

# RatingsDirect®

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## Oregon; Appropriations; General Obligation

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# Oregon; Appropriations; General Obligation

## Credit Profile

US\$243.53 mil tax-exempt GO bnds (State Projects) ser 2017A due 05/01/2042		
<i>Long Term Rating</i>	AA+/Stable	New
US\$107.23 mil GO bnds (Seismic Projects) ser 2017C due 06/01/2037		
<i>Long Term Rating</i>	AA+/Stable	New
US\$62.795 mil GO rfdg bnds (Alternate Energy Projects) ser 2017E due 04/01/2031		
<i>Long Term Rating</i>	AA+/Stable	New
US\$40.285 mil taxable GO bnds (State Projects) ser 2017B due 05/01/2047		
<i>Long Term Rating</i>	AA+/Stable	New
US\$25.735 mil GO bnds (Seismic Projects) ser 2017D due 06/01/2037		
<i>Long Term Rating</i>	AA+/Stable	New
US\$23.475 mil taxable GO rfdg bnds (State Projects) ser 2017G due 05/01/2023		
<i>Long Term Rating</i>	AA+/Stable	New
US\$19.67 mil taxable GO rfdg bnds (Alternate Energy Projects) ser 2017F due 04/01/2024		
<i>Long Term Rating</i>	AA+/Stable	New
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed

## Rationale

S&P Global Ratings assigned its 'AA+' long-term rating and stable outlook to the State of Oregon's:

- Series 2017A tax-exempt Article XI-Q state projects general obligation (GO) bonds;
- Series 2017B federally taxable Article XI-Q state projects GO bonds;
- Series 2017C tax-exempt Article XI-M seismic projects GO bonds;
- Series 2017D tax-exempt Article XI-N seismic projects GO bonds;
- Series 2017E tax-exempt Article XI-J alternate energy projects GO refunding bonds;
- Series 2017F federally taxable Article XI-J alternate energy projects GO refunding bonds; and
- Series 2017G federally taxable Article XI-Q state projects GO refunding bonds.

In addition, S&P Global Ratings affirmed its 'AA+' rating on Oregon's GO debt and its 'AA' rating on the state's appropriation-backed debt outstanding. The outlook is stable.

The rating reflects our view of the state's:

- Demonstrated willingness to make revenue and expenditure adjustments to correct structural imbalances when they arise;
- Constitutional and statutory mechanisms to build rainy-day funds and currently strong budget reserve levels;
- Strong financial policies and practices, including institutionalized quarterly reviews of financial performance and economic forecasts to guide budget assumptions; and
- Relatively good pension-funded ratio and other postemployment benefits that represent a low risk, in our opinion.

Partly offsetting these strengths are what we consider:

- Oregon's propensity for revenue volatility given general fund dependence on personal income taxes (PIT); and
- An active citizen initiative process that can restrict budgetary flexibility, in particular the state's constitutional "kicker" provision, which generates rebates for taxpayers if PIT revenue growth exceeds state forecasts by 2%.

The series 2017 bonds are general obligations of the state and are secured by its full faith and credit and taxing power.

The GO bonds are being issued pursuant to various articles of the state constitution, which allows Oregon to issue GO bonds for various purposes.

According to Oregon's Office of Economic Analysis (OEA), which forecasts state revenues on a quarterly basis, the most recent December 2016 revenue forecast reflects combined general fund and lottery revenue of \$19.3 billion for the current biennium, which is 0.6% higher than original budget estimates and a strong 12.1% compared to the previous biennium. The majority of forecasted state general fund revenue in the current biennium (87%) comes from PIT, which have posted strong growth thanks to an improving labor market and wage gains. Actual PIT collections for the first quarter of fiscal 2017, were 3% above the previous forecast.

OEA's December 2016 forecast projects continued economic growth in the next biennium but at a slower rate.

