REPORT

OF THE

STATE DEBT POLICY ADVISORY COMMISSION

2017 Commission Report

January 23, 2017

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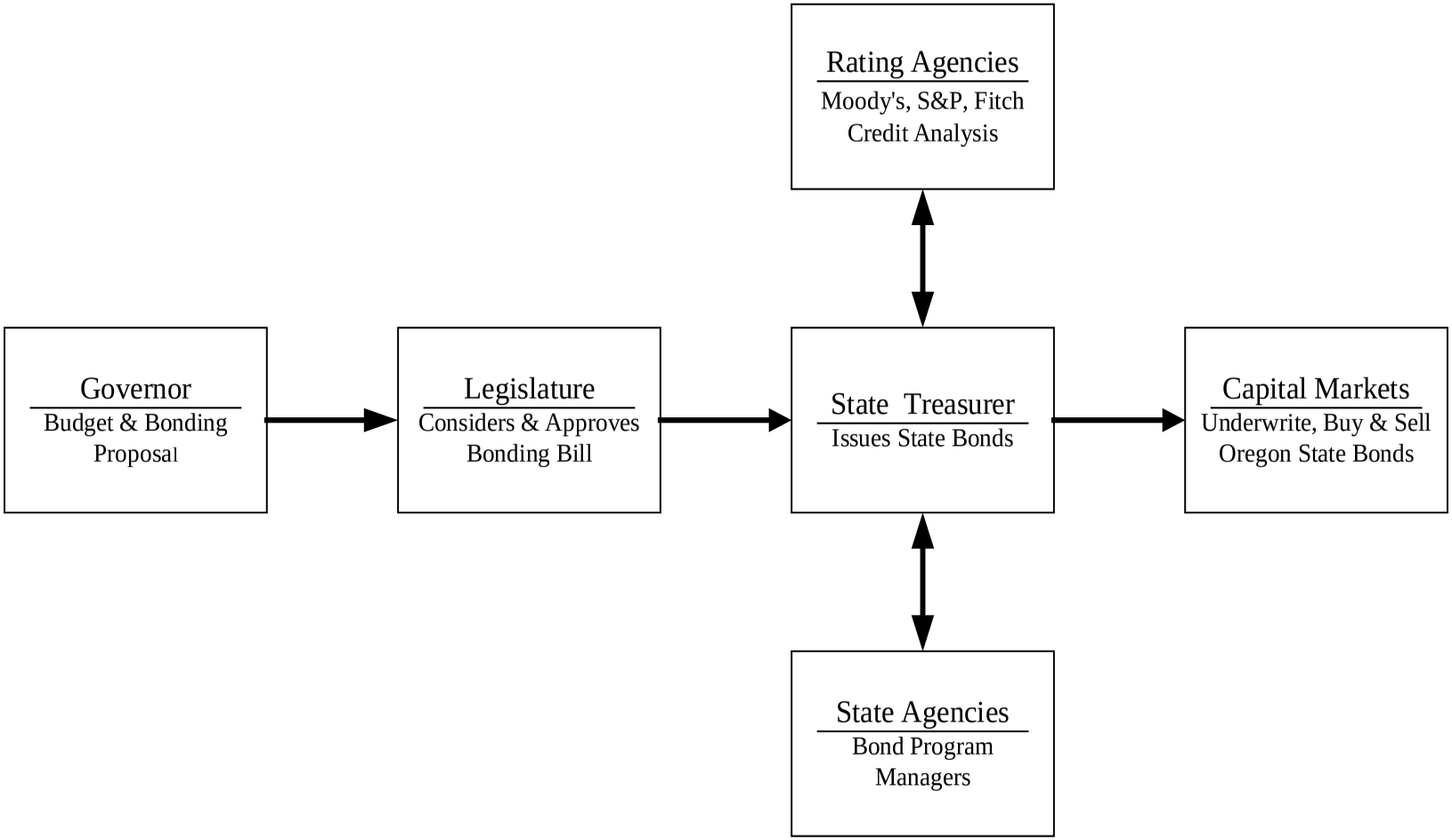
Oregon Bonding Process



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STATE DEBT POLICY
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STATE DEBT POLICY ADVISORY COMMISSION

January 23, 2017

Governor Brown and Members of the 2017 Oregon Legislature:

I am pleased to present you with the *2017 Commission Report* 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 2015 and 2016 Legislatures. In preparing this report, the Commission kept in mind the need to preserve and enhance the State's credit rating to save taxpayers' money through lower interest costs.

The Commission serves to advise the Governor and Legislature on policies related to State debt and long-term capital financing. This report is intended 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 revenue forecast, the $1.15 billion in General Fund supported debt authorized for the 2015-17 biennium remains well within the Commission's recommended General Fund debt capacity limits. In addition, we estimate that the State can issue up to **$1.14 billion** in additional General Fund supported debt in each of the next four biennia while staying within our target debt capacity limit of annual General Fund debt service remaining at or below 5% of General Fund revenues.

- Given the improving forecasts of long-term Lottery revenues, our projections of long-term lottery debt capacity have increased substantially compared to the *2015 Commission Report*. We anticipate future lottery debt capacity of **$209 million** per biennia, or $837 million over the next eight fiscal years. The Commission nevertheless cautions that Lottery bond capacity is a scarce resource and that additional Lottery bond authorizations this biennium will reduce future lottery resources and bond capacity accordingly.

- Oregon State Treasury periodically reviews the cash flow model of the Small Scale Energy Loan Program (SELP) to determine if projected loan repayments are sufficient to meet all future debt service requirements of the bond program. These evaluations have revealed that the program's loan loss reserves have deteriorated to the point that SELP may no longer be a viable loan program unless the State is willing to provide substantial liquidity support. The Commission urges the Legislature and Governor to hold off on new loan commitments until the future direction of this bond program is more clearly determined.

As we look 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 thrive. At the same time, it is a tool that has been – and should continue to be – used wisely. That means, being judicious with borrowing today to remain within our prudent limits, while also making wise investment decisions to improve the state's long-term livability.

The Commission applauds the preliminary efforts of the Joint Interim Task Force on the Capital Construction Budget in inventorying the State's extensive existing facility portfolio, reviewing our most pressing maintenance and capital improvement needs, and exploring criteria for the ranking and scoring of future higher education projects. Given the importance of the biennial capital construction budget to the State's overall long-term economic development, the Commission urges that the Governor and the Legislature reauthorize the Task Force to continue its work into the upcoming biennium, with an expanded charter that includes surveying best practices in long-term capital planning by State and local governments, culminating in recommendations to the 2019 Legislature as to how these best practices might best be incorporated into the State's future biennial capital budgeting process.

In addition, the Commission urges the Governor and the Legislature to establish annual pay-as-you-go funding targets for the proper maintenance and repair of our State's existing portfolios of public buildings, institutional facilities, and transportation infrastructure. In many instances, a modest amount of maintenance money today can stave off a much more costly capital replacement project in the future.

Our state's strong financial management practices, including our prudent management of debt, history of balanced budgets and growing budgetary reserves, are all reasons we continue to receive these very strong credit ratings and have been able to achieve superior results when we borrow funds in the municipal capital markets. 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.

As a result of these high ratings, Oregon continues to be highly regarded by investors, which has allowed us to borrow for our highest priority capital projects and infrastructure needs at historically low interest rates. In addition, over the past several years, these low rates have allowed us to refinance a significant portion of our general obligation and revenue bond portfolio, saving in excess of $378 million in interest costs.

As you make decisions critical to Oregon's long-term financial health, please consider the Commission and its staff as a financial 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 each 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 *2016 Legislative Update* was published January 26, 2016.

This *2017 Commission Report* is intended to provide a picture of the State's bonding capacity based on current revenue projections of the Office of Economic Analysis (OEA) and the bonding authorizations made by the Legislature in 2015 and 2016. It 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 report and advice regarding these programs is intended to assist leadership in the budget and policy decision-making process as it relates to debt management and good bonding practices in the State of Oregon, and to flag emerging policy issues of concern related to the various debt programs of state agencies.

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

- Oregon's combined long-term general obligation, appropriation and revenue bond debt outstanding was $10.3 billion as of June 30, 2016.[1] This represents a decrease of about $270 million compared to the end of the 2015 fiscal year.
- For **General Fund supported debt programs**, the total debt outstanding as of June 30, 2016 was $2.83 billion. This amount is expected to increase to $3.7 billion by the end of the 2015-17 biennium based on the issuance of approximately $1.15 billion in new General Fund debt authorized by the 2015 and 2016 Legislatures. Based on the Office of Economic Analysis (OEA) December 2016 revenue forecast and the planned timing of authorized bond sales, we project that debt service as a percentage of General Fund revenues will not exceed 3.45% in FY 2017, 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 $4.57 billion in additional General Fund-supported debt capacity over the next four biennia in addition to the amounts authorized for sale this biennium. The

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

Commission recommends that the State evenly spread out this remaining General Fund debt capacity over time. However, the Commission recommends capping the authorization at **$1.14 billion** per biennium, as this approach helps mitigate the impact of fluctuations in the State's revenues that could significantly impact the state's long-term debt capacity and allows for more consistent long-term capital planning and budgeting.

Additional Debt Capacity for General Fund Supported Debt Programs*

($ Millions)

Fiscal Year Ending June 30th	Maximum Annual Amount of Debt That Can be Issued within 5% Target Capacity	GF Debt Service as a % of General Fund Revenues	SDPAC's Recommended Maximum Annual Amount of Debt that Should be Issued	GF Debt Service as a % of General Fund Revenues
2018	$ 1,301.5	5.0%	$ 570.8	4.4%
2019	450.4	5.0%	570.8	4.5%
2020	285.1	5.0%	570.8	4.8%
2021	546.4	5.0%	570.8	4.8%
2022	568.8	5.0%	570.8	4.8%
2023	316.7	5.0%	570.8	5.0%
2024	485.4	5.0%	570.8	5.0%
2025	612.4	5.0%	570.8	5.0%
Total	**$ 4,566.6**		**$ 4,566.6**	

* Assumes issuance of $1.15 billion in General Fund supported bonds authorized by the 2015 and 2016 Legislatures.

For the **Lottery Bond Program**, the total debt outstanding was $1.09 billion as of June 30, 2016. Lottery revenue bond covenants require a minimum debt service coverage ratio of four times unobligated net Lottery proceeds. Given the redirection of a significant amount of net Lottery revenues to fund the multi-year Lottery's video machine replacement program, the *2016 SDPAC Legislative Update confirmed that* that Lottery debt capacity would only be available in the second year of the current biennium.

In response, the Oregon Legislature directed staff to schedule the issuance of $213.1 million in newly authorized Lottery bonds for the spring of 2017, which effectively moves all new debt service on Lottery bonds into the 2017-19 biennium. While current projections of future net Lottery revenues indicate a significant improvement over the December 2014 OEA forecast used in the *2015 SDPAC Report*, OEA still projects long-term Lottery revenue growth at somewhat lower levels than earlier in the decade due to new gaming competition in Washington State and emerging trends in consumer spending on gaming witnessed in the aftermath of the Great Recession.

- Based on the most recent OEA long-term Lottery revenue forecast, the Commission projects that there is $837.5 million in additional Lottery Bond capacity available over the next four biennia, in addition to the $213.1 million in bonds already authorized for sale in FY 2017. Spreading out this capacity over the balance of the longer term forecast period results in a projected **$209.4 million** in available Lottery bond capacity for the 2017-19 budget cycle.

The Commission nevertheless cautions that overall long-term Lottery bond capacity is a scarce resource that will remain constrained in the coming years. In addition to funding Lottery bond debt service, net Lottery revenue funds critical educational and economic development programs throughout the state. Therefore, the Commission recommends that the Legislature and Governor limit the use of Lottery bonding to only 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.

Additional 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
2018	$ 249.6	4.0	25%	$ 104.7	4.3	23%
2019	95.5	4.0	25%	104.7	4.3	23%
2020	139.8	4.0	25%	104.7	4.4	23%
2021	80.9	4.0	25%	104.7	4.3	23%
2022	63.6	4.0	25%	104.7	4.2	24%
2023	70.3	4.0	25%	104.7	4.1	24%
2024	67.5	4.0	25%	104.7	4.1	25%
2025	70.2	4.0	25%	104.7	4.0	25%
Total	**$ 837.5**			**$ 837.5**		

*Assumes issuance of $213.1 million in Lottery revenue bonds in spring 2017 as authorized by the 2015 and 2016 Legislatures.

While the State's **Net Tax-Supported Debt (NTSD)** has stabilized over the past few years, the overall debt burden per capita is considerably higher than the national average. Prior to FY 2003, Oregon's debt burden was well below the 50-state medians as calculated by Moody's Investor Service. However, in 2003 the state issued approximately $2.0 billion in pension obligation

bonds and $432 million in appropriation bonds for budget deficit financing, which significantly increased the state's net tax-supported debt. Since that time, the State has paid off the appropriation deficit bonds but has continued to issue Lottery and Highway User Tax bonds, which added to the State's NTSD debt burden and debt ratios.

At the end of FY 2016, Oregon's outstanding NTSD stood at $7.65 billion. By the end of FY 2017, this amount is projected to increase by $1.12 billion to $8.77 billion, as existing NTSD is retired and new General Obligation, Highway User Tax and Lottery Revenue bonds authorized by the Legislature in 2015 and 2016 are sold to investors. This in turn will increase the State's debt per capita ratio and debt as a percentage of personal income for FY 2017 respectively.

State of Oregon
Net Tax-Supported Debt Ratios

	Fiscal Year Ending June 30th		
	FY 2015 (Actual)	**FY 2016 (Actual)**	**FY 2017 (Projected)**
Net Tax-Supported Debt (Billions)	$ 7.80	$ 7.65	$ 8.77
Population*	4,013,845	4,076,400	4,137,000
Personal Income (Billions)*	176.4	185.0	194.6
NTSD Per Capita	$1,944	$1,876	$2,120
NTSD as a % of Personal Income	4.4%	4.1%	4.5%
Pension Obligation Bonds Excluded			
NTSD Per Capita	$1,487	$1,442	$1,712
NTSD as a % of Personal Income	3.4%	3.2%	3.6%

*Source: Oregon Office of Economic Analysis, December 2016 economic and revenue forecast report

Rating agencies typically calculate total net tax-supported debt both with and without pension obligation bonds. In this way, states that issue POBs in comparison to others that may have a relatively low debt burden and have not issued POBs but have sizable unfunded pension liabilities are not overly penalized. When pension obligation bonds are excluded from this NTSD calculation, projected FY 2017 debt burden drops to $1,712 per capita and 3.6% as a percentage of personal income.

The Commission has determined that capacity for other **non-tax supported debt programs** is based on ongoing review of constitutional and statutory limitations, program needs, sound program management practices, and biennial review and approval of program debt issuance, rather than a specific dollar limit capacity. Careful and ongoing consideration of these concerns by Oregon State Treasury, the Governor's office, the Legislature, the Department of Administrative Services, and agency management allows the State to maintain debt issuance for

these programs at levels that preserve a sound fiscal position for the State and its bonding agencies, while meeting program objectives.

The Commission remains deeply concerned, however, about the long-term financial viability of the Oregon Department of Energy (ODOE) Alternate Energy General Obligation Bond Program. This bond program was established in 1980 to provide low-interest loans through the Small Scale Energy Loan Program (SELP) to individuals, companies, state agencies, local governments and non-profits for a range of energy efficiency and renewable energy projects.

The Oregon State Treasury periodically reviews SELP's balance sheet, income statements, and cash flow model to determine if projected loan repayments are sufficient to meet all future debt service requirements of the bond program. These evaluations have revealed that the bond program has deteriorating loan loss reserves due to the default of several large loans to private energy producers/manufacturers, and a number of delinquent loans to other private parties that are 91 days or more past due.

Although SELP has tightened its loan underwriting standards and continues to pursue delinquent borrowers, the Department's most recent cash flow forecast suggests that the Legislative Assembly will need to provide cash infusions to the SELP program beginning in FY 2021 and continuing through FY 2034, in order for the program to meet all of its GO debt service obligations. The most recent cash flow projection for the program indicates that cash infusions will total at least $16 million over time and could occur sooner or increase in size if additional SELP loans become delinquent or are written off as uncollectible.

Over the past year, the Joint Interim Committee reviewing ODOE's overall operations made several recommendations regarding the future management, operations, and funding of the SELP bond program.

- The Commission urges the Legislature and Governor to review recommendations and take action on these recommendations during the 2017 Legislative session. Until these determinations are made, the Commission continues to recommend that ODOE hold off on making any new loans.

The Commission applauds the preliminary efforts of the Joint Interim Task Force on the Capital Construction Budget in inventorying the State's extensive existing facility portfolio, reviewing our most pressing maintenance and capital improvement needs, and exploring criteria for the ranking and scoring of future higher education projects.

- Given the importance of the biennial capital construction budget to the State's overall long-term economic development, the Commission recommends that the Governor and the Legislature reauthorize the Task Force to continue its work into the upcoming biennium, with an expanded charter that includes surveying best practices in long-term capital planning by State and local governments, culminating in recommendations to the 2019 Legislature as to how these best practices might best be incorporated into the State's future biennial capital budgeting process.

As reported to the Interim Task Force, the State of Oregon has a myriad of capital needs related to the maintenance of aging, state-owned facilities (the mean age is 53 years). The state-owned and leased facility portfolio, including higher education facilities, is approximately 54 million gross square feet (MGSF) located in over 6,700 separate buildings. State agencies are housed in

21.4 MGSF of this space in approximately 4,800 buildings. Given the limited amount of funding dedicated to the on-going maintenance of the State's existing buildings, institutional facilities, and infrastructure, these structures often deteriorate to the point that expensive major renovations or complete replacement are eventually required. To the extent that agency operating budgets are not sufficient to address ordinary maintenance and repairs, facility upgrade and replacement projects will continually be in competition with new capital projects for funding through the state's limited debt capacity.

- Given the significant long-term savings that can be achieved through the funding of on-going and repair of existing State facilities, the Commission strongly urges the Governor and the Legislature to establish annual pay-as-you go funding targets for the maintenance and repair of existing State buildings, institutional facilities, and infrastructure.

In conclusion, while the Commission projects that the State will have available debt capacity in the years to come, it notes that this debt capacity must be balanced against the considerable backlog of pressing capital projects and transportation improvements for which the State will need to tap the credit markets for funding. The Commission therefore continues to recommend that the Legislature and Governor limit their bonding authorizations to only the highest priority State capital projects in order to maintain the State's strong credit ratings and overall healthy financial position.

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 Security and Exchange Commission (SEC) disclosure issues. Also, 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 takes into account 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

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

[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 Highway, 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.

- Seismic Rehabilitation of Emergency Services Buildings – Article XI-N
- 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. For example, the 69th Legislative Assembly referred Measure 52, proposing a Lottery-revenue backed bond program to finance education needs throughout the state.

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

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. Given the higher credit rating and lower cost of XI-Q GO bonds compared to COPs, it is unlikely that the State will continue to issue COPs in the future. Rather, as market conditions allow, the State has been refunding existing COPs with XI-Q bonds; to date, the State has refunded $580 million in outstanding COPs with XI-Q GO bonds, saving an estimated $92.4 million in interest costs on a present value savings basis.

Exhibit I.1

State of Oregon

OUTSTANDING[1] LONG-TERM FINANCIAL OBLIGATIONS[2] AND CONSTITUTIONAL PROVISIONS

As of June 30, 2016

General Obligation Bonds	Legal Provision	Constitutional Debt Limit (as % RMV) [3]	Constitutional Debt Limit (in Dollars)	Amount Outstanding [4]	Authorization Remaining [5]
General Fund Supported					
General Purpose Bonds [6]	ARTICLE XI SEC 7	0.0000%	$ 50,000	$ 0	$ 50,000
Community College Bonds	ARTICLE XI-G			167,060,000	
Higher Ed. Facility (XI-G) Bonds [7]	ARTICLE XI-G	0.7500%	3,796,315,977	527,704,632	1,836,112,687
Pollution Control Bonds [8] (42% of Total)	ARTICLE XI-H	1.0000%	5,061,754,636	15,393,000	5,046,361,636
DAS Oregon Opportunity Bonds [9]	ARTICLE XI-L	0.5000%	2,530,877,318	97,905,000	2,432,972,318
Seismic Rehab – Public Education Bldgs.	ARTICLE XI-M	0.2000%	1,012,350,927	70,782,500	941,568,427
Seismic Rehab – Emergency Service Bldgs.	ARTICLE XI-N	0.2000%	1,012,350,927	21,962,500	990,388,427
DAS Pension Obligation Bonds (32% of Total)	ARTICLE XI-O	1.0000%	5,061,754,636	565,206,400	4,496,548,236
Alternate Energy Bonds (XI-J) (37% of Total)	ARTICLE XI-J	0.5000%	2,530,877,318	71,787,400	864,637,208
State Property (82% of total)	ARTICLE XI-Q	1.0000%	5,061,754,636	1,009,030,500	3,141,608,302
Total General Fund Supported				**$2,546,831,932**	
Self-Supporting					
State Highway Bonds	ARTICLE XI SEC 7	1.0000%	5,061,754,636	0	5,061,754,636
Veteran's Welfare Bonds [7]	ARTICLE XI-A	8.0000%	40,494,037,092	300,250,000	40,193,787,092
State Power Development	ARTICLE XI-D	1.5000%	7,592,631,955	0	7,592,631,955
Forest Rehabilitation	ARTICLE XI-E	0.1875%	949,078,994	0	949,078,994
Higher Ed. XI-F Bonds [7]	ARTICLE XI-F(1)	0.7500%	3,796,315,977	1,213,834,349	2,582,481,628
Pollution Control Bonds [8] (58% of Total)	ARTICLE XI-H	0.5000%	5,061,754,636	21,257,000	5,040,497,636
Water Resources Bonds	ARTICLE XI-I(1)	1.5000%	7,592,631,955	0	7,592,631,955
Elderly & Disabled Housing Bonds	ARTICLE XI-I(2)	0.5000%	2,530,877,318	50,805,000	2,480,072,318
Oregon School Bond Guaranty	ARTICLE XI-K	0.5000%	2,530,877,318	0	2,530,877,318
State Property (18% of Total)	ARTICLE XI-Q	1.0000%	759,263,195	221,494,500	537,768,695
Alternate Energy Project Bonds (63% of Total)	ARTICLE XI-J	0.5000%	1,594,452,710	122,232,600	1,472,220,110
DAS Pension Obligation Bonds (68% of Total)	ARTICLE XI-O	1.0000%	3,441,993,152	1,201,063,600	2,240,929,552
Total Self-Supporting				**$3,130,937,049**	
Total General Obligation Bonds				**$5,677,768,981**	
Revenue Bonds					
Direct Revenue Bonds					
Lottery Revenue Bond Program(s)	[ORS 286A.563-585]	---	---	1,088,615,000	
Transportation Infrastructure Bank	[ORS 367.030]	---	---	0	
Highway User Tax	[ORS 367.620]	---	---	2,257,365,000	
Single & Multi-Family Housing Programs	[ORS 456.661]	---	---	885,805,000	
Economic Development - Bond Bank	[ORS Ch. 285B]	---	---	569,470,000	
Total Direct Revenue Bonds				**$4,288,255,000**	

1 Totals may not agree with sum of components due to rounding.

2 Excludes refunded and defeased Bonds and Notes issued for less than 13 months.

3 Percentages listed are of Real Market Value (RMV) of all taxable real property in the state.

4 Excludes refunded and defeased bonds.

5 Based on the January 1, 2015 Real Market Value (RMV) of $506,175,463,644. Authorization does not include inactive programs.

