

# RatingsDirect®

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## State of Delaware; Appropriations; General Obligation

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# State of Delaware; Appropriations; General Obligation

Credit Profile		
US\$234.2 mil GO bnds ser 2017A dtd 12/14/2017 due 12/01/2037		
<i>Long Term Rating</i>	AAA/Stable	New
US\$110.0 mil GO Bonds ser 2017C dtd 12/14/2017 due 12/01/2037		
<i>Long Term Rating</i>	AAA/Stable	New
US\$15.8 mil GO bnds ser 2017B dtd 12/14/2017 due 12/01/2019		
<i>Long Term Rating</i>	AAA/Stable	New
<b>Delaware GO</b>		
<i>Long Term Rating</i>	AAA/Stable	Affirmed

## Rationale

S&P Global Ratings has assigned its 'AAA' rating, and stable outlook, to the State of Delaware's series 2017A general obligation (GO) bonds, series 2017B GO bonds (subject to the alternative minimum tax), and series 2017C GO refunding bonds. At the same time, S&P Global Ratings affirmed its 'AAA' rating, with a stable outlook, on Delaware's GO debt outstanding and its 'AA+' long-term rating, and stable outlook, on the state's appropriation debt outstanding.

The 2017 bonds are secured by the general obligation of the state and its full faith and credit pledge.

The rating reflects what we view as Delaware's:

- Strong financial and budget management;
- Relatively diverse economy, which continues to expand at a modest pace and in line with national trends;
- Consistently strong general fund reserves and liquidity even during recessionary periods;
- Moderate overall debt burden, with what we consider strong debt management policies in place; and
- Well-funded pension system and progress in recent years in addressing other postemployment benefits (OPEB) liabilities, which are significant.

Delaware has historically exhibited what we view as prudent fiscal management and in years past has made difficult decisions to restore budget balance when necessary while managing surpluses to retain structural budget balance. Most recently, the state's fiscal 2018 enacted operating budget totaling \$4.2 billion (including grants in aid and dedicated cash to the bond and capital improvement acts) closed a \$386 million shortfall as of March 2017 (9.2% of expenditures) through a majority of recurring measures. The budget included several revenue increases including corporate franchise taxes (\$116 million), reality transfer taxes (\$44.7 million), and cigarette taxes (\$11.6 million). Spending reductions included lowered funding to the educational sustainment fund (\$11 million) and the elimination of vacation positions across state agencies (\$5 million). The budget fully funds the rainy-day fund at \$231.6 million, or a good 5.5% of operating expenditures.

The latest Delaware Economic and Financial Advisory Council (DEFAC) estimates as of September 2017 increased estimated revenues for fiscal years 2018 and 2019. The forecast for fiscal 2018 was raised by \$242.5 million, or a considerable 5.7% of the \$4.2 billion of revenue expected for the fiscal year. Similarly, fiscal 2019 estimates were raised by \$278.4 million or a large 6.5% of the estimated \$4.3 billion of revenue. The most significant changes to the revenues in both fiscal 2018 and fiscal 2019 were increases to net franchise taxes and realty transfer taxes, which were both updated in the state's enacted fiscal 2018 operating budget. In DEFAC's September meeting, net franchise tax estimates increased \$122.1 million (12.2%) for fiscal 2018 and \$126.9 million (12.5%) for fiscal 2019. In addition, realty transfer tax estimates were raised by \$62.6 million (73%) in fiscal 2018 and \$72.9 million in fiscal 2019 (81%). Effective Aug. 1, 2017, the state increased its levy on realty transfer taxes to 2.5% from 1.5%. DEFAC meets six times a year to prepare revenue estimates for the state budget; the next meeting is scheduled for December.