According to the baseline forecast, continued favorable economic trends will yield almost \$1.5 billion of new net general fund revenue in the 2017-2019 biennium, or 8.3% higher than the previous biennium, to total \$19.5 billion. Projected personal income tax revenue is 10.8% higher than the previous biennium before estimated kicker refunds and incorporates forecasted real personal income growth of 5.8% and 5.7% in 2018 and 2019, respectively, which we find reasonable although slightly above IHS Global Insight Inc. forecasts of 5.5% and 5.6%, respectively. OEA forecasts continued relatively strong annual growth in employment compared to the nation but at a slowing rate of 2.4% in 2017, 2.2% in 2018, and 1.5% in 2019, which incorporates a bill passed in the state's 2016 "short" legislative session that authorized a phased-in increase to the minimum wage on a tiered basis for Portland and for rural areas. IHS Global Insight also projects above-average employment growth with a slowing trend although at slightly more conservative levels of 2.0%, 1.6%, and 1.5% in 2017, 2018, and 2019, respectively. Identified risks to the forecast include a national recession or global economic weakness, volatile financial markets, diminished housing affordability in the state that could dampen relatively strong historical population growth, shifts in federal funding and fiscal policy, and potential future voter initiatives.

Oregon's employment continues to grow faster than that of the nation, led by new jobs in the professional and business services and education and healthcare services sectors. Construction and professional and business services employment has also grown 7% and 6.3%, respectively, through October 2016 compared with a year earlier. Although state employment growth was broad-based across most sectors, IHS Global Insight projects total manufacturing employment in the state will remain flat in 2016 after; layoffs by Intel as well as declines in primary metal manufacturing associated with declines in energy prices and mining. OEA's December 2016 economic and revenue forecast also incorporates recent weakness in manufacturing employment, estimating a 1.1% decline in 2017 and projects 0.9% and 1.0% annual growth in 2018 and 2019, given the strong dollar and economic slowdown in China, a major export destination market. The state's unemployment rate has improved to 5.1% based on preliminary figures in November 2016 compared with a year earlier, although it continues to remain higher than the national rate of 5.6%.

Despite continued forecasted revenue growth for the next biennium, estimated spending growth (assuming current service levels with projected growth factors such as inflation, labor contract changes, and caseload changes) outpaces revenue to create an estimated \$1.7 billion-\$1.8 billion budgetary gap over the next two years. In particular, general fund expenditures for health care at current service levels with no additional changes are estimated to grow by a significant \$1 billion, or about 30% more than the current biennium. Although the state has stabilized overall health care cost growth in its budget through its coordinated care model, general fund costs in the next biennium will grow as federal matching rates decline for both traditional and expanded health care coverage under the Affordable Care Act and one-time balances used in the current biennium are depleted. Higher pension contributions as well as a voter initiative to improve high school dropout rates also contribute to the budgetary gap. In December 2016, the governor released a \$20.6 billion proposed executive budget for the combined general and lottery fund in the 2017-19 biennium. The proposal would cover estimated growth at current service levels in education spending, which comprises about half of the budget. The governor's proposal also includes about \$900 million of new revenue from a reinstated insurer assessment and increase in hospital tax as well as increased cigarette and liquor taxes and fees. The executive budget recommends expenditure reductions for existing programs to cover the remainder of the projected budgetary gap. In January 2017, a legislative recommended budget proposed \$20.3 billion combined general fund and lottery budget, primarily by limiting health and education spending growth with no new proposed revenue measures. In addition to approving the budget, the next legislature which convenes on Feb. 1, will likely reprise discussions on transportation funding needs in the state.

Although we have cited the kicker provision as a potential impediment to Oregon's ability to accumulate strong reserve levels, the state has still managed to increase its effective budgetary reserves, including ending general fund balances, since fiscal 2011. Based on the December 2016 The OEA forecast and with no additional budget changes, the state projects effective reserve balances in the education stability fund, rainy-day fund, and ending general fund balance at the close of fiscal 2017 could total about \$1 billion, or about 5.6% of two-years' combined lottery and general fund expenditures (or about 10.5% on an annualized basis relative to one year's expenditures), which we consider strong. The expected reserves and ending balances are the highest levels the state has accumulated in recent history and are up notably from fiscal 2011 when reserves represented about 0.5% of general fund expenditures. Furthermore, based on the continued economic and revenue growth, with no additional budgetary changes, the official forecast reflects a \$1.2 billion balance in the education stability fund and rainy-day fund by the end of the next 2017-2019 biennium.

Adjusted reserves forecasted for the fiscal 2015-2017 biennium consist of the following:

- A \$388 million ending balance in the state rainy-day fund;
- A \$383 million ending balance in the education stability fund;
- A \$245 million ending balance in the general fund; and
- A \$47 million ending balance in the lottery fund.