6 The State of Oregon may not incur indebtedness exceeding $50,000 without a constitutional amendment approved by the voters.

7 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.

8 The amount of General Fund debt service support will vary over time depending on the amortization and budgeted allocation of debt service on each bond, Department of Environmental Quality (DEQ) Pollution Control debt is reported as 42% General Fund supported and 58% 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 37% General Fund supported and 63% self-supporting. Pension Bonds were approved by the voters September 16, 2003. 32% of Pension Bonds are General Fund supported, 68% are paid from non-General Fund sources. COP obligations are reported at 85% General Fund supported and 15% self-supporting.

9 Oregon Opportunity Bonds, Oregon Health & Science University (OHSU) were authorized to finance capital costs of OHSU in an aggregate principal amount that produces net proceeds in an amount that does not exceed $200 million. Authorized debt may not exceed ½ of 1 percent RMV of all taxable real property in the State.

	Legal Provision	Constitutional Debt Limit (as % RMV) [1]	Constitutional Debt Limit (in Dollars)	Amount Outstanding [2]	Authorization Remaining [3]
Pass Through Revenue Bonds					
Economic Development – Industrial Dev.	[ORS Ch. 285]			$ 309,476,924	
Oregon Facilities Authority	[ORS Ch. 289]			1,935,622,653	
Multi-family Housing Programs	[ORS 456.692]			303,992,849	
Total Pass Through Revenue Bonds				**$2,549,092,426**	
Appropriation Credits					
Certificates of Participation (COPs GF)	[ORS Ch. 283.085]			$281,396,750	
Certificates of Participation (COPs Non-GF)	[ORS Ch. 283.085]			49,658,250	
Oregon Appropriation Bonds	[SB 856 – 2003 Legislature]			0	
Total Appropriation Credits				**$331,055,000**	

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[1] Percentages listed are of Real Market Value (RMV) of all taxable real property in the state.
[2] Excludes refunded and defeased bonds.
[3] Based on the January 1, 2015 Real Market Value (RMV) of $506,175,463,644. Authorization does not include inactive programs.

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 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 *2017 SDPAC Report* 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 (at 100% except as otherwise indicated) the following programs in its assumptions of General Fund-supported debt:

- Higher Education Facility & Community College Bonds (Article XI-G);
- Forty-two percent of Pollution Control Bonds (Article XI-H);
- Thirty-seven percent of Alternate Energy Bonds (Article XI-J);
- Oregon School Bond Guaranty Bonds[1] (Article XI-K);
- Oregon Opportunity Bonds (Article XI-L);
- Thirty-two percent of State Pension Obligation Bonds (Article XI-O);
- Oregon Appropriation Bonds (SB 856 – 2003 Legislature);
- Seismic Rehabilitation Bonds for Public Education (Article XI-M) and Public Safety Buildings (Article XI-N);
- Public School Facility Bonds (Article XI-P);
- Eighty-two percent of State Property Bonds (Article XI-Q); and
- Eighty-five percent of Certificate of Participation Obligations (ORS 283.085 to 283.092).

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

- Balance of State Pension Obligation Bonds, State Property Bonds, and Certificates of Participation;
- Lottery Revenue Bonds (ORS 286A.560-585);
- State Highway Bonds (Article XI, Section 7);
- Highway User Tax Revenue Bonds (ORS 367.620); and
- Oregon Transportation Infrastructure Fund Bonds (ORS 367.630).[2]

Exhibit I.2 provides a comparison of total outstanding gross debt; General Fund-supported debt and net tax-supported debt as of June 30, 2016.

[1] The Oregon School Bond Guaranty Program (OSBG) allows the State to guaranty qualified bonds of eligible school districts, education service districts and community colleges. As of June 30, 2016 there are no outstanding State general obligation bonds for this program. While the Oregon School Bond Guaranty Program is technically part of the General Fund and net tax supported debt calculation, it is not built into the model because the State has never issued, nor does it expect to issue, any bonds for this program.

[2] No Transportation Infrastructure Fund bonds have ever been issued.

SDPAC - Exhibit I.2
State of Oregon
Comparison of Long-Term Debt Outstanding

as of 6/30/2016

Type & Purpose	Article	General Fund Supported Debt	Net Tax-Supported Debt	Total Gross Debt Outstanding
General Obligation				
General Fund Supported				
Community College Bonds	ARTICLE XI-G	$ 167,060,000	$ 167,060,000	$ 167,060,000
Higher Education Institutions & Activities	ARTICLE XI-G	527,704,632	527,704,632	527,704,632
Pollution Control Bonds	ARTICLE XI-H	15,393,000	15,393,000	15,393,000
Alternate Energy Bonds	ARTICLE XI-J	71,787,400	71,787,400	71,787,400
DAS Oregon Opportunity Bonds	ARTICLE XI-L	97,905,000	97,905,000	97,905,000
Seismic Rehab - Public Education Bldgs	ARTICLE XI-M	70,782,500	70,782,500	70,782,500
Seismic Rehab - Emergency Service Bldgs	ARTICLE XI-N	21,962,500	21,962,500	21,962,500
State General Purpose	ARTICLE XI-Q	1,009,030,500	1,009,030,500	1,009,030,500
DAS Pension Obligation Bonds (1)	ARTICLE XI-O	565,206,400	565,206,400	565,206,400
School District Capital Costs	ARTICLE XI-P	-	-	-
Total General Fund Supported		$ 2,546,831,932	$ 2,546,831,932	$ 2,546,831,932
Dedicated Fund Supported				
Veterans' Welfare Bonds	ARTICLE XI-A	-	-	300,250,000
Higher Education Building Projects	ARTICLE XI-F(1)	-	-	1,213,834,349
Pollution Control Bonds	ARTICLE XI-H	-	-	21,257,000
Elderly & Disabled Housing Bonds	ARTICLE XI-I(2)	-	-	50,805,000
Alternate Energy Project Bonds	ARTICLE XI-J	-	-	122,232,600
State General Purpose	ARTICLE XI-Q	-	221,494,500	221,494,500
DAS Pension Obligation Bonds (1)	ARTICLE XI-O	-	1,201,063,600	1,201,063,600
Total Dedicated Fund Supported		$ -	$ 1,422,558,100	$ 3,130,937,049
Total General Obligation		**$ 2,546,831,932**	**$ 3,969,390,032**	**$ 5,677,768,981**
Revenue Bonds				
Direct Revenue Bonds				
Lottery Revenue Bond Program(s)	[ORS 286.563 - 585]	-	1,088,615,000	1,088,615,000
Highw ay User Tax Revenue Bonds	[ORS 367.620]	-	2,257,365,000	2,257,365,000
Single-Family & Multi-Family Housing	[ORS 456.661]	-	-	885,805,000
Economic Development - Bond Bank	[ORS Ch. 285B]	-	-	56,470,000
Total Direct Revenue Bonds		$ -	$ 3,345,980,000	$ 4,288,255,000
Conduit or Pass Through Revenue Bonds				
Economic & Industrial Development	[ORS Ch. 285]	-	-	309,476,924
Oregon Facilities Authority	[ORS Ch. 289]	-	-	1,935,791,296
Multi-Family Housing Programs	[ORS Ch. 456.692]	-	-	303,992,849
Total Conduit or Pass Through Revenue Bonds		$ -	$ -	$ 2,549,261,069
Total Revenue Bonds		**$ -**	**$ 3,345,980,000**	**$ 6,837,516,069**
Appropriation Credits				
Certificates of Participation (COPs)	[ORS Ch. 283 & 286]	281,396,750	331,055,000	331,055,000
Oregon Appropriation Bonds	SB 856 - 2003 Legislature	-	-	-
Total Appropriation Credits		**$ 281,396,750**	**$ 331,055,000**	**$ 331,055,000**
Total Gross Debt				**$ 12,846,340,049**
Total Debt - Less Conduit Revenue Bonds		**$ 2,828,228,682**	**$ 7,646,425,032**	**$ 10,297,078,981**

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

presented.

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II. CURRENT DEBT PICTURE IN OREGON

A. Outstanding Debt

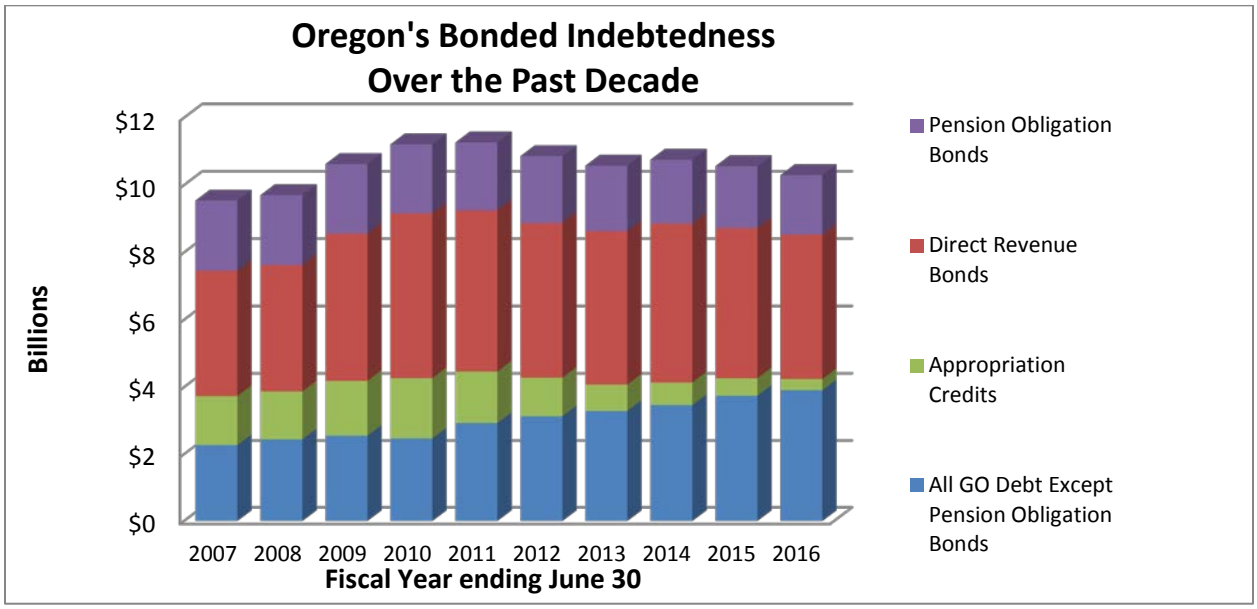
Exhibit II.1 shows a 10-year history of the State's total outstanding obligations by major category from fiscal years ending 2007 to 2016.[1]

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. 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. As a result of these actions, there was a steady increase in the State's net tax-supported debt over the first half of the past decade, although overall debt levels have dropped since then due to the slower pace of debt issuance since FY 2010.

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

Exhibit II.1



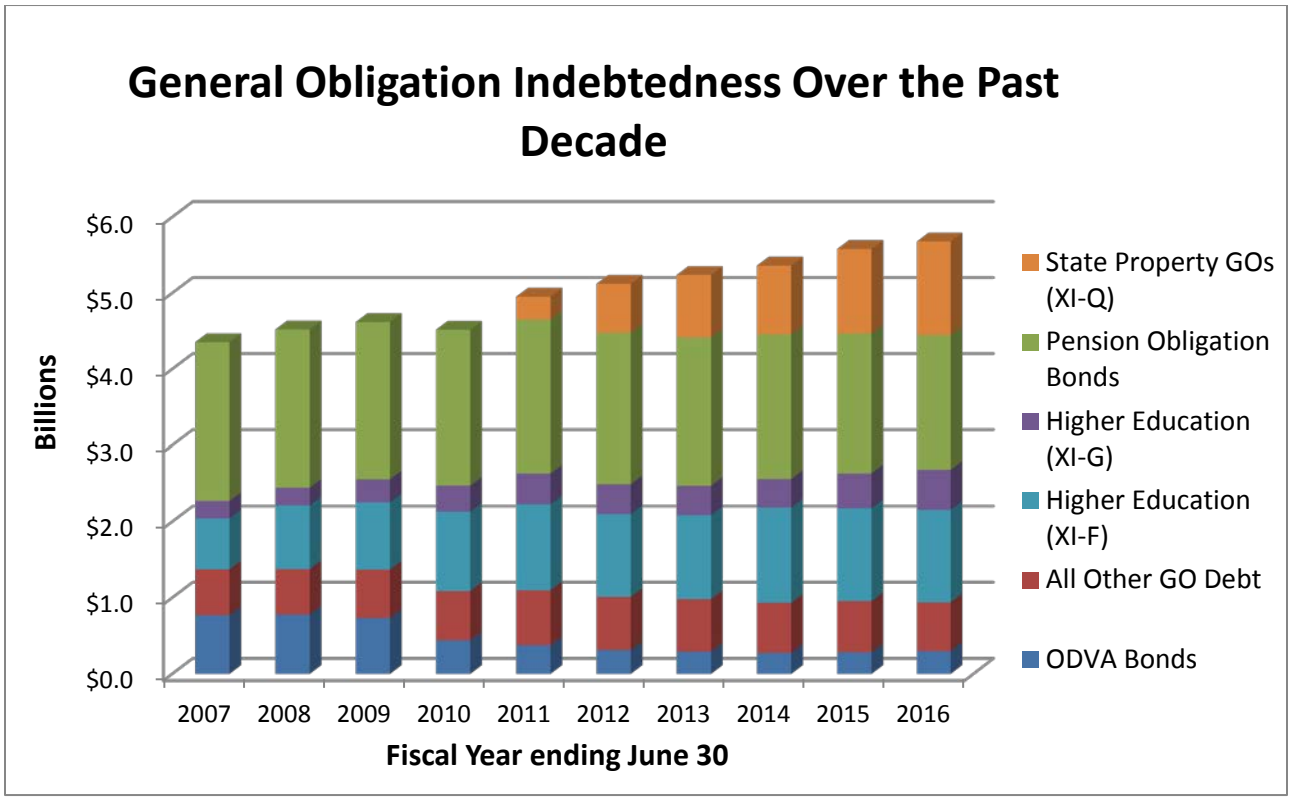
[1] Does not include conduit or pass-through revenue bonds.

Exhibit II.2 reflects the changing components of State general obligation indebtedness over the past decade. Overall outstanding State general obligation indebtedness totaled $5.68 billion at the end of FY 2016, representing an increase of approximately $1.3 billion over the levels reported ten years ago.

Over the past decade, the ODVA steadily paid down its general obligation bonds and only a limited amount of new ODVA loans have been originated as a result of other private lender options available to Oregon veterans. Simultaneously, there has been a steady increase in the issuance of self-supporting Higher Education GO bonds (Article XI-F) that fund revenue-generating university capital projects, with this type of indebtedness growing from $671.2 million outstanding in FY 2007 to $1.2 billion outstanding in FY 2016.

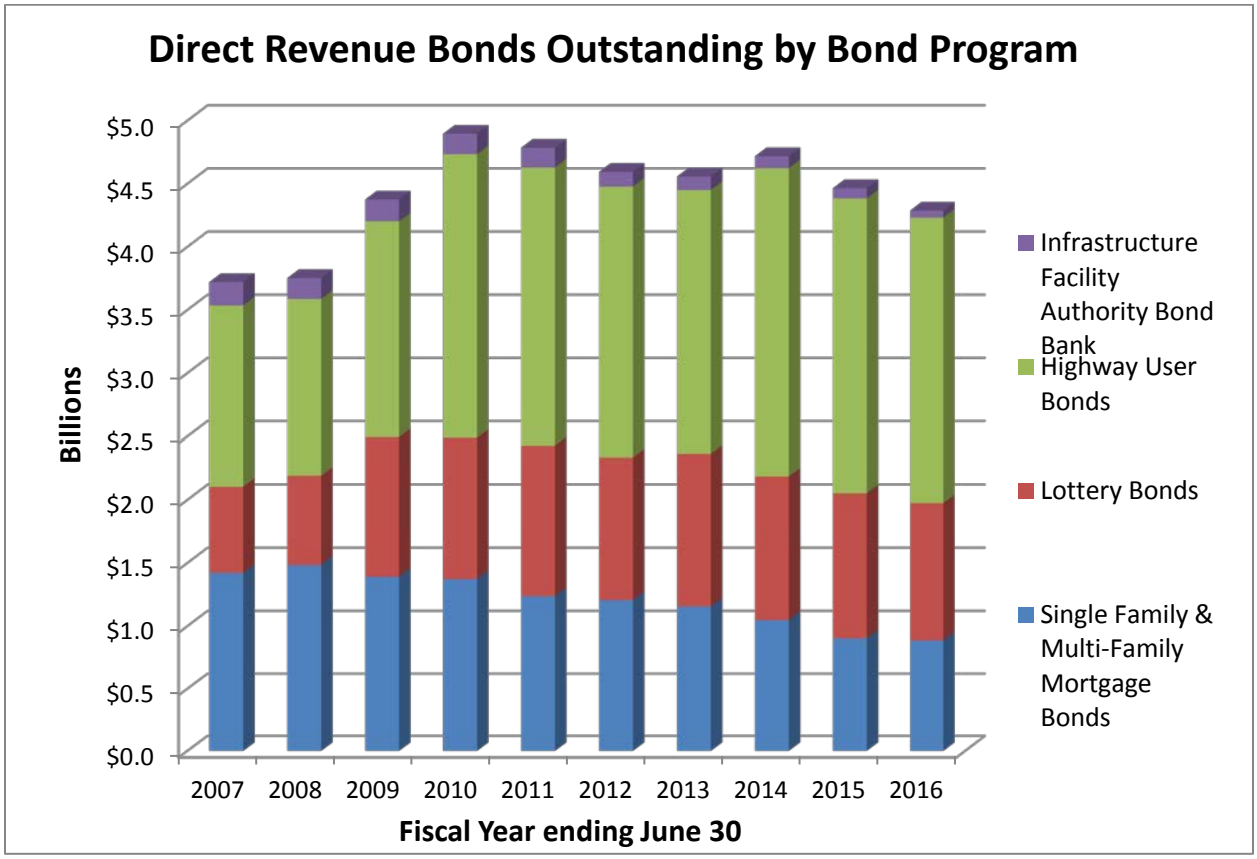
The other large growth area in terms of State GO bonded indebtedness is related to the establishment of the Article XI-Q GO bond program. In November 2010, Oregon voters authorized the sale of general obligation bonds for state buildings, facilities and other capital projects (Article XI-Q GO bonds) as an alternative to the more costly financing of these projects through Certificates of Participation (COPs). It was anticipated at the time of passage of this constitutional amendment 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 $580 million in COPs with the new XI-Q GO bonds, saving an estimated $92.4 million in interest costs on a present value savings basis. In addition, all new state property projects have been financed with XI-Q GO bonds since FY 2011. As of June 30, 2016, approximately $331 million in COPs remain outstanding.

Exhibit II.2



The State issued a significant amount of direct revenue bonds from FY 2007 to FY 2010, as seen in *Exhibit II.3*. There are two major reasons for this big increase in direct revenue indebtedness. First, the Oregon Lottery's expansion into video line games in 2005 led to significantly expanded lottery revenues which in turn led to higher Lottery bonding authorizations by the Legislative Assembly to fund various transportation and economic development projects around the state. Second, the State issued approximately $1.4 billion in Highway User Tax bonds to fund the balance of projects for the highway and bridge modernization authorized by the three Oregon Transportation Infrastructure Acts (OTIA I, II, and III) and a portion of the congestion management and modernization projects authorized by the 2009 Jobs and Transportation Act (JTA). It is anticipated that the balance of roughly $390 million in Highway User Tax bonds authorized by JTA will be issued by the State in the fall of 2017.

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, 2016.

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

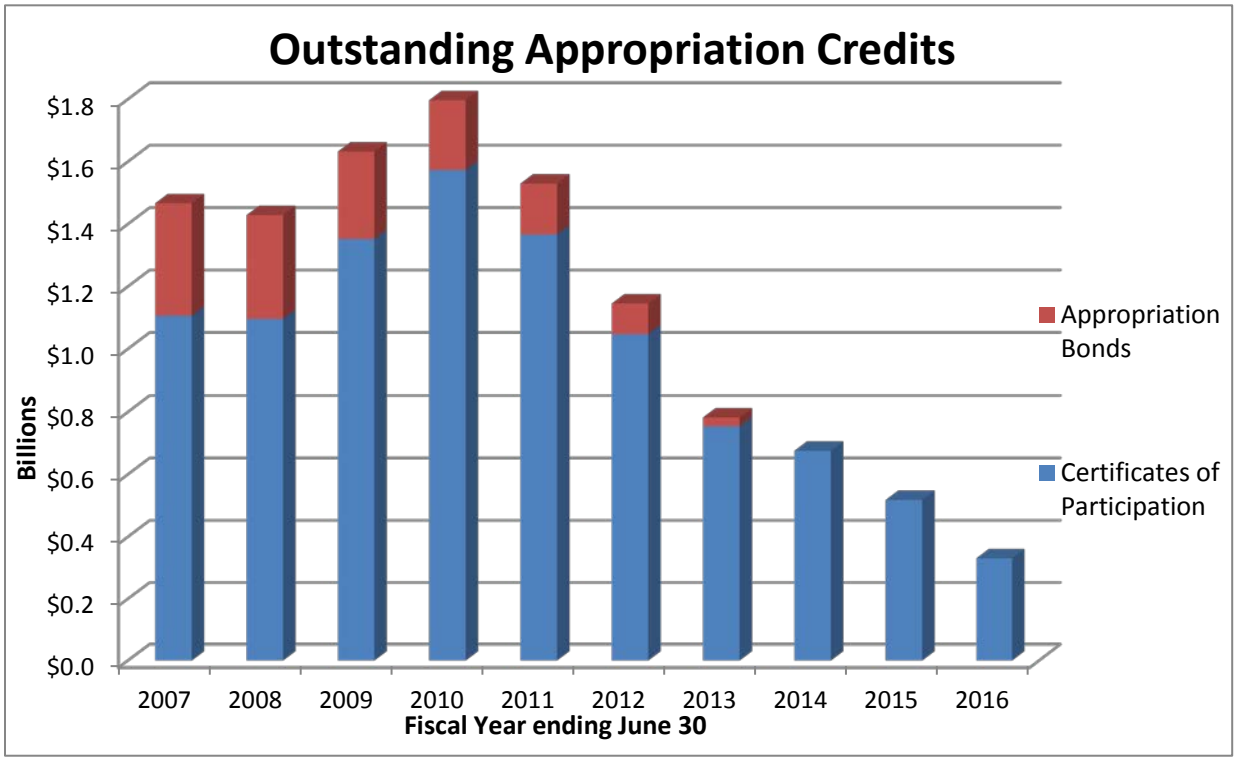
purpose state facilities. Therefore, COPs were used to fund the construction of adult and juvenile prisons and correctional facilities mandated by Measure 11. COPs were later used to fund the replacement of the aging State Mental Hospital in Salem.

