total borrowing to independent agencies and authorities.

For purposes of determining Oregon’s capacity standard, the Commission concludes that there exists a range under which the State can evaluate its capacity. This range exists between a low of 0.0% and a high of 10%.

In the following illustration, a ratio within the “green” area signifies that the State is within a prudent capacity range to pay debt service, and thus, has capacity to issue additional General Fund-supported debt obligations. A ratio within the “yellow” area signifies that the State’s capacity is entering a cautionary zone where debt exceeds prudent capacity targets and may result in negative implications to the State’s long-term credit rating and cost of funds. At this level, it would be wise for the State to reevaluate bonding priorities. Finally, were the State to reach a ratio within the “red” zone, consequences would be expected to include increased interest costs, negative credit rating impacts, and reduced access to capital markets.

Target debt capacity range can be visualized as follows:

General Fund-supported Debt Payments as a Percentage of General Fund Revenues

0 to 5% **“Green”**	**Over 5% to 7%** **“Yellow”**	**Over 7% to 10%** **“Red”**
Capacity Available	Exceeds Prudent Capacity Target	Capacity Limits Reached

B. *Inputs & Assumptions for General Fund Debt Capacity Model*

As required by ORS 286A.555, the Commission's model projects debt capacity over the same number of years as the quarterly Office of Economic Analysis' (OEA) Economic and Revenue forecast, which provides a General Fund forecast for the next ten years. The model looks at General Fund-supported debt programs as a whole, intending for the Governor and Legislature to determine which specific programs will receive funding within the capacity range.

This *2020 Commission Report* provides a look at debt capacity from FY 2020 through FY 2029 based on the OEA December 2019 revenue forecast and the bonding authorizations enacted by the 2018 Legislature.

The model is based on General Fund-supported debt service as a percentage of General Fund revenues. The Commission has chosen to use 5% as the model's capacity target because it is the dividing point between a "green/available" capacity level and a "yellow/cautionary" target level. It is acknowledged that this 5% target is not a strict capacity limitation, but rather reflects an approach into the "yellow/cautionary" capacity range. The movements from one target level to the next signals the need for a reevaluation of existing debt authorization and future bonding priorities.

The model first solves for "overall capacity" to pay debt service on General Fund-supported debt issuance. As noted earlier, the following programs are considered General Fund-supported debt obligations for purposes of this report:

- State Highway Bonds (Article XI-Section 7)
- Higher Education Facility & Community College Bonds (Article XI-G)
- Pollution Control Bonds (Article XI-H) (44% of program debt service)
- Alternate Energy Bonds (Article XI-J) (40% of program debt service)
- Oregon Opportunity Bonds (Article XI-L) (for OHSU projects)
- Seismic Rehab – Public Education Buildings Bonds (Article XI-M)
- Seismic Rehab – Emergency Service Buildings Bonds (Article XI-N)
- Public School Facility Bonds (Article XI-P)
- State General Purpose Bonds (Article XI-Q) (93% of program debt service)
- State Pension Obligation Bonds (35% of program debt service)
- Certificate of Participation obligations (ORS 283.085 to 283.092) (92% of program debt service)

As shown in *Table III.1*, the model solves for overall debt capacity for fiscal years 2020 through 2029 using the most recent General Fund forecast from OEA and the 5% of General Fund revenues as the maximum debt service capacity limit. Based on this capacity limit, the model demonstrates that yearly dollars to pay debt service ranges from $501 million in FY 2020 to $812 million in FY 2029.

Table III.1

General Fund Forecast
($ Millions)

Fiscal Year Ending June 30th	Estimated General Fund Revenues[1]	Amount Available for Debt Service at 5% Capacity Limit
2020	$ 10,012.7	$ 500.6
2021	10,947.3	547.4
2022	11,954.9	597.7
2023	12,335.7	616.8
2024	12,974.3	648.7
2025	13,514.4	675.7
2026	14,139.2	707.0
2027	14,740.3	737.0
2028	15,635.4	781.8
2029	16,240.1	812.0

After determining the yearly dollars available, the portion already committed to annual debt service on outstanding General Fund debt, as well as amounts used to pay debt service on authorized General Fund-supported bonds expected to be issued over the balance of the biennium is calculated. For purposes of this report, we assume that all $946 million in General Fund-supported debt authorized by the 2019 Legislatures will be issued by June 30, 2021.

The new General Fund-supported debt includes the following: update based on bond bill 2019-21:

- $75.3 million in XI-G GO bonds for 50% matching grants for community college building projects;
- $101.2 million in XI-M GO bonds for seismic upgrade grants to public schools;
- $20.3 million in XI-N GO bonds for seismic upgrade grants to public safety facilities;
- $126.1 million in XI-P GO bonds for matching grants for K-12 school capital improvements; and
- $623.1 million in XI-Q GO bonds for various state agency capital projects, matching grants for county courthouse projects and gap funding for affordable multifamily housing projects.

[1] General Fund revenues are shown as projected by the Oregon Office of Economic Analysis in the *Oregon Economic and Revenue Forecast* for December 2019.

Projected annual debt service payments on the planned new General Fund supported debt are based on the following assumptions:

- Level annual debt service payments;
- An interest rate of 4.50%, the standard rate used in annual SDPAC reports, which is 63 basis points higher than the 10-year average of the *Bond Buyer 20-Bond Index* as of December 12, 2019[1]; and
- Twenty-year average maturity length for all General Fund-supported debt obligations.

The model forecasts the remaining dollars available to pay debt service on future issuance, and therefore bonding capacity, by introducing known annual debt service payments for outstanding debt and the projected debt service payments for planned issuance. This is shown in *Table III.2*. A detailed outline of debt service requirements for each General Fund-supported debt program is provided in *Appendix A* to this report.

[1] The *20-Bond Index* consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa3 rating and Standard & Poor's AA-minus rating.

Table III.2

Remaining General Fund Dollars Available for Future Debt Issuance
($ Millions)

	1	2	3	4
Fiscal Year Ending June 30th	**Available Dollars to Pay Annual Debt Service (at the 5% target)**	**(Less) Annual Payments for Debt Service on Existing General Fund-Supported Debt Outstanding[1]**	**(Less) Projected Annual Payments for Debt Service on New General Fund-supported Debt[2]**	**Remaining Dollars Available to Pay Debt Service on Future Debt**
2020	500.6	(448.4)	-	52.3
2021	547.4	(447.0)	(20.3)	80.0
2022	597.7	(425.2)	(72.7)	99.8
2023	616.8	(420.8)	(72.7)	123.3
2024	648.7	(402.2)	(72.7)	173.8
2025	675.7	(379.4)	(72.7)	223.6
2026	707.0	(378.0)	(72.7)	256.3
2027	737.0	(367.7)	(72.7)	296.6
2028	781.8	(261.4)	(72.7)	447.7
2029	812.0	(254.7)	(72.7)	484.6

The overall dollars available to pay debt service as determined in *Table III.1* is illustrated in *Table III.2* column 1 above. Columns 2 and 3 are the principal and interest payments for outstanding General Fund-supported debt and for new authorized issuances respectively. The remaining dollars available to pay debt service (column 4) is determined by subtracting the outstanding and planned issuance debt service (columns 2 and 3) from the overall calculated dollars available (column 1).

As outlined above, remaining dollars to pay for debt service on future state bonds varies over the forecast period as projected General Fund revenues change and as debt service requirements are amortized on existing state debt obligations. *Table III.3* displays the remaining dollars available to pay debt service on future debt issuance, including the balance of 2019 debt capacity that was not allocated by the 2017 and 2018 Legislative Assemblies. The overall calculation of remaining General Fund dollars is based on the previously presented assumptions and with reductions each year to reflect the addition of new General Fund debt service.

[1] This represents the projected annual (fiscal year) debt service requirement on all General Fund-supported debt issued through June 30, 2019. See Appendix A for detail.

[2] The 2019 Legislative Assembly collectively authorized $946 million in General Fund-supported debt. The model assumes issuance of $264.2 million in FY 2020 and $681.8 million in FY 2021, with debt service beginning in the following year after the sale of bonds, as shown in *Table III.2, Column 3*.

Table III.3

General Fund-Supported Debt Capacity Determination
($ Millions)

	1	2	3	4	5
Fiscal Year Ending June 30th	**Remaining Dollars to Pay Debt Service**	**Maximum Amount of Additional Debt that May be Issued[1]**	**(Less) Debt Service on Amount of Additional Debt that May be Issued**	**Net Dollars Remaining to Pay Debt Service**	**Debt Service as a % of General Fund Revenues**
2020	$ 52.3	$ 63.0	$ (4.8)	$ 47.4	4.5%
2021	80.0	252.1	(19.4)	55.8	4.5%
2022	99.8	983.1	(75.6)	-	5.0%
2023	123.3	305.8	(23.5)	-	5.0%
2024	173.8	657.3	(50.5)	-	5.0%
2025	223.6	647.3	(49.8)	-	5.0%
2026	256.3	425.0	(32.7)	-	5.0%
2027	296.6	524.0	(40.3)	-	5.0%
2028	447.7	1,965.7	(151.1)	-	5.0%
2029	484.6	480.8	(37.0)	-	5.0%
Total Additional General Fund Capacity		**$6,304.0**			

Table III.3 accounts for all issued and planned to be issued General Fund-supported debt, as authorized by the Legislature for the 2019-21 biennium, as well as the maximum amount of additional General Fund supported-debt that could be issued each year while staying within the Commission's target debt capacity limit of 5% debt service to General Fund revenues.

Based on the analysis above, the Commission concludes that the General Fund-supported debt issuance amounts illustrated in *Table III.3* would allow the State to issue a maximum of $6.3 billion in additional General Fund-supported debt through FY 2029 on top of the $946 million already authorized by the 2019 Legislature.

[1] *Table III.3* accounts for the issuance of $946 million in planned General Fund-supported bonds that was authorized by the 2019 Legislature.

C. *Capacity Considerations*

The Commission emphasizes that while the State has the capacity to issue General Fund-supported debt in the amounts outlined in *Table III.3*, issuance of State bonds at this level has significant budgetary impacts that can extend for long periods of time into the future. An increase in monies used to finance General Fund-supported debt service could result in a reduction of funding for other State-supported programs, particularly in periods of economic downturns.

In addition, the Commission also cautions that while the current model shows that the State has substantial debt capacity over the next decade, this capacity can sharply decline if interest rates rise more than predicted in the model or if there is a substantial drop in future General Fund revenue levels. To address the large backlog of capital needs throughout the state, the Commission recommends that the Governor and Legislature continue the policy of spreading debt capacity evenly over future biennia, as illustrated in *Table III.4*. This will assist in assuring long-term planning for the funding for the State's highest priority capital projects over time, regardless of economic and revenue fluctuations that may occur over the forecast period.

Table III.4

Recommended Allocation of Additional General Fund-Supported Debt Capacity ($ Millions)

Fiscal Year Ending June 30th	Maximum Annual Amount of Additional Debt that Should be Issued	(Less) Debt Service on Future Debt Issued	Debt Service as a % of General Fund Revenues
2020	$ 63.0	(4.8)	4.5%
2021	252.1	(19.4)	4.5%
2022	748.6	(57.6)	4.8%
2023	748.6	(57.6)	5.1%
2024	748.6	(57.6)	5.1%
2025	748.6	(57.6)	5.2%
2026	748.6	(57.6)	5.4%
2027	748.6	(57.6)	5.5%
2028	748.6	(57.6)	4.8%
2029	748.6	(57.6)	5.0%
Total Additional General Fund Capacity	**$6,304.0**		

Table III.5 and *Table III.6* illustrate the potential impact of changing interest rates and revenues on the forecast of the State's General Fund debt capacity. Based on planned debt issuances of $946 million over the next two years and estimates of General Fund revenues for the balance of the ten-year forecast period, remaining general fund capacity is $6.3 billion; a 1% increase in the long-term interest rate would decrease capacity by $589.4 million *(Table II.5)*. A 10% decline in revenue over the forecast period would decrease debt capacity by approximately $1.1 billion. *(Table III.6)*.

Table III.5

Forecast of General Fund Debt Capacity With Changing Interest Rates FY 2020 - FY 2029 ($ Millions)			
	Projected Debt Capacity at 4.5% Interest Rate	**5.5% Interest Rate (1.0% Increase)**	**3.5% Interest Rate (1.0% Decrease)**
Total	$ 6,304.0	$ 5,714.6	$ 6,975.3
Difference from Base Case		($ 589.4)	$ 671.3

Table III.6

Forecast of General Fund Debt Capacity With Changing General Fund Revenue Forecasts FY 2020 - FY 2029 ($ Millions)			
	Projected Debt Capacity with Current Long-Term General Fund Forecast	**10% Increase in Long-term GF Revenue Forecast**	**10% Decrease in Long-term GF Revenue Forecast**
Total	$ 6,304.0	$ 7,360.3	$ 5,247.8
Difference from Base Case		$ 1,056.3	($ 1,056.3)

IV. LOTTERY-BACKED DEBT CAPACITY

Due to the importance of State Lottery revenues for funding various state programs and activities, the Commission believes it is important to point out that the State's continued ability to issue Lottery-backed bonds is predicated on the prudent management and sound fiscal position of the State Lottery program itself. Accordingly, for purposes of determining capacity, the Commission has chosen to view the Lottery revenue bond program as distinct from both net tax-supported and General Fund-supported debt programs.

A. *Unobligated Net Lottery Proceeds*

Article XV, Section 4 of the Oregon Constitution requires the Legislative Assembly to appropriate Unobligated Net Lottery Proceeds or revenues to first repay Lottery bonds, before appropriating the proceeds for any other purpose.

In each fiscal year, and prior to any use of such moneys for any other purpose, all unobligated net Lottery revenues are deposited into the Debt Service Account until all scheduled debt service for the fiscal year has been provided for. The unobligated net Lottery proceeds consist of all revenues derived from the operation of the State Lottery except for revenues used for the payment of prizes and expenses of the State Lottery.

Once debt service on Lottery-backed bonds are paid each year, the remaining State Lottery revenues are distributed to the Education Stability Fund, the Parks and Natural Resources Fund, the Veterans Services Fund, and the Outdoor School Education Fund, as required by the Constitution. Revenues are then allocated and applied to certain economic development and educational purposes. The Education Stability Fund and the Parks and Natural Resources Fund are allocated 18% and 15% respectively of unobligated net proceeds; the Veteran Services Fund receives 1.5%, and the Outdoor Education Fund receives the lesser of 4% or $22 million per year. In addition, an amount of not less than 1% of net Lottery proceeds is allocated to the Problem Gambling Treatment Fund, which is separate and distinct from the General Fund. Article XV, Section 4 of the Oregon Constitution and applicable Oregon law allocate any remaining amounts to various economic development and public education projects as authorized.

The forecast summary of net Lottery revenues is presented in *Table IV.1.* Total available Lottery resources are net of Lottery prizes and administration. Also shown are the projected debt service for outstanding Lottery bonds and the projected debt service coverage ratio as of June 30, 2019; assuming that no additional Lottery bonds are issued either this biennium or in the future.

Table IV.1

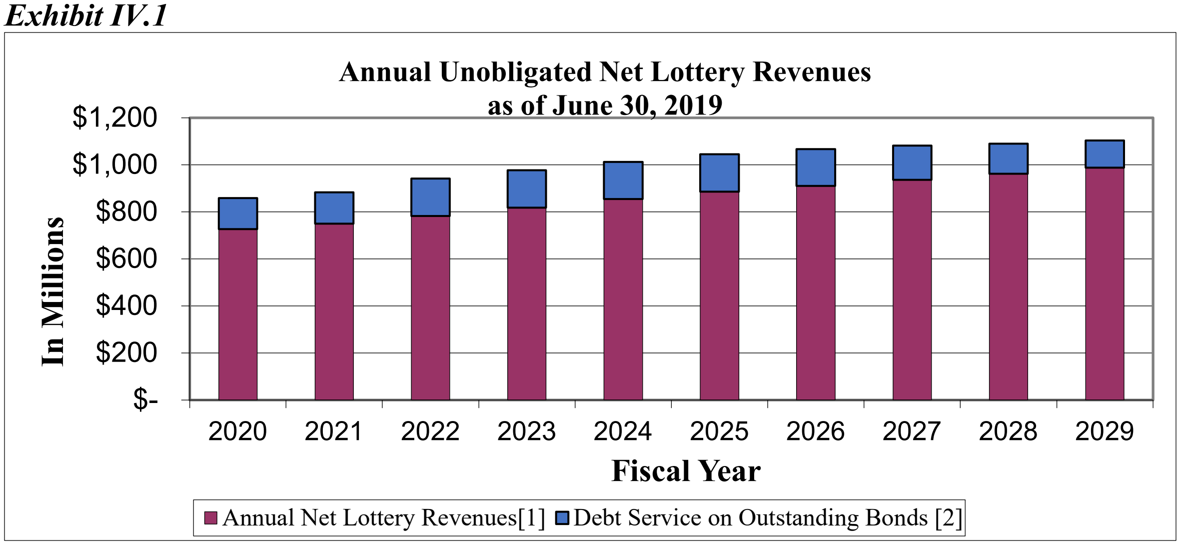
Forecast of Lottery Revenue, Debt Service, and Debt Service Coverage Ratios ($ Millions)

Fiscal Year	Annual Net Lottery Revenues[1]	Debt Service on Outstanding Bonds	Projected Debt Service Coverage
2020	$ 726.1	$ 133.1	5.5
2021	749.4	133.3	5.6
2022	782.8	158.6	4.9
2023	818.4	158.2	5.2
2024	854.3	158.2	5.4
2025	886.3	158.2	5.6
2026	910.7	155.7	5.8
2027	935.8	146.3	6.4
2028	961.7	127.9	7.5
2029	988.3	114.8	8.6

[1] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, December 2019

Exhibit IV.1 below graphically displays the amount of revenues consumed by debt service on outstanding Lottery revenue bonds and the remaining proceeds available to the State for other purposes.

Exhibit IV.1



[1] Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast, December 2018.
[2] Includes Lottery bonds issued through June 30, 2018. This does not include debt service on $221.0 million in authorized but not yet issued Lottery bonds that are planned to be issued before the end of FY 2019.

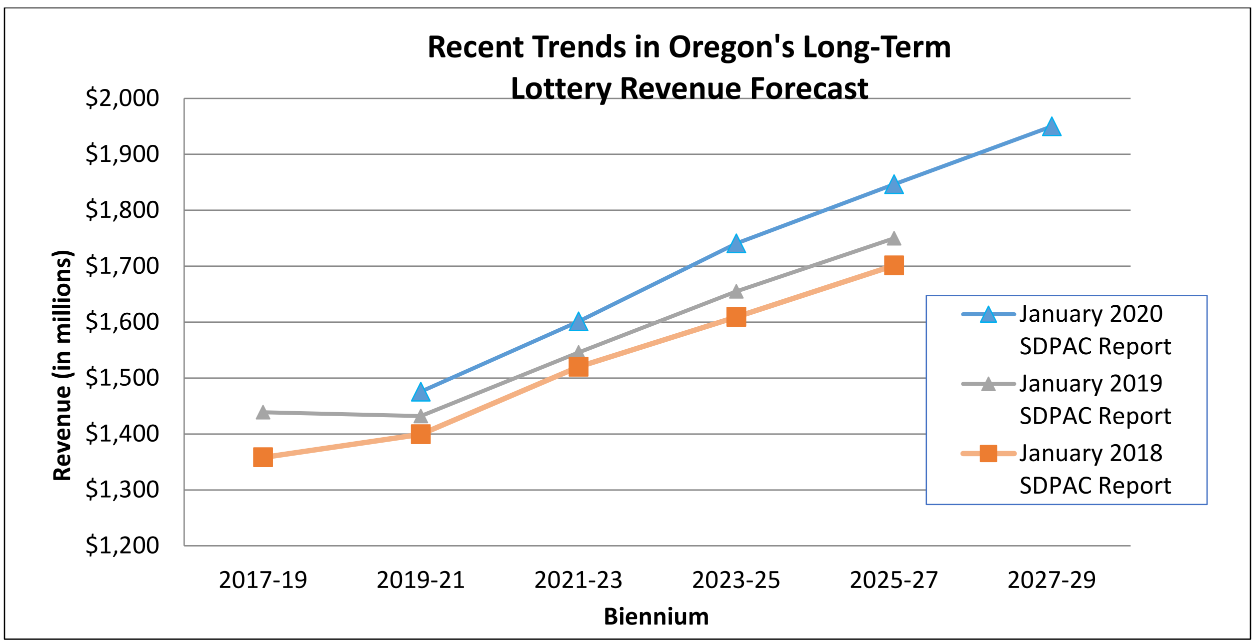
B. *Lottery Capacity Determination and Coverage Ratios*

The most appropriate means of determining future debt capacity for this program is its current legal debt service coverage requirements. This type of analysis compares expected debt service requirements to the available revenues pledged to repay this debt service. The extent to which the available revenues are forecasted to exceed debt service requirements is referred to as the debt service coverage ratio.

The Commission's current lottery bond capacity policy is that combined existing and proposed lottery debt service should not be more than 25% of net unobligated lottery revenues, which means that the debt service coverage ratio should not fall below a four times coverage. The four-times coverage ratio, is viewed by rating agencies as a conservative, yet realistic level and is incorporated in the State's Lottery Revenue bond indenture as a general bond covenant. This means that in order for the State to issue additional Lottery-backed bonds, unobligated net Lottery revenues must be at least four times the maximum annual debt service on all outstanding Lottery bonds, with the debt service on new proposed Lottery bonds treated as part of the debt service ratio calculation.

Over the past several years, the Commission's estimate of the State's future Lottery debt capacity has been lower than in earlier years, based on the Office of Economic and Analysis (OEA) downward revisions of long-term Lottery revenues due to the prospect of gaming competition in Washington State and trends in reduced consumer spending on gaming. In addition, sports betting was introduced by Lottery in October of 2019 and is now included in the long-term revenue forecast but represents only 2.5% of net proceeds. As *Exhibit IV.2* below shows, OEA's most recent forecast of long-term Lottery revenues is considerably higher than it has been over the past few years, based on actual Lottery collections over the past year and a revised view of the impact that the new casino in Washington State will have on future Lottery revenue.

Exhibit IV.2



Source: Oregon Office of Economic Analysis, December Economic and Revenue Forecast Reports, 2018 - 2020.

This significant increase in forecasted future Lottery revenues has in turn led to a healthy increase in the Commission's projection of future lottery debt capacity compared to previous Commission annual reports.

Table IV.1 reflects the positive impacts of this improving long-term Lottery revenue forecast. Lottery debt service coverage ratios are projected at a healthy 5.6 for FY 2021, which incorporates the planned issuance of $302.5 million in Lottery bonds authorized by the 2019 Legislative Assembly. The table also shows that Lottery debt service payments remain relatively constant for several years of the forecast period and declining after FY 2026, with the corresponding debt service coverage ratio improving over time as projected Lottery revenue increases.

Based on OEA's most recent long-term forecast of Annual Unobligated Net Lottery Proceeds and the targeted four-times (4.0) coverage ratio, as displayed in *Table IV.2*, the estimated available dollars for annual debt service ranges from $726.1 million in FY 2020 to $988.3 million in FY 2029.