We view Oregon's debt burden as moderate to moderately high. The state's tax-supported debt in fiscal 2016 less debt supported by other pledged non-tax revenue, represents a moderate \$1,845 per capita and 3.4% of gross state product, in our opinion. We consider the tax burden moderately high relative to personal income at 4.2%. Tax-supported debt service also represents a moderately high 6.3% of governmental expenditures in fiscal 2016. Debt amortization is

average, in our view, with about 59% of principal outstanding amortized over 10 years as of June 30, 2016. We don't expect recent and pro forma debt to change the state's overall credit profile. The executive recommended budget for 2017-2019 includes a proposed \$969 million in additional GO bonds in the next two years to meet capital needs related to state facilities and IT systems, higher education and school facilities, and seismic rehabilitation of existing schools. The bonding proposal also includes \$10 million for initial testing to begin to address the Environmental Protection Agency (EPA) order for cleanup of the Portland Harbor Superfund site and determine allocation of the total \$1 billion estimated cost to meet EPA standards; state officials currently estimate the state's share of the total cost related to runoff from state highways is relatively small. We believe state debt ratios could increase to moderately high levels with additional GO proposed debt for the 2017-2019 biennium, but are not likely to materially impact the state's credit profile.

Lower investment returns and lower discount rate assumptions, led to a decline in the Oregon Public Employees Retirement System (OPERS) pension funded ratio of 80.5% in 2016. OPERS reported a minimal 1.6% money-weighted net return on investment at the end of June 2016, which will likely result in a lower state pension-funded ratio next year and higher future contributions. We estimate Oregon's share of the net pension liability for the OPERS in fiscal 2016 totaled almost \$3 billion, or 1.7% of personal income, which we consider extremely low.

Based on the analytic factors described in our criteria, on a four-point scale, in which '1.0' is the strongest, S&P Global Ratings assigned a composite score of '1.6' to the state.

## **Outlook**

The stable outlook reflects our view that Oregon's finances are poised to remain strong and currently good reserves mitigate potential future revenue cyclicity.

### **Upside scenario**

While not expected in the near-to-medium term, we could raise the rating if there were a lower propensity for revenue volatility due to the state's dependence on income taxes and financial markets as well as sustained improvement in demographic and income trends.

### **Downside scenario**

Downside credit risk would likely have economic origins and, in particular, could stem from a sustained downturn in the financial markets, a strong U.S. dollar, changes in trade policy, or weaker-than-anticipated economies of some of Oregon's international trading partners. Such developments, particularly if they struck when the state already owed taxpayers the kicker-related refund, could strain Oregon's budget alignment. In addition, while not currently delineated, significant changes in federal policy, such as health care funding that upend the state's structural budgetary balance could pressure the rating. Should the state rely on one-time sources and reduce reserves in a time of economic growth, we could lower the rating.

## **Governmental Framework**

Oregon Constitution requires a balanced biennial budget with significant flexibility, in our view, to raise revenues and reduce expenditures, subject to a majority vote of the legislature. In an attempt to discourage budget surpluses as an offset to the balanced-budget requirement, in 2000 voters approved the constitutional kicker provision, which requires Oregon to rebate income tax revenues that exceed original budget forecasts by 2%. In our view, the kicker provision complicates the state's ability to assemble large enough budget reserves to avert the occasional fiscal strain that is inevitable given Oregon's heavy reliance on income taxes, the revenues of which exhibit considerable volatility. In response to economic downturns and periods of revenue softness, the state turns to spending reductions and, as we have noted, the executive branch exercised its "allotment" authority to make across-the-board spending reductions outside of the legislative session to restore budgetary balance. In light of institutional impediments to building budget reserves, we believe the state's willingness to reduce previously budgeted spending when conditions warrant is beneficial to its credit quality.

Most state spending is determined through negotiations between and among the legislature and governor as part of the budget development process. The only major constitutional spending mandate consists of a requirement to set aside 15% of net lottery proceeds for parks and natural resource projects. Although the constitution requires the provision of kindergarten to grade 12 (K-12) education, the Oregon Supreme Court has not mandated a specific funding level. Instead it has ruled that the requirement to fund education should be evaluated in light of available resources. As with other U.S. states, during periods of relatively weaker revenue performance, and as an element of its budget-balancing strategy, Oregon has achieved expenditure savings by reducing financial support to local governments. The state has also demonstrated a willingness to increase revenues when it implemented an increase in personal income and corporate taxes as part of its budget-balancing actions before 2013.