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, $580 million of COPs have been refunded as Article XI-Q GO bonds, saving the State $92.4 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 in the future; rather, it is anticipated that as remaining outstanding COPs become eligible for refunding, the State will refund this debt using Article XI-Q GO bonds, saving taxpayers additional millions in interest costs.

It should be noted that there are a small amount of COPs issued by the State in the early 2000s to fund community correction facilities that are neither owned nor operated by the State of Oregon that cannot be refunded with XI-Q GO bonds (which can only be legally issued for projects that meet one of these two criteria). In addition, the State sold $161.7 million in taxable COPs in 2010 through the Build America Bond program that are not callable and therefore cannot be refunded with XI-Q GO bonds. Based on the above-referenced issues, the scheduled final payment of COPs is currently projected to occur in FY 2037.

The first and only authorized State of Oregon Appropriation Bonds was issued 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



B. Future Capital Needs of the State of Oregon

As this report demonstrates, there is approximately $1.14 billion in General Fund debt capacity available in each of the next four biennia. In addition, there will be on average approximately $209 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.

To that end, the 2015 Legislature authorized the establishment of a Joint Interim Task Force on the Capital Construction Budget (SB 501, Sections 1-3), composed of the two co-chairs of the Ways and Means Committees and two additional members of the Legislature, as well as staff support from the Department of Administrative Service and the Legislative Fiscal Office. The Commission applauds the preliminary efforts of the Joint Interim Task Force, which over the past two years has met three time to take testimony from State facility manager's regarding the State's extensive existing facility portfolio and its most pressing maintenance and capital improvement needs, from various public universities regarding their highest priority capital needs, and from the Higher Education Coordinating Commission, who has established criteria for the ranking and scoring of future higher education and community college capital projects.

Given the importance of the biennial capital construction budget to the State's overall long-term economic development, the Commission recommends that the Governor and the Legislature reauthorize the Capital Construction Budget Task Force to continue its work into the upcoming biennium, with an expanded charter that includes surveying best practices in long-term capital planning by State and local governments, culminating in recommendations to the 2019 Legislature as to how these best practices might best be incorporated into the State's future biennial capital budgeting process.

The State of Oregon has current and future capital needs related to maintaining aging, state-owned facilities (the mean age is 53 years). The state-owned and leased facility portfolio, including higher education facilities, is approximately 54 million gross square feet (MGSF) located in over 6,700 separate buildings. State agencies are housed in 21.4 MGSF of this space in approximately 4,800 buildings. 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 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 are being offered to agencies in an effort to ensure a consistent assessment methodology and uniform measure of facilities condition.

By the end of the 2015-17 biennium, a total of seven agencies representing 70 percent of agency-owned facility gross square footage will have completed their facility conditions assessments of major buildings and campuses. These include Oregon Department of Transportation (ODOT), Oregon Department of Forestry (ODF), Department of Corrections (DOC), Oregon Department of Fish and Wildlife (ODFW), Department of Administrative Services (DAS), Oregon Youth Authority (OYA) and the Oregon Liquor Control Commission (OLCC). As of December 2016, the estimate of deficiencies for these agencies for buildings valued over $1 million is $340 million. Without further investment, the deficiencies will increase to $642 million in 10 years. Seismic and flood risk analyses were completed on over 115 of DAS buildings in the DAS, OYA and OLCC portfolios. The seismic benefit cost analysis resulted in a list of prioritized remediation recommendations for each agency. ODOT, ODF, DOC and ODFW will have the FEMA rapid visual screening portion of the risk assessments completed by the end of the 2015-17 biennium, with the analysis and recommendations to follow as funding allows.

Given the significant long-term savings that can be achieved through the funding of on-going and repair of existing State facilities, the Commission strongly urges the Governor and the Legislature to establish annual pay-as-you go funding targets for the maintenance and repair of existing State buildings, institutional facilities, and infrastructure based on these facility assessments.

In recent years, the State Legislature has established new State 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 multi-family 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 2015-17 biennium and/or will likely require funding in the future.

Public Safety

The 2013 Legislature passed HB 3194 that modified sentence guidelines and allowed for some options on early release of prisoners to parole, which is expected to reduce the need for further expansion of the State's correctional facilities. Nevertheless, 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 $63 million of Article XI-Q bonds was authorized in the 2015-17 biennium.

The OYA has a 10-year strategic facilities plan that identifies facility maintenance/renovation needs estimated at over $100 million. 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. As one of three state agencies to participate in a pilot program

to comprehensively assess facility conditions, OYA's 2014 Facilities Condition Assessment (FCA) report identified immediate as well as long term facility needs over a 10-year horizon. These findings will inform OYA's future facility disposition and consolidation strategy.

At over 5.4 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. Preliminary FCA findings for DOC's deficiencies (excluding seismic remediation and modernizations) are estimated at over $100 million and are projected to more than double by 2024. 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.

The Oregon Military Department (OMD) has identified a substantial need for both new construction and maintenance/renovation projects at armories, readiness centers and other OMD facilities located throughout the state. The 2015 Legislature authorized issuance of $11 million of XI-Q bonds to match with federal funds to construct and upgrade facilities across the state.

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 now governed by independent boards that are autonomous from State government, and have been granted 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 bonds to fund a combination of grants and loans from the Higher Education Coordinating Commission 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.

In the 2015 session, approximately $241 million in Higher Education capital construction projects were authorized using bonds supported by General Fund revenues. During the 2016 session, an additional $7.1 million of GO bonds were authorized to fund public university capital projects. In addition, the 2015 Legislature authorized $200 million in funding for a cancer research center on the Oregon Health and Sciences University campus using Article XI-G GO bonds. Given the State's aspiration that 40% of adult Oregonians will have completed a four-year college degree program by 2025, it is likely there will be significant higher education capital project expenditures to meet this goal even with a significant increase in the use of online degree programs.

The former Department of Community College and Workforce Development was abolished by the Legislature during the 2015 session and was established as an office within the Higher Education Coordinating Commission. The 2015 Legislature authorized approximately $53 million in General Fund-supported Article XI-G bonds for community college construction projects that were originally approved to be issued in the 2013-15 biennium, but will instead be issued during the 2015-17 biennium for those community colleges that secure matching funds by February 1, 2017.

The issuance of $126.2 million of general obligation bonds under Article XI-P of Oregon's Constitution was authorized by the 2015 Legislature in the 2015-17 biennium. Article XI-P,

adopted by voters in May 2010, allows debt to be issued to provide matching funds to finance the capital costs of school districts that have received voter approval for local general obligation bonds. Capital costs include costs associated with acquisition, construction, improvement, maintenance or furnishing school facilities. As authorized in Senate Bill 447 (Oregon Laws 2015, chapter 783), the enabling legislation, the Department of Education developed a grant-program to provide these matching funds in accordance with requirements for eligibility and award stipulated in the enabling legislation. Given the current condition of many school district facilities and the anticipated demand for matching grant monies, this program may use 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 2015 Legislature authorized the issuance during the 2015-17 biennium of up to $175 million in Article XI-M Seismic Rehabilitation General Obligation bonds for public school seismic projects and $30 million of Article XI-N Seismic Rehabilitation General Obligation bonds for emergency services facilities. This represents a significant increased investment in seismic rehabilitation efforts in Oregon compared to prior biennia.

It should be noted that based on the 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 has traditionally used Lottery Bonds to capitalize and expand its Infrastructure Finance Authority Bond Bank loan programs, which offer low interest loans to local governments for local infrastructure including drinking water and sewer improvements. In the 2015-17 biennium, the Legislature authorized $18 million in Lottery Bonds for this purpose. The 2015 Legislature also approved $12 million in Lottery Bonds for local economic development grants through the Regional Solutions program.

Given the shortage of affordable housing in Oregon, the 2015 Legislature authorized the issuance of Article XI-Q bonds to provide $40 million for low income housing projects through Oregon Housing and Community Services and $2.5 million of Lottery bond proceeds. An additional $20 million of Lottery bond proceeds was approved to fund mental health housing during the 2015-17 biennium.

Water 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 revenue bonds during the 2013-15 biennium. The 2015 Legislature authorized a combined $18 million in lottery bonds and $30.5 million in State GO bonds for water supply and water development projects during the 2015-17 biennium.

Transportation

The 2015 Legislature authorized $45 million in Lottery bond proceeds to provide grants for multi-modal transportation including projects to improve rail, port, airport and bicycle/pedestrian facilities (the Connect Oregon program) for the 2015-17 biennium. An additional $10 million of Lottery bond proceeds was authorized to fund the Coos Bay Rail Line project. In addition, the 2016 Legislature authorized $20.3 million of Article XI-Q bonds to complete the implementation of the State Radio Project.

While transportation infrastructure projects have historically been funded through Highway User Tax Revenue Bonds, the 2015 Legislature authorized the issuance of General Fund-supported GO bonds under Article XI, Section 7, for various highway improvement projects.

Other

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. In addition to the projects already mentioned above, the 2015 Legislature authorized $44 million of Lottery bonds to fund regional and community projects across Oregon. Often, these types of projects are not financially feasible without the Legislature's allocation of Lottery bond proceeds for these purposes.

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. The 2015 Legislature authorized $28 million in XI-Q bond proceeds in 2015-17 to fund two courthouse projects that received some funding during the 2013-15 biennium and one new courthouse project. 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.

During the 2016 Legislative Session, $30.5 million of Article XI-Q GO bonds were authorized to finance capital improvements to the Oregon Capitol Building.

Other non-construction related bond needs are for IT system development and upgrades. Examples of these systems include the Department of Justice's Child Support Enforcement System, the Department of Revenue's Core Tax Revenue and Property Valuation Systems, and the Oregon Judicial Department's E-Court System. All of these projects were at least partially funded in 2015-17 through a total of $50 million in Article XI-Q GO bond proceeds; if implementation is not completed by the end of the biennium, these projects will likely require continued state debt financing during the 2017-19 biennium.

Finally, DAS has responsibility for the facility management of 3.4 MGSF in 46 state-owned buildings and 3.6 MGSF in leases on behalf of many state agencies, notably the Department of Human Services. DAS is focused on delivering quality effective and efficient facilities at the lowest possible costs; while the FCA found that DAS' facilities overall are in excellent condition for their age, significant investment is needed to renew large state office buildings, including the Executive Building, Labor and Industries, Revenue and the Portland State Office Building. DAS has also identified the need for at least two new office buildings on the Capital Mall, one in the near term to meet locational demand as well as to facilitate large building systems renovations

To the extent these renovations are not funded through maintenance and operations budgets, these projects will require significant amounts of debt financing.

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.

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 *2017 Commission Report* provides a look at debt capacity from FY 2018 through FY 2025 based on the OEA December 2016 revenue forecast and the bonding authorizations enacted by the 2015 and 2016 Legislatures.

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 as depicted above. 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, upon a thorough review of all current outstanding state debt, the following programs are considered General Fund-supported debt obligations for purposes of this report:

- Higher Education Facility & Community College Bonds (Article XI-G only)
- Pollution Control Bonds (42% of total outstanding as of June 30, 2016)
- Alternate Energy Bonds (37% of total outstanding as of June 30, 2016)
- Oregon Opportunity Bonds (for OHSU projects)
- Seismic Rehab – Public Education Buildings Bonds (Article XI-M)
- Seismic Rehab – Emergency Service Buildings Bonds (Article XI-N)
- State Property Bonds (Article XI-Q) (82% of total outstanding as of June 30, 2016)
- Pension Obligation Bonds (32% of total outstanding as of June 30, 2016)
- Certificate of Participation obligations (85% of total outstanding as of June 30, 2016)

As shown in *Table III.1*, the model solves for overall debt capacity for fiscal years 2018 through 2025 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 $473.5 million in FY 2018 to $658.1 million in FY 2025.

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
2018	$ 9,470.3	$ 473.5
2019	9,983.8	499.2
2020	10,390.5	519.5
2021	11,100.0	555.0
2022	11,588.2	579.4
2023	12,096.8	604.8
2024	12,613.7	630.7
2025	13,162.6	658.1

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 $1.15 billion in General Fund-supported debt authorized by the 2015 and 2016 Legislatures will be issued by June 30, 2017. This new debt includes $292.4 million in Higher Education XI-G GO bonds (of which $200 million is allocated to the Oregon Health and Sciences University for a new cancer research center); $58.4 million in Community College XI-G GO bonds; $176.9 million in Seismic Rehab – Public Education Buildings XI-M GO bonds; $30.4 million in Seismic Rehab – Public Safety Building XI-N GO bonds; $126.2 million in Public School Construction XI-P GO bonds; and $433.5 million in State Property XI-Q GO bonds.

Projected debt service payments for planned new issuances are based on the following assumptions:

- Level annual debt service payments;
- An interest rate of 4.50%, the new standard rate that will be used in these annual reports, which is 32 basis points higher than the 10-year average of the *Bond Buyer 20-Bond Index* as of December 8, 2016[2]; 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

[1] General Fund revenues are shown as projected by the Oregon Office of Economic Analysis in the *Oregon Economic and Revenue Forecast* for December 2016.
[2] 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.

debt and the projected debt service payments for planned issuance. This is shown below 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.

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 General Fund-Supported Debt Outstanding[1]**	**(Less) Projected Annual Payments for Debt Service on New General Fund-supported Debt Issuance[2]**	**Remaining Dollars Available to Pay Debt Service on Future Debt Issuance**
2018	$473.5	$(303.7)	$ (69.8)	$100.0
2019	499.2	(294.7)	(69.8)	135.0
2020	519.5	(293.1)	(69.8)	157.0
2021	555.0	(286.6)	(69.8)	199.0
2022	579.4	(267.3)	(69.8)	242.0
2023	604.8	(268.4)	(69.8)	267.0
2024	630.7	(256.9)	(69.8)	304.0
2025	658.1	(237.3)	(69.8)	351.0

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 payment amounts 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 projected 2017 debt capacity that was not allocated by the 2015 and 2016 Legislatures. 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, 2016. See Appendix A for detail.
[2] The 2015 and 2016 Legislative Assemblies collectively authorized $1.15 billion in General Fund-supported debt. The issuance of $245.3 million in FY 2016 and a projected $908 million in FY 2017 is accounted for 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**
2017	140.6	--	--	$ 140.6	3.4%
2018	100.1	1,301.5	(100.1)	-	5.0%
2019	134.7	450.4	(34.6)	-	5.0%
2020	156.6	285.1	(21.9)	-	5.0%
2021	198.6	546.4	(42.0)	-	5.0%
2022	242.3	568.8	(43.7)	-	5.0%
2023	266.7	316.7	(24.3)	-	5.0%
2024	304.0	485.4	(37.3)	-	5.0%
2025	351.1	612.4	(47.1)	-	5.0%
Total Additional General Fund Capacity		**$ 4,566.6**			

Table III.3 accounts for all issued and planned to be issued General Fund-supported debt, as authorized by the Legislature for the 2015-17 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 $4.57 billion in additional General Fund-supported debt through FY 2025 on top of the $1.15 billion already authorized by the 2015 and 2016 Legislatures.

[1] *Table III.3* accounts for the full $1.15 billion in planned General Fund-supported debt that was authorized by the 2015 and 2016 Legislatures.

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 funding for the State's highest priority capital projects.

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
2017	-	-	3.4%
2018	$ 570.8	$(43.9)	4.4%
2019	570.8	(43.9)	4.5%
2020	570.8	(43.9)	4.8%
2021	570.8	(43.9)	4.8%
2022	570.8	(43.9)	4.8%
2023	570.8	(43.9)	5.0%
2024	570.8	(43.9)	5.0%
2025	570.8	(43.9)	5.0%
Total Additional General Fund Capacity	**$ 4,566.6**		

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 in 2015-17 and estimates of General Fund revenues for the balance of the ten year forecast period, remaining capacity is $4.57 billion; a 1% increase in the long-term interest rate would decrease

capacity by $450.3 million *(Table III.5)*. A 10% decline in revenue for the forecast period would decrease capacity by approximately $856.1 million. *(Table III.6)*.

Table III.5

Forecast of General Fund Debt Capacity
With Changing Interest Rates
FY 2018 - FY 2025
($ Millions)

	4.5% Interest Rate (From *Table III.3*)	5.5% Interest Rate (1.0% Increase)	3.5% Interest Rate (1.0% Decrease)
Total	**$ 4,566.6**	**$ 4,116.3**	**$ 5,067.3**
Difference from Base Case		**$ (450.3)**	**$ 500.7**

Table III.6

Forecast of General Fund Debt Capacity
With Changing General Fund Revenues
FY 2018 – FY 2025
($ Millions)

	Projected General Fund Debt Capacity (From *Table III.3*)	10% Increase in Net General Fund Revenue	10% Decrease in Net General Fund Revenue
Total	**$ 4,566.6**	**$ 5,422.7**	**$ 3,710.5**
Difference from Base Case		**$ 856.1**	**$ (856.1)**

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 Public Employees Retirement System (PERS). 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 (POB) through the Oregon State Treasury. Because the POBs were sold at an average interest rate of 5.8%, 2.2% below the actuarially assumed rate of 8%, the State expects to realize significant budgetary savings over the life of these bonds.

The savings through the issuance of POBs depends on future asset returns by PERS. 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.

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. Also, 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, 2016; assuming that no additional Lottery bonds are issued either this biennium or in the future.

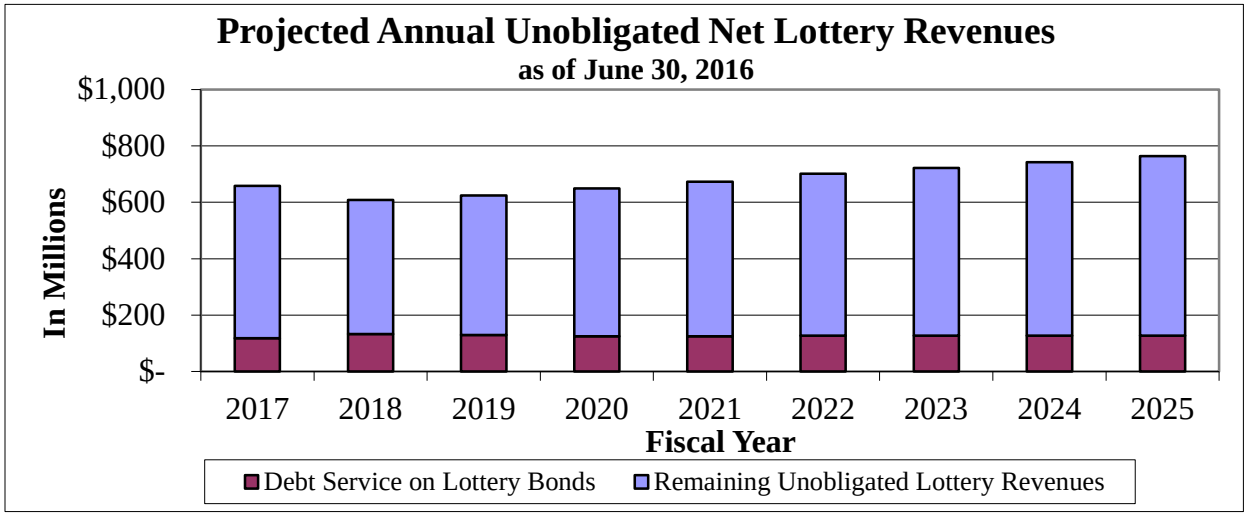
Table IV.1

Forecast of Net Lottery Revenue, Lottery Debt Service, and Debt Service Coverage Ratios as of June 30, 2016

Fiscal Year	Annual Net Lottery Revenues (millions)[1]	Debt Service on Outstanding Bonds (millions)[2]	Projected Debt Service Coverage Ratio (times)
2017	658.9	117.4	5.6
2018	608.4	132.9	4.6
2019	623.9	129.4	4.8
2020	649.2	125.0	5.2
2021	673.7	124.9	5.4
2022	701.4	127.0	5.5
2023	721.6	126.6	5.7
2024	742.4	126.6	5.9
2025	764.0	126.6	6.0

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 2016.
[2] Includes Lottery bonds issued through June 30, 2016. This does not include debt service on $215.1 million in authorized but not yet issued Lottery bonds that are planned to be issued before the end of FY 2017.