For FY 2021, the calculation of maximum annual lottery debt service is:

Available Revenues ÷ Required Coverage Ratio = Maximum Annual Debt Service

– or –

$749.4 million ÷ 4 Times Coverage = **$187.4 million**

The capacity forecast for Lottery-backed revenue bonds illustrated in *Table IV.2*, accounts for:

- all outstanding Lottery revenue bonds as of June 30, 2019,
- all new Lottery revenue bonds authorized and expected to be issued before the end of the 2019-21 biennium, and
- an estimate of remaining capacity to issue additional Lottery revenue bonds through the end of FY 2029.

Projected net unobligated Lottery revenues available to pay Lottery bond debt service are displayed in *Table IV.2* column 1. The Lottery revenue bond debt service, as presented in *Table IV.2* column 2, accounts for existing debt service, as of June 30, 2019, and the planned FY 2021 issuance in the amount of the $302.5 million authorized Lottery bonds this biennium. The Commission estimates this sale will result in annual debt service payments of approximately $23.3 million starting in FY 2022, assuming a 4.5% interest rate[1] and a 20-year amortization period. The debt service on all future Lottery bonds are projected using a similar interest rate and term.

[1] The assumed interest rate of 4.5% is the new standard rate that will be used in the Commission's annual reports. The 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa3 rating and Standard & Poor's AA- minus rating.

Table IV.2 column 4 shows projected debt service for FY 2020 through FY 2029 resulting from the issuance of additional Lottery revenue bonds at the required coverage of four-times unobligated net Lottery revenues. Based on the assumptions provided above, there is a projected maximum of $1,721.1 million in Lottery bond capacity over the balance of the next four biennia, of which $30.5 million is available for authorization this February 2020 during the interim Legislative session.

Table IV.2

Lottery Debt Capacity Determination
($ Millions)

Fiscal Year	Estimated Lottery Revenues Available to Pay Debt Service	Debt Service Bonds Outstanding As of June 30, 2019 and Planned FY 20-FY21 Issuance	Maximum Amount of New Debt That May Be Issued	Projected Debt Service on Additional Issuance	Debt Service Ratio	Debt Service as a % of Lottery Revenues
2020	726.1	(133.1)	-	-	5.5	18%
2021	749.4	(133.3)	30.5	(2.3)	5.5	18%
2022	782.8	(158.6)	452.6	(34.8)	4.0	25%
2023	818.4	(158.2)	120.5	(9.3)	4.0	25%
2024	854.3	(158.2)	116.9	(9.0)	4.0	25%
2025	886.3	(158.2)	104.1	(8.0)	4.0	25%
2026	910.7	(155.7)	111.7	(8.6)	4.0	25%
2027	935.8	(146.3)	204.3	(15.7)	4.0	25%
2028	961.7	(127.9)	322.8	(24.8)	4.0	25%
2029	988.3	(114.8)	257.6	(19.8)	4.0	25%
Max. Lottery New Debt Capacity		$	1,721.1			

Source:
Oregon Office of Economic Analysis, Oregon Economic and Revenue Forecast

Fiscal Year	Estimated Lottery Revenues Available to Pay Debt Service	Debt Service Bonds Outstanding As of June 30, 2019 and Planned FY 20-FY21 Issuance	Maximum Amount of New Debt That May Be Issued	Projected Debt Service on Additional Issuance	Debt Service Ratio	Debt Service as a % of Lottery Revenues
2020	726.1	(133.1)	-	-	5.5	18%
2021	749.4	(133.3)	30.5	(2.3)	5.5	18%
2022	782.8	(158.6)	452.6	(34.8)	4.0	25%
2023	818.4	(158.2)	120.5	(9.3)	4.0	25%
2024	854.3	(158.2)	116.9	(9.0)	4.0	25%
2025	886.3	(158.2)	104.1	(8.0)	4.0	25%
2026	910.7	(155.7)	111.7	(8.6)	4.0	25%
2027	935.8	(146.3)	204.3	(15.7)	4.0	25%
2028	961.7	(127.9)	322.8	(24.8)	4.0	25%
2029	988.3	(114.8)	257.6	(19.8)	4.0	25%
Max. Lottery New Debt Capacity			$ 1,721.1			

C. *Other Capacity Considerations*

As is the case with General Fund supported debt capacity, the Commission recommends that projected Lottery debt be evenly spread out over time, in order to assure that the State does not overcommit this scarce resource. *Table IV.3* displays the Commission's recommended approach to allocating Lottery debt capacity over time, an approach that has historically protected the high credit ratings on the State's Lottery Bonds in times when Lottery revenues have dropped sharply.

The Oregon Lottery launched online sports betting in October 2019, with the resulting increase in net Lottery proceeds that this new program is expected to generate (approximately 2.5% of overall revenue) now incorporated into both the long-term Lottery revenue and Lottery debt capacity forecasts. If the net proceeds from the new sports betting program is excluded in the capacity calculation, overall Lottery capacity drops by roughly $84 million, or $21 million per biennium.

Table IV.3

Recommended Allocation of Additional Lottery Debt Capacity ($ Millions)

Fiscal Year (ending June 30th)	Maximum Annual Amount of Additional Debt that Should be Issued	Debt Service Coverage Ratio on Current, Planned & Averaged Issuance of Future Debt	Debt Service as % of Net Lottery Revenues
2020	-	5.5	18%
2021	$ 30.5	5.6	18%
2022	211.3	4.5	22%
2023	211.3	4.0	23%
2024	211.3	3.3	24%
2025	211.3	2.8	25%
2026	211.3	2.3	26%
2027	211.3	1.9	26%
2028	211.3	1.7	25%
2029	211.3	1.4	25%
Max. Lottery New Debt Capacity	$ 1,721.1		

On occasion, the State has been required to issue a portion of its Lottery bonds on a taxable basis; generally, taxable Lottery bonds have funded economic development activities that do not fit into the Federal government's tax rules regarding "qualified" private activity. Issuance of Lottery debt on a taxable basis results in a higher overall interest rate than the tax-exempt rates assumed in the capacity calculation above. In addition, proposed changes in the Federal tax code that may reduce or eliminate tax-exemption could also further reduce long-term Lottery bond capacity, as these changes would increase the interest cost paid by the State to investors on future State bond issues.

Table IV.4 illustrates the impact of changes to long-term interest rate assumptions in the Lottery debt capacity model. Based on current estimates of annual unobligated net Lottery revenues and the assumed long-term interest rate of 4.5%, the capacity of Lottery revenue to support additional bond issuance is calculated to be $1,721.1 million over the balance of the forecast period. A 1.0% increase in the projected long-term interest rate on these bonds to 5.5% would reduce the maximum available capacity over this period by approximately $164.5 million; conversely, a reduction in the interest rate assumption by 1.0% to 3.5% would add roughly $198.3 million in capacity over the forecast period.

Table IV.4

Forecast of Lottery Revenue Debt Capacity*
From FY 2020 to FY 2029
at Various Assumed Interest Rates
($ Millions)

	4.5 % Interest Rate	3.5 % Interest Rate (1% Decline)	5.5 % Interest Rate (1% Increase)
Total	$1,721.1	$ 1,888.9	$ 1,526.1
Difference from Base Case		198.3	(164.5)

*Does not includes the $302.5 million in planned Lottery bond issuance by the end of FY 2019.

As the recent past has demonstrated, OEA's revisions in projected long-term Lottery revenues have had a substantial impact on projections of future Lottery bond capacity. As shown in *Table IV.5*, a 10% reduction in unobligated net Lottery revenues over the forecast period would reduce the available debt capacity by $321.4 million over the next four biennia.

Conversely, increases in projections of net Lottery proceeds would increase Lottery bond capacity substantially. As *Table IV.5* illustrates, a 10% increase in projected Lottery revenues would add $301.5 million to the long-term debt capacity forecast.

Table IV.5

Forecast of Lottery Revenue Debt Capacity*
With Changing Lottery Revenues
($ Millions)

	Current Lottery Capacity Projection (From *Table IV.2*)	10% Decrease in Unobligated Net Lottery Revenue	10% Increase in Unobligated Net Lottery Revenue
Total	$1,721.1	$ 1,369.2	$ 2,022.6
Difference from Base Case		(321.4)	301.5

*Does not include the $302.5 million in planned Lottery bond issuance by the end of FY 2019.

V. NET TAX-SUPPORTED DEBT

Net tax-supported debt (NTSD) is defined as all debt serviced by tax revenues of the State. Based on the approach taken by rating agencies, this definition encompasses General Fund-supported debt, as well as all Pension Obligation Bonds and Certificates of Participation that are characterized as self-supporting in Section III.B of this report, all Lottery revenue bonds and all State Highway revenue bonds. *Exhibit I.2* in the section titled "Bonding in Oregon," provides a comparison of the State's total outstanding gross debt, General Fund-supported debt, and net tax-supported debt as of June 30, 2019. The State's net tax supported debt, as of June 30, 2019, was \$8.7 billion.

Lottery revenue bonds are included in the calculation of net tax-supported debt even though they are special obligations of the State with debt service for the bonds coming from non-tax resources, that is, discretionary lottery purchases. However, because Lottery bonds are also secured by a "moral obligation" pledge of the state and a statutory commitment to request appropriated funds for any deficiencies in reserves or inability to pay debt service, these bonds are considered tax-supported and included in rating agency calculations of net tax-supported debt.

Given the importance of Lottery revenue bonds to the State's overall capital planning process, Lottery revenue bond capacity is discussed separately in the previous section of this report.

The definition of net tax-supported debt omits a variety of other self-supporting debt obligations issued by the State that were designed to be self-supporting in all but the most extreme circumstances. General obligation bonds sold on behalf of the Oregon Veterans' Home Loan Program, the Pollution Control Loan Program, and the Oregon Housing and Community Services Department's Elderly and Disabled Mortgage Loan Program are examples of this category of self-supporting GO debt. These GO bond programs are expected to fully repay all GO bonds issued on their behalf from the loan revenue streams they receive over time from borrowers, while maintaining adequate loan reserves to cover any temporary shortfalls in loan repayments.

This same type of self-supporting financial structure is built into the Single and Multifamily Housing mortgage revenue bond loan programs and the Infrastructure Finance Authority's Bond Bank loan program, as well as all conduit revenue bonds sold by the State. While certain revenue and self-supporting GO bond debt programs are included on the State's gross debt balance sheet, these bond programs have a long history of paying their obligations with non-tax revenue resources and are therefore not included in the calculation of NTSD. While a large economic or natural disaster (e.g., a major seismic event) might temporarily impact loan repayments on some of these self-supporting loan programs (which is the reason that strong loan reserves are needed), it remains reasonable to exclude these programs from the NTSD calculation until such time that a State loan program actually requires the use of the State's tax resources to repay bonds issued on its behalf.

Table V.1 lists the 2019-21biennium net tax-supported debt authorizations approved by the 2019 Legislature. For purposes of this *2020 Legislative Update*, it is assumed that all authorized net tax-supported debt will be issued during the 2019-21 biennium. GO bonds issued for General Purposes (Article XI-Q); Higher Education facilities and Community College matching grants (Article XI-G); Public School Construction matching grants (Article XI-P); and Seismic Upgrade grants to schools (Article XI-M), along with Lottery Revenue and Highway User Tax Revenue Bonds make up the majority of new tax-supported debt planned for issuance this biennium.

Table V.1

Net Tax-Supported Debt Authorizations
2020-21 Biennium

Type & Purpose	Authorized and Expected to Be Issued by June 30, 2021
General Obligation Bonds	
Community College Bonds (Article XI-G)	$ 75,265,000
Higher Education Facility Bonds (Article XI-G)	-
DEQ – Pollution Control Bonds (Article XI-H)	-
Seismic Upgrade Bonds for Public Schools (Article XI-M)	101,240,000
Seismic Upgrade Bonds for Public Safety Facilities (Article XI-N)	20,270,000
School Construction Bonds (Article XI-P)	126,090,000
DAS General Purpose GO (Article XI-Q)	673,285,000
Total General Obligation Bonds	$ 996,150,000
Direct Revenue Bonds	
Lottery Revenue Bonds	302,505,000
Highway User Tax Revenue Bonds	485,000,000
Appropriation Credits	
DAS Financing Agreements (ORS 283 & 286A)	-
Total Net Tax-Supported Debt	$1,783,655,000

Two measures most commonly used by rating agencies and municipal analysts to gauge a state's overall debt burden include:

- Net Tax-Supported Debt Per Capita, and
- Net Tax-Supported Debt as a Percentage of Personal Income.

Prior to FY 2003, Oregon's debt burden was well below the 50-state medians as calculated by Moody's Investors Service. For the past 16 years, however, Oregon's debt burden per capita has exceeded national averages.

In their *2019 State Debt Medians* report (which uses calendar year 2018 data), Moody's determined the average NTSD per capita for the 50 states was $1,493 and the median was $1,068.[1] The average NTSD as a percentage of income was reported at 2.8% and the median at 2.2%. By comparison, Oregon's NTSD ranked 17th highest nationally in terms of net tax-supported debt outstanding, but 13th highest in terms of net tax-supported debt per capita at $1,921 and 12th in net tax-supported debt as a percentage of personal income at 4.0%.

The significant jump in Oregon's debt since FY 2003 was due to the issuance of $2 billion in pension obligation bonds, and the combined growth in Lottery and Highway User Tax revenue bond issuance to fund high priority economic development and transportation projects around the state.

As *Table V.2* illustrates at the end of FY 2019, net tax-supported debt totaled $8.7 billion with debt ratios of $2,051 per capita and 3.9% of personal income. Based on the issuance of an estimated

$1.7 billion in authorized debt over the 2019-21 biennium, it is projected that the State's net tax-supported debt will increase to about $9.37 billion by the end of the 2021 fiscal year.

Table V.2

Net Tax-Supported Debt Ratios[1]			
	Fiscal Year Ending June 30th		
	FY 2019 (Actual)	**FY 2020 (Projected)**	**FY 2021 (Projected)**
Net Tax-Supported Debt (Billions)	$ 8.70	$ 8.52	$ 9.37
Population*	4,242,700	4,299,400	4,349,800
Personal Income (Billions)*	$224.4	$234.4	$246.0
NTSD Per Capita	$ 2,051	$ 1,982	$ 2,153
NTSD as a % of Personal Income	3.88%	3.63%	3.81%
Pension Obligation Bonds Excluded			
NTSD Per Capita	$1,701	$1,664	$1,871
NTSD as a % of Personal Income	3.22%	3.05%	3.31%

*Source: Oregon Office of Economic Analysis Economic and Revenue Forecast, December 2019.

Rating agencies typically calculate total net tax-supported debt both with and without pension obligation bonds. In this way, they do not penalize states that issue POBs in comparison to other states that may have not issued POBs, yet may still have sizable unfunded pension liabilities. For Oregon, if pension obligation bonds are excluded from the NTSD calculation shown in *Table V.2*, the estimated FY 2021 debt burden drops to $1,701 per capita and 3.22% as percentage of personal income.

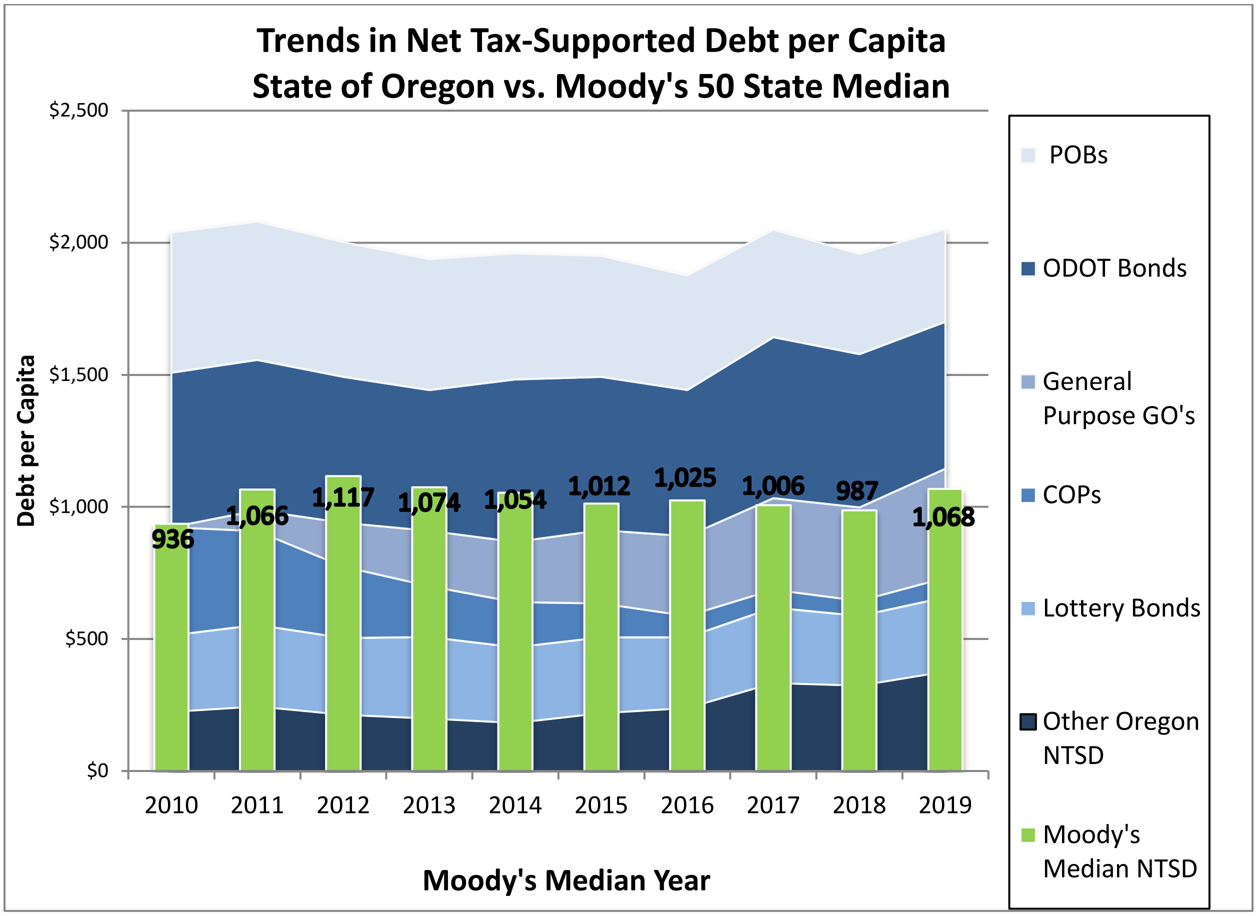
Debt Ratio Comparisons

At the time of this report, Oregon's general obligation debt was rated by Moody's as Aa1, and AA+ by both Standard & Poor's and Fitch Investors Service. *Exhibits V.1a & V.1b* compare Oregon's NTSD ratios over the past decade with the Moody's median ratios of all 50 states. Prior to FY 2003, Oregon's debt ratios compared favorably to the national averages, with Oregon generally having lower ratios than states with higher credit ratings. Since that time, the State has issued a substantial amount of new debt to address unfunded pension liabilities, economic development, highway modernization, and public safety needs. As *Exhibit V.1a* below shows, Oregon's current per capita debt burden has remained well above Moody' national medians due to the aforementioned issuance of both POBs and Highway User Tax bonds for various Oregon Department of Transportation (ODOT) projects. *Exhibit V.1b* below shows that while Oregon's

[1] FY 2020 and FY 2021 projections based on the issuance of $314.4 million and $1.469.3 billion of new tax-supported debt over the balance of the 2019-21 biennium

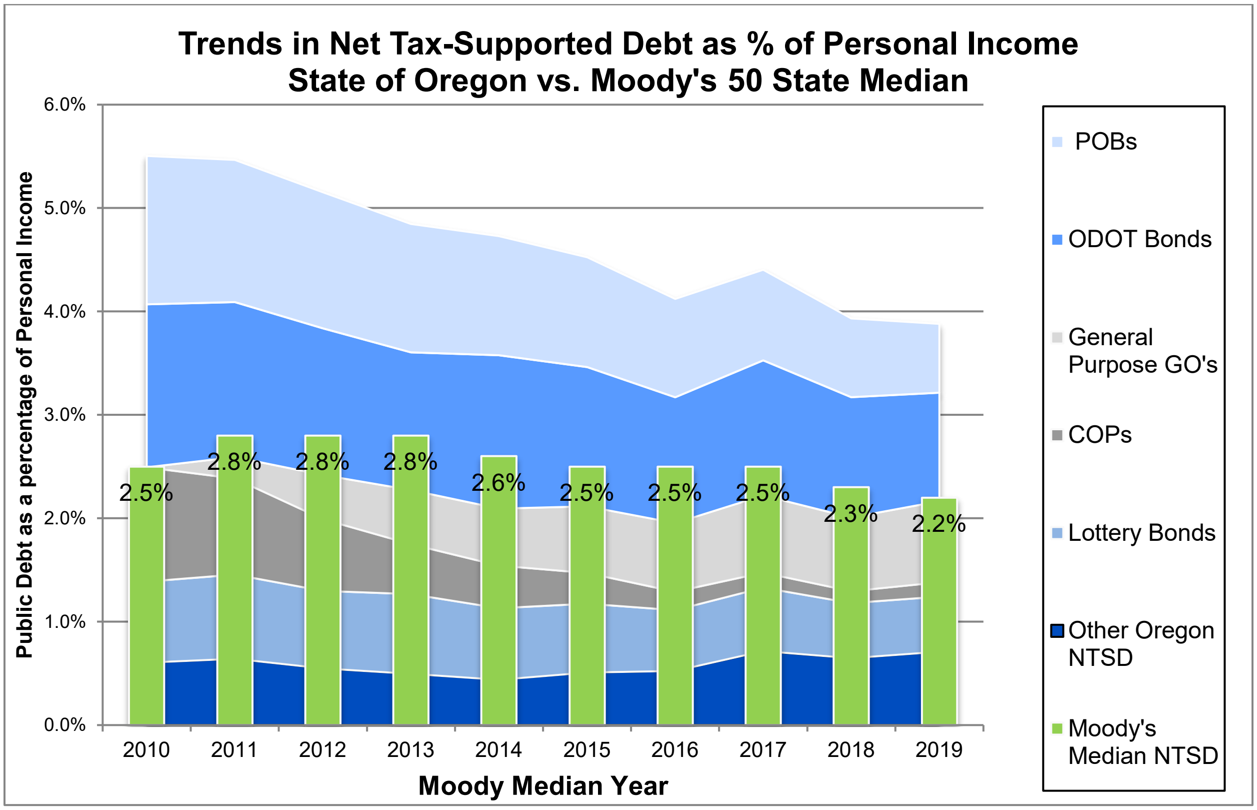
NTSD as a percentage of personal was well above the 50 state median in FY 2010 at 5.5%, this ratio has dropped dramatically as personal income levels have increased across the state.

Exhibit V.1a



Source: Moody's Median Reports, 2010-2019.

Exhibit V.1b



Source: Moody's Median Reports, 2010-2019.