The state constitution allows for the issuance of GO bonds secured by the state's full faith and credit, as well as lottery revenue bonds, which must be paid first from net lottery revenues. We understand that, aside from lottery revenue bonds, there is no direct prioritization of debt service under state law, but that statutes providing for the governor's allotment authority exempt debt service from across-the-board cuts. We believe that this provides indirect prioritization of debt service.

Oregon has historically been one of the most active initiative and referendum states, and voters have previously approved initiatives that have reduced revenue and spending autonomy. Measures 47 and 50 in the mid-1990s, which limited property taxes, mostly had local effects, but also indirectly affected state spending for education in that the state payments complemented property tax receipts for school district operating budgets under a per-pupil funding formula set by the legislature. But they also made permanent, through Measure 76, in November 2010, the 15% lottery set-aside for parks and natural resources. The state legislature can modify statutory initiatives before they go into effect, but not constitutional changes, which require a higher number of signatures to qualify for the ballot. In November 2016, voters passed a measure to reduce high school dropout rates, which would cost the state \$290 million in additional biennium spending if fully implemented, or about 1.5% of budget. This could create additional incremental budgetary pressure as the state is already projecting a budget gap in the next biennium; however, the

measure also allowed the legislature some flexibility to provide less than full funding if the OEA forecasts general fund revenue for the next biennium do not grow by more than \$1.5 billion. A measure requiring a tax increase for certain corporations to help fund education did not pass. Two other approved ballot measures devoted a portion of state lottery revenue for veterans services and up to \$22 million for deposit to an outdoor school education fund, although the estimated cost of the dedications represent a relatively minimal \$60 million per year (0.3% of biennium budget),

On a four-point scale, in which '1.0' is strongest and '4.0' is the weakest, we have assigned a score of '1.7' to Oregon's governmental framework.

## **Financial Management**

We view Oregon as having a strong track record of responding to downward revisions to forecast revenues through the executive branch's across-the-board "allotment" expenditure reduction authority and a generally structural approach to addressing budgetary imbalances. (However, the state has also swept unspent but previously appropriated funds as a part of its overall approach to eliminating budget deficits, particularly when they arise on a midbudget cycle basis.) The state legislature has met in special session when Oregon has substantially reduced its revenue forecasts and can convene an emergency board to modify the governor's allotment reductions when it believes across-the-board reductions may be disruptive to critical services. The state's political leadership has demonstrated a willingness to consider difficult fiscal adjustments, including both expenditure and revenue measures when necessary, to restore fiscal balance. Revenue projections are apolitical and are developed according to Oregon's independent revenue forecasts.

We consider the state's management practices "strong" under our FMA methodology. An FMA of strong indicates our view that practices are strong, well embedded, and likely sustainable. The state's OEA presents quarterly revenue forecasts covering the current and upcoming biennium. The state uses these forecasts, which are based on IHS Global Insight's forecasts, to set revenue parameters at biennial budget adoption and has a record of making budget adjustments within a given biennium when the forecast council materially changes its projections. Also guiding budgeting decisions are financial forecasts extending at least three years; the OEA's revenue forecast, which covers the current biennium and, depending on timing, two subsequent biennia; and a multiyear capital planning framework that identifies funding sources. The state has a formal investment policy, reports on holdings quarterly, and maintains a debt policy, the compliance of which it reports on annually. The state does not have a minimum reserve policy but has automatic statutory and constitutional mechanisms for capitalizing rainy-day funds.

On a four-point scale, in which '1.0' is the strongest and '4.0' is the weakest, we have assigned a score of '1.0' to Oregon's financial management.

## **Economy**

The state's population grew by a strong 1.6% in 2016 to total 4.09 million, ranking it the sixth fastest-growing state in nation. Most of the state's population growth is the result of in-migration, particularly of young high-skilled workers and older retirees. While Oregon's 2015 age dependency ratio, which measures the portion of the population that is

younger or older than working age, increased to 60.6 from 60.3 in the previous year, it improved relative to the nation's 60.7 ratio.

Since 2005, other components of the state's economy have also expanded considerably faster than the nation's as a whole. Real state GDP has grown at a compounded annual rate of 2.6% on average, compared with that of the nation, which has increased 1.2% per year since 2005. Employment growth of 3.3% was also relatively strong compared with the nation's 2.0% rate. On the other hand, personal income growth in Oregon has remained just under that of the nation, with per capita personal income continuing to represent about 90% of the nation.