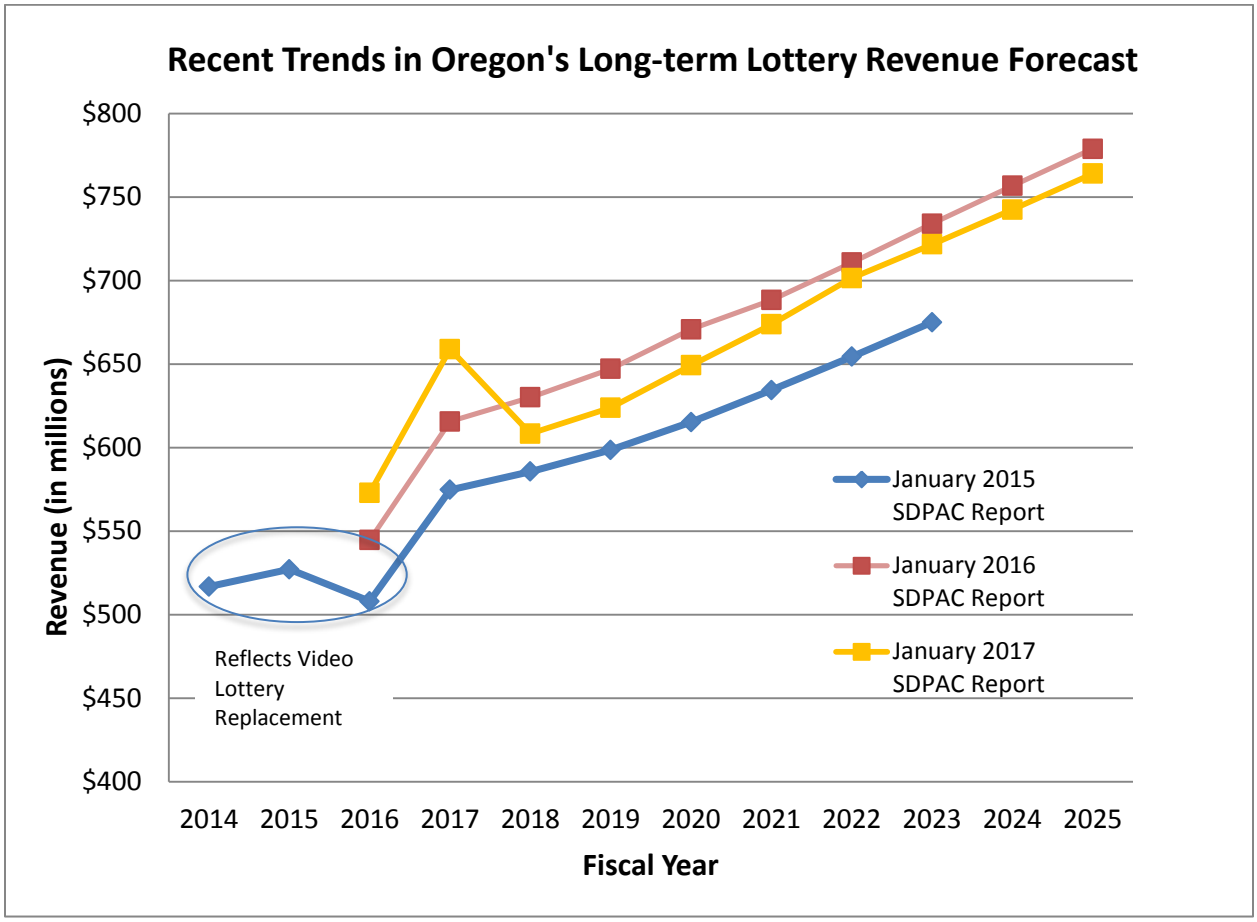
B. *Lottery Capacity Determination and Coverage Ratios*

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 coverage ratio. For example, if available program revenues were expected to be $100 million annually, and debt service requirements were expected to be $10 million annually, the expected coverage ratio would be 10 ($100 million divided by $10 million).

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.

Long-term projections of future net Lottery revenues by the Office of Economic Analysis (OEA) declined between the *2012* and *2015 SDPAC Reports*. However, more recent long-term forecasts indicate higher annual transfers of unobligated lottery revenues compared to the forecast used in the *2015 SDPAC Report*, as shown on *Exhibit IV.2*. The completion of the statewide video terminal replacement program led to higher transfers of unobligated lottery revenues to the State than initially forecast. Although long-term lottery revenue growth is expected to be at lower levels than anticipated in SDPAC reports prepared earlier this decade due to competing gaming options in Washington State and to reduced consumer spending on gaming in general.

Exhibit IV.2



Considering the limits to Lottery revenue growth, state debt managers are striving to maximize capacity through effective management of the existing Lottery bond portfolio. Over the past several years, historically low interest rates allowed for the refunding of approximately $709 million in outstanding Lottery bonds, saving the State approximately $60 million in interest costs on the Lottery bond program. In addition, the consolidation of portions of the Lottery bond's debt service reserve funds into a common reserve fund freed up $23.8 million in existing debt reserves that were used for authorized projects that would have otherwise needed bond funding. Finally, the 2015 Legislature scheduled this biennium's $213.1 million in new Lottery bonding to occur in the spring of 2017, effectively moving debt service on these bonds into the 2017-19 biennium.

Table IV.1 reflects the combined, positive impacts of the improving Lottery revenue forecast and the various actions taken by the State to maximize debt capacity for this program. Lottery debt service coverage ratios are projected at a healthy 5.6 for FY 2017. The table also shows that Lottery debt service payments remain relatively constant over the balance of the forecast period, 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 $608.4 million in FY 2018 to $764.0 million in FY 2025.

For FY 2018, the calculation of maximum annual lottery debt service is:

Available Revenues ÷ Required Coverage Ratio = Maximum Annual Debt Service

– or –

$608.4 million ÷ 4 Times Coverage = **$152.1 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, 2016,
- all new Lottery revenue bonds authorized and expected to be issued before the end of the 2015-17 biennium, and
- an estimate of remaining capacity to issue additional Lottery revenue bonds over the next four biennia.

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, 2016, and the planned FY 2017 issuance in the amount of $213.1 million. Assuming the entire authorization is sold in the spring of 2017, the Commission estimates an increase in debt service payments of approximately $16.4 million per year starting in FY 2018. This estimate assumes a 4.5% interest rate[1] and a 20-year amortization period for the FY 2017 Lottery bond sale and all Lottery bonds sold thereafter.

Table IV.2 column 4 shows projected debt service for FY 2018 through FY 2025 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, including the planned issuance of $213.1 million in new Lottery bonds in FY 2017, there is a projected $837.5 million in Lottery bond capacity over the balance of the eight year forecast period.

[1] The assumed interest rate of 4.5% is the new standard rate that will be used in these annual reports, which is currently 32 basis points above the 10-year average of the Bond Buyer 20 Bond Index through December 8, 2016. 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

Lottery Debt Capacity Determination
($ Millions)

	1	2	3	4	5	6
Fiscal Year Ending June 30	**Estimated Lottery Revenues Available to Pay Debt Service**	**Debt Service on Bonds Outstanding As of June 30, 2016 and Planned FY 2017 Issuance***	**Maximum Amount of New Debt that can be Issued Within Required Debt Service Coverage Ratio**	**Projected Debt Service on Additional Issuance**	**Debt Service Coverage Ratio**	**Debt Service as a % of Lottery Revenues**
2018	608.4	(132.9)	249.6	-	4.0	25%
2019	623.9	(129.4)	95.5	(19.2)	4.0	25%
2020	649.2	(125.0)	139.8	(7.3)	4.0	25%
2021	673.7	(124.9)	80.9	(10.8)	4.0	25%
2022	701.4	(127.0)	63.6	(6.2)	4.0	25%
2023	721.6	(126.6)	70.3	(4.9)	4.0	25%
2024	742.4	(126.6)	67.5	(5.4)	4.0	25%
2025	764.0	(126.6)	70.2	(5.2)	4.0	25%
Additional Lottery Debt Capacity:			**$ 837.5**			

*Includes the $213.1 million in planned Lottery bond issuance in spring of 2017.

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.

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	Debt Service as a % of Lottery Revenues
2018	104.7	4.3	18%
2019	104.7	4.3	23%
2020	104.7	4.4	23%
2021	104.7	4.3	23%
2022	104.7	4.2	23%
2023	104.7	4.1	24%
2024	104.7	4.1	24%
2025	104.7	4.0	25%
Total Additional General Fund Capacity	**$ 837.5**		

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 rates 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 $837.5 million over the balance of the forecast period. A 1.0% (100 basis points) 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 $85.4 million; conversely, a reduction in the interest rate assumption by 1.0% to 3.5% would add roughly $97.3 million in capacity over the forecast period.

Table IV.4

Forecast of Lottery Revenue Debt Capacity*
From FY 2018 to FY 2025
at Various Assumed Interest Rates
($ Millions)

	4.5 % Interest Rate (From *Table IV.2*)	**3.5 % Interest Rate (1% Decline)**	**5.5 % Interest Rate (1% Increase)**
Eight Year Total	$ 837.5	$ 934.8	$ 752.1
Difference from Base Case		$ 97.3	$ (85.4)

*Includes the $213.1 million in planned Lottery bond issuance in spring of 2017.

As the recent past has demonstrated, OEA's downward 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 $248.5 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 $248.4 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**
Eight Year Total	$ 837.5	$ 589.0	$ 1,085.9
Difference from Base Case		$ (248.5)	$ 248.4

*Includes the $213.1 million in planned Lottery bond issuance in spring of 2017.

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, 2016. The State's net tax supported debt, as of June 30, 2016, was $7.6 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 lendees, 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 2015-17 biennium net tax-supported debt authorizations approved by the 2015 Legislature. For purposes of this *2017 Commission Report*, it is assumed that the remaining $1.51 billion of the $1.76 billion in authorized net tax-supported debt will be issued during the second year of the 2015-17 biennium. Revenue bonding through the Highway User Tax and Lottery bond programs, and GO bonds issued for General Purposes (Article XI-Q); Higher Education facilities, the OHSU Cancer Center, and Community College grants (Article XI-G);

Public School Construction grants (Article XI-P); and Seismic Upgrade grants to schools (Article XI-M) make up the majority of new authorizations planned for issuance this biennium.

Table V.1

Net Tax-Supported Debt
Authorizations & Expected Issuance
2015-2017 Biennium

Type & Purpose	Authorization	Expected Issuance
General Obligation Bonds		
State Highway Bonds (Article XI, Sec 7)	35,475,000	35,475,000
Community College Bonds (Article XI-G)	58,401,600	58,401,600
Higher Education Facility Bonds (Article XI-G)	92,450,000	92,450,000
OHSU Cancer Center Bonds (Article XI-G)	200,035,000	200,035,000
Seismic Upgrade Bonds (Article XI-M)	176,870,000	176,870,000
Seismic Bonds (Article XI-N)	30,440,000	30,440,000
Public School Construction (Article XI-P)	126,210,000	126,210,000
State Property (Article XI-Q)	433,460,000	433,460,000
General Obligation Bond Total	**$1,153,341,600**	**$1,153,341,600**
Direct Revenue Bonds		
Lottery Revenue Bonds (ORS 286A.560-585)	213,125,000	213,125,000
Highway User Tax Bonds (ORS 367.620)	393,160,000	393,160,000
Direct Revenue Bond Total	**$606,285,000**	**$606,285,000**
Total Authorized & Expected Issuance	**$1,759,626,600**	**$1,759,626,600**

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 13 years, however, the State's debt burden per capita has exceeded national averages.

In their *2016 State Debt Medians* report (which uses calendar year 2015 data), Moody's determined the average NTSD per capita for the 50 states was $1,431 and the median was $1,025.[1] The average NTSD as a percentage of income was reported at 3.0% and the median at 2.5%. By comparison, Oregon's NTSD ranked 18th highest nationally in terms of net tax-supported debt outstanding at about $7.7 billion, but 12th highest in terms of net tax supported debt per capita at $1,907 and 12th in net tax-supported debt as a percentage of personal income at 4.6%.

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

[1] Moody's *2016 State Debt Medians* reflect NTSD as of the end of calendar year 2015.

As *Table V.2* illustrates, at the end of FY 2016, net tax-supported debt totaled $7.65 billion with debt ratios of $1,876 per capita and 4.1% of personal income. Based on the issuance of an estimated $1.76 billion in authorized debt over the 2015-17 biennium, it is projected that the State's net tax-supported debt will increase to about $8.77 billion by the end of the 2017 fiscal year.

Table V.2

Net Tax-Supported Debt Ratios[1]

	Fiscal Year Ending June 30th		
	FY 2015 (Actual)	**FY 2016 (Estimated)**	**FY 2017 (Estimated)**
Net Tax-Supported Debt (Billions)	$ 7.80	$ 7.65	$ 8.77
Population*	4,013,845	4,076,400	4,137,000
Personal Income (Billions)*	176.4	185.0	194.6
NTSD Per Capita	$1,944	$1,876	$2,120
NTSD as a % of Personal Income	4.4%	4.1%	4.5%
Pension Obligation Bonds Excluded			
NTSD Per Capita	$1,487	$1,442	$1,712
NTSD as a % of Personal Income	3.4%	3.2%	3.6%

*Source: Oregon Office of Economic Analysis Economic and Revenue Forecast, December 2016.

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 above in *Table V.2*, the estimated FY 2017 debt burden would drop by $408 per capita and 0.9% as percentage of personal income.

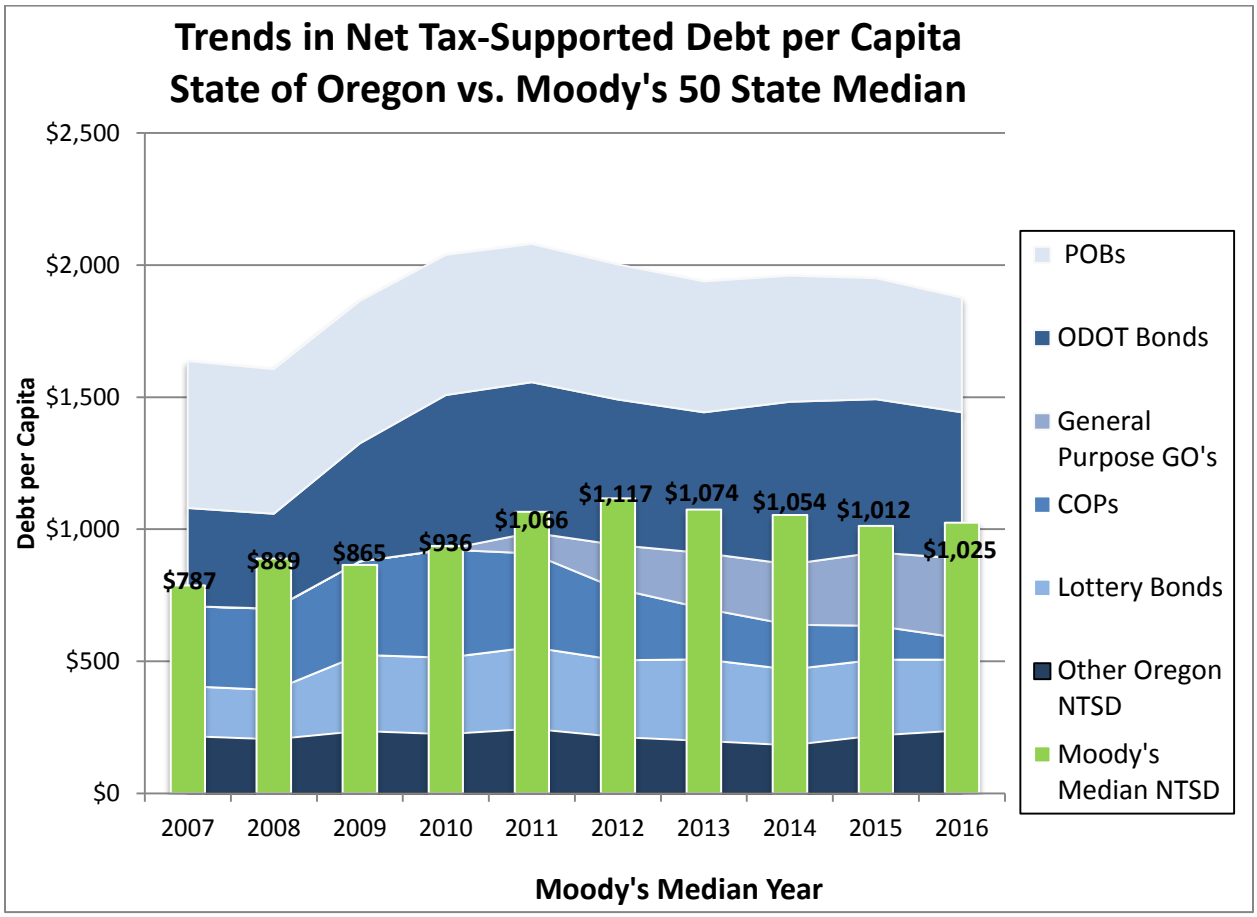
Debt Ratio Comparisons

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

[1] FY 2016 and FY 2017 projections based on the issuance of $245 million and $1.51 billion of new tax-supported debt.

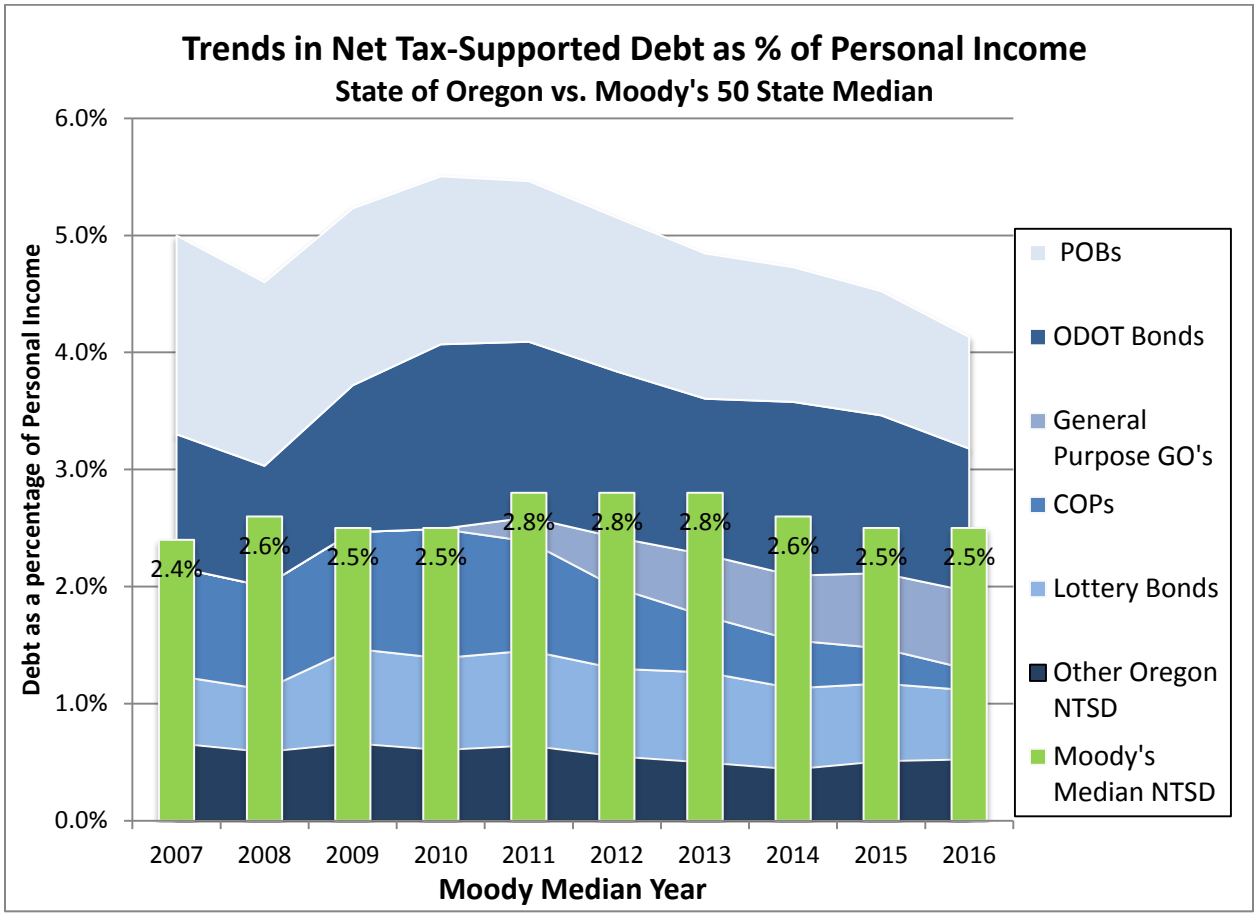
development, highway modernization, and public safety needs. As the charts show, Oregon's current per capita debt burden and debt as a percent of personal income is above Moody' national medians due to the aforementioned issuance of both POBs and Highway User Tax bonds for various Oregon Department of Transportation (ODOT) projects. *Exhibit V.1a* and *Exhibit V.1b* project Oregon's debt ratios over the next few years assuming the issuance of $1.76 billion in net tax-supported bonds authorized by the 2015 and 2016 Legislature.

Exhibit V.1a



Source: Moody's Median Reports, 2007-2016

Exhibit V.1b



Source: Moody's Median Reports, 2007-2016

Since 2008, 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. *Table V.3* displays an excerpt from S&P's most recent annual pension report, which still ranked Oregon's pension system funding as the 6th highest funded among the states as of the end of FY 2015 – it should be noted that this ranking is likely to drop in the future, as the State's FY 2016 CAFR now incorporates the substantial impact of the *Moro* decision on the State's net pension liability, which will reduce the State's funded ratio considerably. The aforementioned S&P report also compares the combined debt ratio for each state to its gross state product, which provides a great deal of insight as to the financial resources that each state has available to manage its overall liabilities. As *Table V.4* shows, for FY ending 2015, Oregon remained well below the national median at approximately 5%, although this ratio will increase as well in subsequent years due to the impact of the *Moro* decision.