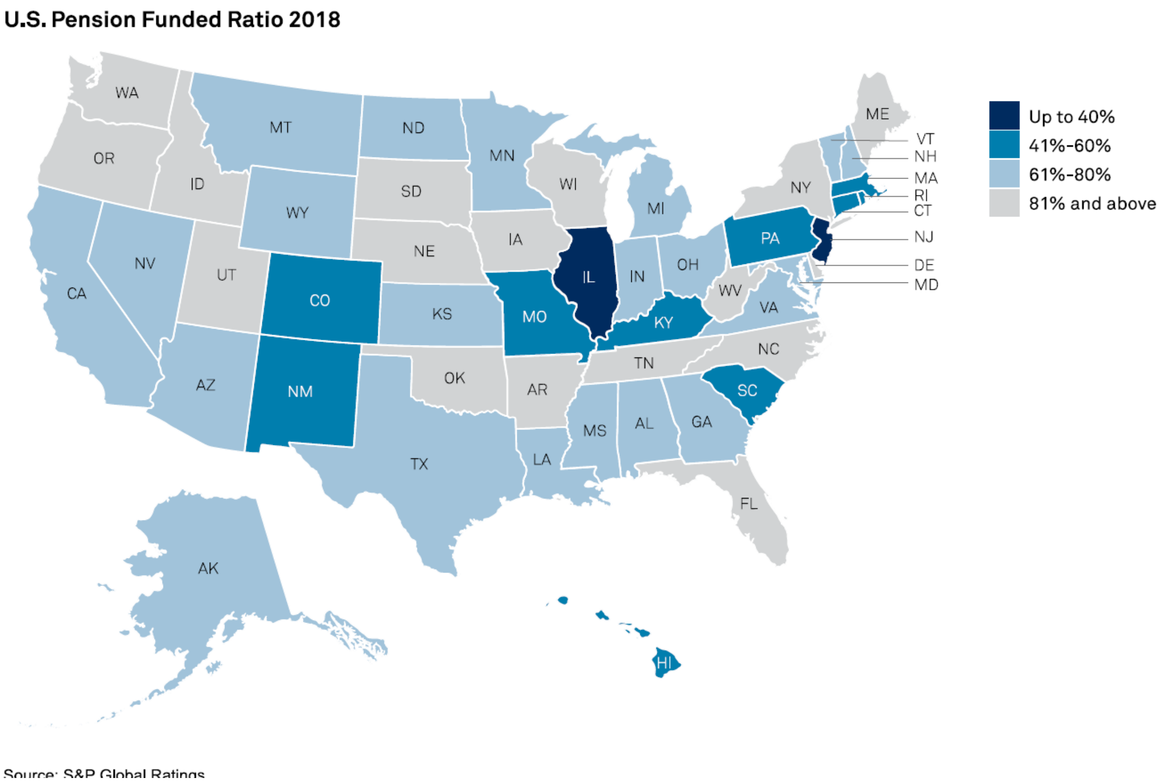
[1] Moody's *2019 State Debt Medians* reflect NTSD as of the end of calendar year 2019.

Overall State Long-term Liabilities

Given the growing awareness of unfunded long-term pension liability, Standard & Poor's (S&P) has taken a more comprehensive approach to the tracking of overall state long-term liabilities; their reports include both the public indebtedness and the net pension liability of each state as reported in their Comprehensive Annual Financial Reports (CAFRs) as part of their overall 50 state debt ratio analysis. *Exhibit V.2* displays a graph from S&P's most recent pension report, which shows the funded ratio for the pension systems of all fifty states, as reported in their CAFRs for FY 2018. At 82% funded, Oregon's system ranked 15th highest among states.

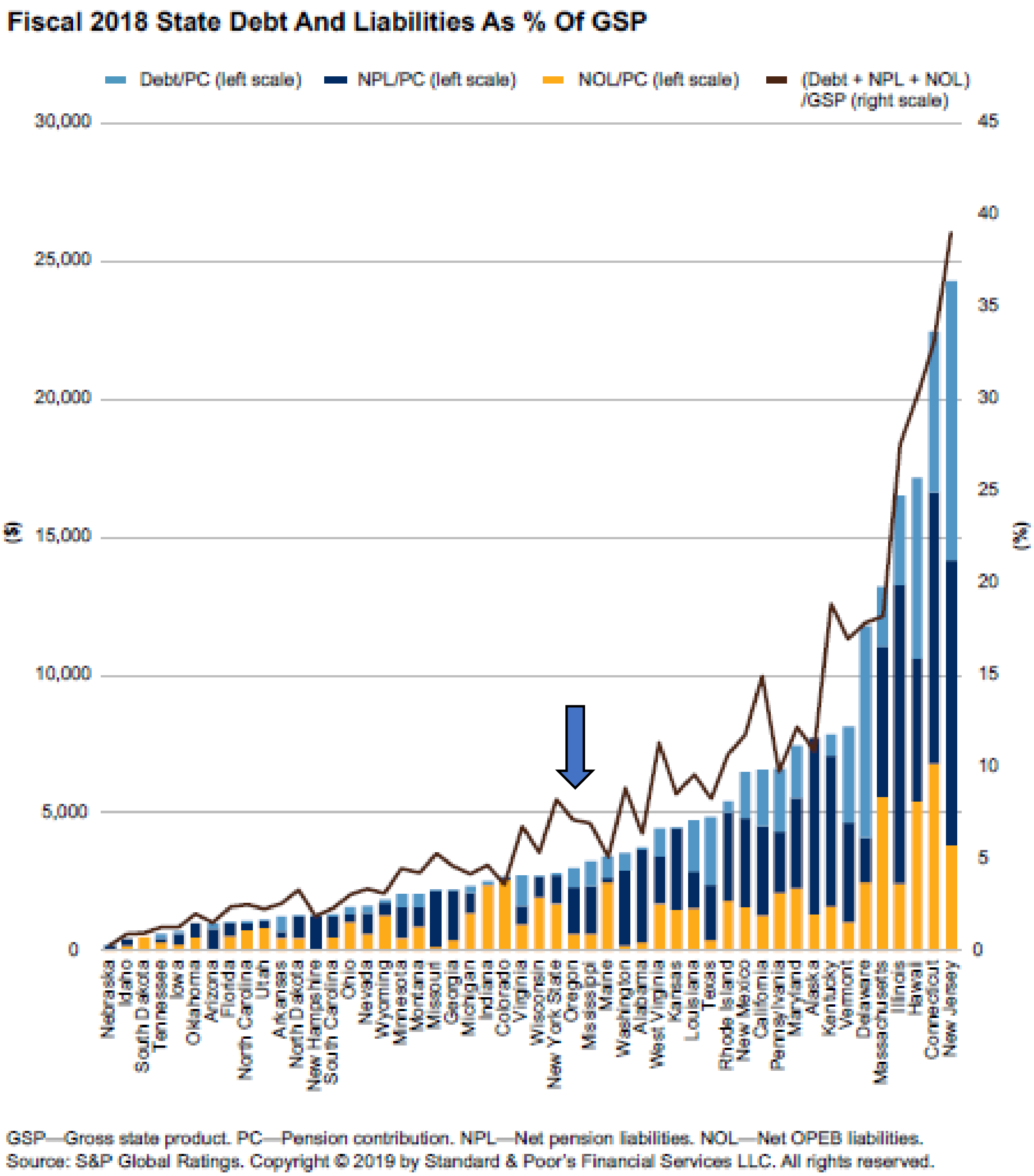
The aforementioned S&P report also compares the combined public debt and unfunded pension and other post-employment liabilities per capita for each state as compared to its gross state product, which provides great insight as to the portion of each state's financial resources are required to manage their overall state long-term liabilities. As *Exhibit V.3* shows, for FY ending 2018, the State of Oregon's combined liability was $2,747 or just above the 50 state median for this debt measure.

Exhibit V.2



Source: Standard & Poor's, *U.S. State Pension Reforms Partly Mitigate the Effects of the Next Recession,* Sept 26, 2019. Please note in the chart above, the net pension liability used for each state is based on the amount reported in their Comprehensive Annual Financial Reports as of June 30, 2018, as now required by GASB.

Exhibit V.3



Source: Standard & Poor's, *U.S. State Pension Reforms Partly Mitigate the Effects of the Next Recession,* Sept 26, 2019. Please note in the chart above, the net pension liability used for each state is based on the amount reported in their Comprehensive Annual Financial Reports as of June 30, 2018, as now required by GASB. "OPEB" means Other Post-Employment Benefits, which generally include retiree health care benefits guaranteed for payment by a state.

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VI. NON-TAX-SUPPORTED DEBT

For several of the State's largest bonding programs, the majority of their bonds do not fall under the definition of either General Fund supported debt or net tax-supported as used in this report. These programs include:

- Veterans' Welfare General Obligation GO Bonds (Article XI-A);
- Higher Education Building Project GO Bonds (Article XI-F(1));
- OHCSD[1] Elderly & Disabled Housing Project GO Bonds (Article XI-1(2));
- OHCSD[1] Single-Family & Insured Multi-Family Revenue Bonds (ORS 456.661);
- Pollution Control GO Bonds (Article XI-H) (56% of Total);
- Alternate Energy Project GO Bonds (Article XI-J) (60% of Total):
- Oregon School Bond Guaranty Program (Article XI-K);
- Oregon Infrastructure Authority Bond Bank Revenue Bonds; and
- Conduit or "Pass Through" Revenue Bond Programs.

These programs were designed and intended to be fully self-supporting from enterprise revenues or loan repayments and under normal circumstances are not expected to require a draw on General Fund or special tax revenues. Therefore, it is less meaningful to discuss their capacity in the same terms with which we discuss net tax-supported or General Fund supported debt programs. However, it is understandable that these programs cannot issue debt unconditionally without consequence because, with the exception of conduit revenue bonds, they represent an exposure to the financial resources and reputation of the State. Capacity for these programs is more appropriately judged by reflecting the need for sound management and lending practices, as well as careful consideration of the economic circumstances unique to each program. The Commission proposes that capacity for these programs is more appropriately based on ongoing review of constitutional and statutory limitations, program needs, sound program management practices, and biennial review and approval of debt program issuance rather than a specific dollar limit capacity.

[1] Oregon Housing and Community Services Department.

Table VI.1

Debt Issuance Considerations for Non Tax-Supported Bond Programs

NON TAX-SUPPORTED DEBT PROGRAM	BASED ON:
Veterans' Welfare General Obligation Bonds *Article XI-A*	• Demand for loan program services; • Annual cash flow projections; • Legal limitations (8% of State TCV); • Governor's budgetary review; • Biennial Legislative Authorization; and • Central debt management review.
Higher Education Building Projects General Obligation Bonds *Article XI-F(1)*	• Need for capital building projects; • Revenue producing capacity of desired projects; • Projects are self-supporting without requiring any General Fund revenues to cover debt service; • Legal limitations (0.75% of State TCV); • Governor's budgetary review; • Biennial Legislative Authorization; and • Central debt management review.
Pollution Control Projects General Obligation Bonds *Article XI-H*	• Demand for loan and grant program services; • Wastewater loans to communities are self-supporting without requiring any General Fund revenues to cover debt service; • Bonds used to fund grants for clean-up of orphan sites require General Fund debt service support • Legal limitations (1% of State TCV)
Alternate Energy Project General Obligation Bonds *Article XI-J*	• Local community/region energy needs; • Applicant screening; • Technical review; • Legal limitations (0.5% of State TCV); • Governor's budgetary review; • Biennial Legislative Authorization; and • Central debt management review.
Oregon School Bond Guaranty Program General Obligation Bonds *Article XI-K*	• May be triggered if state has to pay district debt service; • State-Aid may be intercepted for debt service payments; • May levy a district-specific or statewide property tax to repay bonds; • State's full faith in credit; and • Legal Limitation (0.5% of State TCV).

Infrastructure Finance Authority **Bond Bank** **Program Revenue Bonds** *ORS Chapter 285B*	• Municipality water and wastewater system needs; • Municipality infrastructure needs; • Legal limitations (0.5% of State TCV); • Governor's budgetary review; • Biennial Legislative Authorization; and • Central debt management review.
Elderly & Disabled Housing Project **General Obligation Bonds** *Article XI-I(2)* and **Single-Family & Multi-Family** **Revenue Bonds** *ORS 456.661*	• Demand for mortgage program services; • Continued strict applicant screening and eligibility requirements; • Annual cash flow review; • Legal limitations; ▪ Elderly & Disabled (0.5% of State TCV) ▪ Single & Multifamily ($2 billion) • Governor's budgetary review; • Biennial Legislative Authorization; and • Central debt management review.
Conduit Revenue Bond Programs *Oregon Facilities Authority* *Industrial Development Revenue Bonds* *Housing Development Revenue Bonds* *Beginning & Expanding Farmer Loan Revenue Bonds*	• Conduit borrower's ability to pay debt service on intended projects; • Evaluation of market impact of conduit issues on other State issues; • Biennial Legislative Authorization; and • Central debt management review.

A. *Veterans' Welfare Bond Program*

As noted earlier, the Oregon Department of Veterans' Affairs (ODVA) is authorized to issue bonds to finance mortgage loans to eligible veterans. Although bonds outstanding under this program are fully self-supporting (repaid) from mortgage loan repayments, this was not always the perception by the bond market. In the late 1970s and early 1980s, the ODVA faced considerable difficulties due to the effects of the nationwide recession, aggressive lending practices, and improperly structured bond issues. Revenues from their mortgage portfolio were projected to be insufficient to cover operating expenses, bonded debt service resulting from mortgage prepayments and the increased losses from higher foreclosure rates. During this time, management practices allowed an extraordinary volume of bond issuance, resulting in over $6 billion outstanding in the ODVA program in 1985. These management practices were, in part, responsible for an eventual State ratings downgrade, leading to increased capital financing costs for the State for many of its bond programs.

Over the last thirty years, the State and ODVA made excellent progress and has transformed the Veterans' loan program into a sound, well-structured self-supporting GO bond program. ODVA did not issue debt between 1987 and 1995, and did not make mortgage loans between 1987 and 1991. The restructured program began lending mortgage monies again in 1992. Current financial strategies of the Department include: exercising bond call options for high cost debt where opportunity exists; close monitoring of administrative expenses; working to achieve the maximum spread between bond borrowing costs and mortgage lending rates permitted under Federal tax law; and structuring new bonds similar to proven single-family mortgage revenue bond programs nationwide.

Requirements for participation in the ODVA Mortgage Loan Program are much more stringent than the early years of the program. Individual applicants and properties must generally meet Federal National Mortgage Association underwriting standards, which include, but are not limited to: adequate income, verification of stable employment, acceptable credit history, and sufficient funds to pay the down-payment and closing costs. A private mortgage insurer must also insure loans that exceed 80% of the value of the underlying security.

ODVA makes annual cash flow forecasts to assess future ability to meet debt service and related operating expenses. Future bond issuance will be based primarily on demand for program loans when ODVA loan rates can be provided below the prevailing commercial market rate.

B. *Higher Education Building Project Bond Program*

Historically, the Oregon University System (OUS) was composed of Oregon's seven public four-year universities, one satellite campus, and the affiliated Oregon Health & Science University (OHSU) in Portland. The Board of Higher Education had the authority to issue GO bonds for OUS projects based on two constitutional provisions, Article XI-F (1) and Article XI-G.

General obligation bonds issued on behalf of OUS are repaid either through revenues generated by various universities (Article XI-F (1)) or through State general fund appropriations (Article XI-G). Debt issued under Article XI-G is considered tax-supported debt for purposes of this report, and is accounted for in the General Fund capacity model and net tax-supported debt ratio calculations. Debt issued under Article XI-F (1), for Higher Education Building Projects, or through OUS revenue bonds, are not included in either model's calculations.

Article XI-F (1) bonded debt is paid solely out of non-General Fund revenues of OUS. These revenue sources may include tuition, student building fees, gifts, grants, endowment earnings, and other similar funds. Under program requirements, members of the OUS were required by the Board of Higher Education to set rates for the use of dormitories, cafeterias, parking structures and other self-liquidating auxiliary enterprises sufficient to produce revenues to fund all operation and maintenance costs, as well as to meet debt service requirements on their facilities.

Over the past several years, the State Legislature passed a series of bills that restructure the governance and management of many aspects of public higher education in Oregon. In 2011, the Oregon Education Investment Board was established to provide overarching policy guidance for Oregon's public education enterprise from pre-kindergarten through college. The 2011 Legislature also granted more independence to the various institutions within the OUS. In 2013, the Legislature adopted SB 270, which granted full administrative autonomy to individual public universities within OUS. The University of Oregon, Portland State University, and Oregon State University were granted the ability to establish independent governing boards that, as of July 1, 2014 establishment of campus-wide multi-year capital master plans and the issuance of stand-alone revenue bonds. In 2014, the Legislature granted the same administrative autonomy to the remaining four schools within OUS, which became effective on July 1, 2015. With the simultaneous dissolution of OUS and the Board of Higher Education, state budget and bonding request coordination and other higher education policy duties were assigned by law to the Higher Education Coordination Commission. In 2015, this new business relationship between the State and the independent universities for bonding matters was further clarified and documented with the passage of HB 3199.

To the extent that these new, independent governing boards want to avail themselves of future self-supporting Article XI-F (1) or XI-Q GO bonds, State law requires that the Office of the State Treasurer (OST) review and approve any future standalone university revenue bonds to assure that the pledged revenues of the university are sufficient to cover debt service on both existing State GO bonds as well as these new university revenue bonds. To the extent that a university board does not wish to seek the review and approval of the OST prior to the sale of their revenue bonds, they are precluded from seeking new Article XI-F (1) or XI-Q GO bonding authority. To date, OST has reviewed and approved multiple series of revenue bonds issued under this new authority by the University of Oregon and Oregon State University.

Historically, the combined non-General Fund revenues of the OUS were more than adequate to meet the operating and debt service requirements of the XI-F (1) bonding program. To assure that the General Fund is never actually required to repay this debt, and with the full implementation of independent university boards, the OST has the responsibility of working with the Higher Education Coordinating Commission and each university to identify enterprise revenues available at each school to pay debt service on existing and future XI-F (1) bonds. Each campus' future XI-F (1) bonding capacity will be dependent upon its governing board's adoption of sound financial management policies and practices and the revenue-producing ability of the projects financed.

C. *Housing & Community Services Department Bond Programs*

The Oregon Housing and Community Services Department (OHCSD) is authorized to issue GO bonds for the Elderly and Disabled Housing program, direct revenue bonds for Single-Family and Multifamily housing mortgage programs, and pass-through revenue bonds for its multifamily conduit revenue program. None of these programs fall under the definition of net tax-supported debt used in this report. Thus, program capacity is discussed separately from assumptions made in the General Fund capacity model.

Like other self-supporting bonding programs, capacity for OHCSD programs is based primarily on the fiscal soundness of these programs and prudent financial management. The Director and the State Housing Council are appointed by the Governor. The Housing Council develops policies for OHCSD and submits proposed legislation to the Oregon Legislative Assembly on measures the Council considers necessary to address housing programs.

Applicants proposing to borrow monies under any of OHCSD's housing programs must first meet the eligibility requirements of that particular program. Applicants then follow an application review and approval process prior to receiving any loan monies associated with the program.

As noted earlier, bonds issued by OHCSD are fully self-supporting. Debt service is paid solely from revenues received from mortgage loan repayments, investment earning, and other assets held under each specific Trust Indenture. In order to assure that these assets are sufficient to fund necessary debt service requirements, OHCSD is required to submit materials outlining projected revenues annually to OST. These projections must outline the ability to repay principal and interest over the life of outstanding bonds, as well as other expenses of OHCSD. If projected revenues show an inability to provide for these requirements, OHCSD would be precluded from issuing additional bonds or applying any revenues to the financing of additional mortgage loans.

Similar to other programs outlined here, OHCSD's capacity to issue bonds is based on sound management, prudent lending practices, maintenance of strong operation reserves for program continuance, and awareness of evolving economic and social factors affecting individual borrowers' ability to repay mortgage loans. OHCSD, more than other state agencies, has used sophisticated public finance tools like variable rate bonds backed with liquidity facilities and floating-to-fixed interest rate swaps in order to offer more competitive mortgage rates to its customers while reducing its bond portfolio's interest rate risk.

D. *Alternate Energy Program Bonds*

The Oregon Department of Energy (ODOE) is authorized to issue GO bonds for the Alternative Energy Project in accordance with the provisions of Article XI-J to finance secured loans for the development of small-scale local energy projects (SELP) throughout Oregon. ODOE may have bonds outstanding equal to one-half of one percent of the true cash value of the property of the State. SELP was originally designed to be fully self-supporting requiring prior determination and identification of repayment sources prior to making loans from bond proceeds. Constitutional and statutory provisions mandate that loan repayments are made from secured loan sources before any General Funds are advanced to SELP for repayment of Article XI-J debt.

Debt service on Alternate Energy Program GO bonds is paid from revenues received from loan repayments. Prior to each bond sale, ODOE is required to submit materials outlining projected revenues and expenses to the OST. The projections provided must show the program's future capability of meeting all planned and outstanding bond payments through program resources. ODOE's capacity to issue these bonds must be based on sound program and departmental management, prudent lending practices, maintenance of appropriate loan loss reserves, and awareness of underlying borrowers' ability to repay loans.

Currently, a portion of ODOE's Alternate Energy Bonds are considered as General Fund-supported debt, as XI-J GO bonds were sold to fund loans for energy projects on various OUS campuses that are being repaid through annual General Fund appropriations to the State's newly independent universities. For FY 2019, these General Fund appropriations represent approximately 40% of ODOE's overall GO debt service payments for this fiscal year.

In preparation for an ODOE bond sale in 2012, the State Treasurer's staff reviewed SELP's cash flow model to determine if their projected loan repayments were sufficient to meet all future debt service requirements of their GO bond portfolio. This evaluation revealed that SELP's loan loss reserves were seriously depleted, due to the default of an $18 million loan on an ethanol facility, and a growing number of large, delinquent loans to private parties that were 91 days or more past due. Since that time, several other large loans linked to renewable energy projects have also gone into default and have been written off as non-collectible, further deteriorating SELP's balance sheet and reserve balances, which have sharply reduced the program's ability to make new loans without additional financial support from State general fund resources.

To address these problems, ODOE's management has tightened loan underwriting standards and pursued delinquent borrowers. In addition, the State Treasury refunded and restructured a portion of the outstanding ODOE bond portfolio in 2017, lowering ODOE's debt service payments substantially. Even with these efforts, General Fund cash infusions will be required starting in FY 2020 to supplement SELP loan repayments. Approximately $4.4 million will be needed in the 2019-21 biennium, in order for the SELP program to meet its scheduled debt service obligations. The overall amount of General Fund assistance needed over time is projected to total approximately $7 million, although the amount, timing, and size of future cash infusions will change if more SELP loans become delinquent or are written off as uncollectible.

E. *Department of Environmental Quality Pollution Control Bonds*

The Department of Environmental Quality manages two separate programs under this bond category—loans to local Oregon communities to address their wastewater infrastructure needs and grants for the clean-up of environmentally contaminated sites where neither existing nor previous owners can fund this work (i.e. "orphan sites).

GO bonds issued for these purposes are authorized under Article XI-H of the State Constitution, for purposes of financing pollution abatement and control facilities, as well as pollution control and disposal activities of State and local government agencies. This authorization, granted under Article XI-H, requires that most facilities funded by the program, with the exception of pollution control and disposal activities and hazardous substance facilities, must "conservatively appear" to be at least 70% self-supporting and self-liquidating from revenues, gifts, federal grants, user charges, assessments and other fees.[1] Historically, the portion of the debt service of these bonds associated with orphan hazardous disposal site clean-up has been repaid by General Fund appropriation, with the balance of debt service repaid by DEQ fees and repayment on loans.

[1] In accordance with Article XI-H Section 2, the facilities supported by the Pollution Control Bonds must be 70% self-supporting and self-liquidating. However, the bonds that provide the funds to support the facilities are currently non-self-supporting, requiring debt service payments to be provided by General Fund appropriations.