Oregon's economy parallels that of the U.S. as a whole by many measures but is unusual in that its low electricity costs and proximity to Asian markets make it a center of high-tech manufacturing. Oregon's economy also relies to a greater extent on manufacturing employment than does the nation's (10.5% of employment versus 8.7% nationally). This translates into a more export-oriented economy than that of many other states, in particular exports to China, when coupled with Oregon's lumber industry. Weaker trends in the Chinese economy, changes in trade policy, and a strong U.S. dollar, could pressure Oregon's economic expansion in the future.

On a four-point scale, in which '1.0' is the strongest, we have assigned a score of '1.8' to Oregon's economy.

## **Budget Performance**

Beyond Oregon's reserves, the state's good budget management is a credit strength in our view. Formal revenue forecasts, informed by the state's scenario analyses as described above, are updated quarterly. The OEA also prepares an extended forecast, which enhances Oregon's long-term budget planning capacity.

Oregon weathered the previous recession and demonstrated good responsiveness in its budget management, but the contraction took a toll on the state's revenues and reserve levels.

We view the state's budget management options as offering some protection under a scenario of unanticipated economic softening. For instance, spending can be curtailed more when necessary via the executive branch's across-the-board "allotment" expenditure-reduction authority. The state's authority and demonstrated willingness to deploy the allotment reductions when fiscal conditions warrant are an important strengthening feature to Oregon's credit profile, in our view. The state's primary means to achieve budget balance have been structural reductions in state spending, including K-12 education. Although the legislature could do so, it has not used payment deferrals to local governments as a means of balancing its budget. Maintaining even low reserve levels required successive expenditure reductions in previous biennia, but to the same end, previously the state had, to a lesser degree, increased personal income and corporate taxes and taken advantage of federal grants and sweeps of other funds. Because of its constitutional kicker provision, the state must also monitor its upside revenue performance.

Although Oregon does not have a minimum reserve policy, the state constitution requires it to set aside 18% of net lottery revenues for its education stability fund, a form of rainy-day fund. That fund can be tapped and has been (such as in previous bienniums) under a provision that allows the state to draw on the fund with a three-fifths vote if the legislature finds that general fund revenues and balances in the ensuing biennium will be at least 3% below the current



biennium appropriations. The fund may also be drawn on if nonfarm employment shows a decline for two consecutive quarters in the past 12 months, or if general fund revenues have dropped at least 2% from the revenue forecast at the close of the legislative session. The amount in the fund cannot exceed 5% of general fund revenues in the previous biennium. By statute, the state also maintains a rainy-day fund, which it initially capitalized in fiscal 2007 by diverting a corporate tax rebate. The state can add to the rainy-day fund by as much as 1% of general fund appropriations for a biennium. This fund cannot exceed 7.5% of revenues collected in the previous biennium, and the state can, upon a three-fifths vote of the legislature, draw on the fund under the same provisions as the education stability fund. The state has shown a strong track record of building reserves during strong economic times.

Although the state is highly dependent on the PIT, which made up 86% of fiscal 2016 general fund revenues according to the fiscal 2016 state comprehensive annual financial report on a generally accepted accounting principles (GAAP) basis, it retains good liquidity, with the ability to borrow from its short-term fund (pooled short-term invested cash of the state and local governments in the state) within a given year. In addition to internal fund borrowing, the state regularly issues tax anticipation notes.

### **Fiscal 2016 audited financial statement results**

On an audited basis and according to GAAP, the state's total ending general fund balance at the close of fiscal 2016 improved further by \$317 million to \$1.6 billion, equal to 18% of expenditures, which we consider strong. Revenue growth also contributed to higher balances as PIT rose \$719 million year-over-year, or almost 11%, related to 2014 capital gains, while corporate income taxes increased almost \$87 million, or 16.8%. The portion of the fund balance designated as committed, unassigned, or assigned totaled almost \$1.1 billion, or 12% of audited general fund expenditures. Beginning in fiscal 2012, the state's rainy-day fund balance, at \$372 million as of fiscal 2016, is among Oregon's committed fund balance and represents a portion of the state's cash position on its balance sheet. The state's implementation of Governmental Accounting Standards Board (GASB) Rule 54 in 2012 moved certain funds that were previously treated as special revenue funds to the general fund pursuant to the new accounting rule. Most notably, this included Oregon's rainy-day fund.