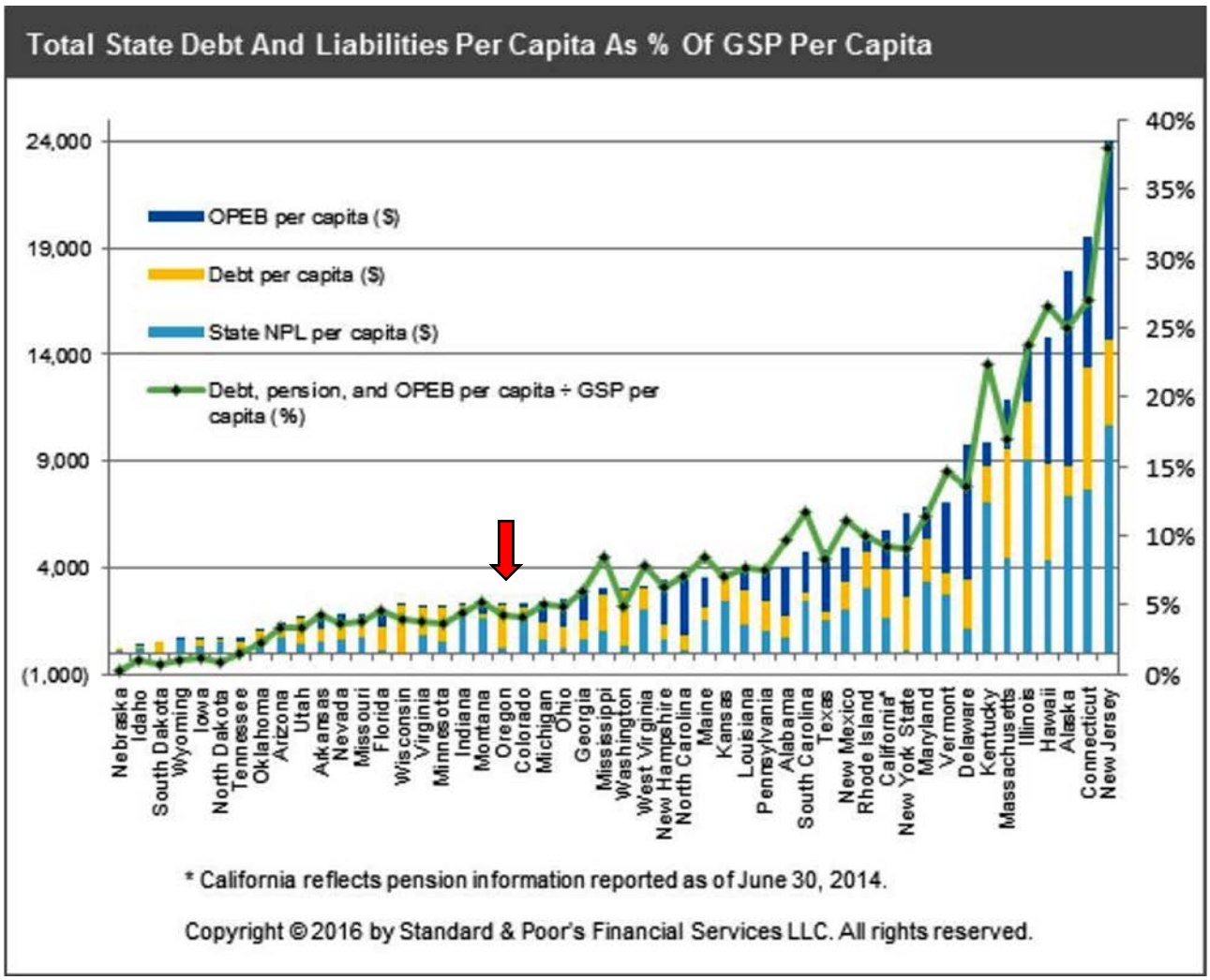
Table V.3

S&P's Ranking of Sate's Pension Liabilities
Based on System Funding Ratio, FY 2015

Ranking	State	Pension Funded Ratio	Net Pension Liability (mil.)	Net Pension Liability per capita	Debt, pension and OPEB Liability per capita
1	South Dakota	104.1%	$(94)	$(109)	$411
2	Wisconsin	102.7	(687)	(119)	2,104
3	New York State	98.1	1,471	74	6,544
4	North Carolina	94.6	1,701	169	3,480
5	Florida	92.0	2,229	113	2,017
6	**Oregon**	**91.9**	**1,092**	**271**	**2,296**
50 State Median		74.6	$3,134	$790	$3,016
50 State Average		73.2	11,551	1,870	4,849

Source: Standard & Poor's, *U.S. State Pensions*: *Weak Market Returns Will Contribute to Rise in Expense*, September 12, 2016. Please note in the table 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, 2015, as now required by GASB. "OPEB" means Other Post-Employment Benefits, which generally include retiree health care benefits guaranteed for payment by a state. The net pension liability reported for Oregon for FY 2015 does not include the impact on the State's net pension liability due to the *Moro* decision.

Table V.4


Total State Debt And Liabilities Per Capita As % Of GSP Per Capita
24,000
19,000
14,000
9,000
4,000
(1,000)
40%
35%
30%
25%
20%
15%
10%
5%
0%
OPEB per capita ($)
Debt per capita ($)
State NPL per capita ($)
Debt, pension, and OPEB per capita ÷ GSP per capita (%)
Nebraska
Idaho
South Dakota
Wyoming
Iowa
North Dakota
Tennessee
Oklahoma
Arizona
Utah
Arkansas
Nevada
Missouri
Florida
Wisconsin
Virginia
Minnesota
Indiana
Montana
Oregon
Colorado
Michigan
Ohio
Georgia
Mississippi
Washington
West Virginia
New Hampshire
North Carolina
Maine
Kansas
Louisiana
Pennsylvania
Alabama
South Carolina
Texas
New Mexico
Rhode Island
California*
New York State
Maryland
Vermont
Delaware
Kentucky
Massachusetts
Illinois
Hawaii
Alaska
Connecticut
New Jersey
* California reflects pension information reported as of June 30, 2014.
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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);
- Alternate Energy Project GO Bonds (Article XI-J); (63% 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.

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.

[1] Oregon Housing and Community Services Department.

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 eighty percent 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 loans 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, directly oversee all aspects of each university's budget and operations, including the 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 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.

ODOE's program staff investigates and evaluates each loan request. Registered engineers typically design larger projects representing loan amounts in excess of $100,000. In general, the reviews examine project design and the reliability of the resource. The ODOE staff investigations provide reasonable assurance that each loan is secured and protected against loss.

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 2017, these General Fund appropriations represent approximately 37% 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. Nevertheless, because of the size of these loan defaults, cash infusions will be required starting in April 2020, and continuing through FY 2034, aggregating to approximately $16 million overall, in order for the SELP program to meet its scheduled debt service obligations. The timing and size of this cash infusion could change if more SELP loans become delinquent and/or are written off as uncollectible.

Over the past year, a legislative Joint Interim Committee has examined the SELP program as part of their larger review of ODOE's operation and made a series of recommendations regarding the future management, operations, and funding of SELP. These recommendations include:

- Returning the Small Energy Loan Program (SELP) to its original mission and establishing a cap on individual loan sizes;
- Transferring the SELP to the Oregon Business Development Department (OBDD) with a continued ODOE role in project qualification;
- Directing OBDD to work with the State Treasurer Office to review past loan defaults and strengthen loan underwriting and other program requirements where needed;
- Removing statutory authority for the Governor to override ODOE/OBDD decisions on loan applications and approvals;
- Repealing the Alternative Vehicle Fuel Revolving Loan Program and transferring any remaining funds (approximately $3 million) to SELP to rebuild its loan reserves;
- Restarting the loan program to help generate a repayment revenue stream to reduce the program's cash shortfall, if supported by OBDD/Treasurer Office review.

The Joint Interim Committee will be presenting their findings during the 2017 Legislative session. Until the future of this bonding program is resolved, the Commission continues to recommend that SELP not make any new loan commitments.

E. *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.

F. *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.

G. *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, the 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.

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/college's bond debt service when due;
- Authorization of the 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 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 guaranty 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.

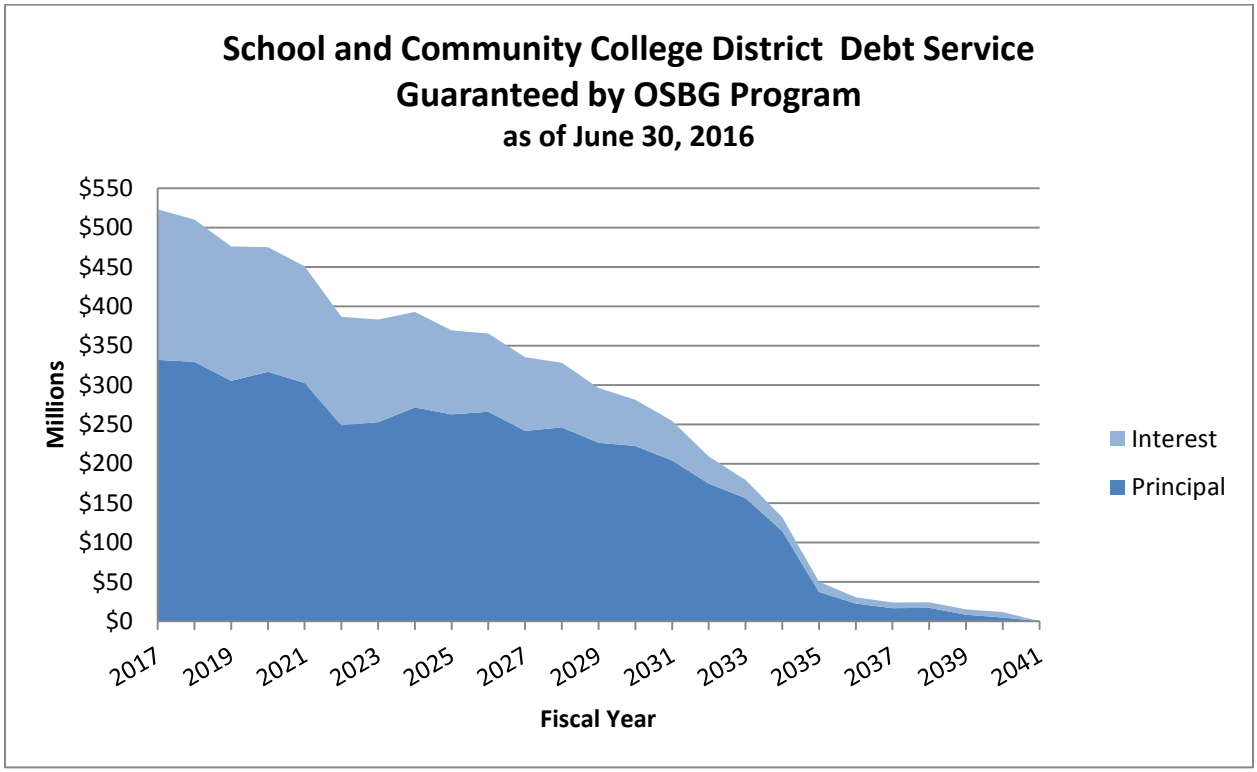
In addition, the administrative aspects of the OSBG program have been designed to reduce the likelihood of payment default by participating educational districts. The district's business administrator is required to transfer to its paying agent funds sufficient to cover each debt service payment at least 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 the OST at that time. The paying agent must notify the 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, 2016, the program has outstanding guarantees on $4.6 billion of GO bonds ($6.5 billion in overall 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 $10.8 million per year, or $215.7 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 2017, this guaranty applies to local school district and community college annual debt service payments of $523.3 million, which is equivalent to approximately 5.65% of total State General Fund revenues for the fiscal year and 13.6% of overall State school aid for schools and community colleges.

Exhibit VI.1



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. 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. Under current state law, the OST does not have the authority to review or approve these fund diversion agreements although they represent a contingent liability of the State.

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 2003. The Commission projects that the State will divert approximately $277.8 million in state school aid for this purpose in FY 2017, or 7.2% of combined annual state aid for school districts and community colleges.

Exhibit VI.2

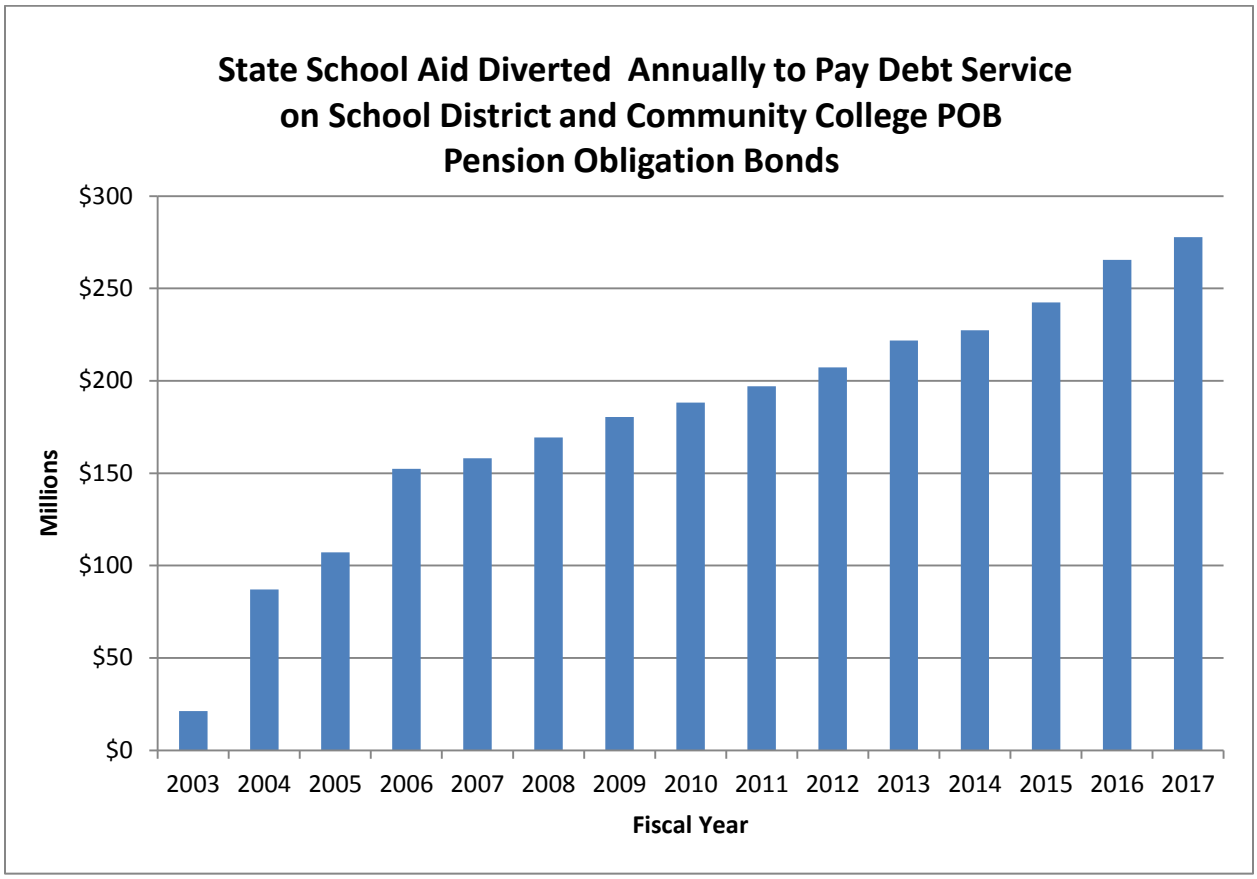
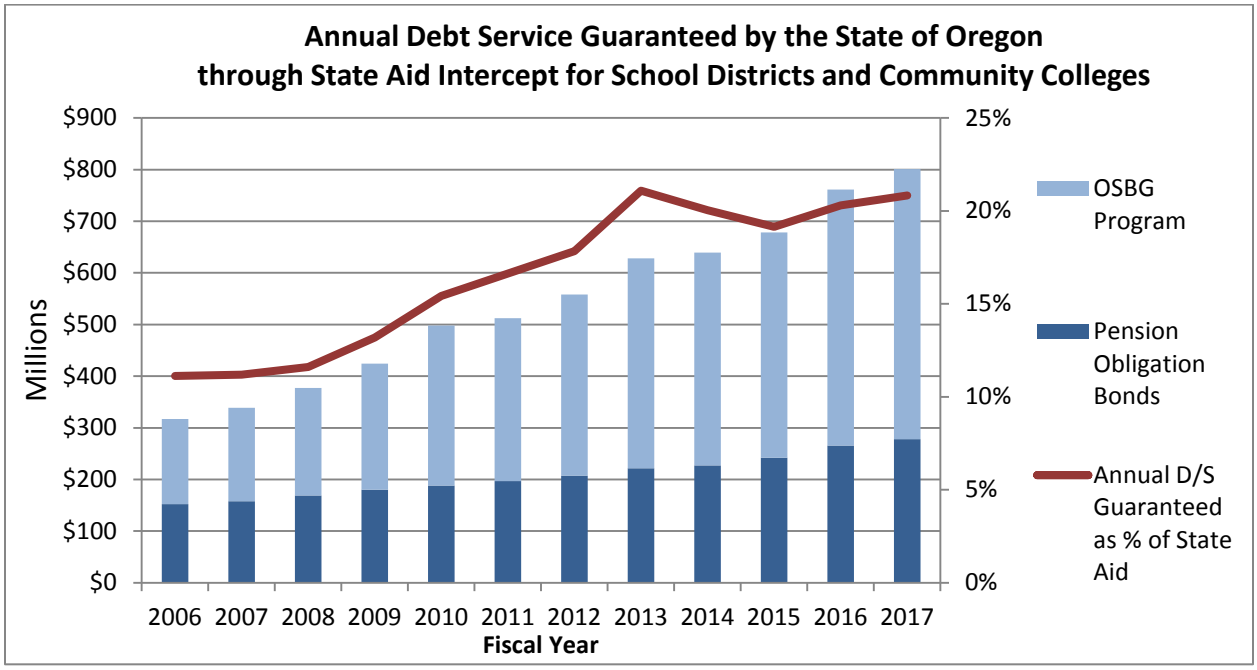


Exhibit VI.3 displays the steady growth in the State's combined annual guaranteed debt service for both the OSBG and the POB fund diversion programs over the past decade. As the next chart shows, these two state aid intercept bonding programs combined are relying on a significant percentage of state 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 2017 represents 20.8% of annual state aid for schools and community colleges.

Exhibit VI.3



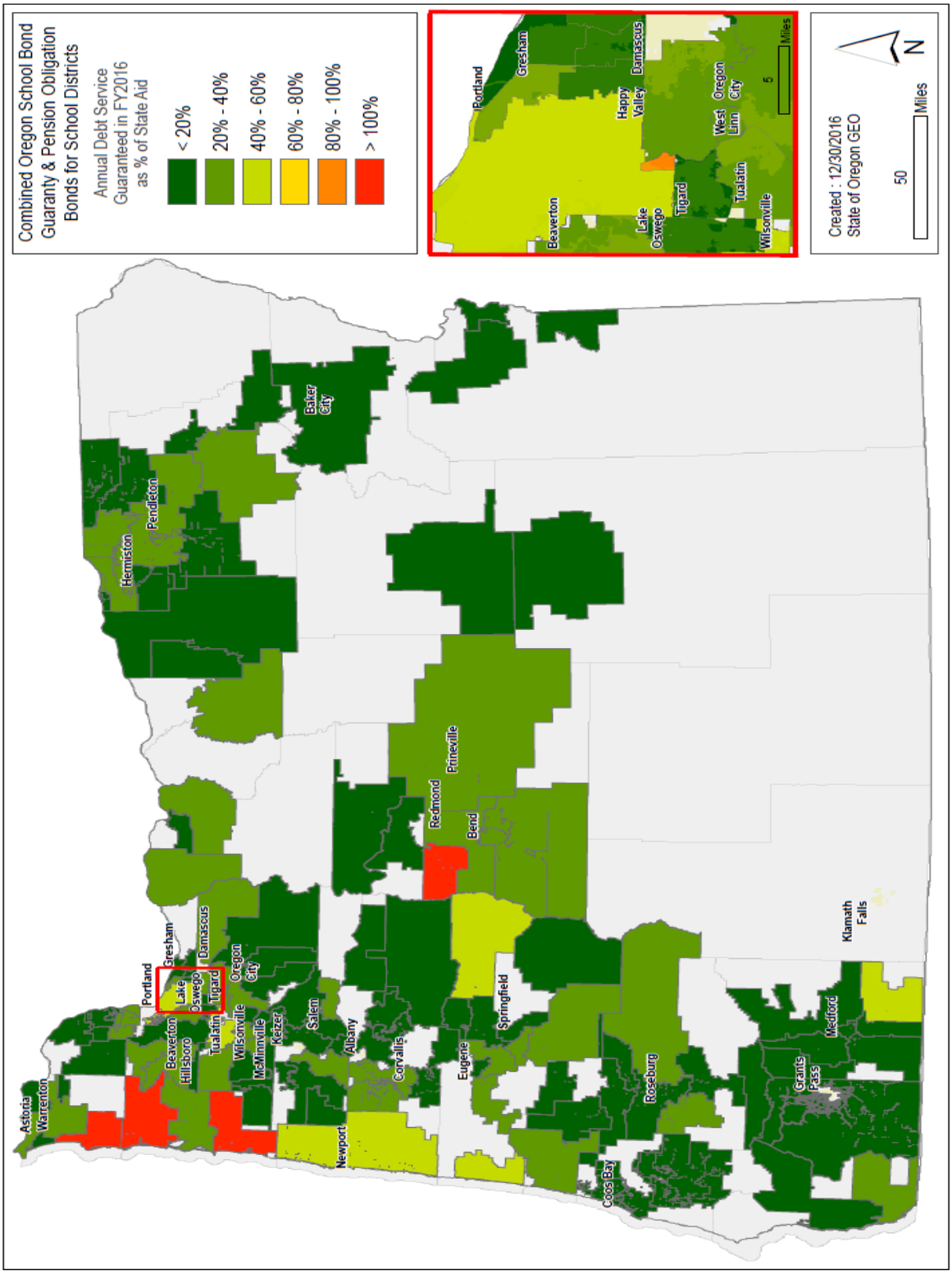
Policy Considerations

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 assure that the state guarantee of school debt is managed wisely.