F. *Oregon Business Development Department Bond Bank Program*

The Oregon Business Development Department (OBDD) administers the Oregon Bond Bank. The Bond Bank was created by the consolidation of the Water Program, which authorizes loans to municipalities to finance safe drinking water projects and waste water system improvement projects, and the Special Public Works Fund program, which provides loans to municipalities for construction, improvement and repair of water, wastewater, and other local infrastructure. Periodically, the Legislative Assembly authorizes the sale of Lottery Revenue Bonds to replenish the funds available to OBDD to make new loans for local and regional water, wastewater and other infrastructure projects. Additionally, the Oregon Bond Bank may issue stand-alone revenue bonds secured by these loans, to free up OBDD funds that can then be loaned again to municipalities for additional local infrastructure projects.

In 2011, the Legislative Assembly authorized further consolidation of various OBDD loans, grants and bonding programs for local governments through the creation of the Oregon Infrastructure Finance Authority (IFA). The IFA was established as an administrative unit within OBDD, with a nine-member advisory board that provides policy guidance on the infrastructure loan, grant, and bonding activities of the agency.

Infrastructure loans made through IFA are typically full faith and credit obligations of the borrowing municipality, payable from the borrower's utility enterprise as well as the municipality's General Fund. OBDD may request the State to withhold any amounts otherwise due to the municipality from the State of Oregon, and to pay such amounts to OBDD, in the event that a municipality defaults on its loan payments.

IFA Bond Bank Revenue bond capacity is based on OBDD's sound financial management, prudent lending practices, awareness of underlying borrowers' ability to repay loans and any funds provided by the Legislative Assembly as part of their historical practice of providing program capital.

G. *Conduit Revenue Bond Programs*

The State of Oregon has three actively operating conduit revenue bond programs. These programs operate under the auspices of the Oregon Facilities Authority, the Oregon Business Development Department and the Oregon Housing and Community Services Department.

Conduit revenue programs are viewed uniquely when discussing capacity concepts. These programs, although issued by the OST, constitute no draw or contingent liability on any State of Oregon revenues. Debt service on these bonds is paid solely from revenues generated by the projects being financed or from other sources available to the conduit borrower. In no case is the credit of the State loaned or used for payment of any of the bonds. Further, the State is not responsible for expenses or costs incurred in connection with the issuance of the bonds. Therefore, capacity judgments should be reflected more in terms of market impact, beneficial interests of the State and prudent evaluation of participating conduit borrowers' ability to repay debt obligations.

H. *Oregon School Bond Guaranty Program*

The Oregon Legislature passed the School Bond Guaranty Act in 1997, with subsequent approval by voters via a constitutional amendment the following year that allows the State to guarantee voter-approved GO bonds of qualifying Oregon education districts. Participation in the program is voluntary and is open to public school districts, education service districts, and community college districts.

The Oregon School Bond Guaranty (OSBG) program is administered by OST, which establishes administrative rules prescribing application procedures and qualification guidelines. Upon determination of a district's eligibility, OST issues a certificate of qualification valid for one year from the date of issuance, which may be applied to all GO bonds issued by the district during that period. Prior to bond closing and contingent on complying with OSBG requirements, the district receives a confirmation letter for the specific bond sale.

I. Constitutional, Statutory, and Administrative Framework

The Constitutional and statutory framework for the OSBG program provides several strong credit enhancement features that have resulted in the program receiving the same credit rating as the State receives on its GO bonds. These features include:

- A pledge of the State's full faith and credit to guarantee payment of a qualified district/community college's bond debt service when due;
- Authorization of OST to make debt service payments from the Oregon Common School Fund, the Oregon Short-term Fund, or other State funds assures immediate liquidity for all guaranteed school district and community college debt service payments;
- Constitutional provision authorizing OST to issue property tax-backed State GO bonds to fund the State's guaranty, if necessary; and
- Authorization of OST to assure repayment of any draws on state funds to make school district GO debt service payments, including:
    - use of the state school funds intercept mechanism; or
    - legal compulsion of a district or community college to levy sufficient property taxes to repay any loan made; or
    - State GO bond sold, on its behalf.

A participating district, for which the State has made a guaranteed payment, is obligated to repay the State, with interest, and in certain instances, may be subject to an additional penalty. The range of State school funds that can be intercepted for repayment include any payments from the State's General Fund, the State School Fund, income from the Common School Fund, or any other operating funds provided by the State to the school district.

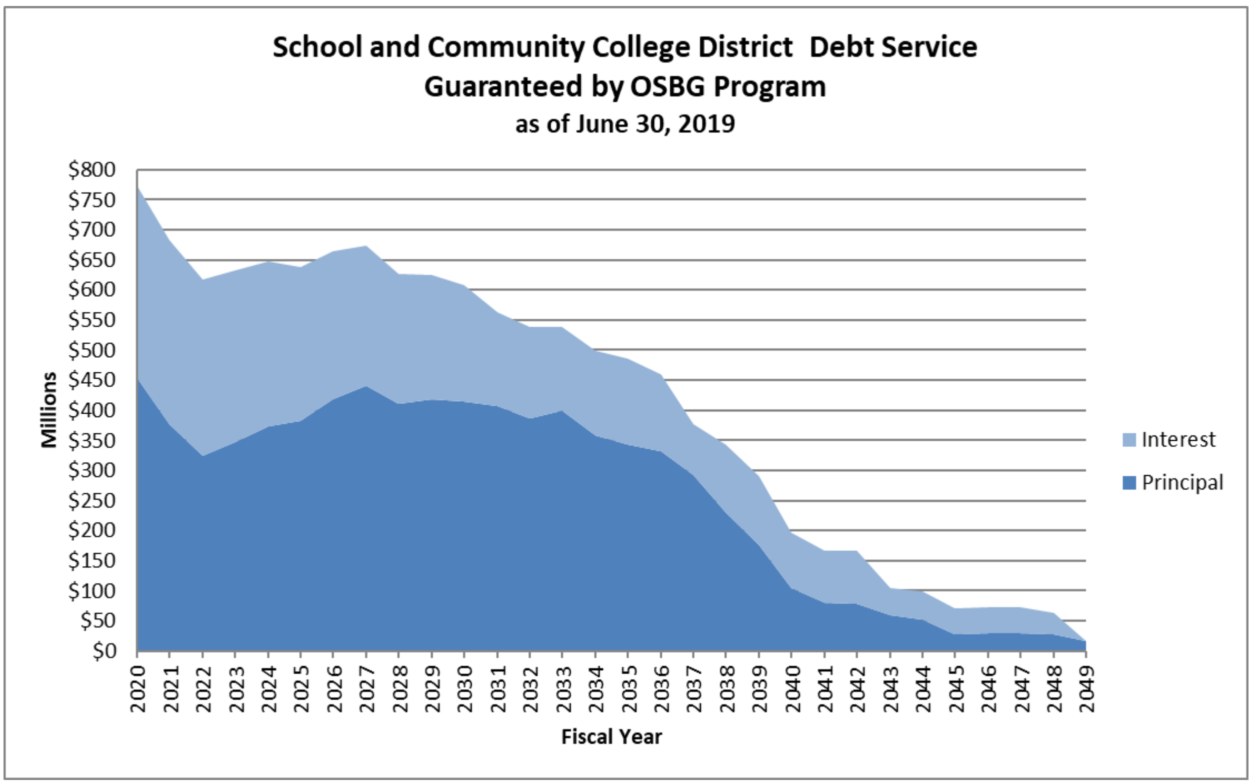
In addition, the administrative aspects of the OSBG program have been designed to reduce the likelihood of payment default by participating educational districts. The district's business administrator is required to transfer to its paying agent funds sufficient to cover each debt service payment at least 15 days before the scheduled payment date on OSBG guaranteed bonds. If it is unable to do so, the district must notify both the paying agent and OST at that time. The paying agent must notify OST if sufficient funds are not transferred at least 10 days before the scheduled payment date.

Program Statistics

Since its inception in 1999, the OSBG program has grown significantly in size and scope; as of June 30, 2019, the program has guarantees on $6.8 billion of outstanding GO bonds ($10.6 billion in principal and interest guaranteed debt service) issued by Oregon school districts and community colleges. While it is impossible to know precisely how much the State guaranty has saved Oregon taxpayers in interest costs on school bonds, a conservative estimate of an average reduction of .25% (25 basis points) in borrowing costs suggests debt service savings of roughly $17.6 million per year, or $351.9 million over a twenty-year period.

Exhibit VI.1 projects State-guaranteed principal and interest over the remaining life of these school bonds. For FY 2020, this guaranty applies to local school district and community college annual debt service payments of $772.3 million, which is equivalent to approximately 6.87% of total State General Fund revenues for the fiscal year and 17.2% of overall State school aid for schools and community colleges.

Exhibit VI.1



J. State Guarantees of School District/Community College Pension Bonds

In 2001, the Legislative Assembly authorized the State Department of Education to enter into Fund Diversion Agreements as a means of improving the creditworthiness of Pension Obligation Bonds (POBs) issued by Oregon school districts and community colleges. POBs were initially issued from 2002 to 2007 by many local Oregon jurisdictions with this Fund Diversion provision to prepay their accrued unfunded pension liabilities in the Oregon's Public Employees Retirement System (OPERS). Under these Fund Diversion Agreements, the State Board of Education agreed to make POB debt service payments to a POB bond trustee out of the annual state aid grants made to participating districts.

Since 2002, there have been nine separate pooled POB borrowings issued by the Oregon School Board Association and community colleges totaling $3.16 billion that have used this Fund Diversion Agreement approach to guarantee repayment of the POBs. While most of these pooled POBs were sold as non-callable taxable bonds, a few pooled POBs did have call features on certain maturities, which allowed for their refunding at lower interest rates over the last few years.

Exhibit VI.2 shows the substantial growth in the amount of state school aid that has been diverted each year to pay district POB debt service since FY 2010. The Commission estimates that the State diverted $300.3 million in state school aid for this purpose in FY 2019, or 7.2% of combined annual state aid for school districts and community colleges.

Exhibit VI.2

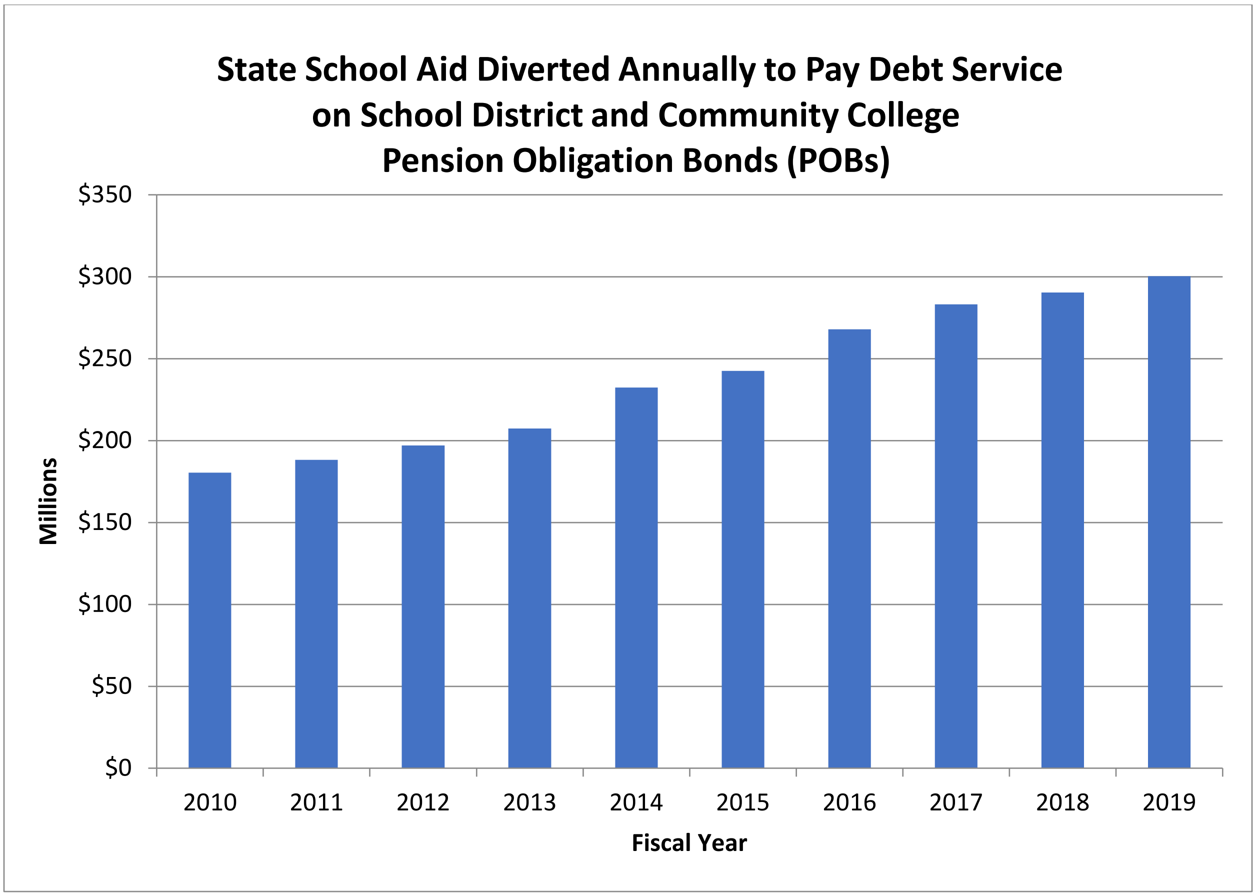
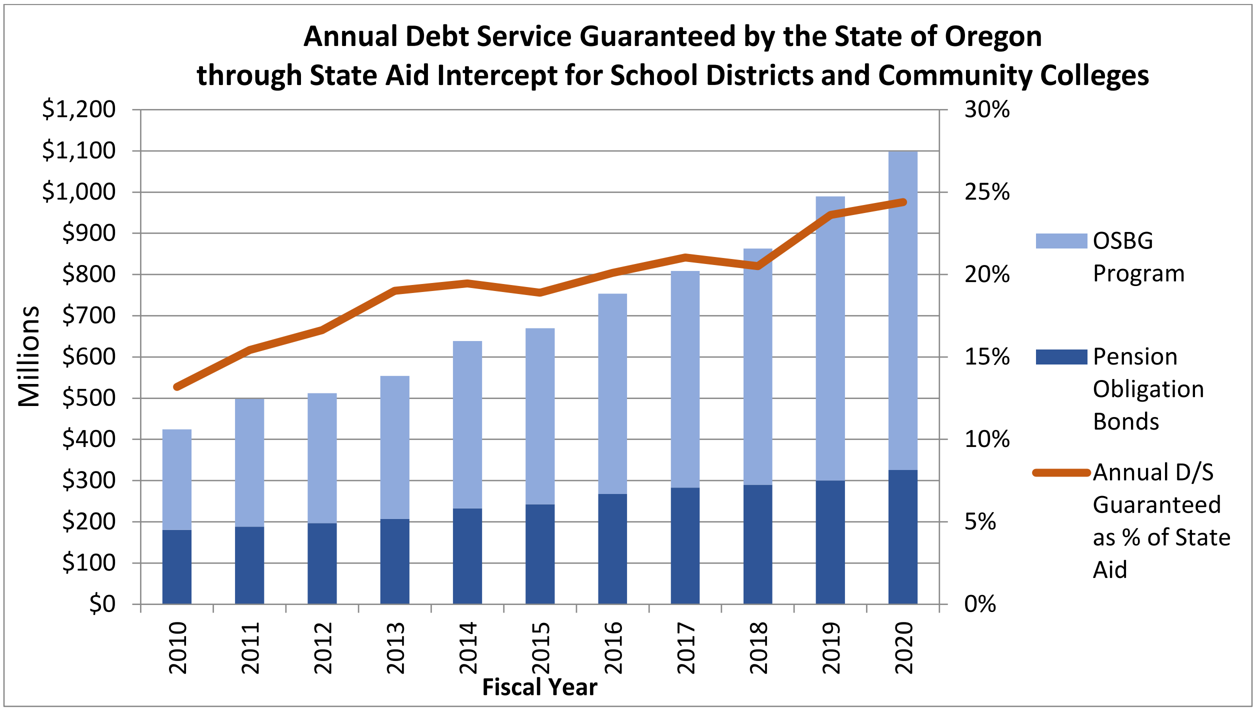


Exhibit VI.3 displays the steady growth in the State's combined annual guaranteed debt service for both the OSBG and the POB fund diversion programs. As the next chart shows, these state aid intercept bonding programs are relying on a significant percentage of state aid to schools. The Commission projects that the combined annual debt service guaranteed by the State for school district and community college GO and pension bonds in FY 2020 represents over 24.4% of state school aid, an all-time high for the combined programs.

To address concerns over the growing levels of POB guaranteed debt of Oregon's school districts, as well as the use of POBs by other local jurisdictions to fund their OPERs unfunded liability, the 2019 Legislature passed SB 1049, which now requires all Oregon issuers to develop and report more detailed information to the Municipal Debt Advisory Commission (MDAC) on these types of bond transactions in the future. SB 1049 requires jurisdictions to generate and file a statistically based analysis of the likely earnings over time on any POB bond proceeds deposited with OPERS as compared to the likely borrowing rate on these bonds. Once issued, Oregon Treasury staff will track the actual earnings on these bond proceeds versus the amount estimated, and compare them to the actual bond rate achieved, with the resulting information incorporated into the annual SDPAC report.

Since the passage of SB 1049 in June 2019, there have been no new issuances of POBs by any Oregon jurisdiction.

Exhibit VI.3



To date, no participating Oregon school district or community college has requested that the State of Oregon make a debt service payment on its behalf under the OSBG program. While OSBG guarantees are a contingent liability of the State, this long track record of positive district financial management has meant that to date the rating agencies do not consider this debt as part of the State's overall General Fund or net tax-supported debt.

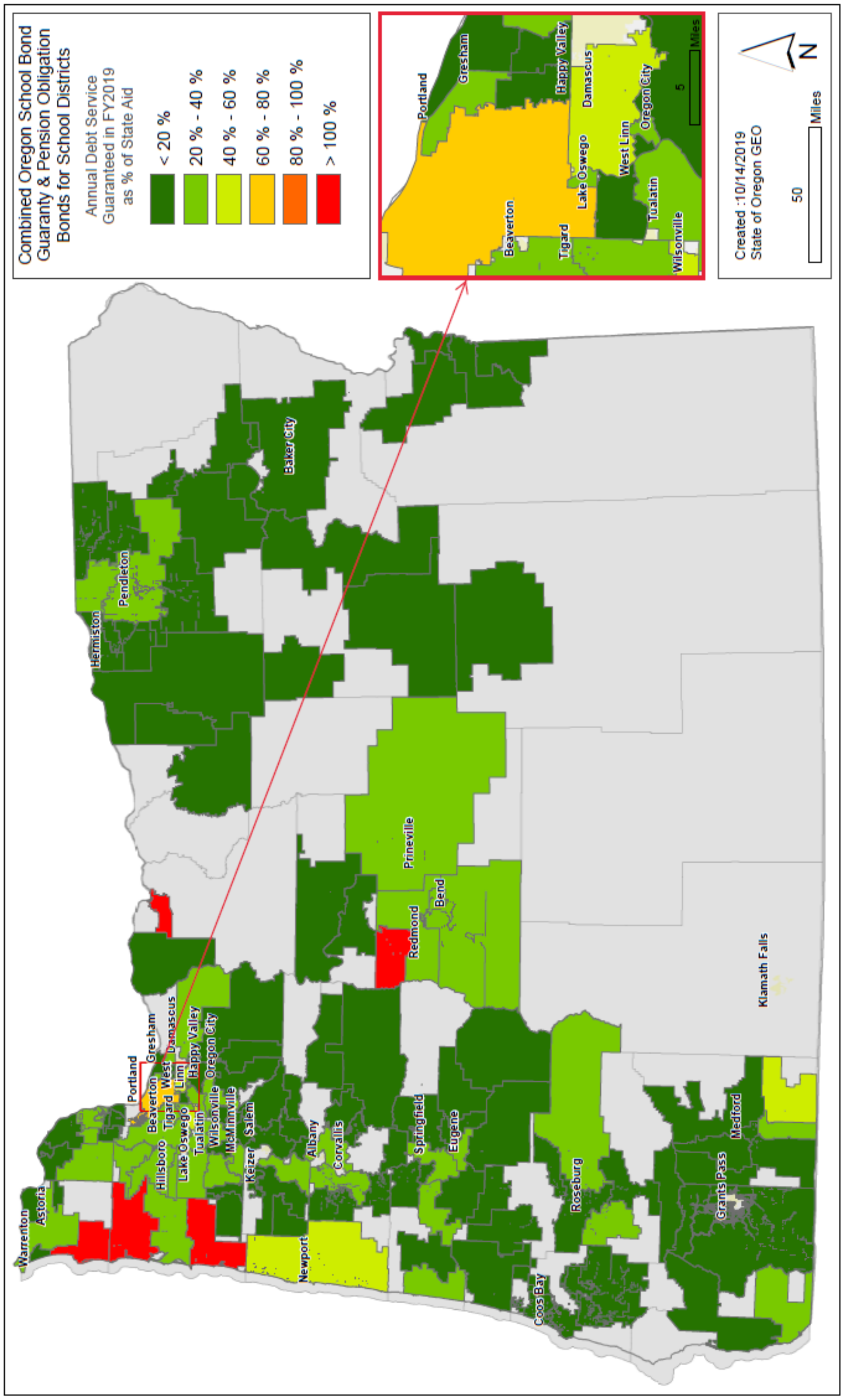
While the OSBG program successfully lowered the borrowing costs of participating jurisdictions throughout the State, OST has spent the past few years analyzing this program due to the increasing levels of annual state guaranteed debt overall, as well as the unusually high amounts of guaranteed debt noted for a few jurisdictions along the Oregon coast. Based on this review, OST has tightened the OSBG program rules to ensure the state guarantee of school debt is managed wisely.

Exhibits VI.4 and VI.5 illustrate each Oregon school district and community college district's respective state guaranteed debt service as a percentage of overall state aid for the fiscal year ending June 30, 2019. State aid is defined for purposes of the following exhibits to include annual appropriations made to school and community college districts through both the State School Fund and the Common School Fund.

As the exhibits demonstrate, there were five school districts and one community college which had a combined annual debt service on State guaranteed GO and POBs that exceeded the amount of annual State school aid they received in FY 2019. For additional detail on the state aid and the amount of debt service guaranteed for specific districts in FY 2019, please see Appendix A, Tables A-9, A-10, and A-11 of this report.