The state faces a significant OPEB liability that has grown despite reform efforts in recent years. These efforts included pre-funding the obligation in 2002 and 2003 with lump sum payments and establishing an OPEB trust in 2007--the funded ratio for this trust is currently very low, in our opinion, at 4.1% under Governmental Accounting Standards Board (GASB) Statement No. 74 reporting. Additional reforms to curb the state's liability were also introduced in 2011 and 2013. As it stands, the state's net OPEB liability (NOL) as of the June 30, 2017 under GASB Statement No. 74 reporting is \$8.3 billion, which we consider significant. This amount is much higher than the \$1.8 billion aggregate net pension liability of the state's pension plans (which are well funded in our opinion). The NOL in 2017 of \$8.3 billion is 16% higher compared with the prior-year total of \$7.2 billion under previous GASB reporting standards due in part to a decrease in the discount rate to 3.58% from 3.75% after incorporating a 20-year 'AA' muni bond rate rather than the previous blended rate. On a per-capita basis, we estimate the unfunded liability to be \$8,671 and rank it among the highest in the nation. We understand that there are no immediate plans to introduce additional OPEB reforms, although the state successfully implemented reform and made various changes to benefits in previous years to actively manage the estimated liability. In our opinion, the state's ability to effectively manage its OPEB liability will be an important credit factor over time.

Delaware's pension liabilities are average, in our view, with what we consider a good three-year average funded ratio of 84.5% across the five pension plans for which the state reports liability. In addition, the state's unfunded liability compared with income and population is moderate in our view. We consider the funding discipline of Delaware's pension plans to be adequate. State contributions to four of its five pension plans are determined on an actuarial basis with contributions historically meeting 100%, which we view as positive. The closed state police plan is funded on a pay-as-you-go basis given the only minimal plan assets, although actual contributions met actuarially determined levels in fiscal 2016. We also note that aggregate annual plan contributions for the pension system were under our calculation of amounts necessary for the plans to cover a portion of the amortization in unfunded liability as well as certain cost drivers of the annual change in the liability. We believe this could also weaken the strength of the state's pension liability profile time.

Economic performance has been historically stable, in our view; however, economic growth is forecast to be somewhat limited in the next five years. According to IHS Markit, employment and GDP growth are forecasted below national levels. From 2017 to 2020, employment growth is expected to be 0.83% for the state, which is under 1.18% for the U.S. The state's GDP growth is expected to increase 1.9% compared to the national growth rate of 2.3%.

Delaware's labor force returned to its pre-recessionary peak at the end of 2014, ahead of IHS Markit's projections, due primarily to strong growth in professional and financial activities jobs. The state is somewhat concentrated in financial services jobs with 4.7% more jobs in this sector compared the national average, which we believes exposes the state to some risk. However, we understand there has been diversification within this sector. The state's unemployment has been consistently below the nation's rate for the past 20 years, at 4.4% for 2016 compared with 4.9% for the nation. However, as of October 2017, the state's unemployment rate is 4.8% compared with 4.1% for the nation.

S&P Global Ratings considers Delaware's debt ratios moderate. The state has focused its attention on reducing debt over time with clearly defined debt affordability parameters and a commitment to cash-funding capital projects, especially when the economy is performing well. We believe that this and rapid amortization of principal outstanding will contribute to a stable debt profile.

In terms of recent litigation, 30 states have presented claims that allege Delaware improperly accepted certain abandoned property that should have been escheated to those other states. In an attempt to avoid multiple, duplicative complaints, the state filed a Bill of Complaint in the U.S. Supreme Court on May 27, 2016. The complaint seeks to resolve the open district court matters and avoid future, similar litigation from other states. However, on June 9, 2016, 21 states filed suit against Delaware in the U.S. Supreme Court for the very same issue, with an estimated \$162 million asserted against Delaware. The state reports that any resolution is likely to be at least a year away. As of Nov. 13, 2017, the state's potential aggregate litigation exposure (across multiple claims) could exceed \$246.2 million. S&P Global Ratings will continue to monitor the lawsuit to gauge the potential impact to the state. In our opinion, abandoned property revenues are a significant revenue source for the state--in fiscal 2018 they are expected to be the state's third-largest revenue source (behind personal income taxes and franchise taxes). Estimated net abandoned property revenues of \$444 million in fiscal 2018 represent 10.5% of total general fund revenues. The state reports that the fiscal 2018 operating budget rewrites Delaware's unclaimed property laws to align them with other states.