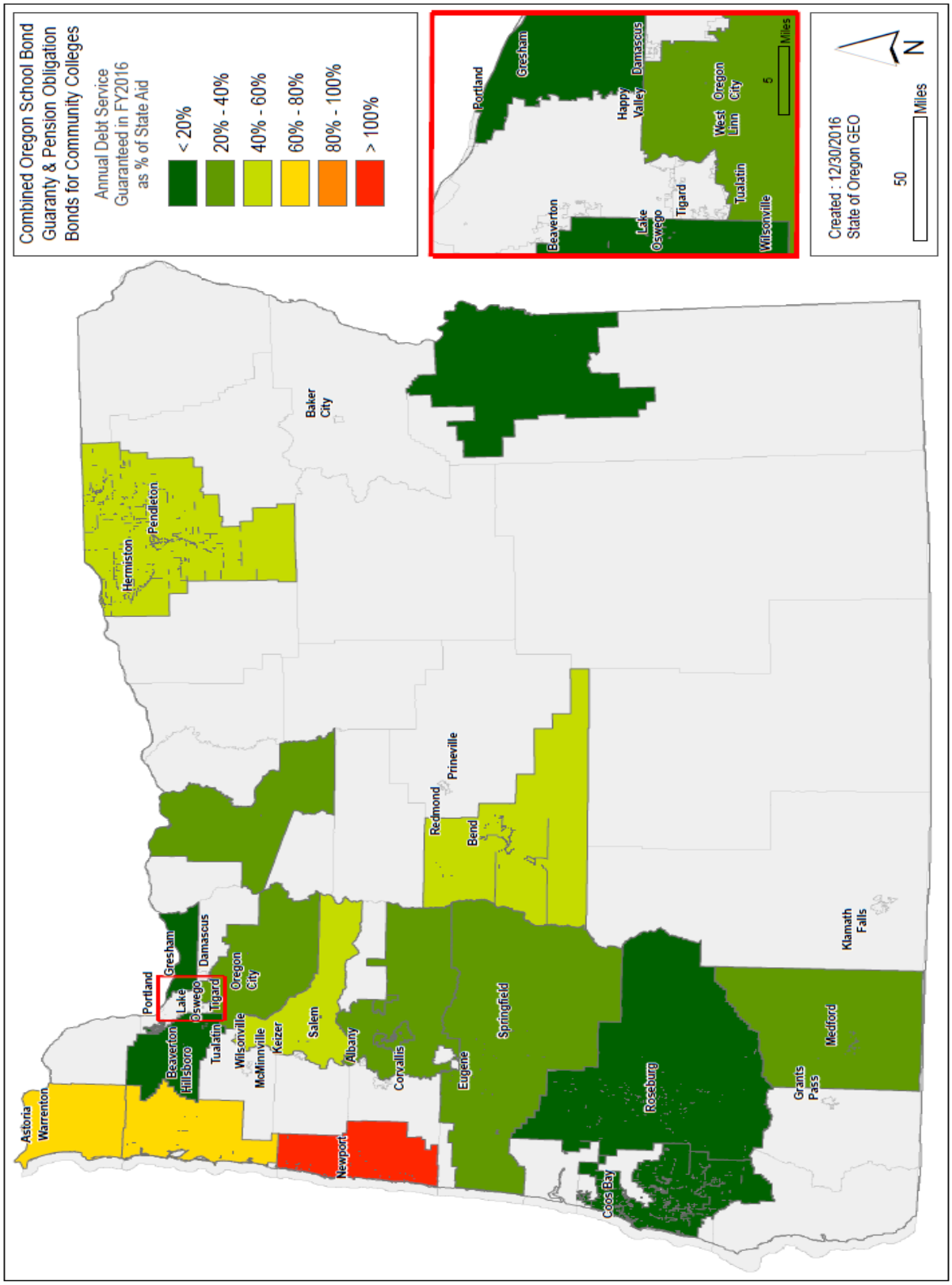
Exhibits VI.4 and VI.5 illustrate each Oregon school district and community college district's respective state guaranteed debt service as a percentage of overall state aid for the fiscal year ending June 30, 2016. State aid is defined for purposes of the following exhibits to include annual appropriations 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 2015. For additional detail on the state aid and the amount of debt service guaranteed for specific districts in FY 2016, please see Appendix A, Tables A-9, A-10, and A-11of this report.

Exhibit VI.4



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

Exhibit VI.5



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

Table VI.1

Debt Issuance Considerations for Non Tax-Supported 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; • Central debt management review.
Higher Education Building Project 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; • Central debt management review.
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; • Central debt management review.
Oregon School Bond Guaranty Program General Obligation Bonds *Article XI-K*	• Maybe triggered if state has to pay district debt service; • State-Aid maybe intercepted for debt service payments; • May levy a statewide property tax or district property tax; • States full faith in credit; • 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; • 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; • Central debt management review.
Conduit Revenue Bond Programs *Oregon Facilities Authority* *Industrial Development Revenue Bonds* *Housing Development 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; • Central debt management review.

APPENDIX A

Supporting Tables

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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**

General Fund-Supported Debt Programs

General Obligation Bond Programs:

- Higher Education Facility – Article XI-G
- Community College Bonds – Article XI-G
- Pollution Control Bonds – Article XI-H (42%)
- Alternate Energy Bonds – Article XI-J (37%)
- Oregon Opportunity Bonds – Article XI-L
- Seismic Rehab – Public Education Bldgs. (Article XI-M)
- Seismic Rehab – Emergency Services Bldgs. (Article XI-N)
- State Property Bonds Article XI-Q (82%)

Direct Revenue Bond Programs:

Appropriation Credits

- Appropriation Bonds – SB 856 – 2003 Legislature
- Certificates of Participation – ORS 283.085 to 283.092 (85%)

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)
- Alternate Energy Bonds – Article XI-J (63%)
- State Property Bonds – Article XI-Q (15%)

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 – ORS 456.692

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 2015-2017 Biennium[1]

Net Tax-Supported Debt Programs	2015-2017 Biennium Authorization	FY 2016 Issuance	FY 2017 Planned Issuance	Remaining Authorization
Community College Bonds Article XI-G	58,401,600	0	58,401,600	0
Dept. Of Higher Education Facility Bonds (Article XI-G)	92,450,000	0	92,450,000	0
OHSU Cancer Center Bonds (Article XI-G)	200,035,000	101,025,000	99,010,000	0
Oregon Opportunity Bonds[2] Article XI-L	0	0	0	0
Seismic Rehab – Public Education Buildings (Article XI-M)	176,870,000	50,660,000	126,210,000	0
Seismic Rehab – Emergency Services Buildings (Article XI-N)	30,440,000	0	30,440,000	0
Dept. of Education – School Construction Bonds (Article XI-P)	126,210,000	0	126,210,000	0
State Property Bonds[3] Article XI-Q – 82%	433,460,000	93,655,000	339,805,000	0
Pension Obligation Bonds[4] Article XI-O	0	0	0	0
Lottery Revenue Bonds ORS 286.563-585	213,125,000	0	213,125,000	0
Highway User Tax Bonds[5] ORS 376.620	393,160,000	0	393,160,000	0
Dept. of Transportation – State Highway Bonds (Article XI (sect7))	35,475,000	0	35,475,000	0
Certificate of Participation Bonds ORS 283.025-092	0	0	0	0
State Appropriation Bonds (SB 856 – 2003 Legislature)	0	0	0	0
Total Net Tax-Supported Debt Authorizations	**$1,759,626,600**	**$245,340,000**	**$1,514,286,600**	**$0**

Note: May not foot due to rounding

[1] Amounts as authorized by the 78th & 79th Oregon Legislative Assembly – 2015 & 2016 Regular Session. Authorization does not guarantee issuance of bonds or appropriation credits in these amounts. For the *2017 Commission Report*, it is assumed that a portion of the authorization was issued for certain programs in fiscal year 2016 and the remainder in fiscal year 2017.

[2] Oregon Opportunity bonds are limited by Article XI-L to $200 million net proceeds. There is no additional authorization.

[3] State Property Bonds: HB5005, Legislature approved $433,460,000 for the 2015-17 biennium. Currently 82% is considered net-tax supported.

[4] Pension Obligation bonds are constitutionally limited to 1% of RMV or $506,152,288,744. While there is no Constitutional authorization there is no current intention to issue additional bonds.

[5] User Tax Bonds: HB 5005 Legislature approved $393,160,000 for the 2015-17 biennium.

Table A-3

General Fund Supported Debt
Annual Debt Service Requirements[1]

Fiscal Year (ending June 30th)	State Appropriation Budget Deficit Bonds	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)	State Property (XI-Q) General Fund Supported	Pollution Control Bonds (General Fund Supported portion)
2017	-	$ 55,676,810	$12,322,605	$41,560,151	$15,437,925	$58,620,352	$5,378,648	$1,608,406	$107,974,916	$1,901,642
2018	-	46,827,031	12,324,081	43,858,116	15,430,825	61,110,455	5,37,8938	1,606,106	106,719,278	1,873,366
2019	-	36,082,760	12,309,287	42,852,112	15,435,025	63,707,829	5,381,888	1,613,156	106,945,755	1,936,712
2020	-	28,553,772	12,326,618	42,577,738	15,434,250	66,415,515	5,391,438	1,609,356	110,961,779	1,796,348
2021	-	21,696,529	12,314,114	41,611,923	15,437,250	69,238,461	5,381,938	1,609,956	108,710,521	1,724,801
2022	-	21,563,122	12,304,220	41,607,709	15,437,125	72,181,742	5,385,388	1,609,806	88,822,676	1,447,487
2023	-	20,383,224	12,297,908	41,612,308	15,432,250	75,248,863	5,383,513	1,610,906	88,925,843	1,444,024
2024	-	19,704,419	12,317,783	41,524,656	8,041,125	78,446,564	5,382,138	1,611,938	82,907,822	1,386,402
2025	-	14,573,169	12,309,408	41,512,796	-	81,781,536	5,383,275	1,608,238	74,120,258	1,054,160
2026	-	14,402,889	12,307,633	40,811,558	-	85,257,296	5,379,738	1,612,013	71,945,598	1,057,526
2027	-	14,106,824	12,338,533	40,640,902	-	88,879,815	5,378,925	1,609,788	62,193,671	842,265
2028	-	13,960,956	12,337,054	38,933,720	-	-	5,380,525	1,610,681	61,683,412	843,654
2029	-	13,797,413	12,341,804	36,586,241	-	-	5,387,675	1,609,081	59,654,642	548,137
2030	-	13,639,673	11,954,116	34,426,416	-	-	5,382,525	1,606,081	55,831,553	550,452
2031	-	13,119,691	11,949,719	32,685,300	-	-	5,384,950	1,611,469	48,651,258	337,250
2032	-	12,943,842	11,951,556	31,158,985	-	-	5,379,325	1,604,869	42,477,275	338,205
2033	-	12,760,249	11,941,644	27,811,378	-	-	5,386,756	1,608,894	39,165,377	336,777
2034	-	12,576,414	11,949,231	27,697,758	-	-	5,387,800	1,608,519	33,708,273	-
2035	-	12,377,953	8,478,453	25,242,885	-	-	5,382,306	1,607,788	31,438,631	-
2036	-	-	8,475,769	25,250,355	-	-	3,915,900	235,125	25,915,567	-
2037	-	-	5,979,834	21,971,684	-	-	423,325	-	16,443,470	-
2038	-	-	5,987,594	21,401,075	-	-	-	-	13,688,393	-
2039	-	-	4,105,500	19,689,625	-	-	-	-	12,931,093	-
2040	-	-	4,105,125	16,553,500	-	-	-	-	1,211,345	-
2041	-	-	-	13,865,125	-	-	-	-	1,209,705	-
2042	-	-	-	9,496,625	-	-	-	-	-	-
2043	-	-	-	-	-	-	-	-	-	-
2044	-	-	-	-	-	-	-	-	-	-
2045	-	-	-	-	-	-	-	-	-	-
2046	-	-	-	-	-	-	-	-	-	-
2047	-	-	-	-	-	-	-	-	-	-
Program Totals	**-**	**$398,746,742**	**$257,029,586**	**$842,940,639**	**$116,085,775**	**$800,888,428**	**$106,616,911**	**$30,812,175**	**$1,454,238,110**	**$19,419,209**

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, 2016.

Table A-3 (Continued)

Fiscal Year (ending June 30th)	Energy Bonds (General Fund Supported)	Total General Fund Supported Debt Service
2017	$9,366,029	$309,847,484
2018	8,531,276	303,659,472
2019	8,443,726	294,708,251
2020	8,057,505	293,124,318
2021	8,869,168	286,594,662
2022	6,917,101	267,276,376
2023	6,021,632	268,360,469
2024	5,571,195	256,894,041
2025	4,919,391	237,262,230
2026	4,925,611	237,699,861
2027	4,542,610	230,533,332
2028	4,410,226	139,160,228
2029	4,205,650	134,130,642
2030	3,340,675	126,731,492
2031	2,690,733	116,430,369
2032	1,755,673	107,609,730
2033	746,017	99,757,092
2034	519,670	93,447,665
2035	-	84,528,016
2036	-	63,792,715
2037	-	44,818,314
2038	-	41,077,062
2039	-	36,726,218
2040	-	21,869,970
2041	-	15,074,830
2042	-	9,496,625
2043	-	-
2044	-	-
2045	-	-
2046	-	-
2047	-	-
Program Totals	**$93,833,888**	**$4,120,611,463**

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
2017	$172,891,292	$136,956,192	$309,847,484
2018	173,298,368	130,361,104	303,659,472
2019	173,357,182	121,351,069	294,708,251
2020	179,691,486	113,432,833	293,124,318
2021	182,421,250	104,173,412	286,594,662
2022	171,283,554	95,992,822	267,276,376
2023	181,082,800	87,277,669	268,360,469
2024	178,475,700	78,418,341	256,894,041
2025	167,594,700	69,667,530	237,262,230
2026	176,749,450	60,950,411	237,699,861
2027	178,881,100	51,652,232	230,533,332
2028	96,965,500	42,194,728	139,160,228
2029	96,545,650	37,584,992	134,130,642
2030	93,776,300	32,955,192	126,731,492
2031	88,013,250	28,417,119	116,430,369
2032	83,320,650	24,289,080	107,609,730
2033	79,433,050	20,324,042	99,757,092
2034	76,937,900	16,509,765	93,447,665
2035	71,718,600	12,809,416	84,528,016
2036	54,488,900	9,303,815	63,792,715
2037	38,047,200	6,771,114	44,818,314
2038	36,116,200	4,960,862	41,077,062
2039	33,482,700	3,243,518	36,726,218
2040	20,163,800	1,706,170	21,869,970
2041	14,227,100	847,730	15,074,830
2042	9,265,000	231,625	9,496,625
2043	-	-	-
2044	-	-	-
2045	-	-	-
2046	-	-	-
2047	-	-	-
Totals	**$2,828,228,682**	**$1,292,382,781**	**$4,120,611,463**

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, 2016.

Table A-5

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

Fiscal Year (ending June 30th)	State Appropriation Budget Deficit Bonds	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)
2017	-	$65,502,130	$12,322,605	$41,560,151	$15,437,925	$183,188,600	$174,189,991	$117,429,521	$9,366,029	$131,676,727
2018	-	55,090,625	12,324,081	43,858,116	15,430,825	190,970,172	162,216,803	116,515,373	8,531,276	130,145,461
2019	-	42,450,306	12,309,287	42,852,112	15,435,025	199,086,967	162,873,901	113,054,049	8,443,726	130,421,652
2020	-	33,592,673	12,326,618	42,577,738	15,434,250	207,548,485	156,128,243	108,649,983	8,057,505	135,319,242
2021	-	25,525,328	12,314,114	41,611,923	15,437,250	216,370,191	150,584,523	108,541,176	8,869,168	132,573,806
2022	-	25,368,379	12,304,220	41,607,709	15,437,125	225,567,942	150,802,477	110,583,843	6,917,101	108,320,337
2023	-	23,980,263	12,297,908	41,612,308	15,432,250	235,152,696	149,968,244	110,234,169	6,021,632	108,446,150
2024	-	23,181,670	12,317,783	41,524,656	8,041,125	245,145,513	149,810,694	110,225,642	5,571,195	101,107,099
2025	-	17,144,905	12,309,408	41,512,796	-	255,567,300	149,644,898	110,228,154	4,919,391	90,390,558
2026	-	16,944,575	12,307,633	40,811,558	-	266,429,051	147,001,849	108,207,331	4,925,611	87,738,535
2027	-	16,596,264	12,338,533	40,640,902	-	277,749,421	146,831,067	98,286,006	4,542,610	75,848,940
2028	-	16,424,654	12,337,054	38,933,720	-	-	162,189,935	80,424,956	4,410,226	75,223,673
2029	-	16,232,251	12,341,804	36,586,241	-	-	180,072,276	66,748,500	4,205,650	72,749,563
2030	-	16,046,675	11,954,116	34,426,416	-	-	179,581,807	53,583,050	3,340,675	68,087,260
2031	-	15,434,931	11,949,719	32,685,300	-	-	180,275,787	43,669,175	2,690,733	59,330,802
2032	-	15,228,049	11,951,556	31,158,985	-	-	179,516,885	23,834,150	1,755,673	51,801,555
2033	-	15,012,058	11,941,644	27,811,378	-	-	179,683,487	21,978,900	746,017	47,762,655
2034	-	14,795,781	11,949,231	27,697,758	-	-	177,895,662	9,332,750	519,670	41,107,650
2035	-	14,562,298	8,478,453	25,242,885	-	-	178,994,969	9,334,500	-	38,339,794
2036	-	-	8,475,769	25,250,355	-	-	92,496,118	-	-	31,604,350
2037	-	-	5,979,834	21,971,684	-	-	94,538,938	-	-	20,053,013
2038	-	-	5,987,594	21,401,075	-	-	96,665,880	-	-	16,693,163
2039	-	-	4,105,500	19,689,625	-	-	98,873,081	-	-	15,769,625
2040	-	-	4,105,125	16,553,500	-	-	-	-	-	1,477,250
2041	-	-	-	13,865,125	-	-	-	-	-	1,475,250
2042	-	-	-	9,496,625	-	-	-	-	-	
2043	-	-	-	-	-	-	-	-	-	
2044	-	-	-	-	-	-	-	-	-	
2045	-	-	-	-	-	-	-	-	-	
2046	-	-	-	-	-	-	-		-	
2047	-	-	-	-	-	-	-	-	-	
Program Totals	**$0**	**$469,113,814**	**$257,029,586**	**$842,940,639**	**$116,085,775**	**$2,502,776,338**	**$3,500,836,974**	**$1,520,861,230**	**$93,833,888**	**$1,773,461,110**

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, 2016.

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)	Total Net Tax-Supported Debt
2017	$5,378,648	$1,608,406	**$759,562,375**
2018	5,378,938	1,606,106	**743,941,141**
2019	5,381,888	1,613,156	**735,858,782**
2020	5,391,438	1,609,356	**728,431,878**
2021	5,381,938	1,609,956	**720,544,174**
2022	5,385,388	1,609,806	**705,351,815**
2023	5,383,513	1,610,906	**711,584,602**
2024	5,382,138	1,611,938	**705,305,854**
2025	5,383,275	1,608,238	**689,763,083**
2026	5,379,738	1,612,013	**692,415,417**
2027	5,378,925	1,609,788	**680,661,720**
2028	5,380,525	1,610,681	**397,778,539**
2029	5,387,675	1,609,081	**396,481,178**
2030	5,382,525	1,606,081	**374,559,056**
2031	5,384,950	1,611,469	**353,370,115**
2032	5,379,325	1,604,869	**322,569,253**
2033	5,386,756	1,608,894	**312,268,565**
2034	5,387,800	1,608,519	**290,294,821**
2035	5,382,306	1,607,788	**281,942,993**
2036	3,915,900	235,125	**161,977,616**
2037	423,325	-	**142,966,794**
2038	-	-	**140,747,711**
2039	-	-	**138,437,831**
2040	-	-	**22,135,875**
2041	-	-	**15,340,375**
2042	-	-	**9,496,625**
2043	-	-	**-**
2044	-	-	**-**
2045	-	-	**-**
2046	-	-	**-**
2047	-	-	**-**
Program Totals	**$106,616,911**	**$30,812,175**	**$11,233,787,648**

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, 2016.

Table A-6

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

Fiscal Year (ending June 30th)	Principal	Interest	Total
2017	$391,104,492	$368,457,883	$759,562,375
2018	391,187,318	352,753,823	743,941,141
2019	401,953,682	333,905,100	735,858,782
2020	413,022,936	315,408,943	728,431,878
2021	425,455,400	295,088,774	720,544,174
2022	430,589,054	274,762,761	705,351,815
2023	458,867,900	252,716,162	711,584,062
2024	476,011,000	229,294,854	705,305,854
2025	485,059,400	204,703,683	689,763,083
2026	513,479,250	178,936,167	692,415,417
2027	529,308,300	151,353,420	680,661,720
2028	275,506,000	122,272,539	397,778,539
2029	288,409,150	108,072,028	396,481,178
2030	280,937,100	93,621,956	374,559,056
2031	274,170,600	79,199,515	353,370,115
2032	257,148,600	65,420,653	322,569,253
2033	259,603,500	52,665,065	312,268,565
2034	250,726,350	39,568,471	290,294,821
2035	255,885,000	26,057,993	281,942,993
2036	145,785,000	16,192,616	161,977,616
2037	131,230,000	11,736,794	142,966,794
2038	132,725,000	8,022,711	140,747,711
2039	134,110,000	4,327,831	138,437,831
2040	20,405,000	1,730,875	22,135,875
2041	14,480,000	860,375	15,340,375
2042	9,265,000	231,625	9,496,625
2043	-	-	-
2044	-	-	-
2045	-	-	-
2046	-	-	-
2047	-	-	-
Totals	**$7,646,425,032**	**$3,587,362,617**	**$11,233,787,648**

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, 2016.

Table A-7[1]

Annual Debt Service Requirements for Lottery Bonds Outstanding

Fiscal Year (ending June 30th)	$33,920,000 2006 Series A Connect Oregon, North Bend Airport	$120,505,000 2007 Series A ODOT Multi-Modal, South Metro, OUS Def. Maint.	$440,345,000 2009 Series A Portland Light Rail Project, Connect Oregon II, Oregon Street Car Project, Hillsboro Parking Project, OUS Deferred Maintenance	$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 Mountain Community College, Mt. Hood Community College, Clatsop	$9,2454,000 2010 Series B Manufactured Home Dwelling Park, Low-Income Housing, Energy Efficiency & Sustainable Technology Loan Program	$129,250,000 2011 Series A DAS - Port of Tillamook, DAS - Lane Transit District, Community Colleges & Workforse Development Dept., Connect Oregon III, Oregon University	$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)	$2,750,000 2012 Series C DAS, Oregon University System, and Water Resources
2017	1,687,050	7,596,200	22,592,125	2,170,000	2,203,950	191,846	3,324,250	1,121,550	1,142,654	933,300	11,254,550	922,765
2018	-	-	22,587,800	2,170,750	2,399,900	-	3,324,250	1,121,550	1,142,654	1,408,300	11,259,650	451,453
2019	-	-	22,591,550	2,172,000	2,398,500	-	3,324,250	11,806,550	1,142,654	1,854,550	5,606,300	-
2020	-	-	-	2,173,500	2,397,650	-	3,324,250	13,009,500	1,142,654	1,856,750	1,888,500	-
2021	-	-	-	-	2,397,500	-	3,324,250	745,500	13,412,654	1,857,500	1,885,500	-
2022	-	-	-	-	2,396,000	-	3,324,250	-	14,169,522	1,855,750	1,890,300	-
2023	-	-	-	-	146,150	-	5,289,250	-	-	1,856,500	1,892,500	-
2024	-	-	-	-	146,150	-	5,286,088	-	-	1,854,500	1,890,750	-
2025	-	-	-	-	146,150	-	5,287,675	-	-	1,854,750	1,890,000	-
2026	-	-	-	-	146,150	-	6,478,488	-	-	1,857,000	-	-
2027	-	-	-	-	146,150	-	4,444,913	-	-	1,856,000	-	-
2028	-	-	-	-	146,150	-	11,984,863	-	-	1,856,750	-	-
2029	-	-	-	-	146,150	-	2,254,500	-	-	1,854,000	-	-
2030	-	-	-	-	3,301,150	-	26,444,500	-	-	1,857,750	-	-
2031	-	-	-	-	-	-	19,829,525	-	-	1,857,500	-	-
2032	-	-	-	-	-	-	-	-	-	1,853,250	-	-
2033	-	-	-	-	-	-	-	-	-	-	-	-
2034	-	-	-	-	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-	-	-	-	-
2036	-	-	-	-	-	-	-	-	-	-	-	-
2037	-	-	-	-	-	-	-	-	-	-	-	-
2038	-	-	-	-	-	-	-	-	-	-	-	-
2039	-	-	-	-	-	-	-	-	-	-	-	-
2040	-	-	-	-	-	-	-	-	-	-	-	-
Totals	**1,687,050**	**7,596,200**	**67,771,475**	**8,686,250**	**18,517,700**	**191,846**	**107,245,300**	**27,804,650**	**32,152,790**	**28,324,150**	**39,458,050**	**1,374,218**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Lottery debt issued through June 30, 2016.