On a four-point scale, in which '1.0' is the strongest, we have assigned a score of '2.0' to Oregon's budgetary performance.

## **Debt And Liabilities**

Overall, as of June 30, 2016, the state had about \$7.4 billion of net tax-supported debt outstanding when including Oregon's highway users' (\$2.3 billion) and lottery revenue (\$1.1 billion) bonds. This is equal to 3.4% of state GDP, which we view as moderate, and 4.2% of total state personal income, which we view as moderately high. At \$1,845 per capita, debt is moderate, according to our criteria. Total tax-supported debt service as a percent of government spending in fiscal 2016 (including the funds from which debt service is paid) was moderately high in our view, at about 6.2%. When including pro forma debt and bonds issued to date in fiscal 2017, we estimate debt ratios remain moderate to moderately high.

Under the state's certificates of participation (COP) program, begun in 1989, approximately \$331 million of COPs remained outstanding as of June 30, 2016. The Department of Administrative Services manages all COP financings for

Oregon. This program is being phased out in favor of the state's ability to issue GO bonds for these projects pursuant to Article XI-Q of the state constitution.

Oregon's updated unfunded pension liability as of fiscal 2016 represents its proportionate share of the defined benefit pension plan of the OPERS and, while higher than fiscal 2015, is relatively small, in our opinion, at 1.7% of personal income. Oregon's fiscal 2016 unfunded pension liability totaled \$736 per capita up from \$271 per capita in fiscal 2015. We consider the three-year average pension-funded ratio still strong at 92%, although down from 96% as of fiscal 2015. The plan reported a decline in its fiduciary net assets-to-total liabilities funded ratio as of June 30, 2016, to 80.5%, which reflects a weak 1.6% money-weighted net investment return in fiscal 2016 and the lowering of the assumed discount rate to 7.50% from 7.75%. The lower assumed discount rate and weak recent market returns will depress future reported pension-funded ratios, all else being equal, and increase required contribution rates in future biennia, although a collar will limit the state's actual annual contribution rate increase to 3%-6%, depending on whether the funded ratio falls below certain thresholds. The prior year valuation had incorporated higher liability estimates as a result of a Supreme Court decision that overturned a significant feature of the state's 2013 pension reform legislation (Moro Decision), which have contributed to higher pension contribution costs in the 2017-2019 biennium.

Oregon's contributions to OPERS include an actuarially determined employer contribution and the member contribution rate, known as the 6% pick-up, which is set by statute. Oregon also makes payments on pension obligation bonds it previously issued in fiscal 2004 to bolster its asset position. Statutes require the calculation of an actuarially determined contribution based on market valuation, although a "collar" on upward or downward shifts in state contribution rates as a percent of payroll (as well as a lag between valuation and biennial legislative appropriations) works to limit the budgetary impact of fluctuations in required contributions. We calculate that total annual plan contributions for OPERS in fiscal 2014 through fiscal 2016 did not cover a levels equal to service cost and an interest cost component plus some amortization of the unfunded liability. Statutes require the collars to widen to allow larger annual increases in contribution rates if the employer's funded status falls below 70%. The state estimates that (all else being equal) at the assumed 7.5% discount rate, projected collared contribution growth will allow the system to maintain a minimum 70% funded ratio in the next few years. However, based on state projections, assumed investment returns under 7% would likely result in a widening of collared contribution growth rates and higher relative annual pension costs in future budgets.

We believe, on the whole, management factors and actuarial inputs do not significantly encumber or improve our view of the state's overall pension funding discipline. OPERS assumes a closed, layered amortization period of 20 years; however, the relatively short and favorable closed amortization schedule is offset by its use of the "level percentage of pay" method that assumes rising future payroll and results in escalating pension contributions over time. The plan's five-year average rate of return as of fiscal 2016 is close to the 7.5% assumed rate due to the plan's actual 1.2% annual return as of June 2016. The system does not project an asset depletion date under GASB 67, which we believe is reasonable. The plan's ratio of active members to beneficiaries equals 1.23, which is only moderately below the median national ratio of 1.50 and we believe it is not a weakness because the plan maintains a still-good pension funded ratio as of fiscal 2016, in our opinion. We believe the system incorporates experience trends and industry standards in its experience study and we favorably view its practice to produce an experience study every two years.