S&P Global Ratings considers Delaware's management practices strong under its financial management assessment (FMA) methodology. An FMA of strong indicates that practices are strong, well-embedded, and likely sustainable. The state's financial management highlights include regular general fund revenue and expenditure reports, multi-year revenue forecasting, a formal general fund reserve policy, and formal statutory debt affordability issuance guidelines. Delaware has implemented various debt management policies to decrease its debt burden and limit bond issuance. These measures have reduced the state's debt level despite the broad role it maintains in funding capital requirements for education, transportation, and corrections.

Delaware's bonds are eligible to be rated above the sovereign because we believe the state can maintain better credit characteristics than the U.S. in a stress scenario. Under our criteria "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions" (published Nov. 19, 2013, on RatingsDirect), U.S. states are considered to have moderate sensitivity to country risk. State-derived revenues are the sole source of security on the bonds, and the institutional framework in the U.S. is predictable with significant state autonomy and flexibility.

Based on the analytic factors we evaluate for states, on a scale of '1.0' (strongest) to '4.0' (weakest), we have assigned a composite score of '1.6' to Delaware. We have notched up to 'AAA' as allowed as per our state rating methodology criteria because in our view the state's primary credit profile is still strong and we believe remains in line with

comparable 'AAA' rated peers.

## **Outlook**

The stable outlook reflects what we view as Delaware's strong fiscal management that has allowed the state to proactively manage its budgets and has been key to the state's credit stability. We believe this will be an important consideration over our two-year outlook horizon, especially given a somewhat sluggish economy that we believe faces challenges that could pressure future budgets. In addition, strong management will be essential to control the state's OPEB liabilities, which are significant in our view. The outlook also reflects the state's healthy reserve and liquidity position, which has been relatively stable over a range of economic cycles. We believe Delaware's strong reserve position adds cushion to the state's budgetary position and note that no funds have been withdrawn since its inception in 1980, which we believe is evident of strong fiscal management. Although not likely, if the state's reserve position were to decline precipitously due to revenue softening or the outcome of current litigation surrounding the abandoned property program--which is a large revenue source for the state--this could put downward pressure on the rating. Downward pressure could also arise from decreased budgetary flexibility stemming from soft revenues, high fixed costs related to elevated OPEB liabilities, or significant changes in federal policy including health care funding. In addition, we could take action if we believe weakened long-term economic trends exposes the state to challenges uncharacteristic of the rating level.

## **Government Framework**

In our opinion, Delaware has a strong government framework. Due to well-established policies, the state has maintained what we view as a solid financial position, especially during recessionary periods, including the recent recession. The Delaware Constitution requires that the governor submit a balanced budget to the general assembly annually. Although there is no legal requirement to maintain a balanced budget during the year, DEFAC's frequent revenue and expenditures updates allow for timely adjustments. State statute provides the executive branch with the authority to make necessary adjustments after providing for the payment of principal and interest on Delaware's bonds, notes, or revenue notes. The state cannot carry forward operating deficits.

A constitutionally required annual operating appropriation limit of 98% of estimated budgetary general fund revenues and the previous year's unencumbered budgetary general fund balance support the government framework. The state has what we regard as considerable revenue-raising ability; it can increase income tax and license fees as well as implement the imposition or the levy of new taxes or license fees with the concurrence of three-fifths of all members of each house.

Public and higher education, and health and social services are the state's leading expenditures, accounting for 69% in the fiscal 2018 budget. Delaware currently pays 60%-80% of public school capital improvements on approval by the state board of education, with the school district paying the difference. As debt service becomes due, the school districts are required to pay debt service into the state's budgetary general fund from their tax receipts; then the state pays the total debt service from its budgetary general fund appropriations.

If Delaware fails to make sufficient provisions to pay principal and interest on any of the bonds, or if sufficient funds are unavailable at the time an amount is payable, state law requires the state treasurer to set apart a sum to pay principal and interest from the first revenues thereafter received by the state. Delaware does not permit for initiatives or referendums at the state or local level, and is the only state that does not require popular approval of constitutional amendments.

On a four-point scale, where '1.0' is the strongest and '4.0' is the weakest, S&P Global Ratings has assigned an overall score of '1.4' to Delaware's governmental framework.

## **Financial Management**

Delaware's constitution, statutes, and internally developed policies guide the state's overall financial and budget management. Policy improvements have been made continuously and the state's track record of adhering to policies has been what we consider strong. S&P Global Ratings considers Delaware's management practices strong under its FMA methodology. An FMA of strong indicates practices are strong, well-embedded, and likely sustainable.