Table A-7[1] (Continued)

Annual Debt Service Requirements for Lottery Bonds Outstanding

Fiscal Year (ending June 30th)	$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)	$105,635,000 2014 Series C Advance Refunding - Refunding Various Series (2006 Series A, 2007 Series A, 2009 Series A)	$77,805,000 2015 Series A DAS, Connect Oregon, ODOT, OWRD	$38,945,000 2015 Series B Taxable DAS, OBDD, ODOE, OHCSD	$117,995,000 2015 Series C Advance Refunding - 2007 Series C, 2008 Series A, 2009 Series A, 2009 Series D, 2010 Series A, 2011 Series A	$164,230,000 2015 Series D Advance Refunding - 2007 Series C, 2008 Series A, 2009 Series A, 2009 Series D, 2010 Series A, 2011 Series A	$22,710,000 2015 Series E Advance Refunding - 2007 Series C, 2008 Series A, 2009 Series A, 2009 Series D, 2010 Series A, 2011 Series A	$17,000,000 2015 Series F Advance Refunding - 2007 Series C, 2008 Series A, 2009 Series A, 2009 Series D, 2010 Series A, 2011 Series A	Total Outstanding Debt Service Requirements
2017	5,885,544	6,762,504	10,616,256	805,100	4,418,250	5,224,250	3,890,250	5,446,878	9,033,500	8,211,500	1,135,500	859,750	117,429,521
2018	5,885,544	6,758,725	10,618,365	1,365,100	12,218,250	5,224,250	3,890,250	5,448,083	9,033,750	8,211,500	1,135,500	859,750	116,515,373
2019	5,885,544	6,761,118	2,120,833	2,473,900	11,113,250	5,224,250	3,890,250	5,446,051	9,035,750	8,211,500	1,135,500	859,750	113,054,049
2020	7,875,544	4,768,452	2,126,231	2,473,500	11,109,000	5,224,250	3,890,250	5,444,203	9,039,000	28,911,500	1,135,500	859,750	108,649,983
2021	12,644,744	-	2,126,455	2,471,600	11,112,250	5,224,250	3,890,250	5,448,974	9,038,000	28,906,500	3,195,500	859,750	108,541,176
2022	12,646,944	-	2,127,080	2,468,950	11,726,750	29,464,250	3,890,250	5,444,048	9,032,500	6,090,000	3,197,500	859,750	110,583,843
2023	12,646,194	-	2,126,120	2,471,450	11,721,000	29,467,250	3,890,250	5,446,256	21,027,250	6,090,000	3,194,250	2,969,750	110,234,169
2024	12,644,694	-	2,125,160	2,473,050	11,723,500	29,464,500	4,150,250	5,185,251	21,026,750	6,090,000	3,190,750	2,974,250	110,225,642
2025	12,644,444	-	2,124,885	2,466,750	11,727,750	29,468,250	9,337,250	-	21,025,250	6,090,000	3,196,750	2,968,250	110,228,154
2026	12,644,444	-	-	2,475,250	10,892,500	-	9,334,250	-	23,860,750	34,350,000	3,196,500	2,972,000	108,207,331
2027	12,643,694	-	-	2,478,000	10,888,500	-	9,337,750	-	15,974,250	34,347,000	3,195,000	2,974,750	98,286,006
2028	12,646,194	-	-	-	-	-	9,336,750	-	3,937,500	34,348,500	3,197,000	2,971,250	80,424,956
2029	12,643,850	-	-	-	-	-	9,335,750	-	-	34,350,750	3,192,000	2,971,500	66,748,500
2030	12,645,650	-	-	-	-	-	9,334,000	-	-	-	-	-	53,583,050
2031	12,646,400	-	-	-	-	-	9,335,750	-	-	-	-	-	43,669,175
2032	12,645,900	-	-	-	-	-	9,335,000	-	-	-	-	-	23,834,150
2033	12,642,900	-	-	-	-	-	9,336,000	-	-	-	-	-	21,978,900
2034	-	-	-	-	-	-	9,332,750	-	-	-	-	-	9,332,750
2035	-	-	-	-	-	-	9,334,500	-	-	-	-	-	9,334,500
2036	-	-	-	-	-	-	-	-	-	-	-	-	-
2037	-	-	-	-	-	-	-	-	-	-	-	-	-
2038	-	-	-	-	-	-	-	-	-	-	-	-	-
2039	-	-	-	-	-	-	-	-	-	-	-	-	-
2040	-	-	-	-	-	-	-			-	-	-	-
Totals	**189,918,225**	**25,050,799**	**36,111,385**	**24,422,650**	**118,651,000**	**143,985,500**	**134,071,750**	**43,309,743**	**161,064,250**	**244,208,750**	**33,297,250**	**25,960,250**	**$ 1,520,861,230**

Note: May not foot due to rounding

[1] Includes annual fiscal year debt service requirements on all Lottery debt issued through June 30, 2016.

Table A-8

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

Fiscal Year (ending June 30th)	Principal	Interest	Total
2017	$67,170,000	$50,259,521	$117,429,521
2018	68,590,000	47,925,373	116,515,373
2019	67,580,000	45,474,049	113,054,049
2020	65,910,000	42,739,983	108,649,983
2021	68,615,000	39,926,176	108,541,176
2022	73,780,000	36,803,843	110,583,843
2023	76,840,000	33,394,169	110,234,169
2024	80,510,000	29,715,642	110,225,642
2025	84,375,000	25,853,154	110,228,154
2026	86,535,000	21,672,331	110,207,331
2027	80,940,000	17,346,006	98,286,006
2028	67,130,000	13,294,956	80,424,956
2029	56,825,000	9,923,500	66,748,500
2030	46,400,000	7,183,050	53,583,050
2031	38,855,000	4,814,175	43,669,175
2032	21,005,000	2,829,150	23,834,150
2033	20,200,000	1,778,900	21,978,900
2034	8,465,000	867,750	9,332,750
2035	8,890,000	444,500	9,334,500
2036	-	-	-
Total	**$1,088,615,000**	**$432,246,230**	**$1,520,861,230**

Note: May not foot due to rounding.

[1] Includes annual fiscal year debt service requirements on all Lottery revenue debt issued through June 30, 2016.

Table A-9

State Guaranteed Debt Service for School Districts

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

Fiscal Year 2016

District Type	District	FY15-16 OSBG Annual P&I DS	FY15-16 POB Annual P&I DS	FY 15-16 Total Annual P&I DS	*FY15-16 Net State Aid	FY15-16 % Total DS /Net State Aid
School	Tillamook Cty SD 101 (Nestucca Valley)	763,350	187,990	951,340	45,409	2095.1%
School	Tillamook Cty SD 56 (Neah-Kah-Nie)	1,174,832		1,174,832	73,603	1596.2%
School	Clatsop Cty SD 10 (Seaside)		759,424	759,424	133,992	566.8%
School	Deschutes Cty SD 6 (Sisters)	1,876,063	770,144	2,646,207	1,957,281	135.2%
School	Multnomah Cty SD 51J (Riverdale)	1,371,974	374,453	1,746,427	2,387,817	73.1%
School	Lincoln Cty Unified SD	5,808,475	4,153,886	9,962,361	17,191,797	57.9%
School	Jackson Cty SD 5 (Ashland)	5,725,313		5,725,313	10,073,238	56.8%
School	Lane Cty SD 68 (McKenzie)	698,600		698,600	1,298,968	53.8%
School	Multnomah Cty SD 1J (Portland)	47,322,441	42,712,723	90,035,164	199,479,434	45.1%
School	Lane Cty SD 97J (Siuslaw)	1,523,731	794,823	2,318,554	5,256,424	44.1%
School	Washington Cty SD 88J (Sherwood)	11,490,858	1,103,567	12,594,425	28,906,649	43.6%
School	Yamhill Cty SD 29J (Newberg)	9,166,250	3,037,566	12,203,816	29,369,707	41.6%
School	Douglas Cty SD 12 (Glide)	802,850	263,609	1,066,459	2,752,666	38.7%
School	Clackamas Cty SD 3J (W.Linn-Wilsonville)	13,783,733	3,356,107	17,139,840	44,867,207	38.2%
School	Benton Cty SD 509J (Corvallis)	9,294,750	2,009,093	11,303,843	30,799,203	36.7%
School	Benton Cty SD 17J (Philomath)	2,874,063	495,998	3,370,061	10,021,453	33.6%
School	Lane Cty SD 4J (Eugene)	21,372,225	4,268,396	25,640,621	78,630,889	32.6%
School	Deschutes Cty SD 2J (Redmond)	11,183,738	2,583,214	13,766,951	42,455,005	32.4%
School	Clatsop Cty SD 1 (Astoria)	1,981,200	1,519,212	3,500,412	10,939,435	32.0%
School	Clackamas Cty SD 46 (Oregon Trail)	7,735,379		7,735,379	24,334,722	31.8%
School	Clackamas Cty SD 86 (Canby)	6,013,901	3,117,516	9,131,417	29,271,838	31.2%
School	Clackamas Cty SD 115 (Gladstone)	3,012,378	1,450,971	4,463,348	14,560,738	30.7%
School	Lane Cty SD 40 (Creswell)	2,125,094	350,257	2,475,351	8,196,704	30.2%
School	Umatilla Cty SD 1 (Helix)	470,225		470,225	1,590,175	29.6%
School	Clackamas Cty SD 12 (North Clackamas)	19,167,470	9,864,523	29,031,993	98,266,807	29.5%
School	Yamhill Cty SD 8 (Dayton)	1,407,564	645,173	2,052,737	7,035,703	29.2%
School	Tillamook Cty SD 9 (Tillamook)	1,032,200	1,451,539	2,483,739	8,664,491	28.7%
School	Polk Cty SD 13J (Central)	4,853,541	1,748,548	6,602,089	23,361,477	28.3%
School	Umatilla Cty SD 8 (Hermiston)	8,696,207	1,781,514	10,477,721	38,116,130	27.5%
School	Curry Cty SD 17 (Brookings-Harbor)	1,237,307	880,226	2,117,533	7,928,353	26.7%
School	Lane Cty SD 28J (Fern Ridge)	1,790,700	567,830	2,358,530	9,013,592	26.2%
School	Washington Cty SD 48J (Beaverton)	45,048,367	13,785,018	58,833,385	229,988,463	25.6%
School	Multnomah Cty SD 3 (Parkrose)	4,112,550		4,112,550	16,565,299	24.8%
School	Lane Cty SD 45J3 (South Lane)	2,252,300	2,614,577	4,866,877	19,838,670	24.5%
School	Washington Cty SD 13 (Banks)	1,222,623	277,087	1,499,710	6,185,909	24.2%
School	Crook Cty School District	1,742,425	2,057,844	3,800,269	16,237,667	23.4%
School	Washington Cty SD 15 (Forest Grove)	7,721,413	2,260,451	9,981,863	42,865,125	23.3%
School	Columbia Cty SD 6J (Clatskanie)	680,090		680,090	2,944,413	23.1%
School	Columbia Cty SD 1J (Scappoose)	2,457,735		2,457,735	10,877,053	22.6%
School	Clackamas Cty SD 62 (Oregon City)	6,839,018	3,674,765	10,513,783	46,787,711	22.5%
School	Wasco Cty SD 29 (Dufur)	530,150		530,150	2,392,617	22.2%
School	Umatilla Cty SD 16R (Pendleton)	2,822,950	2,225,498	5,048,448	22,977,476	22.0%
School	Hood River Cty SD (Hood River)	3,822,325	2,101,862	5,924,187	27,082,676	21.9%
School	Douglas Cty SD 105 (Reedsport)	616,063	244,757	860,819	4,006,386	21.5%
School	Douglas Cty SD 116 (Winston-Dillard)	934,400	1,071,432	2,005,832	9,677,880	20.7%
School	Yamhill Cty SD 1 (Yamhill-Carlton)	608,113	816,372	1,424,485	6,880,438	20.7%
School	Union Cty SD 1 (La Grande)	1,903,642	841,974	2,745,615	13,365,537	20.5%
School	Umatilla Cty SD 61 (Stanfield)	488,675	305,688	794,363	3,909,178	20.3%
School	Marion Cty SD 29J (North Santiam)	1,411,025	1,358,100	2,769,125	13,676,604	20.2%
School	Deschutes Cty SD 1 (Bend-Lapine)	10,246,363	6,132,684	16,379,047	80,991,461	20.2%
School	Gilliam Cty SD 25J (Condon)	207,500		207,500	1,029,036	20.2%
School	Marion Cty SD 45 (St Paul)	480,360		480,360	2,383,690	20.2%
School	Linn Cty SD 8J (Greater Albany)	7,932,500	3,665,133	11,597,633	58,814,923	19.7%
School	Yamhill Cty SD 4J (Amity)	561,556	572,215	1,133,771	5,997,060	18.9%
School	Lane Cty SD 1 (Pleasant Hill)	1,142,107		1,142,107	6,055,552	18.9%
School	Marion Cty SD 24J (Salem Keizer)	39,164,809	17,041,695	56,206,504	301,058,236	18.7%
School	Lane Cty SD 79 (Marcola)	325,515		325,515	1,754,341	18.6%
School	Yamhill Cty SD 40 (McMinnville)	5,881,056	2,432,539	8,313,596	45,752,252	18.2%
School	Harney Cty SD 3 (Burns)	209,338	898,825	1,108,163	6,171,005	18.0%
School	Curry Cty SD 1 (Central Curry)	344,150		344,150	1,919,441	17.9%
School	Jackson Cty SD 549C (Medford)	11,248,531	3,356,415	14,604,946	81,682,187	17.9%
School	Jackson Cty SD 4 (Phoenix-Talent)	1,724,962	1,188,176	2,913,139	16,344,210	17.8%
School	Linn Cty SD 55 (Sweet Home)	1,368,941	1,484,269	2,853,210	16,098,430	17.7%
School	Morrow Cty SD 1	1,906,138	626,778	2,532,916	14,681,286	17.3%
School	Multnomah Cty SD 7 (Reynolds)	8,407,344	6,990,489	15,397,833	90,595,767	17.0%

Table A-9 (Continued)

State Guaranteed Debt Service for School Districts

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

Fiscal Year 2016

District Type	District	FY15-16 OSBG Annual P&I DS	FY15-16 POB Annual P&I DS	FY 15-16 Total Annual P&I DS	*FY15-16 Net State Aid	FY15-16 % Total DS /Net State Aid
School	Marion Cty SD 4J (Silver Falls)	3,515,900	1,408,163	4,924,063	29,264,067	16.8%
School	Umatilla Cty SD 5R (Echo)	242,125	145,718	387,843	2,347,206	16.5%
School	Clackamas Cty SD 108 (Estacada)	2,030,425	942,507	2,972,932	18,089,257	16.4%
School	Marion Cty SD 5 (Cascade)	988,275	1,327,334	2,315,609	14,452,700	16.0%
School	Douglas Cty SD 130 (Sutherlin)	417,400	919,625	1,337,025	8,394,321	15.9%
School	Marion Cty SD 15 (North Marion)	1,257,542	1,036,174	2,293,716	14,682,503	15.6%
School	Josephine Cty SD (Three Rivers)	2,191,956	2,118,835	4,310,791	27,872,026	15.5%
School	Jefferson Cty SD 509J (Madras)	2,580,644	1,056,468	3,637,112	23,677,328	15.4%
School	Umatilla Cty SD 2 (Pilot Rock)	263,050	195,712	458,762	3,073,338	14.9%
School	Union Cty SD 11 (Imbler)	423,000		423,000	2,911,937	14.5%
School	Malheur Cty SD 8C (Ontario)	2,043,040	828,997	2,872,037	19,930,439	14.4%
School	Lane Cty SD 19 (Springfield)	5,332,108	4,668,464	10,000,572	69,928,904	14.3%
School	Wasco Cty SD 12 (The Dalles) Bonds	1,710,750	1,312,230	3,022,980	21,195,935	14.3%
School	Clatsop Cty SD 30 (Warrenton-Hammond)	414,000	346,048	760,048	5,392,757	14.1%
School	Clatsop Cty SD 4 (Knappa)	496,231		496,231	3,532,689	14.0%
School	Marion Cty SD 91 (Mt Angel)	778,688		778,688	5,562,906	14.0%
School	Multnomah Cty SD 10J (Gresham-Barlow)	6,036,438	5,141,480	11,177,918	80,270,120	13.9%
School	Clackamas Cty SD 7J (Lake Oswego)		3,514,738	3,514,738	25,498,702	13.8%
School	Washington Cty SD 1J (Hillsboro)	9,077,263	7,643,992	16,721,255	123,104,008	13.6%
School	Douglas Cty SD 4 (Roseburg)	2,064,022	2,959,708	5,023,731	37,014,030	13.6%
School	Lane Cty SD 52 (Bethel)	4,636,188		4,636,188	35,936,791	12.9%
School	Linn Cty SD 9 (Lebanon Community)	3,528,481		3,528,481	27,530,069	12.8%
School	Morrow Cty SD 2 (Ione)	267,000		267,000	2,134,819	12.5%
School	Jefferson Cty SD 4 (Culver)	681,500		681,500	5,468,136	12.5%
School	Columbia Cty SD 502 (St Helens)		2,180,999	2,180,999	18,236,638	12.0%
School	Jackson Cty SD 9 (Eagle Point)	3,230,375		3,230,375	27,260,927	11.8%
School	Washington Cty SD 23J (Tigard-Tualatin)	3,470,600	3,272,668	6,743,268	59,237,041	11.4%
School	Umatilla Cty SD 6 (Umatilla)	918,243	330,690	1,248,932	11,091,477	11.3%
School	Clackamas Cty SD 35 (Molalla River)		1,794,051	1,794,051	16,061,779	11.2%
School	Yamhill Cty SD 48J (Sheridan)	893,938		893,938	8,125,451	11.0%
School	Douglas Cty SD 19 (South Umpqua)		1,114,694	1,114,694	10,422,939	10.7%
School	Columbia Cty SD 13 (Rainier)		546,312	546,312	5,161,012	10.6%
School	Polk Cty SD 2 (Dallas)	2,310,610		2,310,610	22,200,204	10.4%
School	Marion Cty SD 1 (Gervais)		832,035	832,035	8,049,880	10.3%
School	Jackson Cty SD 6 (Central Point)	2,721,740		2,721,740	27,374,391	9.9%
School	Jackson Cty SD 35 (Rogue River)	547,100		547,100	5,906,903	9.3%
School	Polk Cty SD 57 (Falls City)		151,851	151,851	1,642,576	9.2%
School	Marion Cty SD 14J (Jefferson)		595,430	595,430	6,492,617	9.2%
School	Umatilla Cty USD 7 (Milton-Freewater)		1,152,163	1,152,163	13,583,862	8.5%
School	Washington Cty SD 511J (Gaston)		353,552	353,552	4,180,549	8.5%
School	Klamath Cty SD 1 (Klamath Falls)	1,712,088		1,712,088	21,349,434	8.0%
School	Marion Cty SD 103 (Woodburn)	3,814,700		3,814,700	50,518,569	7.6%
School	Columbia Cty SD 47J (Vernonia)	537,706		537,706	7,276,757	7.4%
School	Linn Cty SD 7J (Harrisburg)	439,650		439,650	5,957,475	7.4%
School	Yamhill Cty SD 30J (Willamina)	220,900	222,036	442,936	6,163,661	7.2%
School	Lane Cty SD 76 (Oakridge)	292,750		292,750	4,273,206	6.9%
School	Coos Cty SD 13 (North Bend)	1,104,394	823,660	1,928,055	29,464,511	6.5%
School	Umatilla Cty SD 29J (Athena-Weston)	276,925		276,925	4,260,612	6.5%
School	Grant Cty SD 3 (John Day)		314,290	314,290	5,166,674	6.1%
School	Multnomah Cty SD 28J (Centennial)	2,778,150		2,778,150	47,151,625	5.9%
School	Malheur Cty SD 61 (Adrian)	173,625		173,625	2,953,476	5.9%
School	Union Cty SD 5 (Union)		143,869	143,869	2,498,526	5.8%
School	Multnomah Cty SD 40 (David Douglas)	2,003,587	2,933,014	4,936,601	87,604,349	5.6%
School	Coos Cty SD 9 (Coos Bay)		1,045,948	1,045,948	18,742,649	5.6%
School	Coos Cty SD 8 (Coquille)	323,495		323,495	5,996,747	5.4%
School	Klamath Cty SD	1,956,675		1,956,675	43,403,866	4.5%
School	Baker Cty SD 5J (Baker)		708,185	708,185	17,100,155	4.1%
School	Coos Cty SD 41 (Myrtle Point)	185,886		185,886	4,605,022	4.0%
School	Benton Cty SD 1J (Monroe)		146,083	146,083	3,801,918	3.8%
School	Douglas Cty SD 34 (Elkton)	151,375		151,375	3,993,761	3.8%
School	Polk Cty SD 21 (Perrydale)	99,698		99,698	2,717,620	3.7%
School	Douglas Cty SD 77 (Glendale)	99,750		99,750	2,793,607	3.6%
School	Clackamas Cty SD 53 (Colton)	146,867		146,867	4,429,137	3.3%
School	Douglas Cty SD 1 (Oakland)	104,300		104,300	3,826,940	2.7%
School	Malheur Cty SD 84 (Vale) (UHD 3)	200,400		200,400	7,733,157	2.6%
School	Douglas Cty SD 22 (North Douglas)	59,750		59,750	2,646,490	2.3%
School	Linn Cty SD 129J (Santiam Canyon)		367,490	367,490	31,414,897	1.2%