Exhibit VI.4

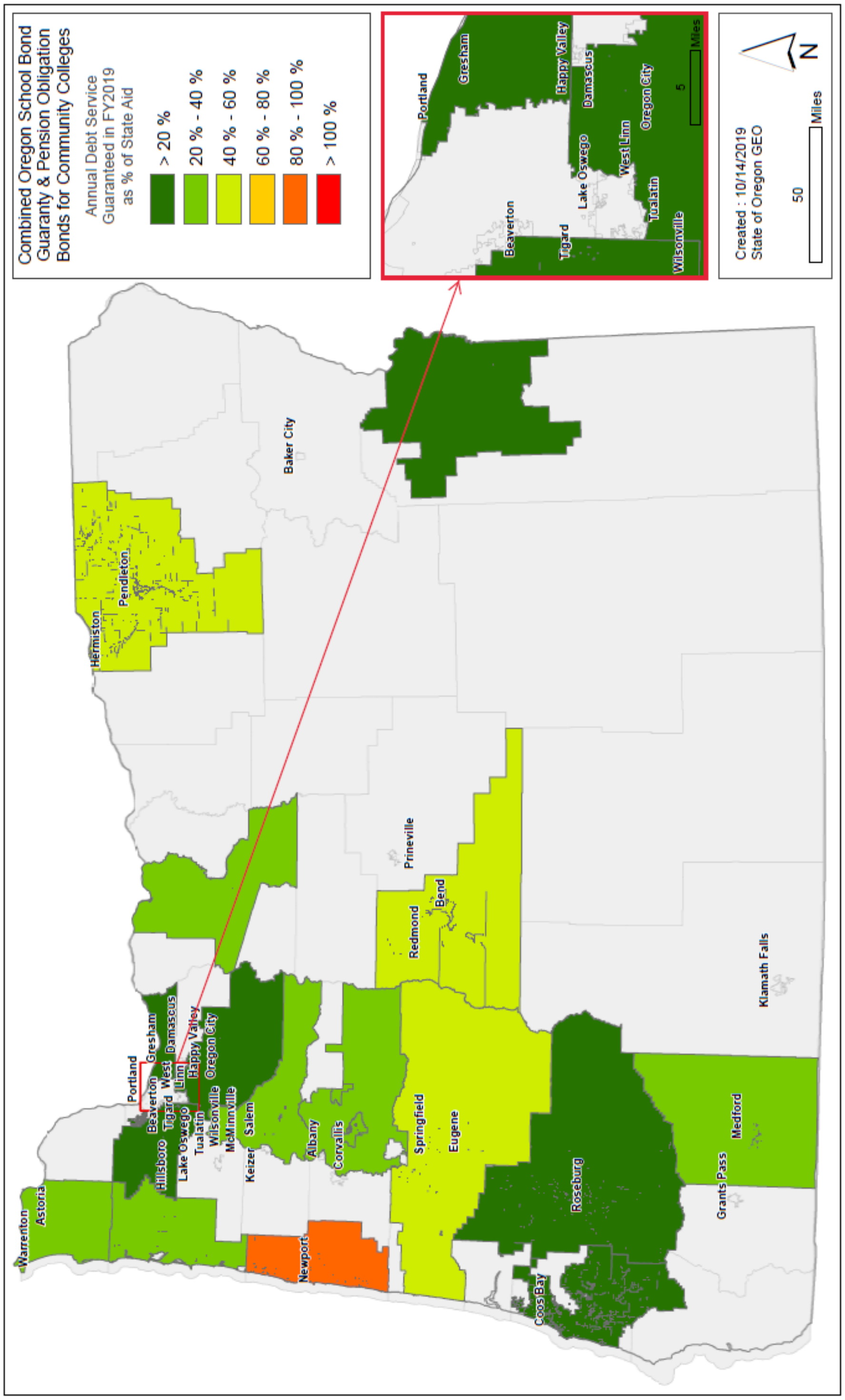
Combined Oregon School Bond Guaranty & Pension Obligation Bonds for School Districts



Map developed by Oregon Geospatial Enterprise Office (gis.oregon.gov)

Exhibit VI.5

Combined Oregon School Bond Guaranty & Pension Obligation Bonds for Community Colleges



Map developed by Oregon Geospatial Enterprise Office (gis.oregon)

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APPENDIX A

Supporting Tables and Graphs

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Table A-1

State of Oregon Bonding and Appropriation Credit Programs

Classification of Debt for Capacity and Debt Burden Determinations

Active

State of Oregon Bonding Programs

- **General Obligation**
- **Direct Revenue**
- **Appropriation Credit**

General Fund-Supported Debt Programs

General Obligation Bond Programs:

- State Highway Bonds - Article XI Sec 7
- Higher Education Facility – Article XI-G
- Community College Bonds – Article XI-G
- Pollution Control Bonds – Article XI-H (44%)
- Alternate Energy Bonds – Article XI-J (40%)
- Oregon Opportunity Bonds – Article XI-L
- Seismic Rehab – Public Education Bldgs. (Article XI-M)
- Seismic Rehab – Emergency Services Bldgs. (Article XI-N)
- School District Capital Costs – Article XI-P
- State General Purpose Bonds Article XI-Q (93%)
- Pension Obligation Bonds – Article XI-O (35%)

Direct Revenue Bond Programs:

Appropriation Credits

- Appropriation Bonds – SB 856 – 2003 Legislature
- Certificates of Participation – ORS 283.085 to 283.092 (92%)

Non Tax-Supported Debt Programs

General Obligation Bond Programs:

- Veterans' Welfare – Article XI-A
- Elderly & Disabled Housing Bonds – Article XI-I(2)
- Higher Education Building Bonds – Article XI-F(1)
- Pollution Control Bonds – Article-H (56%)
- Alternate Energy Bonds – Article XI-J (60%)
- State General Purpose Bonds – Article XI-Q (7%)
- Pension Obligation Bonds – Article XI-O (65%)

Direct Revenue Bond Programs:

- Single & Multi-Family Housing Bonds – ORS 456.661
- Oregon Infrastructure Authority Bond Bank – ORS 285B.482

CONDUIT REVENUE BOND PROGRAMS:

- Economic & Industrial Development Bonds – ORS 285.310 to 285.397
- Oregon Facilities Authority – ORS Ch. 289
- Housing Development Revenue Bonds –

Net Tax-Supported Debt

All General Fund-Supported Debt Programs

Plus

Direct Revenue Bond Programs:

- Lottery Revenue Programs – ORS 286A.563 to 286A.585
- Highway User Tax Bonds – ORS 367.620

Table A-2

Net Tax-Supported Debt Authorizations for 2019-2021 Biennium[1]

Net Tax-Supported Debt Programs	2019-2021 Biennium Authorization	FY 2020 Actual Issuance	FY 2021 Planned Issuance	Remaining Authorization
Community College Bonds Article XI-G	$ 75,265,000	$ 0	$ 75,265,000	0
Dept. Of Higher Education Facility Bonds (Article XI-G)	0	0	0	0
DEQ – Pollution Control Bonds (Article XI-H)	0	0	0	0
Seismic Rehab – Public Education Buildings (Article XI-M)	101,240,000	50,620,000	50,620,000	0
Seismic Rehab – Emergency Services Buildings (Article XI-N)	20,270,000	10,135,000	10,135,000	0
Dept. of Education – School Construction Bonds (Article XI-P)	126,090,000	0	126,090,000	0
State General Purpose Bonds[2] Article XI-Q	673,285,000	253,600,777	419,684,223	0
Lottery Revenue Bonds ORS 286.563-585	302,505,000	0	302,505,000	0
Highway User Tax Bonds[3] ORS 376.620	485,000,000	0	485,000,000	0
Dept. of Transportation – State Highway Bonds (Article XI (sect7))	0	0	0	0
Certificate of Participation Bonds ORS 283.025-092	0	0	0	0
Total Net Tax-Supported Debt Authorizations	**$ 1,783,655,000**	**$ 314,355,777**	**$ 1,469,299,223**	**$ 0**

Note: May not foot due to rounding

[1] Amounts as authorized by the 80th Oregon Legislative Assembly – 2019 Regular Session. Authorization does not guarantee issuance of bonds or appropriation credits in these amounts. For the *2020 Commission Report,* it is assumed that all authorized bonds will be issued in fiscal year 2020.

[2] State General Purpose Bonds: SB 5702, 2019 Legislature approved $673,285,000 for the 2019-21 biennium, of which $626,155,050 will be repaid from general fund resources.

Table A-3

General Fund Supported Debt Annual Debt Service Requirements[1]

Fiscal Year (ending June 30th)	Certificates of Participation (GF Supported)	Community College Bonds (XI-G)	Higher Education Facilities Bonds (XI-G)	Oregon Opportunity Bonds (OHSU)	Pension Obligation Bonds (General Fund Supported)	Seismic Rehabilitation of Public Education Bldgs. (XI-M)	Seismic Rehabilitation of Emergency Services Bldgs. (XI-N)	School District Capital Cost (XI-P)	State Property (XI-Q) General Fund Supported
2020	37,616,665	15,572,580	57,183,072	15,434,250	72,641,970	20,423,760	4,873,412	15,230,867	197,087,127
2021	30,195,653	16,263,825	61,277,810	15,437,250	75,729,567	20,415,188	4,871,906	15,227,450	194,505,808
2022	30,048,933	17,320,081	60,199,134	15,437,125	78,948,780	20,411,888	4,873,206	15,226,075	171,919,445
2023	28,773,460	17,428,619	60,138,920	15,432,250	82,303,444	20,417,763	4,873,606	15,216,425	166,441,725
2024	28,040,361	17,446,044	59,979,544	8,041,125	85,800,930	20,412,138	4,876,688	15,220,425	152,895,913
2025	22,486,719	17,438,669	59,985,440	-	89,448,555	20,411,775	4,867,738	15,213,900	141,155,595
2026	22,302,865	17,436,269	59,344,551	-	93,250,168	20,408,488	4,877,513	15,208,250	136,730,424
2027	21,979,795	17,348,519	59,173,302	-	97,212,297	20,408,675	4,876,788	15,203,875	123,799,079
2028	21,823,089	17,345,716	57,466,533	-	-	20,406,025	4,874,681	15,198,625	116,623,320
2029	21,647,613	16,805,463	54,083,922	-	-	20,412,925	4,875,581	15,201,500	114,334,165
2030	21,477,296	16,421,447	51,925,185	-	-	20,415,275	4,870,081	15,201,000	107,960,814
2031	20,914,007	16,417,306	50,226,106	-	-	20,411,450	4,872,969	15,196,250	99,833,792
2032	20,721,635	16,413,919	48,627,192	-	-	20,410,325	4,868,619	15,196,000	92,816,158
2033	20,521,099	16,414,244	45,271,140	-	-	20,411,256	4,874,144	15,184,125	88,035,845
2034	20,322,534	16,415,566	45,293,283	-	-	20,419,050	4,869,269	15,184,375	80,610,187
2035	20,107,381	13,096,178	42,863,397	-	-	20,411,556	4,863,038	15,184,875	73,216,384
2036	6,710,303	13,093,969	42,764,667	-	-	18,943,400	3,493,625	15,174,500	66,944,044
2037	6,710,490	10,597,659	39,490,597	-	-	15,447,825	3,259,750	15,176,500	56,199,363
2038	6,710,252	10,604,769	38,925,500	-	-	6,418,750	1,288,750	6,857,500	45,664,843
2039	6,713,811	8,726,375	37,437,250	-	-	4,698,750	603,750	6,856,500	41,019,837
2040	-	8,719,375	34,309,500	-	-	-	-	-	19,824,810
2041	-	1,631,250	30,816,625	-	-	-	-	-	19,826,949
2042	-	1,627,500	26,442,250	-	-	-	-	-	18,455,990
2043	-	1,634,875	16,942,000	-	-	-	-	-	12,765,506
2044	-		6,125,875	-	-	-	-	-	11,249,838
2045	-		6,124,375	-	-	-	-	-	-
Program Totals	$ 415,823,961	$322,220,215	$ 1,152,417,169	$69,782,000	$675,335,710	$ 372,116,260	$86,605,112	$287,359,017	$2,349,916,960

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all General Fund Supported debt issued through June 30, 2019.

Table A-3 (Continued)

Fiscal Year (ending June 30th)	ODOT State Hwy XI Sec 7	Pollution Control Bonds (General Fund Supported portion)	Energy Bonds (General Fund Supported)	**Total General Fund Supported Debt Service**
2020	2,046,550	2,033,949	8,230,121	**448,374,322**
2021	2,047,600	1,943,326	9,123,426	**447,038,808**
2022	2,049,200	1,660,039	7,128,259	**425,222,165**
2023	2,049,600	1,658,528	6,022,751	**420,757,091**
2024	2,048,800	1,603,762	5,788,151	**402,153,879**
2025	2,046,800	1,258,052	5,084,105	**379,397,347**
2026	2,049,125	1,262,078	5,097,838	**377,967,567**
2027	2,045,375	1,039,602	4,651,664	**367,738,971**
2028	2,049,375	1,042,133	4,551,345	**261,380,843**
2029	2,046,000	891,974	4,351,556	**254,650,698**
2030	2,050,125	899,454	3,492,101	**244,712,779**
2031	2,046,625	675,021	2,849,545	**233,443,072**
2032	2,045,500	677,567	1,898,025	**223,674,939**
2033	2,046,500	677,159	806,505	**214,242,017**
2034	2,049,375	322,809	561,805	**206,048,252**
2035	2,049,000	323,049	-	**192,114,858**
2036	2,050,250	324,978		**169,499,736**
2037	2,048,000	324,196	-	**149,254,380**
2038	2,047,125	322,935	-	**118,840,423**
2039	2,047,375	151,739	-	**108,255,387**
2040	2,048,500	-	-	**64,902,185**
2041	2,050,250	-	-	**54,325,074**
2042	2,047,500	-	-	**48,573,240**
2043	2,050,000	-	-	**33,392,381**
2044		-	-	**17,375,713**
2045		-	-	**6,124,375**
Program Totals	$49,154,550	$19,092,350	**$** 69,637,199	**$5,869,460,502**

Note: May not foot due to rounding.

Table A-4

General Fund Supported Debt
Total Principal and Interest Debt Service Requirements[1]

Fiscal Year (ending June 30th)	Principal	Interest	Total
2020	$251,052,746	$197,321,576	$448,374,322
2021	265,361,120	181,677,688	447,038,808
2022	255,428,254	169,793,911	425,222,165
2023	263,589,400	157,167,691	420,757,091
2024	257,671,550	144,482,329	402,153,879
2025	247,388,150	132,009,197	379,397,347
2026	258,486,850	119,480,717	377,967,567
2027	261,496,150	106,242,821	367,738,971
2028	168,607,550	92,773,293	261,380,843
2029	169,841,050	84,809,648	254,650,698
2030	168,031,450	76,681,329	244,712,779
2031	164,861,300	68,581,772	233,443,072
2032	162,900,350	60,774,589	223,674,939
2033	161,289,650	52,952,367	214,242,017
2034	160,876,900	45,171,352	206,048,252
2035	154,754,750	37,360,108	192,114,858
2036	139,624,250	29,875,486	169,499,736
2037	125,796,550	23,457,830	149,254,380
2038	100,976,950	17,863,473	118,840,423
2039	94,965,150	13,290,237	108,255,387
2040	55,925,800	8,976,385	64,902,185
2041	47,900,950	6,424,124	54,325,074
2042	44,446,550	4,126,690	48,573,240
2043	31,254,400	2,137,981	33,392,381
2044	16,426,500	949,213	17,375,713
2045	6,124,375		6,124,375
Totals	**$ 4,034,929,319**	**$ 1,834,381,808**	**$ 5,869,460,502**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all General Fund Supported debt issued through June 30, 2019.

Table A-5

Net Tax-Supported Debt
Annual Debt Service Requirements[1]

Fiscal Year (ending June 30th)	Certificates of Participation	Community College Bonds (XI-G)	Higher Education Facilities Bonds (XI-G)	Oregon Opportunity Bonds (OHSU)	Pension Obligation Bonds (XI-O)	Highway User Tax Revenue Bonds	Lottery Revenue Bonds	Energy Bonds (GF Supported portion)	State Property Bonds (Article XI-Q) (GF Supported Portion)
2020	$40,887,679	$15,572,580	$57,183,072	$15,434,250	$207,548,485	$179,348,551	$133,064,964	8,230,121	$211,921,642
2021	32,821,362	16,263,825	61,277,810	15,437,250	216,370,191	179,253,531	133,270,965	9,123,426	$209,146,030
2022	32,661,884	17,320,081	60,199,134	15,437,125	225,567,942	179,866,608	135,310,871	7,128,259	$184,859,619
2023	31,275,500	17,428,619	60,138,920	15,432,250	235,152,696	179,683,934	134,942,858	6,022,751	$178,969,597
2024	30,478,653	17,446,044	59,979,544	8,041,125	245,145,513	179,488,346	134,933,374	5,788,151	$164,404,207
2025	24,442,086	17,438,669	59,985,440	-	255,567,300	179,285,194	134,937,665	5,084,105	$151,780,210
2026	24,242,244	17,436,269	59,344,551	-	266,429,051	178,585,208	132,447,512	5,097,838	$147,021,961
2027	23,891,082	17,348,519	59,173,302	-	277,749,421	178,351,015	123,012,093	4,651,664	$133,117,290
2028	23,720,749	17,345,716	57,466,533	-	-	180,348,949	104,662,271	4,551,345	$125,401,420
2029	23,530,014	16,805,463	54,083,922	-	-	177,567,818	91,515,094	4,351,556	$122,939,962
2030	23,344,887	16,421,447	51,925,185	-	-	177,075,599	77,485,625	3,492,101	$116,086,897
2031	22,732,616	16,417,306	50,226,106	-	-	178,364,079	67,905,988	2,849,545	$107,348,164
2032	22,523,517	16,413,919	48,627,192	-	-	177,605,177	48,761,150	1,898,025	$99,802,320
2033	22,305,543	16,414,244	45,271,140	-	-	177,771,779	46,973,650	806,505	$94,662,199
2034	22,089,711	16,415,566	45,293,283	-	-	175,983,954	34,332,500	561,805	$86,677,620
2035	21,855,849	13,096,178	42,863,397	-	-	177,083,261	34,327,250	-	$78,727,294
2036	7,293,807	13,093,969	42,764,667	-	-	90,849,500	24,997,000	-	$71,982,843
2037	7,294,011	10,597,659	39,490,597	-	-	93,351,500	24,994,500	-	$60,429,422
2038	7,293,752	10,604,769	38,925,500	-	-	95,956,000	12,133,000	-	$49,101,981
2039	7,297,620	8,726,375	37,437,250	-	-	98,659,875	12,132,750	-	$44,107,352
2040	-	8,719,375	34,309,500	-	-	32,060,000	-	-	$21,317,000
2041	-	1,631,250	30,816,625	-	-	33,340,000	-	-	$21,319,300
2042	-	1,627,500	26,442,250	-	-	34,675,000	-	-	$19,845,150
2043	-	1,634,875	16,942,000	-	-	-	-	-	$13,726,350
2044	-	-	6,125,875	-	-	-	-	-	$12,096,600
2045	-	-	6,124,375	-	-	-	-	-	-
Program Totals	**$451,982,566**	**$322,220,215**	**$1,152,417,169**	**$69,782,000**	**$1,929,530,600**	**$3,334,554,877**	**$1,642,141,081**	**$69,637,199**	**$2,526,792,430**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Net Tax-Supported debt issued through June 30, 2019.

Table A-5 (Continued)

Net Tax-Supported Debt
Annual Debt Service Requirements[1]

Fiscal Year (ending June 30th)	Seismic Rehab Public Ed Bldgs. (XI-M)	Seismic Rehab Emergency Services Bldgs. (XI-N)	School District Capitol Costs (XI-P)	State Highway GO Bonds (XI-Sec7)	Pollution Control Bonds (XI-H)	Total Net Tax- Supported Debt
2020	$20,423,760	$4,873,412	$15,230,867	$2,046,550	2,033,949	**$913,799,881**
2021	$20,415,188	$4,871,906	15,227,450	2,047,600	1,943,326	**917,469,860**
2022	$20,411,888	$4,873,206	15,226,075	2,049,200	1,660,039	**902,571,930**
2023	$20,417,763	$4,873,606	15,216,425	2,049,600	1,658,528	**903,263,046**
2024	$20,412,138	$4,876,688	15,220,425	2,048,800	1,603,762	**889,866,769**
2025	$20,411,775	$4,867,738	15,213,900	2,046,800	1,258,052	**872,318,933**
2026	$20,408,488	$4,877,513	15,208,250	2,049,125	1,262,078	**874,410,087**
2027	$20,408,675	$4,876,788	15,203,875	2,045,375	1,039,602	**860,868,700**
2028	$20,406,025	$4,874,681	15,198,625	2,049,375	1,042,133	**557,067,822**
2029	$20,412,925	$4,875,581	15,201,500	2,046,000	891,974	**534,221,810**
2030	$20,415,275	$4,870,081	15,201,000	2,050,125	899,454	**509,267,676**
2031	$20,411,450	$4,872,969	15,196,250	2,046,625	675,021	**489,046,119**
2032	$20,410,325	$4,868,619	15,196,000	2,045,500	677,567	**458,829,310**
2033	$20,411,256	$4,874,144	15,184,125	2,046,500	677,159	**447,398,243**
2034	$20,419,050	$4,869,269	15,184,375	2,049,375	322,809	**424,199,316**
2035	$20,411,556	$4,863,038	15,184,875	2,049,000	323,049	**410,784,748**
2036	$18,943,400	$3,493,625	15,174,500	2,050,250	324,978	**290,968,539**
2037	$15,447,825	$3,259,750	15,176,500	2,048,000	324,196	**272,413,961**
2038	$6,418,750	$1,288,750	6,857,500	2,047,125	322,935	**230,950,062**
2039	$4,698,750	$603,750	6,856,500	2,047,375	151,739-	**222,719,336**
2040	-	-	-	2,048,500	-	**98,454,375**
2041	-	-	-	2,050,250	-	**89,157,425**
2042	-	-	-	2,047,500	-	**84,637,400**
2043	-	-	-	2,050,000	-	**34,353,225**
2044	-	-	-	-	-	**18,222,475**
2045	-	-	-	-	-	**6,124,375**
Program Totals	**$372,116,260**	**$86,605,112**	**$287,359,017**	**$49,154,550**	**$18,769,415**	**$12,313,385,425**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Net Tax-Supported debt issued through June 30, 2019.

Table A-6

Net Tax-Supported Debt
Total Principal and Interest Debt Service Requirements[1]

Fiscal Year (ending June 30th)	Principal	Interest	Total
2020	$498,626,746	$415,173,136	$913,799,881
2021	529,750,920	387,718,940	917,469,860
2022	539,796,954	362,774,976	902,571,930
2023	567,490,000	335,773,046	903,263,046
2024	582,379,800	307,486,969	889,866,769
2025	594,229,600	278,089,333	872,318,933
2026	627,130,600	247,279,487	874,410,087
2027	646,452,400	214,416,300	860,868,700
2028	376,844,000	180,223,822	557,067,822
2029	372,257,600	161,964,210	534,221,810
2030	365,757,400	143,510,276	509,267,676
2031	364,006,200	125,039,919	489,046,119
2032	351,859,200	106,970,110	458,829,310
2033	357,784,000	89,614,243	447,398,243
2034	352,458,200	71,741,116	424,199,316
2035	357,537,200	53,247,548	410,784,748
2036	252,265,400	38,703,139	290,968,539
2037	242,641,400	29,772,561	272,413,961
2038	209,367,400	21,582,662	230,950,062
2039	207,759,600	14,959,736	222,719,336
2040	89,215,000	9,239,375	98,454,375
2041	82,530,000	6,627,425	89,157,425
2042	80,370,000	4,267,400	84,637,400
2043	32,135,000	2,218,225	34,353,225
2044	17,235,000	987,475	18,222,475
2045	5,975,000	149,375	6,124,375
Totals	**8,703,854,619**	**3,609,381,431**	**12,313,385,425**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Net Tax-Supported debt issued through June 30, 2019.