Many of the state's former employees are eligible for health care benefits through OPERS. For these retirees, the state offers two types of benefits that entail an explicit subsidy. The state's portion of the unfunded actuarial accrued liability (UAAL) as of Dec. 31, 2015, equals \$70 million on a combined basis. The state's Public Employees Benefits Board (PEBB) also allows employees not in the OPERS insurance plan to purchase pre-Medicare insurance benefits at a rate subsidized by the state. This translates to an estimated UAAL of \$105 million as of July 1, 2013. The total OPEB UAAL, therefore, for PEBB and the explicit liabilities was \$175 million, or what we consider a low \$43 per capita. The state is funding its annual required contribution to amortize the explicit subsidy over a closed 10-year period, but management reports that the state does not plan to set aside a reserve for the implicit subsidy.

On a four-point scale, in which '1.0' is strongest, we have assigned a score of '1.7' to Oregon's debt and liability profile.

Ratings Detail (As Of January 24, 2017)		
Oregon rfdg certs of part (tax-exempt) (Dept of Admin Svcs)		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon GO bnds (Hgr Ed) ser 2016A due 08/01/2041		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO bnds (Hgr Ed) ser 2016B due 08/01/2022		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO VRDB (Veterans Welfare) 1985		
<i>Long Term Rating</i>	AA+/A-1+/Stable	Affirmed
Oregon GO VRDB (Veterans Welfare) 1986		
<i>Long Term Rating</i>	AA+/A-1+	Affirmed
Oregon GO VRDB (Veterans Welfare) 1987		
<i>Long Term Rating</i>	AA+/A-1+	Affirmed
Oregon GO VRDB (Veterans Welfare) 1988B		
<i>Long Term Rating</i>	AA+/A-1+/Stable	Affirmed
Oregon APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon APPROP (AGM)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed

Ratings Detail (As Of January 24, 2017) (cont.)		
Oregon GO		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Oregon GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
<b>Oregon GO (MBIA of Illinois)</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
<b>Oregon Oregon GO (Vet Welfare)</b>		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
<b>Oregon (Dept of Admin Svcs) certs of part ser 2007B</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Oregon (Dept of Admin Svcs) certs of part 2003B</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Oregon (Dept of Admin Svcs) certs of part 2004B&amp;C</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Oregon (Oregon Dept of Admin Svcs) certs of part &amp; rfdg certs of part</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Oregon Dept of Admin Svcs, Oregon</b>		
Oregon		
Oregon Dept of Admin Svcs (Oregon) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon Dept of Admin Svcs (Oregon) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon Dept of Admin Svcs (Oregon) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon Dept of Admin Svcs (Oregon) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Oregon Dept of Admin Svcs (Oregon) GO bnds		
<i>Long Term Rating</i>	AA+/Stable	Affirmed

## Ratings Detail (As Of January 24, 2017) (cont.)

**Oregon Dept of Admin Svcs certs of part**

<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
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**Oregon (Dept of Admin Svcs) certs of part ser 2003A**

<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
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**Oregon (Dept of Admin Svcs) certs of part ser 2004A**

<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
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**Oregon Dept of Energy, Oregon**

Oregon

Oregon Dept of Energy (Oregon) GO

<i>Long Term Rating</i>	AA+/Stable	Affirmed
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**Oregon Dept of Envir Qlty, Oregon**

Oregon

Oregon Dept of Envir Qlty (Oregon) GO

<i>Long Term Rating</i>	AA+/Stable	Affirmed
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**Oregon Dept of Veterans Affairs, Oregon**

Oregon

Oregon Dept of Veterans Affairs (Oregon) GO bnds (Oregon) (Veterans Welfare Bonds Series 95 Variable Rate) ser 2015 P

<i>Long Term Rating</i>	AA+/A-1+/Stable	Affirmed
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Oregon Dept of Veterans Affairs (Oregon) GO (Veterans Welfare)

<i>Long Term Rating</i>	AA+/Stable	Affirmed
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**Oregon St Brd of Hgr Ed, Oregon**

Oregon

Oregon St Brd of Hgr Ed (Oregon) GO bnds

<i>Long Term Rating</i>	AA+/Stable	Affirmed
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Many issues are enhanced by bond insurance.

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