***State Aid **includes** State School Fund Grant, plus Estimated Common School Fund Payments, and **excludes** Estimated Sate Managed Timber Payments

Table A-10

State Guaranteed Debt Service for School Districts
(Alpha List)
Fiscal Year 2016

District Type	District	FY15-16 OSBG Annual P&I DS	FY15-16 POB Annual P&I DS	FY 15-16 Total Annual P&I DS	*FY15-16 Net State Aid	FY15-16 % Total DS /Net State Aid
School	Baker Cty SD 5J (Baker)		708,185	708,185	17,100,155	4.1%
School	Benton Cty SD 17J (Philomath)	2,874,063	495,998	3,370,061	10,021,453	33.6%
School	Benton Cty SD 1J (Monroe)		146,083	146,083	3,801,918	3.8%
School	Benton Cty SD 509J (Corvallis)	9,294,750	2,009,093	11,303,843	30,799,203	36.7%
School	Clackamas Cty SD 108 (Estacada)	2,030,425	942,507	2,972,932	18,089,257	16.4%
School	Clackamas Cty SD 115 (Gladstone)	3,012,378	1,450,971	4,463,348	14,560,738	30.7%
School	Clackamas Cty SD 12 (North Clackamas)	19,167,470	9,864,523	29,031,993	98,266,807	29.5%
School	Clackamas Cty SD 35 (Molalla River)		1,794,051	1,794,051	16,061,779	11.2%
School	Clackamas Cty SD 3J (W.Linn-Wilsonville)	13,783,733	3,356,107	17,139,840	44,867,207	38.2%
School	Clackamas Cty SD 46 (Oregon Trail)	7,735,379		7,735,379	24,334,722	31.8%
School	Clackamas Cty SD 53 (Colton)	146,867		146,867	4,429,137	3.3%
School	Clackamas Cty SD 62 (Oregon City)	6,839,018	3,674,765	10,513,783	46,787,711	22.5%
School	Clackamas Cty SD 7J (Lake Oswego)		3,514,738	3,514,738	25,498,702	13.8%
School	Clackamas Cty SD 86 (Canby)	6,013,901	3,117,516	9,131,417	29,271,838	31.2%
School	Clatsop Cty SD 1 (Astoria)	1,981,200	1,519,212	3,500,412	10,939,435	32.0%
School	Clatsop Cty SD 10 (Seaside)		759,424	759,424	133,992	566.8%
School	Clatsop Cty SD 30 (Warrenton-Hammond)	414,000	346,048	760,048	5,392,757	14.1%
School	Clatsop Cty SD 4 (Knappa)	496,231		496,231	3,532,689	14.0%
School	Columbia Cty SD 13 (Rainier)		546,312	546,312	5,161,012	10.6%
School	Columbia Cty SD 1J (Scappoose)	2,457,735		2,457,735	10,877,053	22.6%
School	Columbia Cty SD 47J (Vernonia)	537,706		537,706	7,276,757	7.4%
School	Columbia Cty SD 502 (St Helens)		2,180,999	2,180,999	18,236,638	12.0%
School	Columbia Cty SD 6J (Clatskanie)	680,090		680,090	2,944,413	23.1%
School	Coos Cty SD 13 (North Bend)	1,104,394	823,660	1,928,055	29,464,511	6.5%
School	Coos Cty SD 41 (Myrtle Point)	185,886		185,886	4,605,022	4.0%
School	Coos Cty SD 8 (Coquille)	323,495		323,495	5,996,747	5.4%
School	Coos Cty SD 9 (Coos Bay)		1,045,948	1,045,948	18,742,649	5.6%
School	Crook Cty School District	1,742,425	2,057,844	3,800,269	16,237,667	23.4%
School	Curry Cty SD 1 (Central Curry)	344,150		344,150	1,919,441	17.9%
School	Curry Cty SD 17 (Brookings-Harbor)	1,237,307	880,226	2,117,533	7,928,353	26.7%
School	Deschutes Cty SD 1 (Bend-Lapine)	10,246,363	6,132,684	16,379,047	80,991,461	20.2%
School	Deschutes Cty SD 2J (Redmond)	11,183,738	2,583,214	13,766,951	42,455,005	32.4%
School	Deschutes Cty SD 6 (Sisters)	1,876,063	770,144	2,646,207	1,957,281	135.2%
School	Douglas Cty SD 1 (Oakland)	104,300		104,300	3,826,940	2.7%
School	Douglas Cty SD 105 (Reedsport)	616,063	244,757	860,819	4,006,386	21.5%
School	Douglas Cty SD 116 (Winston-Dillard)	934,400	1,071,432	2,005,832	9,677,880	20.7%
School	Douglas Cty SD 12 (Glide)	802,850	263,609	1,066,459	2,752,666	38.7%
School	Douglas Cty SD 130 (Sutherlin)	417,400	919,625	1,337,025	8,394,321	15.9%
School	Douglas Cty SD 19 (South Umpqua)		1,114,694	1,114,694	10,422,939	10.7%
School	Douglas Cty SD 22 (North Douglas)	59,750		59,750	2,646,490	2.3%
School	Douglas Cty SD 34 (Elkton)	151,375		151,375	3,993,761	3.8%
School	Douglas Cty SD 4 (Roseburg)	2,064,022	2,959,708	5,023,731	37,014,030	13.6%
School	Douglas Cty SD 77 (Glendale)	99,750		99,750	2,793,607	3.6%
School	Gilliam Cty SD 25J (Condon)	207,500		207,500	1,029,036	20.2%
School	Grant Cty SD 3 (John Day)		314,290	314,290	5,166,674	6.1%
School	Harney Cty SD 3 (Burns)	209,338	898,825	1,108,163	6,171,005	18.0%
School	Hood River Cty SD (Hood River)	3,822,325	2,101,862	5,924,187	27,082,676	21.9%
School	Jackson Cty SD 35 (Rogue River)	547,100		547,100	5,906,903	9.3%
School	Jackson Cty SD 4 (Phoenix-Talent)	1,724,962	1,188,176	2,913,139	16,344,210	17.8%
School	Jackson Cty SD 5 (Ashland)	5,725,313		5,725,313	10,073,238	56.8%
School	Jackson Cty SD 549C (Medford)	11,248,531	3,356,415	14,604,946	81,682,187	17.9%
School	Jackson Cty SD 6 (Central Point)	2,721,740		2,721,740	27,374,391	9.9%
School	Jackson Cty SD 9 (Eagle Point)	3,230,375		3,230,375	27,260,927	11.8%
School	Jefferson Cty SD 4 (Culver)	681,500		681,500	5,468,136	12.5%
School	Jefferson Cty SD 509J (Madras)	2,580,644	1,056,468	3,637,112	23,677,328	15.4%
School	Josephine Cty SD (Three Rivers)	2,191,956	2,118,835	4,310,791	27,872,026	15.5%
School	Klamath Cty SD	1,956,675		1,956,675	43,403,866	4.5%
School	Klamath Cty SD 1 (Klamath Falls)	1,712,088		1,712,088	21,349,434	8.0%
School	Lane Cty SD 1 (Pleasant Hill)	1,142,107		1,142,107	6,055,552	18.9%
School	Lane Cty SD 19 (Springfield)	5,332,108	4,668,464	10,000,572	69,928,904	14.3%
School	Lane Cty SD 28J (Fern Ridge)	1,790,700	567,830	2,358,530	9,013,592	26.2%
School	Lane Cty SD 40 (Creswell)	2,125,094	350,257	2,475,351	8,196,704	30.2%
School	Lane Cty SD 45J3 (South Lane)	2,252,300	2,614,577	4,866,877	19,838,670	24.5%
School	Lane Cty SD 4J (Eugene)	21,372,225	4,268,396	25,640,621	78,630,889	32.6%
School	Lane Cty SD 52 (Bethel)	4,636,188		4,636,188	35,936,791	12.9%

Table A-10 (Continued)

State Guaranteed Debt Service for School Districts
(Alpha List)
Fiscal Year 2016

District Type	District	FY15-16 OSBG Annual P&I DS	FY15-16 POB Annual P&I DS	FY 15-16 Total Annual P&I DS	*FY15-16 Net State Aid	FY15-16 % Total DS /Net State Aid
School	Lane Cty SD 68 (McKenzie)	698,600		698,600	1,298,968	53.8%
School	Lane Cty SD 76 (Oakridge)	292,750		292,750	4,273,206	6.9%
School	Lane Cty SD 79 (Marcola)	325,515		325,515	1,754,341	18.6%
School	Lane Cty SD 97J (Siuslaw)	1,523,731	794,823	2,318,554	5,256,424	44.1%
School	Lincoln Cty Unified SD	5,808,475	4,153,886	9,962,361	17,191,797	57.9%
School	Linn Cty SD 129J (Santiam Canyon)		367,490	367,490	31,414,897	1.2%
School	Linn Cty SD 55 (Sweet Home)	1,368,941	1,484,269	2,853,210	16,098,430	17.7%
School	Linn Cty SD 7J (Harrisburg)	439,650		439,650	5,957,475	7.4%
School	Linn Cty SD 8J (Greater Albany)	7,932,500	3,665,133	11,597,633	58,814,923	19.7%
School	Linn Cty SD 9 (Lebanon Community)	3,528,481		3,528,481	27,530,069	12.8%
School	Malheur Cty SD 61 (Adrian)	173,625		173,625	2,953,476	5.9%
School	Malheur Cty SD 84 (Vale) (UHD 3)	200,400		200,400	7,733,157	2.6%
School	Malheur Cty SD 8C (Ontario)	2,043,040	828,997	2,872,037	19,930,439	14.4%
School	Marion Cty SD 1 (Gervais)		832,035	832,035	8,049,880	10.3%
School	Marion Cty SD 103 (Woodburn)	3,814,700		3,814,700	50,518,569	7.6%
School	Marion Cty SD 14J (Jefferson)		595,430	595,430	6,492,617	9.2%
School	Marion Cty SD 15 (North Marion)	1,257,542	1,036,174	2,293,716	14,682,503	15.6%
School	Marion Cty SD 24J (Salem Keizer)	39,164,809	17,041,695	56,206,504	301,058,236	18.7%
School	Marion Cty SD 29J (North Santiam)	1,411,025	1,358,100	2,769,125	13,676,604	20.2%
School	Marion Cty SD 45 (St Paul)	480,360		480,360	2,383,690	20.2%
School	Marion Cty SD 4J (Silver Falls)	3,515,900	1,408,163	4,924,063	29,264,067	16.8%
School	Marion Cty SD 5 (Cascade)	988,275	1,327,334	2,315,609	14,452,700	16.0%
School	Marion Cty SD 91 (Mt Angel)	778,688		778,688	5,562,906	14.0%
School	Morrow Cty SD 1	1,906,138	626,778	2,532,916	14,681,286	17.3%
School	Morrow Cty SD 2 (Ione)	267,000		267,000	2,134,819	12.5%
School	Multnomah Cty SD 10J (Gresham-Barlow)	6,036,438	5,141,480	11,177,918	80,270,120	13.9%
School	Multnomah Cty SD 1J (Portland)	47,322,441	42,712,723	90,035,164	199,479,434	45.1%
School	Multnomah Cty SD 28J (Centennial)	2,778,150		2,778,150	47,151,625	5.9%
School	Multnomah Cty SD 3 (Parkrose)	4,112,550		4,112,550	16,565,299	24.8%
School	Multnomah Cty SD 40 (David Douglas)	2,003,587	2,933,014	4,936,601	87,604,349	5.6%
School	Multnomah Cty SD 51J (Riverdale)	1,371,974	374,453	1,746,427	2,387,817	73.1%
School	Multnomah Cty SD 7 (Reynolds)	8,407,344	6,990,489	15,397,833	90,595,767	17.0%
School	Polk Cty SD 13J (Central)	4,853,541	1,748,548	6,602,089	23,361,477	28.3%
School	Polk Cty SD 2 (Dallas)	2,310,610		2,310,610	22,200,204	10.4%
School	Polk Cty SD 21 (Perrydale)	99,698		99,698	2,717,620	3.7%
School	Polk Cty SD 57 (Falls City)		151,851	151,851	1,642,576	9.2%
School	Tillamook Cty SD 101 (Nestucca Valley)	763,350	187,990	951,340	45,409	2095.1%
School	Tillamook Cty SD 56 (Neah-Kah-Nie)	1,174,832		1,174,832	73,603	1596.2%
School	Tillamook Cty SD 9 (Tillamook)	1,032,200	1,451,539	2,483,739	8,664,491	28.7%
School	Umatilla Cty SD 1 (Helix)	470,225		470,225	1,590,175	29.6%
School	Umatilla Cty SD 16R (Pendleton)	2,822,950	2,225,498	5,048,448	22,977,476	22.0%
School	Umatilla Cty SD 2 (Pilot Rock)	263,050	195,712	458,762	3,073,338	14.9%
School	Umatilla Cty SD 29J (Athena-Weston)	276,925		276,925	4,260,612	6.5%
School	Umatilla Cty SD 5R (Echo)	242,125	145,718	387,843	2,347,206	16.5%
School	Umatilla Cty SD 6 (Umatilla)	918,243	330,690	1,248,932	11,091,477	11.3%
School	Umatilla Cty SD 61 (Stanfield)	488,675	305,688	794,363	3,909,178	20.3%
School	Umatilla Cty SD 8 (Hermiston)	8,696,207	1,781,514	10,477,721	38,116,130	27.5%
School	Umatilla Cty USD 7 (Milton-Freewater)		1,152,163	1,152,163	13,583,862	8.5%
School	Union Cty SD 1 (La Grande)	1,903,642	841,974	2,745,615	13,365,537	20.5%
School	Union Cty SD 11 (Imbler)	423,000		423,000	2,911,937	14.5%
School	Union Cty SD 5 (Union)		143,869	143,869	2,498,526	5.8%
School	Wasco Cty SD 12 (The Dalles) Bonds	1,710,750	1,312,230	3,022,980	21,195,935	14.3%
School	Wasco Cty SD 29 (Dufur)	530,150		530,150	2,392,617	22.2%
School	Washington Cty SD 13 (Banks)	1,222,623	277,087	1,499,710	6,185,909	24.2%
School	Washington Cty SD 15 (Forest Grove)	7,721,413	2,260,451	9,981,863	42,865,125	23.3%
School	Washington Cty SD 1J (Hillsboro)	9,077,263	7,643,992	16,721,255	123,104,008	13.6%
School	Washington Cty SD 23J (Tigard-Tualatin)	3,470,600	3,272,668	6,743,268	59,237,041	11.4%
School	Washington Cty SD 48J (Beaverton)	45,048,367	13,785,018	58,833,385	229,988,463	25.6%
School	Washington Cty SD 511J (Gaston)		353,552	353,552	4,180,549	8.5%
School	Washington Cty SD 88J (Sherwood)	11,490,858	1,103,567	12,594,425	28,906,649	43.6%
School	Yamhill Cty SD 1 (Yamhill-Carlton)	608,113	816,372	1,424,485	6,880,438	20.7%
School	Yamhill Cty SD 29J (Newberg)	9,166,250	3,037,566	12,203,816	29,369,707	41.6%
School	Yamhill Cty SD 30J (Willamina)	220,900	222,036	442,936	6,163,661	7.2%
School	Yamhill Cty SD 40 (McMinnville)	5,881,056	2,432,539	8,313,596	45,752,252	18.2%
School	Yamhill Cty SD 48J (Sheridan)	893,938		893,938	8,125,451	11.0%
School	Yamhill Cty SD 4J (Amity)	561,556	572,215	1,133,771	5,997,060	18.9%
School	Yamhill Cty SD 8 (Dayton)	1,407,564	645,173	2,052,737	7,035,703	29.2%

*State Aid **includes** State School Fund Grant, plus Estimated Common School Fund Payments, and **excludes** Estimated Sate Managed Timber Payments

Table A-11

State Guaranteed Debt Service for Community Colleges

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

Fiscal Year 2016

District Type	District	FY15-16 OSBG Annual P&I DS	FY15-16 POB Annual P&I DS	FY 15-16 Total Annual P&I DS	*FY15-16 Net State Aid	FY15-16 % Total DS /Net State Aid
Community College	Oregon Coast Community College	1,745,575	175,893	1,921,468	1,811,413	106.1%
Community College	Clatsop Community College	948,387	540,097	1,488,485	2,312,062	64.4%
Community College	Tillamook Bay Community College	716,238	126,537	842,775	1,320,154	63.8%
Community College	Blue Mountain Community College	1,606,848	824,332	2,431,180	5,353,946	45.4%
Community College	Chemeketa Community College	9,214,644	3,904,960	13,119,604	31,628,645	41.5%
Community College	Central Oregon Community College	2,944,950	813,201	3,758,151	9,248,757	40.6%
Community College	Columbia Gorge Community College (Treaty-Oak AED)	1,421,325	243,561	1,664,886	4,310,988	38.6%
Community College	Lane Community College	7,070,775	5,540,998	12,611,773	33,552,640	37.6%
Community College	Rogue Community College	1,952,625	1,560,843	3,513,468	10,001,552	35.1%
Community College	Linn-Benton Community College	3,762,188	2,332,701	6,094,889	19,397,726	31.4%
Community College	Clackamas Community College	1,207,070	2,359,995	3,567,065	14,052,613	25.4%
Community College	Southwestern Oregon Community College		1,042,591	1,042,591	7,221,996	14.4%
Community College	Mt Hood Community College		3,508,040	3,508,040	27,569,861	12.7%
Community College	Portland Community College		8,611,252	8,611,252	83,050,353	10.4%
Community College	Treasure Valley Community College		755,474	755,474	7,350,328	10.3%
Community College	Umpqua Community College		948,169	948,169	10,216,233	9.3%

***State Aid **includes** State School Fund Grant, plus Estimated Common School Fund Payments, and **excludes** Estimated Sate Managed Timber Payments

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. While there are no GO State Highway Bonds outstanding for this purpose, the 2015 Legislature authorized the sale of up to $35.475 million in bonds through this program for the 2015-17 biennium.

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 $300.3 million as of June 30, 2016.

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 publically-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 $1.21 billion as of June 30, 2016. 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 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). Two such revenue bonds have been reviewed and approved by OST to date. It is anticipated that the State will continue to issue XI-F(1) bonds for legislatively authorized projects at the newly independent universities given the lower borrowing costs afforded the universities by the State's higher credit ratings.

Higher Education Facilities and Community College Bonds – Article XI-G.[1] 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, 2016 the principal amount outstanding for Community College XI-G bonds was $167.1 million and $527.7 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.

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

[1] 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.

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.[1] 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 $36.7 million as of June 30, 2016.

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. While there were no bonds outstanding under this program as of June 30, 2016, the 2015 Legislature did authorize the sale of up to $30.52 million this biennium for this purpose.

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 $50.8 million as of June 30, 2016.

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. In the past few years, the Department has written-off several large loans to private parties that were deemed non-collectible; greatly depleting SELP's loan reserves. Recent cash flow analysis shows that the State will need to make cash infusions starting in FY 2020 and extending through FY 2034 of at least $15.3 million in order for the Department to meet its 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. In FY 2016, the Legislature appropriated $6.8 million from the General Fund to cover the loan payments on these energy upgrades – this represents 37% of the overall debt service for the program. There were $194.0 million in

[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.

outstanding Article XI-J bonds as of June 30, 2016, of which 37% is considered General Fund-supported debt for purposes of this report.

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 $97.9 million of June 30, 2016.

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 $70.8 million as of June 30, 2016.

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 $22.0 million as of June 30, 2016.

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 68 percent of the bond debt service is paid by non-General Fund resources

leaving 32 percent of the debt service to be paid with General Fund resources. Principal amount outstanding was $1.77 billion as of June 30, 2016.

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.

While the State has not yet issued bonds for this program, the 2015 Legislature authorized the sale of up to $126.21 million for this purpose in the second year of the current biennium. In addition, the Legislature adopted SB 447, which authorizes the establishment of the Office of School Facilities within the Oregon Department of Education to administer the new bond and matching grant program, with the goal of increasing local school district investment in their capital construction and school facilities.

As currently designed, any school district whose voters approve a local general obligation bond measure for school construction projects is eligible to compete for a State matching grant, which is currently capped at $8 million per district. Districts with high numbers of disadvantaged students and low assessed value will be placed on a priority list, which gives them a better chance of receiving a State matching grant upon achieving voter approval of their local bond match. Other school districts will be awarded matching grants on a first-in-time basis - districts that submit applications first will receive State matching grants until XI-P bond funds are depleted. Given the estimated $7.6 billion in statewide deferred school capital and maintenance costs, it is anticipated that there will be strong statewide demand for this bond program.

State Facilities – 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, 2016, the State has sold twenty-six 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 $92.4 million in interest costs on present value savings over the life of these bonds. As of June 30, 2016 principal outstanding for Article XI-Q bonds totaled $1.23 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 $885.8 million as of June 30, 2016.

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.[1] 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 were 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. To date, $450 million of this amount has been issued for the JTA program, with the balance of the JTA bonding expected to occur in FY 2017.

The total principal amount outstanding for highway user tax revenue bonds was $2.26 billion as of June 30, 2016.

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

[1] 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.

and 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 $56.5 million as of June 30, 2016.

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, 2016, Lottery Bond principal amount outstanding was $1.09 billion.

Forest Development Revenue Bonds – ORS 530.140. The State Forestry Department is authorized by the provisions of ORS 530.140 to 530.160 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.

Energy Revenue Bonds – ORS 470.610. The Oregon Department of Energy is authorized by provisions of ORS 470.610 to sell revenue bonds of the State of Oregon to fund loans made through the energy efficiency and sustainable technology (EEAST) loan program. No bonds have been issued or are outstanding 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 $1.94 billion as of June 30, 2016.

Industrial Development Revenue Bonds – ORS Chapter 285B. The Oregon Business Development Commission (OBDC) 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 $309.5 million as of June 30, 2016.

Housing Development Revenue Bonds – ORS 456.692. The Oregon Housing and Community Services Department (OHCSD) is authorized pursuant to ORS 456.692 to issue conduit revenue bonds through the State Treasurer for its Housing Development Program. 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 a single development that is 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 $304.0 million as of June 30, 2016.

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. Each bond issue finances a single loan that is 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. To date, no debt has been issued for this program.

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, 2016 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 sales 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" 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[1] 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 $92.4 million in interest costs to date on a present value savings. Principal amount outstanding for remaining COP debt was $331.1 million as of June 30, 2016.

[1] 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.