Table A-7[1]

Annual Debt Service Requirements for Lottery Bonds Outstanding

Fiscal Year (ending June 30th)	**$40,825,000 2009 Series D Port of Newport - NOAA Fleet, Gilchrist Forest, Low-Income Housing, Umatilla Aquafier**	**$34,195,000 2010 Series A Port of Morrow, Port of Tillamook, Port of Coos Bay, Pendleton Round-Up, Construction & Maintain Court Facilities, Blue Mt Community College, Mt. Hood Community College, Clatsop Community College, Low-Income Housing**	**$129,250,000 2011 Series A DAS - Port of Tillamook, DAS - Lane Transit District, Community Colleges & Workforse Development Dept., Connect Oregon III, Oregon University System**	**$23,795,000 2011 Series B Advance Refunding - Refunding Various Series (1998 - 2009)**	**$25,830,000 2011 Series C Oregon Business Development Dept. and Oregon Housing & Community Services Dept.**	**$18,855,000 2012 Series A DAS, Oregon University System, and Dept. of Forestry**	**$53,535,000 2012 Series B Advance Refunding - Refunding Various Series (2002A, 2002C, 2003A, 2004B, 2005A)**	**$122,500,000 2013 Series A Oregon University System, Community College and Workforce Dept., and Transportation**	**$28,140,000 2013 Series B DAS, Business Oregon, Oregon University System, Community College and Workforce Dept., and Housing & Community Services**	**$71,075,000 2013 Series C Advance Refunding - Refunding Various Series (2001B, 2002B, 2003B, 2004A, 2005B, 2005C)**	**$18,625,000 2014 Series A Advance Refunding - Refunding Various Series (2006 Series A, 2007 Series A, 2009 Series A)**	**$89,515,000 2014 Series B Advance Refunding - Refunding Various Series (2006 Series A, 2007 Series A, 2009 Series A)**
2020	2,173,500	2,065,150	964,113	$13,009,500.00	1,142,654	1,140,250	1,888,500	7,875,544	4,768,452	2,126,231	2,473,500	11,109,000
2021	-	-	964,113	$745,500.00	13,412,654	1,141,000	1,885,500	12,644,744	-	2,126,455	2,471,600	11,112,250
2022	-	-	964,113	-	14,169,522	1,139,250	1,890,300	12,646,944	-	2,127,080	2,468,950	11,726,750
2023	-	-	2,929,113	-	-	-	1,892,500	12,646,194	-	2,126,120	2,471,450	11,721,000
2024	-	-	2,925,950	-	-	-	1,890,750	12,644,694	-	2,125,160	2,473,050	11,723,500
2025	-	-	2,927,538	-	-	-	1,890,000	12,644,444	-	2,124,885	2,466,750	11,727,750
2026	-	-	3,488,350	-	-	-	-	12,644,444	-	-	2,475,250	10,892,500
2027	-	-	2,109,975	-	-	-	-	12,643,694	-	-	2,478,000	10,888,500
2028	-	-	1,684,925	-	-	-	-	12,646,194	-	-	-	-
2029	-	-	337,725	-	-	-	-	12,643,850	-	-	-	-
2030	-	-	3,692,725	-	-	-	-	12,645,650	-	-	-	-
2031	-	-	3,331,588	-	-	-	-	12,646,400	-	-	-	-
2032	-	-	-	-	-	-	-	12,645,900	-	-	-	-
2033	-	-	-	-	-	-	-	12,642,900	-	-	-	-
2034	-	-	-	-	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-	-	-	-	-
2036	-	-	-	-	-	-	-	-	-	-	-	-
2037	-	-	-	-	-	-	-	-	-	-	-	-
2038	-	-	-	-	-	-	-	-	-	-	-	-
2039	-	-	-	-	-	-	-	-	-	-	-	-
Totals	**2,173,500**	**2,065,150**	**26,320,225**	**13,755,000**	**28,724,829**	**3,420,500**	**11,337,550**	**172,261,594**	**4,768,452**	**12,755,931**	**19,778,550**	**90,901,250**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Lottery debt issued through June 30, 2019.

Table A-7[1] (Continued)

Annual Debt Service Requirements for Lottery Bonds Outstanding

Fiscal Year (ending June 30th)	$77,805,000 2015 Series A DAS, Busines Oregon, Dept. of Transportation, Water Resources	$38,945,000 2015 Series B DAS, Community College & Workforce Development, Busines Oregon, Dept. of Energy, Housing & Community Services	$117,995,000 2015 Series C Advance Refunding - Refunding Various Series (2007 Series C, 2008 Series A, 2011 Series A)	$164,230,000 2015 Series D Advance Refunding - Refunding Various Series (2009 Series A)	$22,710,000 2015 Series E Advance Refunding - Refunding Various Series (2009 Series D)	$17,195,000 2015 Series F Advance Refunding - Refunding Various Series (2010 Series A)	$93,000,000 2017 Series A Various Projects - Tax-Exempt	$73,740,000 2017 Series B Various Projects - Taxable	$63,675,000 2017 Series C Advance Redunding - Refunding Various Series (2010 A, 2011 A, 2012 A)	$100,395,000 2019 Series A New Funding Various Projects Tax-Exempt	$56,235,000 2019 Series B New Funding Various Projects Taxable	Total Outstanding Debt Service Requirements
2020	3,890,250	5,444,203	9,039,000	28,911,500	1,135,500	859,750	4,650,000	8,216,237	3,162,800	4,880,313	6,914,769	**$ 133,066,984**
2021	3,890,250	5,448,974	9,038,000	28,906,500	3,195,500	859,750	4,650,000	8,214,500	5,207,800	5,019,750	7,111,877	**$ 133,272,986**
2022	3,890,250	5,444,048	9,032,500	6,090,000	3,197,500	859,750	4,650,000	8,213,281	5,206,000	5,019,750	7,110,635	**$ 135,312,893**
2023	3,890,250	5,446,256	21,027,250	6,090,000	3,194,250	2,969,750	4,650,000	8,213,770	4,074,750	5,019,750	7,113,206	**$ 134,944,881**
2024	4,150,250	5,185,251	21,026,750	6,090,000	3,190,750	2,974,250	4,650,000	8,214,091	4,075,000	5,019,750	7,109,678	**$ 134,935,398**
2025	9,337,250	-	21,025,250	6,090,000	3,196,750	2,968,250	4,650,000	8,213,805	4,072,500	5,019,750	7,114,494	**$ 134,939,690**
2026	9,334,250	-	23,860,750	34,350,000	3,196,500	2,972,000	4,650,000	8,213,158	4,237,250	5,019,750	7,113,310	**$ 132,449,538**
2027	9,337,750	-	15,974,250	34,347,000	3,195,000	2,974,750	4,650,000	8,216,382	4,065,750	5,019,750	7,111,292	**$ 123,014,120**
2028	9,336,750	-	3,937,500	34,348,500	3,197,000	2,971,250	6,220,000	6,645,822	11,544,250	5,019,750	7,110,330	**$ 104,664,299**
2029	9,335,750	-	-	34,350,750	3,192,000	2,971,500	12,861,500	-	3,690,500	11,734,750	396,769	**$ 91,517,123**
2030	9,334,000	-	-	-	-	-	12,862,000	-	26,817,250	12,134,000	-	**$ 77,487,655**
2031	9,335,750	-	-	-	-	-	12,861,750	-	17,599,000	12,131,500	-	**$ 67,908,019**
2032	9,335,000	-	-	-	-	-	12,864,750	-	1,785,000	12,130,500	-	**$ 48,763,182**
2033	9,336,000	-	-	-	-	-	12,864,750	-	-	12,130,000	-	**$ 46,975,683**
2034	9,332,750	-	-	-	-	-	12,865,750	-	-	12,134,000	-	**$ 34,334,534**
2035	9,334,500	-	-	-	-	-	12,861,500	-	-	12,131,250	-	**$ 34,329,285**
2036	-	-	-	-	-	-	12,866,000	-	-	12,131,000	-	**$ 24,999,036**
2037	-	-	-	-	-	-	12,862,500	-	-	12,132,000	-	**$ 24,996,537**
2038	-	-	-	-	-	-	-	-	-	12,133,000	-	**$ 12,135,038**
2039	-	-	-	-	-	-	-	-	-	12,132,750	-	**$ 12,134,789**
Totals	**122,401,000**	**26,968,731**	**133,961,250**	**219,574,250**	**29,890,750**	**23,381,000**	**159,190,500**	**72,361,047**	**95,537,850**	**178,093,063**	**64,206,360**	**$ 1,642,181,671**

Note: May not foot due to rounding

[1] Includes annual fiscal year debt service requirements on all Lottery debt issued through June 30, 2019.

Table A-8

Lottery Revenue Debt
Total Principal and Interest Debt Service Requirements[1]

Fiscal Year (ending June 30th)	Principal	Interest	Total
2020	77,895,000	55,169,964	133,064,964
2021	80,990,000	52,280,965	133,270,965
2022	86,425,000	48,885,871	135,310,871
2023	89,780,000	45,162,858	134,942,858
2024	93,780,000	41,153,374	134,933,374
2025	98,000,000	36,937,665	134,937,665
2026	100,070,000	32,377,512	132,447,512
2027	95,350,000	27,662,093	123,012,093
2028	81,485,000	23,177,271	104,662,271
2029	72,155,000	19,360,094	91,515,094
2030	61,625,000	15,860,625	77,485,625
2031	55,135,000	12,770,988	67,905,988
2032	38,750,000	10,011,150	48,761,150
2033	38,900,000	8,073,650	46,973,650
2034	28,105,000	6,227,500	34,332,500
2035	29,505,000	4,822,250	34,327,250
2036	21,650,000	3,347,000	24,997,000
2037	22,730,000	2,264,500	24,994,500
2038	11,005,000	1,128,000	12,133,000
2039	11,555,000	577,750	12,132,750
Total	**1,194,890,000**	**447,251,081**	**1,642,141,081**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Lottery revenue debt issued through June 30, 2019.

Table A-9

Oregon School Bond Guaranty and Pension Bonds vs. State Aid Analysis, FY19 *Net State Aid includes State School Fund and Common School Fund; does not include State Managed Timber Revenues or Property Taxes *(High to Low based on Percentage of Debt Service to State Aid Guaranteed)*					
School District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Tillamook Cty SD 101 (Nestucca Valley)	1,932,783	219,897	2,152,680	48,009	4483.89%
Clatsop Cty SD 10 (Seaside)	4,523,100	853,903	5,377,003	158,660	3389.01%
Tillamook Cty SD 56 (Neah-Kah-Nie)	1,297,265		1,297,265	81,099	1599.60%
Deschutes Cty SD 6 (Sisters)	2,834,068	890,144	3,724,212	2,368,130	157.26%
Wasco Cty SD 12 (The Dalles) Bonds	1,839,200	1,517,229	3,356,429	2,235,622	150.13%
Multnomah Cty SD 1J (Portland)	120,432,483	49,252,723	169,685,206	254,671,592	66.63%
Lincoln Cty Unified SD	6,248,225	4,818,886	11,067,111	22,321,900	49.58%
Jackson Cty SD 5 (Ashland)	6,238,188		6,238,188	14,218,841	43.87%
Washington Cty SD 88J (Sherwood)	13,552,517	1,264,432	14,816,949	35,441,985	41.81%
Clackamas Cty SD 12 (North Clackamas)	32,398,750	11,414,524	43,813,274	109,394,919	40.05%
Yamhill Cty SD 29J (Newberg)	9,746,900	3,517,565	13,264,465	33,407,152	39.71%
Deschutes Cty SD 1 (Bend-Lapine)	32,267,111	7,099,068	39,366,179	99,148,529	39.70%
Yamhill Cty SD 1 (Yamhill-Carlton)	1,506,459	946,372	2,452,831	6,708,029	36.57%
Lane Cty SD 97J (Siuslaw)	1,642,825	925,143	2,567,968	7,028,174	36.54%
Benton Cty SD 509J (Corvallis)	12,394,805	2,286,833	14,681,638	40,329,828	36.40%
Clackamas Cty SD 115 (Gladstone)	3,941,250	1,680,971	5,622,221	15,981,688	35.18%
Multnomah Cty SD 3 (Parkrose)	4,325,300	495,521	4,820,821	14,269,149	33.78%
Clatsop Cty SD 1 (Astoria)	2,155,000	1,759,212	3,914,212	12,165,146	32.18%
Washington Cty SD 1J (Hillsboro)	34,641,049	8,899,700	43,540,749	139,533,342	31.20%
Deschutes Cty SD 2J (Redmond)	12,290,913	2,929,987	15,220,900	50,281,321	30.27%
Lane Cty SD 4J (Eugene)	24,512,838	4,835,328	29,348,165	97,349,685	30.15%
Clackamas Cty SD 86 (Canby)	6,595,687	3,607,517	10,203,203	34,626,680	29.47%
Tillamook Cty SD 9 (Tillamook)	1,230,100	1,681,539	2,911,639	10,522,179	27.67%
Washington Cty SD 48J (Beaverton)	60,210,190	15,503,884	75,714,075	278,383,341	27.20%
Douglas Cty SD 12 (Glide)	863,325	303,609	1,166,934	4,487,546	26.00%
Yamhill Cty SD 4J (Amity)	618,877	1,182,946	1,801,823	7,091,533	25.41%
Polk Cty SD 13J (Central)	4,731,978	2,028,548	6,760,526	26,615,754	25.40%
Multnomah Cty SD 51J (Riverdale)	463,037	434,452	897,489	3,534,157	25.39%
Columbia Cty SD 502 (St Helens)	2,366,450	2,520,999	4,887,449	19,370,597	25.23%
Clackamas Cty SD 46 (Oregon Trail)	7,271,638		7,271,638	29,349,380	24.78%
Clackamas Cty SD 3J (W.Linn-Wilsonville)	10,332,925	3,905,846	14,238,771	59,004,429	24.13%
Curry Cty SD 17 (Brookings-Harbor)	1,310,976	1,019,555	2,330,532	9,715,405	23.99%
Jackson Cty SD 4 (Phoenix-Talent)	3,051,058	1,376,807	4,427,865	18,496,623	23.94%
Columbia Cty SD 47J (Vernonia)	957,255		957,255	4,018,516	23.82%
Linn Cty SD 8J (Greater Albany)	12,434,100	4,149,922	16,584,022	70,035,413	23.68%
Lane Cty SD 28J (Fern Ridge)	1,939,900	657,831	2,597,731	11,184,501	23.23%
Multnomah Cty SD 10J (Gresham-Barlow)	17,518,013	3,897,951	21,415,964	92,596,410	23.13%
Washington Cty SD 23J (Tigard-Tualatin)	12,674,300	3,652,062	16,326,362	70,691,202	23.10%
Umatilla Cty SD 16R (Pendleton)	3,192,950	2,575,500	5,768,450	25,225,885	22.87%
Yamhill Cty SD 40 (McMinnville)	9,166,750	2,822,328	11,989,078	53,215,723	22.53%
Umatilla Cty SD 1 (Helix)	476,650		476,650	2,130,447	22.37%
Crook Cty School District	1,932,363	2,377,845	4,310,207	19,733,609	21.84%
Washington Cty SD 15 (Forest Grove)	8,337,063	2,546,969	10,884,031	50,150,070	21.70%
Washington Cty SD 511J (Gaston)	505,150	408,551	913,701	4,295,762	21.27%
Marion Cty SD 45 (St Paul)	535,700		535,700	2,537,340	21.11%
Lane Cty SD 40 (Creswell)	1,746,235	393,395	2,139,630	10,250,049	20.87%
Washington Cty SD 13 (Banks)	1,212,900	310,761	1,523,661	7,299,782	20.87%
Douglas Cty SD 116 (Winston-Dillard)	1,023,200	1,241,432	2,264,632	11,143,299	20.32%
Yamhill Cty SD 8 (Dayton)	915,964	728,624	1,644,587	8,258,013	19.92%
Umatilla Cty SD 8 (Hermiston)	8,421,022	1,596,416	10,017,438	50,422,341	19.87%
Hood River Cty SD (Hood River)	4,285,750	1,908,685	6,194,435	31,562,040	19.63%
Marion Cty SD 29J (North Santiam)	1,561,825	1,573,100	3,134,925	16,157,945	19.40%
Clackamas Cty SD 62 (Oregon City)	6,177,655	4,159,042	10,336,697	53,525,885	19.31%
Columbia Cty SD 1J (Scappoose)	2,682,350		2,682,350	14,403,400	18.62%
Lane Cty SD 69 (Junction City)	1,752,950	456,476	2,209,426	11,955,598	18.48%
Union Cty SD 1 (La Grande)	2,121,150	968,103	3,089,253	16,975,541	18.20%
Lane Cty SD 45J3 (South Lane)	2,790,688	1,273,180	4,063,867	22,389,444	18.15%
Marion Cty SD 14J (Jefferson)	658,888	690,430	1,349,317	7,466,157	18.07%
Umatilla Cty SD 61 (Stanfield)	483,600	355,688	839,288	4,648,671	18.05%
Curry Cty SD 1 (Central Curry)	372,150		372,150	2,102,856	17.70%
Multnomah Cty SD 7 (Reynolds)	9,166,350	8,095,490	17,261,840	98,837,591	17.46%

Table A-9 (Continued)

School District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Linn Cty SD 55 (Sweet Home)	1,575,700	1,714,269	3,289,969	18,897,351	17.41%
Lane Cty SD 1 (Pleasant Hill)	1,304,706		1,304,706	7,527,893	17.33%
Umatilla Cty SD 2 (Pilot Rock)	362,881	226,833	589,714	3,413,631	17.28%
Marion Cty SD 4J (Silver Falls)	3,852,400	1,624,429	5,476,829	31,754,958	17.25%
Coos Cty SD 9 (Coos Bay)	3,058,015	1,170,709	4,228,724	24,766,559	17.07%
Harney Cty SD 3 (Burns)	215,650	1,038,825	1,254,475	7,420,699	16.91%
Umatilla Cty SD 5R (Echo)	349,325	170,717	520,042	3,083,341	16.87%
Marion Cty SD 24J (Salem Keizer)	40,437,308	19,331,327	59,768,635	362,194,366	16.50%
Marion Cty SD 5 (Cascade)	1,534,275	1,537,334	3,071,609	18,655,116	16.47%
Benton Cty SD 17J (Philomath)	1,489,600	570,998	2,060,598	12,586,236	16.37%
Marion Cty SD 15 (North Marion)	1,789,851	778,997	2,568,848	16,302,262	15.76%
Jackson Cty SD 549C (Medford)	12,800,150	3,740,709	16,540,859	106,416,809	15.54%
Benton Cty SD 1J (Monroe)	347,025	171,082	518,107	3,390,795	15.28%
Columbia Cty SD 6J (Clatskanie)	697,344		697,344	4,706,977	14.82%
Morrow Cty SD 1	2,002,775	726,779	2,729,554	18,481,487	14.77%
Clackamas Cty SD 108 (Estacada)	2,230,113	1,096,354	3,326,466	22,827,575	14.57%
Josephine Cty SD (Three Rivers)	2,357,600	2,463,283	4,820,883	33,557,586	14.37%
Lane Cty SD 19 (Springfield)	6,953,550	5,251,100	12,204,650	85,886,052	14.21%
Jefferson Cty SD 509J (Madras)	2,763,556	1,221,468	3,985,025	28,299,055	14.08%
Union Cty SD 11 (Imbler)	443,000		443,000	3,248,367	13.64%
Umatilla Cty USD 7 (Milton-Freewater)	742,250	1,327,164	2,069,414	16,146,170	12.82%
Lane Cty SD 52 (Bethel)	5,210,949		5,210,949	41,676,111	12.50%
Jefferson Cty SD 4 (Culver)	757,800		757,800	6,064,541	12.50%
Clackamas Cty SD 7J (Lake Oswego)		4,054,737	4,054,737	32,473,790	12.49%
Clatsop Cty SD 4 (Knappa)	537,950		537,950	4,329,064	12.43%
Clatsop Cty SD 30 (Warrenton-Hammond)	442,675	348,321	790,996	6,483,474	12.20%
Klamath Cty SD 1 (Klamath Falls)	2,939,700		2,939,700	24,241,469	12.13%
Marion Cty SD 91 (Mt Angel)	843,013		843,013	6,978,942	12.08%
Linn Cty SD 9 (Lebanon Community)	3,796,769		3,796,769	31,674,568	11.99%
Yamhill Cty SD 48J (Sheridan)	969,888		969,888	8,555,379	11.34%
Douglas Cty SD 4 (Roseburg)	2,189,336	2,678,889	4,868,225	43,297,545	11.24%
Jackson Cty SD 9 (Eagle Point)	3,540,650		3,540,650	31,518,836	11.23%
Douglas Cty SD 105 (Reedsport)	348,121	284,756	632,877	5,665,344	11.17%
Morrow Cty SD 2 (Ione)	264,600		264,600	2,379,222	11.12%
Columbia Cty SD 13 (Rainier)		616,770	616,770	5,633,850	10.95%
Clackamas Cty SD 35 (Molalla River)		2,084,051	2,084,051	19,618,065	10.62%
Gilliam Cty SD 25J (Condon)	190,200		190,200	1,809,851	10.51%
Polk Cty SD 2 (Dallas)	2,718,360		2,718,360	26,103,652	10.41%
Douglas Cty SD 19 (South Umpqua)		1,289,694	1,289,694	12,420,016	10.38%
Umatilla Cty SD 6 (Umatilla)	899,750	380,690	1,280,440	12,345,030	10.37%
Linn Cty SD 7J (Harrisburg)	664,584		664,584	6,456,862	10.29%
Douglas Cty SD 130 (Sutherlin)		1,069,625	1,069,625	10,742,888	9.96%
Lane Cty SD 32 (Mapleton)	172,125		172,125	1,748,521	9.84%
Lane Cty SD 66 (Crow-Applegate-Lorane)	230,600		230,600	2,404,632	9.59%
Multnomah Cty SD 40 (David Douglas)	5,124,388	3,273,441	8,397,829	95,508,583	8.79%
Jackson Cty SD 6 (Central Point)	2,998,685		2,998,685	36,375,570	8.24%
Malheur Cty SD 8C (Ontario)	1,033,040	958,998	1,992,038	24,201,405	8.23%
Umatilla Cty SD 29J (Athena-Weston)	432,663		432,663	5,314,700	8.14%
Marion Cty SD 103 (Woodburn)	4,274,175		4,274,175	55,367,622	7.72%
Yamhill Cty SD 30J (Willamina)	244,600	245,149	489,749	6,968,364	7.03%
Jackson Cty SD 35 (Rogue River)	564,401		564,401	8,218,774	6.87%
Lane Cty SD 79 (Marcola)	374,513		374,513	5,477,375	6.84%
Polk Cty SD 57 (Falls City)		171,851	171,851	2,739,925	6.27%
Coos Cty SD 13 (North Bend)	1,195,958	956,069	2,152,028	36,007,545	5.98%
Grant Cty SD 3 (John Day)		364,290	364,290	6,324,545	5.76%
Douglas Cty SD 34 (Elkton)	161,200		161,200	2,925,153	5.51%
Malheur Cty SD 84 (Vale) (UHD 3)	479,913		479,913	8,741,836	5.49%
Multnomah Cty SD 28J (Centennial)	3,053,050		3,053,050	55,617,551	5.49%
Union Cty SD 5 (Union)		163,868	163,868	2,988,294	5.48%
Union Cty SD 8J (North Powder)	165,300		165,300	3,400,726	4.86%

Table A-9 (Continued)

School District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Marion Cty SD 1 (Gervais)		624,377	624,377	12,904,709	4.84%
Malheur Cty SD 61 (Adrian)	153,527		153,527	3,863,551	3.97%
Klamath Cty SD	2,185,025		2,185,025	55,956,184	3.90%
Coos Cty SD 41 (Myrtle Point)	171,838		171,838	4,655,460	3.69%
Lane Cty SD 76 (Oakridge)	191,511		191,511	5,505,189	3.48%
Douglas Cty SD 77 (Glendale)	106,250		106,250	3,136,149	3.39%
Grant Cty SD 8 (Monument)		36,122	36,122	1,082,106	3.34%
Clackamas Cty SD 53 (Colton)	163,722		163,722	4,971,722	3.29%
Coos Cty SD 8 (Coquille)	348,135		348,135	10,938,312	3.18%
Polk Cty SD 21 (Perrydale)	106,100		106,100	3,390,948	3.13%
Lane Cty SD 71 (Lowell)	244,010		244,010	8,353,499	2.92%
Malheur Cty SD 26 (Nyssa)	380,800		380,800	13,183,802	2.89%
Baker Cty SD 5J (Baker)		818,185	818,185	34,539,014	2.37%
Douglas Cty SD 22 (North Douglas)	67,150		67,150	2,969,406	2.26%
Grant Cty SD 4 (Prairie City)		28,970	28,970	2,074,940	1.40%
Linn Cty SD 129J (Santiam Canyon)		416,312	416,312	40,652,083	1.02%

Table A-10

Oregon School Bond Guaranty and Pension Bonds vs. State Aid Analysis, FY19 *Net State Aid includes State School Fund and Common School Fund; does not include State Managed Timber Revenues or Property Taxes *(Alpha List)*					
School District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Baker Cty SD 5J (Baker)		818,185	818,185	34,539,014	2.37%
Benton Cty SD 17J (Philomath)	1,489,600	570,998	2,060,598	12,586,236	16.37%
Benton Cty SD 1J (Monroe)	347,025	171,082	518,107	3,390,795	15.28%
Benton Cty SD 509J (Corvallis)	12,394,805	2,286,833	14,681,638	40,329,828	36.40%
Clackamas Cty SD 108 (Estacada)	2,230,113	1,096,354	3,326,466	22,827,575	14.57%
Clackamas Cty SD 115 (Gladstone)	3,941,250	1,680,971	5,622,221	15,981,688	35.18%
Clackamas Cty SD 12 (North Clackamas)	32,398,750	11,414,524	43,813,274	109,394,919	40.05%
Clackamas Cty SD 35 (Molalla River)		2,084,051	2,084,051	19,618,065	10.62%
Clackamas Cty SD 3J (W.Linn-Wilsonville)	10,332,925	3,905,846	14,238,771	59,004,429	24.13%
Clackamas Cty SD 46 (Oregon Trail)	7,271,638		7,271,638	29,349,380	24.78%
Clackamas Cty SD 53 (Colton)	163,722		163,722	4,971,722	3.29%
Clackamas Cty SD 62 (Oregon City)	6,177,655	4,159,042	10,336,697	53,525,885	19.31%
Clackamas Cty SD 7J (Lake Oswego)		4,054,737	4,054,737	32,473,790	12.49%
Clackamas Cty SD 86 (Canby)	6,595,687	3,607,517	10,203,203	34,626,680	29.47%
Clatsop Cty SD 1 (Astoria)	2,155,000	1,759,212	3,914,212	12,165,146	32.18%
Clatsop Cty SD 10 (Seaside)	4,523,100	853,903	5,377,003	158,660	3389.01%
Clatsop Cty SD 30 (Warrenton-Hammond)	442,675	348,321	790,996	6,483,474	12.20%
Clatsop Cty SD 4 (Knappa)	537,950		537,950	4,329,064	12.43%
Columbia Cty SD 13 (Rainier)		616,770	616,770	5,633,850	10.95%
Columbia Cty SD 1J (Scappoose)	2,682,350		2,682,350	14,403,400	18.62%
Columbia Cty SD 47J (Vernonia)	957,255		957,255	4,018,516	23.82%
Columbia Cty SD 502 (St Helens)	2,366,450	2,520,999	4,887,449	19,370,597	25.23%
Columbia Cty SD 6J (Clatskanie)	697,344		697,344	4,706,977	14.82%
Coos Cty SD 13 (North Bend)	1,195,958	956,069	2,152,028	36,007,545	5.98%
Coos Cty SD 41 (Myrtle Point)	171,838		171,838	4,655,460	3.69%
Coos Cty SD 8 (Coquille)	348,135		348,135	10,938,312	3.18%
Coos Cty SD 9 (Coos Bay)	3,058,015	1,170,709	4,228,724	24,766,559	17.07%
Crook Cty School District	1,932,363	2,377,845	4,310,207	19,733,609	21.84%
Curry Cty SD 1 (Central Curry)	372,150		372,150	2,102,856	17.70%
Curry Cty SD 17 (Brookings-Harbor)	1,310,976	1,019,555	2,330,532	9,715,405	23.99%
Deschutes Cty SD 1 (Bend-Lapine)	32,267,111	7,099,068	39,366,179	99,148,529	39.70%
Deschutes Cty SD 2J (Redmond)	12,290,913	2,929,987	15,220,900	50,281,321	30.27%
Deschutes Cty SD 6 (Sisters)	2,834,068	890,144	3,724,212	2,368,130	157.26%
Douglas Cty SD 105 (Reedsport)	348,121	284,756	632,877	5,665,344	11.17%
Douglas Cty SD 116 (Winston-Dillard)	1,023,200	1,241,432	2,264,632	11,143,299	20.32%
Douglas Cty SD 12 (Glide)	863,325	303,609	1,166,934	4,487,546	26.00%
Douglas Cty SD 130 (Sutherlin)		1,069,625	1,069,625	10,742,888	9.96%
Douglas Cty SD 19 (South Umpqua)		1,289,694	1,289,694	12,420,016	10.38%
Douglas Cty SD 22 (North Douglas)	67,150		67,150	2,969,406	2.26%
Douglas Cty SD 34 (Elkton)	161,200		161,200	2,925,153	5.51%
Douglas Cty SD 4 (Roseburg)	2,189,336	2,678,889	4,868,225	43,297,545	11.24%
Douglas Cty SD 77 (Glendale)	106,250		106,250	3,136,149	3.39%
Gilliam Cty SD 25J (Condon)	190,200		190,200	1,809,851	10.51%
Grant Cty SD 3 (John Day)		364,290	364,290	6,324,545	5.76%
Grant Cty SD 4 (Prairie City)		28,970	28,970	2,074,940	1.40%
Grant Cty SD 8 (Monument)		36,122	36,122	1,082,106	3.34%
Harney Cty SD 3 (Burns)	215,650	1,038,825	1,254,475	7,420,699	16.91%
Hood River Cty SD (Hood River)	4,285,750	1,908,685	6,194,435	31,562,040	19.63%
Jackson Cty SD 35 (Rogue River)	564,401		564,401	8,218,774	6.87%
Jackson Cty SD 4 (Phoenix-Talent)	3,051,058	1,376,807	4,427,865	18,496,623	23.94%
Jackson Cty SD 5 (Ashland)	6,238,188		6,238,188	14,218,841	43.87%
Jackson Cty SD 549C (Medford)	12,800,150	3,740,709	16,540,859	106,416,809	15.54%
Jackson Cty SD 6 (Central Point)	2,998,685		2,998,685	36,375,570	8.24%
Jackson Cty SD 9 (Eagle Point)	3,540,650		3,540,650	31,518,836	11.23%
Jefferson Cty SD 4 (Culver)	757,800		757,800	6,064,541	12.50%
Jefferson Cty SD 509J (Madras)	2,763,556	1,221,468	3,985,025	28,299,055	14.08%
Josephine Cty SD (Three Rivers)	2,357,600	2,463,283	4,820,883	33,557,586	14.37%
Klamath Cty SD	2,185,025		2,185,025	55,956,184	3.90%
Klamath Cty SD 1 (Klamath Falls)	2,939,700		2,939,700	24,241,469	12.13%
Lane Cty SD 1 (Pleasant Hill)	1,304,706		1,304,706	7,527,893	17.33%
Lane Cty SD 19 (Springfield)	6,953,550	5,251,100	12,204,650	85,886,052	14.21%

Table A-10 (Continued)

School District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Lane Cty SD 28J (Fern Ridge)	1,939,900	657,831	2,597,731	11,184,501	23.23%
Lane Cty SD 32 (Mapleton)	172,125		172,125	1,748,521	9.84%
Lane Cty SD 40 (Creswell)	1,746,235	393,395	2,139,630	10,250,049	20.87%
Lane Cty SD 45J3 (South Lane)	2,790,688	1,273,180	4,063,867	22,389,444	18.15%
Lane Cty SD 4J (Eugene)	24,512,838	4,835,328	29,348,165	97,349,685	30.15%
Lane Cty SD 52 (Bethel)	5,210,949		5,210,949	41,676,111	12.50%
Lane Cty SD 66 (Crow-Applegate-Lorane)	230,600		230,600	2,404,632	9.59%
Lane Cty SD 69 (Junction City)	1,752,950	456,476	2,209,426	11,955,598	18.48%
Lane Cty SD 71 (Lowell)	244,010		244,010	8,353,499	2.92%
Lane Cty SD 76 (Oakridge)	191,511		191,511	5,505,189	3.48%
Lane Cty SD 79 (Marcola)	374,513		374,513	5,477,375	6.84%
Lane Cty SD 97J (Siuslaw)	1,642,825	925,143	2,567,968	7,028,174	36.54%
Lincoln Cty Unified SD	6,248,225	4,818,886	11,067,111	22,321,900	49.58%
Linn Cty SD 129J (Santiam Canyon)		416,312	416,312	40,652,083	1.02%
Linn Cty SD 55 (Sweet Home)	1,575,700	1,714,269	3,289,969	18,897,351	17.41%
Linn Cty SD 7J (Harrisburg)	664,584		664,584	6,456,862	10.29%
Linn Cty SD 8J (Greater Albany)	12,434,100	4,149,922	16,584,022	70,035,413	23.68%
Linn Cty SD 9 (Lebanon Community)	3,796,769		3,796,769	31,674,568	11.99%
Malheur Cty SD 26 (Nyssa)	380,800		380,800	13,183,802	2.89%
Malheur Cty SD 61 (Adrian)	153,527		153,527	3,863,551	3.97%
Malheur Cty SD 84 (Vale) (UHD 3)	479,913		479,913	8,741,836	5.49%
Malheur Cty SD 8C (Ontario)	1,033,040	958,998	1,992,038	24,201,405	8.23%
Marion Cty SD 1 (Gervais)		624,377	624,377	12,904,709	4.84%
Marion Cty SD 103 (Woodburn)	4,274,175		4,274,175	55,367,622	7.72%
Marion Cty SD 14J (Jefferson)	658,888	690,430	1,349,317	7,466,157	18.07%
Marion Cty SD 15 (North Marion)	1,789,851	778,997	2,568,848	16,302,262	15.76%
Marion Cty SD 24J (Salem Keizer)	40,437,308	19,331,327	59,768,635	362,194,366	16.50%
Marion Cty SD 29J (North Santiam)	1,561,825	1,573,100	3,134,925	16,157,945	19.40%
Marion Cty SD 45 (St Paul)	535,700		535,700	2,537,340	21.11%
Marion Cty SD 4J (Silver Falls)	3,852,400	1,624,429	5,476,829	31,754,958	17.25%
Marion Cty SD 5 (Cascade)	1,534,275	1,537,334	3,071,609	18,655,116	16.47%
Marion Cty SD 91 (Mt Angel)	843,013		843,013	6,978,942	12.08%
Morrow Cty SD 1	2,002,775	726,779	2,729,554	18,481,487	14.77%
Morrow Cty SD 2 (Ione)	264,600		264,600	2,379,222	11.12%
Multnomah Cty SD 10J (Gresham-Barlow)	17,518,013	3,897,951	21,415,964	92,596,410	23.13%
Multnomah Cty SD 1J (Portland)	120,432,483	49,252,723	169,685,206	254,671,592	66.63%
Multnomah Cty SD 28J (Centennial)	3,053,050		3,053,050	55,617,551	5.49%
Multnomah Cty SD 3 (Parkrose)	4,325,300	495,521	4,820,821	14,269,149	33.78%
Multnomah Cty SD 40 (David Douglas)	5,124,388	3,273,441	8,397,829	95,508,583	8.79%
Multnomah Cty SD 51J (Riverdale)	463,037	434,452	897,489	3,534,157	25.39%
Multnomah Cty SD 7 (Reynolds)	9,166,350	8,095,490	17,261,840	98,837,591	17.46%
Polk Cty SD 13J (Central)	4,731,978	2,028,548	6,760,526	26,615,754	25.40%
Polk Cty SD 2 (Dallas)	2,718,360		2,718,360	26,103,652	10.41%
Polk Cty SD 21 (Perrydale)	106,100		106,100	3,390,948	3.13%
Polk Cty SD 57 (Falls City)		171,851	171,851	2,739,925	6.27%
Tillamook Cty SD 101 (Nestucca Valley)	1,932,783	219,897	2,152,680	48,009	4483.89%
Tillamook Cty SD 56 (Neah-Kah-Nie)	1,297,265		1,297,265	81,099	1599.60%
Tillamook Cty SD 9 (Tillamook)	1,230,100	1,681,539	2,911,639	10,522,179	27.67%
Umatilla Cty SD 1 (Helix)	476,650		476,650	2,130,447	22.37%
Umatilla Cty SD 16R (Pendleton)	3,192,950	2,575,500	5,768,450	25,225,885	22.87%
Umatilla Cty SD 2 (Pilot Rock)	362,881	226,833	589,714	3,413,631	17.28%
Umatilla Cty SD 29J (Athena-Weston)	432,663		432,663	5,314,700	8.14%
Umatilla Cty SD 5R (Echo)	349,325	170,717	520,042	3,083,341	16.87%
Umatilla Cty SD 6 (Umatilla)	899,750	380,690	1,280,440	12,345,030	10.37%
Umatilla Cty SD 61 (Stanfield)	483,600	355,688	839,288	4,648,671	18.05%
Umatilla Cty SD 8 (Hermiston)	8,421,022	1,596,416	10,017,438	50,422,341	19.87%
Umatilla Cty USD 7 (Milton-Freewater)	742,250	1,327,164	2,069,414	16,146,170	12.82%
Union Cty SD 1 (La Grande)	2,121,150	968,103	3,089,253	16,975,541	18.20%
Union Cty SD 11 (Imbler)	443,000		443,000	3,248,367	13.64%
Union Cty SD 5 (Union)		163,868	163,868	2,988,294	5.48%

Table A-10 (Continued)

School District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Union Cty SD 8J (North Powder)	165,300		165,300	3,400,726	4.86%
Wasco Cty SD 12 (The Dalles) Bonds	1,839,200	1,517,229	3,356,429	2,235,622	150.13%
Washington Cty SD 13 (Banks)	1,212,900	310,761	1,523,661	7,299,782	20.87%
Washington Cty SD 15 (Forest Grove)	8,337,063	2,546,969	10,884,031	50,150,070	21.70%
Washington Cty SD 1J (Hillsboro)	34,641,049	8,899,700	43,540,749	139,533,342	31.20%
Washington Cty SD 23J (Tigard-Tualatin)	12,674,300	3,652,062	16,326,362	70,691,202	23.10%
Washington Cty SD 48J (Beaverton)	60,210,190	15,503,884	75,714,075	278,383,341	27.20%
Washington Cty SD 511J (Gaston)	505,150	408,551	913,701	4,295,762	21.27%
Washington Cty SD 88J (Sherwood)	13,552,517	1,264,432	14,816,949	35,441,985	41.81%
Yamhill Cty SD 1 (Yamhill-Carlton)	1,506,459	946,372	2,452,831	6,708,029	36.57%
Yamhill Cty SD 29J (Newberg)	9,746,900	3,517,565	13,264,465	33,407,152	39.71%
Yamhill Cty SD 30J (Willamina)	244,600	245,149	489,749	6,968,364	7.03%
Yamhill Cty SD 40 (McMinnville)	9,166,750	2,822,328	11,989,078	53,215,723	22.53%
Yamhill Cty SD 48J (Sheridan)	969,888		969,888	8,555,379	11.34%
Yamhill Cty SD 4J (Amity)	618,877	1,182,946	1,801,823	7,091,533	25.41%
Yamhill Cty SD 8 (Dayton)	915,964	728,624	1,644,587	8,258,013	19.92%

Table A-11

Oregon School Bond Guaranty and Pension Bonds vs. State Aid Analysis, FY19

***Net State Aid includes State School Fund and Common School Fund; does not include State Managed Timber Revenues or Property Taxes**

(High to Low based on Percentage of Debt Service to State Aid Guaranteed)

Community College District Name	FY19 OSBG Annual P&I Debt Service	FY19 Pension Annual P&I Debt Service	FY19 Total Annual P&I Debt Service	FY19 *Net State Aid	FY19 % Total Debt Service/ *Net State Aid
Oregon Coast Community College	1891575	198357.24	2,089,932	2,274,000	91.91%
Lane Community College	8191462.5	5149250	13,340,713	24,961,873	53.44%
Blue Mountain Community College	1810406.26	924901.86	2,735,308	5,649,444	48.42%
Central Oregon Community College	3218250	755647.5	3,973,898	8,807,386	45.12%
Chemeketa Community College	10068181.26	4062625.72	14,130,807	34,909,741	40.48%
Tillamook Bay Community College	700724.74	142715.56	843,440	2,126,524	39.66%
Clatsop Community College	934931.5	627488.9	1,562,420	3,971,830	39.34%
Columbia Gorge Community College (Treaty-Oak AED)	1539475	224836.88	1,764,312	4,773,181	36.96%
Rogue Community College	1424650	1753482.7	3,178,133	11,019,756	28.84%
Linn-Benton Community College	2863950	2643017.5	5,506,968	23,563,715	23.37%
Mt Hood Community College		6380050.3	6,380,050	32,394,937	19.69%
Clackamas Community College	640100	2661342.26	3,301,442	19,049,645	17.33%
Southwestern Oregon Community College		1211593	1,211,593	8,668,992	13.98%
Treasure Valley Community College		700390.98	700,391	7,647,405	9.16%
Portland Community College		9754440.5	9,754,441	108,902,173	8.96%
Umpqua Community College		1076273	1,076,273	12,702,701	8.47%

APPENDIX B

Constitutional & Statutory Framework

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GENERAL OBLIGATION BONDS

General Purpose Bonds – Article XI, Section 7. The Oregon Constitution Article XI, Section 7 prohibits the State from incurring indebtedness exceeding $50,000 without a constitutional amendment approved by voters. This single limitation applies to both General Purpose and short-term general obligation debt. Exceptions are provided such as in the case of war or invasion and also to build and maintain permanent roads. This section does not apply to real property leases up to 20 years entered into by the State for a public purpose. There are currently no General Purpose bonds currently outstanding for this purpose.

State Highway Bonds – Article XI, Section 7. Article XI, Section 7 of the Oregon Constitution approves the issuance of bonds up to one percent of the true cash value of property in the State for the purpose of building and maintaining permanent roads within the State. Although these bonds have the State's General Obligation (GO) backing as security, the debt service funding source is provided by specifically earmarked vehicle registration fees and gasoline and weight-mile tax revenues. As of June 30, 2019, there was $28.7 million in outstanding GO bonds issued under this provision of the state constitution.

Veterans' Welfare Bonds – Article XI-A. This program, authorized by Article XI-A of Oregon's Constitution, allows the State to borrow up to eight percent of the true cash value (TCV) of all taxable property in the state to fund the Oregon War Veterans' Fund. The fund is used to finance farm and home loans for eligible veterans. Although bonds issued under this program are direct general obligations of the State, for which a property tax may be levied, the program is fully self-supporting from loan repayments. Principal amount outstanding was $370.7 million as of June 30, 2019.

State Power Development Bonds – Article XI-D. Article XI-D of the Oregon Constitution provides authority to issue long-term GO debt, up to one and one-half percent of true cash value of all taxable property in the state, to provide for the development of hydroelectric power plants and transmission and distribution lines. This amendment to the Oregon Constitution was adopted in 1932 and has never been used.

State Forest Rehabilitation Bonds – Article XI-E. Article XI-E of the Oregon Constitution authorized the establishment of the Forest Rehabilitation bond program. The Article permits the state's credit to be loaned and indebtedness incurred in an amount not to exceed three-sixteenths of one percent of the state's true cash value to provide for the reforestation of land that the State currently owns or may acquire for the purpose of reforestation. Funds generated by the reforestation must be used to repay any outstanding debt issued under this provision. Property taxes are authorized to assist in the repayment of the debt if necessary. In addition to constitutional provisions, statutes place a limit of $750,000 of debt per year that can be incurred for this program. This program was put in place in response to the 1933 "Tillamook Burn" which ravaged 240,000 acres of forest-land in Tillamook County. The program has not been used since 1971 and there are no outstanding bonds under this authorization.

Higher Education Building Bonds – Article XI-F (1). The Oregon Constitution allows the State to issue GO bonds for publicly-owned higher education facilities under two separate Articles, XI-F (1) and XI-G. Article XI-F(1) authorizes the State Board to borrow up to three-quarters of one percent of state true cash value to finance higher education building and land acquisition projects. Projects financed through this program must be fully self-supporting and self-liquidating from non-General Fund revenues, including tuition, gifts, grants, leases, and/or student building fees. Principal amount outstanding was $1.08 billion as of June 30, 2019. SB 270 (2013) authorized the establishment of independent universities with governing boards for the universities that were formerly part of the Oregon University System (OUS); these independent governing boards now have the ability to sell their own university revenue bonds that rely upon the same types of revenue streams for debt repayment that are also used for repayment of XI-F (1) bonds.

SB 270 required that in order for the newly independent universities to have continued access to the State's XI-F (1) bonding programs, any issuance of university revenue bonds must first be reviewed and approved by the Office of the State Treasurer (OST). Several revenue bonds have been reviewed and approved by OST to date for the University of Oregon and Oregon State University. These revenue bonds were eagerly accepted by the investing public, as both schools have strong, investment grade credit ratings. It is anticipated that the State will continue to issue XI-F (1) bonds for legislatively authorized projects for the balance of independent public universities with substantially lower or no credit ratings, given the significant interest cost savings afforded these universities by the State's higher credit ratings.

Higher Education Facilities and Community College Bonds – Article XI-G.[28] In addition to Article XI-F(1) provisions, Article XI-G, adopted in 1964, allows a debt limit of up to three-fourths of one percent TCV to finance public higher education institution and community college facilities that are not revenue producing. Unlike Article XI-F (1), however, Article XI-G requires that any indebtedness incurred under Article XI-G not exceed the dollar amount appropriated from the State's General Fund for the same or similar purpose as the indebtedness to be incurred. As a result, this type of bond is not issued, unless there is also a legislatively authorized and matching appropriation equal to at least 50 percent of the overall cost of the project.

Historically, Article XI-G bonds for higher education were used to finance instructional and public service facilities of the OUS and community colleges. General Fund appropriations are made annually to pay debt service on these bonds. Despite the change in university governance structure established by SB 270, the State anticipates it will continue to issue XI-G bonds for legislatively authorized projects at the seven independent universities and at the Oregon Health and Sciences University (OHSU). As of June 30, 2019, the principal amount outstanding for Community College XI-G bonds was $731.9 million and $215.8 million for Higher Education Facilities XI-G bonds.

ORS 341.009 directs that the state should maintain a policy of substantial state participation in community college building costs. In the 1960s and 1970s, State GO bonds were issued to help support the costs of the expanding network of Oregon community colleges. The demand for a highly skilled workforce in Oregon has continued to grow, as has the need to support the retraining of existing workers for today's increasingly technical job market. Since 2007, the Legislature has included authorization of XI-G bonding in varying amounts for select community college instructional facilities.

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[28] As of July 1, 2015, all Higher Education facility and Community College GO Bonds will be issued through the Higher Education Coordination Commission, with assistance from the Department of Administrative Services with regards to bond issuance and on-going debt administration. For purposes of calculating constitutional debt limitations, bond issuances under both programs are combined and charged against the total debt authorized under Article XI-G of the State Constitution.

Pollution Control Bonds – Article XI-H. Funds of up to one percent of the State's true cash value may be borrowed for purposes of financing pollution abatement and control facilities, as well as pollution control and disposal activities of State and local government agencies. This authorization, granted under Article XI-H, requires that most facilities funded by the program, with the exception of pollution control and disposal activities and hazardous substance facilities, must "conservatively appear" to be at least seventy percent self-supporting and self-liquidating from revenues, gifts, federal grants, user charges, assessments and other fees.[29] Property taxing authority is provided as an additional source of revenue to support these bonds, but this authority has never been used. Historically, the portion of the debt service of these bonds associated with orphan hazardous disposal site clean-up has been repaid by General Fund appropriation, with the balance of debt service repaid by DEQ fees and repayment on loans. (Please see the "General Fund Supported Debt" chapter of this report for more information on General Fund versus Other Fund split.) The amount of General Fund support may vary over time. Principal amount outstanding was $34.6 million as of June 30, 2019.

Water Resources Bonds – Article XI-I (1). Up to one-half of one percent of the true cash value of property within the State may be borrowed to provide funds for loans to construct water development projects. Project purposes include irrigation and drainage, community water supply, fish protection and watershed restoration. Authorized by Article XI-I (1), at least fifty percent of these funds are reserved for irrigation and drainage projects. The program is intended to be self-supporting from revenues received pursuant to financing agreements with project borrowers. There were no bonds outstanding under this program as of June 30, 2019.

Elderly and Disabled Housing Bonds – Article XI-I (2). Funds may be borrowed to finance multifamily housing for elderly and disabled persons under Article XI-I (2). This program, under which one-half of one percent of state property true cash value may be borrowed, is fully self-supporting from project mortgage loan revenues. Principal amount outstanding was $39.9 million as of June 30, 2019.

Alternate Energy Bonds – Article XI-J. The Department of Energy is authorized by Article XI-J to incur debt up to one-half of one percent of the true cash value of all taxable property of the state to finance development of small-scale local energy projects (SELP). Projects are funded only if they can demonstrate there will be sufficient revenues to repay the loan. Although the program has the State's GO backing, it was designed and has historically been fully self-supporting from loan repayment revenues. Over the past several years, the Department wrote-off several large loans to private parties that were deemed non-collectible, which greatly depleted SELP's loan reserves. Recent cash flow analysis shows that the State will need to make cash infusions starting this biennium of $4.4 million in order for the Department to meet its current debt service obligations.

Approximately $70 million in Article XI-J bonds has been issued for energy upgrades and efficiency projects throughout the OUS system; a significant amount of which will be repaid through General Fund annual appropriations. Overall, the General Fund is now paying 40% of the overall debt service for the SELP program. There were $139.5 million in outstanding Article XI-J bonds as of June 30. 2019,

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[29] In accordance with Article XI-H Section 2, the facilities supported by the Pollution Control Bonds must be 70% self-supporting and self-liquidating. However, the bonds that provide the funds to support the facilities are currently non-self-supporting, requiring debt service payments to be provided by General Fund appropriations.

Oregon School Bond Guaranty Program – Article XI-K. Article XI-K of Oregon's constitution authorizes the State Treasurer to pledge the full faith and credit of the State to guaranty the GO bonds of Oregon common or union high school districts, education service districts or community college districts. The State Treasurer may also issue State GO bonds to meet the State's obligations under the Oregon School Bond Guaranty Program. The amount of State GO bonds that can be issued to back the guaranties is limited to one half of one percent of TCV of all taxable property in the state. As of the date of this report, the State had not issued any debt permitted under the provisions of Article XI-K.

Oregon Opportunity Bonds – Article XI-L. Authorizes bonds to finance capital costs of the Oregon Health and Sciences University (OHSU) in an aggregate principal amount that produces net proceeds for the University in an amount that does not exceed $200 million. Section 1 of the Article authorizes debt not to exceed one-half of one percent of the real market value of all property in the State. However, the State is not permitted to levy ad valorem (property) taxes to pay the bonds. The legislation authorizing the program contemplates that the bonds may be paid from tobacco settlement revenues, but those revenues are not directly pledged to pay the bonds. Principal amount outstanding was $62.8 million of June 30, 2019.

Seismic Rehabilitation of Public Education Buildings – Article XI-M. Authorizes bonds to be issued to provide funds for the planning and implementation of seismic rehabilitation of public education buildings. Outstanding authorized debt may not exceed one-fifth of one percent real market value of all property in the State. Ad valorem property taxes may not be pledged to repay these bonds. Principal amount outstanding was $242.4 million as of June 30, 2019.

Seismic Rehabilitation of Emergency Services Buildings – Article XI-N. Authorizes bonds to be issued to provide funds for the planning and implementation of seismic rehabilitation of emergency services buildings. Outstanding authorized debt may not exceed one-fifth of one percent real market value of all property in the State. Ad valorem property taxes may not be pledged to repay these bonds. Principal amount outstanding was $58.3million as of June 30, 2019.

Pension Obligation Bonds – Article XI-O. Pension Obligation Bonds (POBs) were issued under the authority of Article XI-O of the Oregon Constitution and House Bill 3659 in October 2003 in the principal amount of $2,083,960,000. These bonds are general obligations of the State to which the full faith and credit and taxing power of the State (other than the State's power to levy ad valorem property taxes) are pledged. Proceeds of the POBs were used to pay a substantial portion of the State's unfunded actuarial liability (UAL) of the Oregon Public Employees Retirement System (PERS). The UAL is the State's portion of the difference between PERS' actuarial liability and fair market value of assets in the Public Employees Retirement Fund (PERF) available to pay such liability on November 1, 2003.

The amount of outstanding indebtedness authorized by Article XI-O is limited to one percent of the real market value of all property in the state. Debt service on the bonds is allocated among both General Fund and non-General Fund State agencies based on the payroll of such agencies. The State expects that the allocated costs to each agency will be less than if the State did not issue the bonds. Approximately 65 percent of the bond debt service is paid by non-General Fund resources leaving 35 percent of the debt service to be paid with General Fund resources. The final payment on these bonds will occur in FY 2027. Principal amount outstanding on the POBs was $1.48 billion as of June 30, 2019.

School Construction Bonds – Article XI-P. In May 2010, the Oregon electorate adopted a constitutional amendment allowing for the issuance of State GO bonds as a match to local public school district funds for school capital projects (Article XI-P bonds). This constitutional amendment authorizes the State to incur indebtedness in an amount not to exceed one-half of one percent of the real market value of the real property in the state, but does not authorize a levy on property taxes to pay for these bonds

The 2015 Legislature authorized the bond program's initial sale of bonds for this program, as well as adopting SB 447, which authorized the establishment of the Office of School Facilities within the Oregon Department of Education. The Office of School Facilities was created to administer the new bond program and the Oregon State Capital Improvement Program (OSCIM Program) with the goal of increasing local school district investment in their capital construction and school facilities. The OSCIM Program provides "matching" grants intended to incentivize local voters to vote for school construction general obligation bonds by matching state dollars with local funds.

The OSCIM Program awards funds through two means, a priority list and first in time list. The priority list ranks all districts based on a formula using their assessed value and poverty rate. Districts with lower assessed values and higher poverty rates are higher on the priority list and receive commitments first. The first in time list wards districts commitments based on the time they turn in their applications. All districts that submit during a specified time period are considered to have turned in their applications at the same time and a lottery is used to award funds until XI-P bond funds are depleted. The size of the award is based on a formula with most districts in the state receiving a maximum award of $4 million although larger districts can receive a maximum of up to $8 million.

Given the estimated $7.6 billion in statewide deferred school capital and maintenance costs, it is anticipated that there will be strong statewide demand over time for this bond program. As of June 30, 2019, there was $183.7 million in bonds outstanding through this program.

State General Purpose Bonds – Article XI-Q. Authorizes the State to incur indebtedness in an amount not to exceed one percent of the real market value of the real property in the state to provide funds to acquire, construct, remodel, repair, equip or furnish real or personal property that is or will be owned and/or operated by the State of Oregon. Passed by the voters in November 2010, and enacted into statute in the following year by the 2011 Legislative Assembly, the Article XI-Q bonding program replaced the Certificate of Participation bonding program as a means of financing most state-owned property due to its superior credit ratings and lower cost of funds. Through June 30, 2019, the State has sold thirty-four separate issues of Article XI-Q bonds, both for new state capital projects but also to refund several series of outstanding COPs, saving Oregon taxpayers $101.4 million in interest costs on present value savings over the life of these bonds. As of June 30, 2019 the principal outstanding for Article XI-Q bonds totaled $1.76 billion.

DIRECT REVENUE BONDS

Single-Family and Multifamily Revenue Bonds – ORS 456.645. Oregon Revised Statute 456.645 to 456.725 authorizes the Housing and Community Services Department to issue revenue bonds for the purpose of financing single-family mortgage loans and multifamily housing projects. The statute limits outstanding debt to $2.5 billion. These bonds are fully self-supported with payment for the bonds coming from project rental revenues, as well as mortgage payments and fees. Principal amount outstanding was $1.12 billion as of June 30, 2019.

State Highway User Tax Bonds – ORS 367.605. The Oregon Constitution Article IX, Section 3a and Oregon Revised Statutes 367.605 to 367.665 authorize the Department of Transportation to issue highway user tax revenue bonds to provide proceeds for building and maintaining permanent public roads. Highway user tax bonds differ from other State revenue bond programs in that they are secured by constitutionally dedicated tax proceeds from fuel sales and other taxes or fees charged for vehicle use and licensing. However, they are typical of revenue bond programs in that they are not secured by the State's GO pledge.

The 1999 Legislative Assembly under ORS 367.620 authorized the issuance of debt up to $138.4 million in highway user tax bonds. Under this authorization, the Department issued bonds in the amount of $58,355,000 in August 2000. The remainder of this authorization was repealed in 2001 Oregon Laws Chapter 669.

The 2001 Legislative Assembly revised ORS 367.620(2) to approve issuance of $400 million of new highway user tax bonds. House Bill 4010, passed during the First Special Session of the 2002 Legislature, again revised ORS 367.620 increasing the issuance of new highway user tax revenue bonds sufficient to produce net proceeds of not more than $500 million. The authority granted was further restricted to an aggregate principal amount that the department reasonably believes can be paid with $71.2 million in biennial debt service.[30] As of December 31, 2008 the department had issued all $500 million in net proceeds under this authorization; there is no remaining bonding authority under these provisions.

The 2003 Legislative Assembly approved HB 2041 amending ORS 367.620(3) to provide additional authority for $1.9 billion net proceeds in highway user tax revenue bonds for bridges and highway modernization purposes. It was envisioned at that time that bonds supporting this program authorization would be issued over a number of years; in 2010, the final series of highway user tax revenue bonds for this program was issued.

In 2009, the Legislative Assembly enacted the Jobs and Transportation Act (JTA) which authorized the Department to issue up to $840 million in net proceeds through the issuance of additional highway user tax revenue bonds for specific congestion management projects. The final series of revenue bonds associated with this authorization was sold in FY 2017.

The total principal amount outstanding for highway user tax revenue bonds was $2.36 billion as of June 30, 2019.

Oregon Transportation Infrastructure Fund Bonds – ORS 367.015. ORS 367.015 to 367.030 authorize the Department of Transportation to issue revenue bonds for the Oregon Transportation Infrastructure Fund. The fund is to provide infrastructure loans and assistance for transportation projects. The total principal amount of revenue bonds that may be issued and outstanding at any one time under this authorization cannot exceed $200 million. Currently, no Transportation Infrastructure Fund bonds authorized by these provisions have been issued or are outstanding.

City and County Roads and Recreation Facilities Bonds – ORS 367.700. ORS 367.700 to 367.750 authorizes State Department of Transportation bonded indebtedness in the aggregate principal amount of $50 million. This provision was enacted into law in 1975 for the purpose of providing funds to cities and counties to defray the costs of city and county street construction and

[30] The $58,355,000 Highway User Tax Revenue Bonds Series 2000, issued and outstanding amount, does not count against the $500 million in new issuance or the $71.2 million biennial debt service limitation imposed by HB 4010.

the acquisition, development, maintenance and care of public park and recreation facilities. No State bonds have ever been issued under the provisions of this legislation.

Oregon Bond Bank Revenue Bonds – ORS Chapter 285B.467. The Oregon Economic and Community Development Department (OECDD) have been granted statutory authority to issue bonds under two revenue bond programs. Pursuant to ORS 285B.410 through 285B.479, bonds, may be issued to fund the Special Public Works Fund (SPWF) to assist municipalities in financing the infrastructure necessary for economic development. In addition, the Department, pursuant to ORS 285B.572 through 285B.587, may issue bonds to finance loans to municipalities for safe drinking water projects and wastewater system improvement projects. Bond proceeds under this program are used to fund the Water/Wastewater Financing Program to deliver funds to eligible municipalities. The bonds are payable from loan repayments made by municipalities. Under each of these programs, the Department is authorized to request the State to withhold any amounts otherwise due to the municipality from the State to pay such amounts that may be owed.

In 1997, the Oregon State Legislature enacted ORS 285B.482 to authorize the consolidation of proceeds of revenue bonds issued for the SPWF Program and the Water/Wastewater Program. Future bonds for these programs are issued under the consolidated Oregon Infrastructure Authority Bond Bank Revenue Program. Additionally, all prior bonds issued under these programs are considered parity bonds. Future bonds supporting the SPWF and the Water/Wastewater programs will be issued as single series under the Oregon Infrastructure Authority Bond Bank Revenue Bond program. Principal amount outstanding is $44.5 million as of June 30, 2019.

Lottery Revenue Bond Program(s) – ORS 286A.560 to 286A.585. The Oregon State Lottery was created by an amendment to the Oregon Constitution in 1984. That amendment revised Article XV, Section 4 of the Oregon Constitution to require the establishment and operation of the Oregon State Lottery. Article XV, Section 4 requires that all proceeds from the Lottery, including interest earnings but excluding expenses and payment of prizes, be used for creating jobs, furthering economic development, financing public education in Oregon or restoring and protecting Oregon's parks, beaches, watersheds and critical fish and wildlife habitats. The Article also requires the Legislative Assembly to appropriate Lottery net proceeds in amounts sufficient to pay lottery bonds before appropriating the Lottery's net proceeds for any other purpose.

The first statutory authority, ORS 391.140, permitted the issuance of up to $115 million in bonds for financing the costs of development, acquisition and construction of the Westside corridor light-rail project. Subsequently, the Legislative Assembly has authorized additional Lottery-backed bond programs at each of its regular sessions. In 1999, the Legislature passed Senate Bill 200 to combine previously enacted legislation authorizing lottery bonds into a single Act. The Act, incorporated as ORS 286A.560 to 286A.585, creates a single consistent legislative authorization and uniform administrative procedures for all lottery bonds issued by the State of Oregon. As of June 30, 2019, Lottery Bond principal amount outstanding was $1.19 billion.

Forest Development Revenue Bonds – ORS 530.140. The State Forestry Department is authorized by the provisions of ORS 530.140 to 530.147 to sell revenue bonds of the State of Oregon, to be known as Oregon Forest Development Revenue Bonds. No bonds have been issued or are outstanding under this authorization.

Oregon Student Assistance Revenue Bonds – ORS 348.655. Bond authorization and eligibility requirements are defined by ORS 348.655 to 348.695. It authorizes the issuance of up to $30 million annually in revenue bonds to fund loans to support the "alternative student loan" program. Eligible student, as defined by ORS 348.618, means a student enrolled in an eligible post-secondary educational institution located in Oregon or a student who is an Oregon resident and who is enrolled in an eligible post-secondary educational institution located outside of Oregon. To date, no debt has been authorized or issued under this authorization.

Oregon Innovation Revenue Bonds – ORS 284.746. Bond authorization and project eligibility requirements are defined by ORS 284.740 to 284.749. These bonds are intended to fund loans and grants related to innovation-based economic development projects, as determined by the Oregon Innovation Council. To date, no debt has been authorized or issued under this authorization.

CONDUIT REVENUE BONDS

The State has authorized four conduit or "pass-through" revenue bond programs. Under these programs, the State is considered the issuer, but has no obligation to fund debt service payments other than out of payments from the entities on whose behalf the bonds are issued.

Oregon Facilities Authority (OFA) – ORS Chapter 289. The Oregon Facilities Authority, formerly named the Health, Housing, Educational, and Cultural Facilities Authority, was created in 1989 and operates pursuant to Oregon Revised Statues Chapter 289. OFA is a public corporation empowered to issue conduit revenue bonds and assist with the assembling and financing of lands for health care, housing, educational and cultural uses and for the construction and financing of facilities for such uses. Effective January 1, 2007, OFA's mandate was expanded to include the financing for all non-profit institutions, organizations or entities within the State that are exempt from taxation under section 501(c)(3) of the Internal Revenue Code, as defined in ORS 314.011. The Authority reviews proposed projects and makes recommendations to the State Treasurer whether to finance the project through the issuance of limited obligation bonds.

Although the State Treasurer issues OFA bonds, they are repaid solely from revenues generated by the projects being financed or from other sources available to the borrower. The State has no financial obligation for these bonds and bondholders have no recourse against the properties, funds or assets of the Issuer, the State or the Authority for payment of bond debt service. Bondholder's only recourse for payment of the bonds is against the actual borrower.

In 2007, OFA initiated the Small Nonprofit Accelerated Program (SNAP Bond Program), which is a streamlined low-cost private placement program for smaller non-profits that is simple to use and generally has smaller transaction costs. Principal amount outstanding for OFA in total was $2.19 billion as of June 30, 2019.

Industrial Development Revenue Bonds – ORS Chapter 285B. The Oregon Business Development Commission is empowered, pursuant to ORS 285B.320 to 285B.371, to issue Industrial Development Revenue Bonds through the Oregon Business Development Department, with the approval of the State Treasurer. They are issued as limited obligation bonds payable only from project revenues or other sources available to the borrower. Industrial or economic development revenue bonds do not constitute an indebtedness of the Issuer, the Commission or the State. Proceeds of these bonds are loaned to private businesses to finance various expansions, relocations, retentions, and other projects that will stimulate economic development and provide jobs in the State. Prior to approval of issuance, the State subjects individual projects to a cost effectiveness test to ensure that the public benefits of a project outweigh the related public costs. Principal amount outstanding was $652.3 million as of June 30, 2019.

Housing Development Revenue Bonds – ORS 456.692. The Oregon Housing and Community Services Department is authorized pursuant to ORS 456.692 to issue conduit revenue bonds through the State Treasurer for Housing Development. The multifamily housing program provides financing for developments in which a certain number of the housing units are for persons and families of lower income. Each bond issue finances multi-family housing projects that are separately secured by revenues and assets specifically pledged by the borrower. Similar to the other State conduit revenue bond programs, as noted above, there is no bondholder recourse to the State for payment should the project not be able to meet its debt service requirements. Principal amount outstanding was $663.0 million as of June 30, 2019.

Beginning and Expanding Farmer Revenue Bonds – ORS 285.430. The Oregon Business Development Department is authorized pursuant to ORS 285.430 to issue conduit revenue bonds to fund Beginning and Expanding Farmer loans for approved agricultural projects. Bond issues finance loans that are secured by revenues and assets specifically pledged by the borrower. Similar to the other State conduit revenue bond programs, as noted above, there is no bondholder recourse to the State for payment should the borrower not be able to meet its debt service obligations. As of June 30, 2019, two small loans have been issued through this program and there is no outstanding balance.

APPROPRIATION CREDITS

Appropriation Bonds – SB 856 – 2003 Legislature. Senate Bill 856, the Appropriation Bond Act, was passed by the 2003 Legislative Assembly. The Act authorized the issuance of bonds to assist the State of Oregon in balancing its budget for the 2001-2003 Biennium. Appropriation bonds in the par amount of $431,560,000 were issued in April 2003. These bonds are special obligations of the State payable solely from appropriated moneys and do not represent a general, unlimited-tax obligation of the State. In the Appropriation Bond Act, the Legislative Assembly acknowledged its current intention to apply the moneys available to the State from tobacco settlement revenues to pay the debt service for the appropriation bonds. As of June 30, 2019 there were no outstanding bonds under this authorization.

Certificates of Participation – ORS Chapter 283.085. Oregon Revised Statutes 283.085 to 283.092 permit the State to enter into financing agreements, including lease purchase agreements, installment sale agreements and loan agreements to finance essential real or personal property and issue certificates of participation evidencing these financing agreements.

Certificates of Participation (COPs) are considered tax-exempt government securities and special obligations of the State payable solely from available funds. They are no general obligations secured by the full faith and credit of the State. Rather, the Oregon Legislature must appropriate COP repayment amounts each biennium for which repayments are scheduled. If the Legislature were to deny a budget request to make the COP payments for a future biennium, the COP Trustee would exercise available legal remedies against the State. These remedies could include the denial of the use of the building(s) or the equipment financed by the COPs for which payment had been denied. While the state's General Fund has been traditionally viewed as the source of repayment for all COP debt, a recent review indicates that a portion of this debt service payment is actually paid by other revenues. (Please see "General Fund Supported Debt Capacity" chapter of this report for additional information.)

Passage of Ballot Measure 11 by Oregon voters in 1994 is directly related to the significant increase in COP debt from about $191 million in FY 1995 to about $1.1 billion in FY 2008. Measure 11 created mandatory minimum penalties for specified crimes and required that juveniles charged with certain violent crimes be tried and sentenced as adults. The practical effect of Measure 11 is the considerable requirement for increased construction of adult and juvenile prisons and correctional facilities.

Beginning with the construction of the Snake River Correction Facility in Ontario in the early 1990s, the Oregon Department of Corrections has used COPs to finance the major expansion of the prison system. The proceeds from COPs are also used for the construction of local jail capacity related to the SB 1145[31] population, purchase of property, design costs, site costs, major improvements or upgrades of existing facilities, and the staff costs associated with the construction and improvement of facilities.

Since the passage of Article XI-Q GO bonds for state owned and/or operated facilities by voters in 2011, the State has dramatically reduced the use of this financing mechanism, as GO bonds provide a higher rating and lower cost of funds compared to COPs. In addition, the State has refinanced a significant portion of existing COP debt with Article XI-Q bonds, saving Oregon taxpayers $101.4 million in interest costs to date on a present value savings. In March 2019, the State issued $100 million in COPs to fund the partial decoupling of the Elliott State Forest from the Common School Fund – given the unusual nature of this financing, COPs rather than XI-Q GO bonds were used to provide funds to offset the financial impacts that environmental restrictions that have imposed on the revenue-generating ability of this forest. Principal amount outstanding for remaining COP debt was $311.4 million as of June 30, 2019.

[31] The community corrections system is based on SB 1145 (1995) which transferred management of offenders sentenced or sanctioned for incarceration periods of 12 months or less and all felony offenders under community supervision to the counties effective January 1997. Oregon Department of Corrections provides funds to offset the cost of supervising these offenders.