Key policies include:

- The regularly updated DEFAC general revenue and budget forecasts for current and future fiscal years, along with an annual DEFAC report that outlines current and subsequent fiscal-year performance and estimates;
- A constitutionally required annual operating appropriation limit of 98% of estimated budgetary general fund revenues and the previous year's unencumbered budgetary general fund balance;
- A constitutionally required general fund budget reserve account funded at 5% of budgetary general fund revenues to provide flexibility against any unexpected revenue declines;
- A cash management policy board that sets formal state investment policies and regularly monitors investments;
- Well-established debt management policies, including a three-part statutory debt affordability limit; and
- Multi-year revenue forecasts updated throughout the fiscal year with a less formal process for general operating expenditures.

Delaware maintains a traditional multi-year capital improvement program. The state fully outlines its annual capital requirements in the annual capital budget, but officials make internal cost estimates for capital projects they expect to span multiple years.

The three-part statutory debt affordability limit includes the following:

- New tax-supported debt authorizations in any one fiscal year cannot exceed 5% of estimated net budgetary general fund revenue for that fiscal year.
- No new tax-supported debt and no transportation authority debt can be issued if the total maximum annual debt service (MADS) on debt outstanding exceeds 15% of estimated budgetary general fund revenues and transportation trust fund revenues for the fiscal year succeeding the fiscal year in which such debt is issued.
- No new state GO debt can be issued if, in any fiscal year, the MADS on existing GO debt exceeds the estimated cash balances, including all reserves, for the fiscal year subsequent to the fiscal year in which the debt is issued.

## **Budget Management Framework**

An executive order mandates DEFAC to submit budgetary general fund and transportation trust fund revenue forecasts to the governor and the general assembly six times a fiscal year--in September, December, March, April, May, and June--for the current fiscal year and the succeeding two fiscal years. Delaware uses these forecasts in the state budget process to ensure compliance with constitutional spending limits and statutory debt limitations. The state has a strong track record of implementing adjustments as needed.

On a four-point scale, where '1.0' is the strongest and '4.0' is the weakest, S&P Global Ratings has assigned an overall score of '1.0' to Delaware's financial management.

## **Economy**

We believe Delaware's economy is relatively diverse following several decades of active economic development at the state level. Economic development initiatives have included targeted statutory and tax policy changes to encourage financial sector, business services, pharmaceutical, and biotech expansion, and have reduced the state's reliance on traditional manufacturing. Although Delaware lost several large manufacturing firms during the recession, many of the sites have been acquired and are undergoing redevelopment.

In our opinion, Delaware has significant competitive advantages compared with other states, including: its geographic proximity to New York City, Philadelphia, Baltimore, and Washington DC; its above-average share of highly skilled scientific and technical workers; a critical mass of chemical, pharmaceutical, and biomedical companies; modest but steady population growth; a low cost of living; and a favorable regulatory climate. That said, IHS Markit forecasts that the state's momentum will slow and average employment growth will be just 0.83% from 2017-2020. Furthermore, gross state product and real personal income will average gains of 1.9% and 4.3%, respectively, over this period.

State income levels remain in line with the national average. Delaware's economy has grown, albeit slowly, in 2017 with payrolls expanding 0.5% year-over-year in the third quarter of 2017. Solid growth in education and health services (3.0%), leisure and hospitality (5.0%), and finance (2.5%) have helped the state's employment growth stay positive during the year, according to IHS Markit, while declines in the business services (1.2%) and retail (1.9%) sectors suppressed growth. IHS Markit expects state payrolls to continue to expand slowly over the next several quarters with gains coming primarily from health services, hospitality services, and finance.

On a four-point scale, where '1.0' is the strongest and '4.0' is the weakest, S&P Global Ratings has assigned an overall score of '1.8' to the state's economic factors.

## **Budgetary Performance**

Delaware's tax and revenue structure is broad, in our opinion. The general fund relies on tax revenues from personal income and corporate income, as well as a corporate franchise tax; business and occupational gross receipts; a bank franchise tax; realty transfers; and cigarette taxes, among others. Additional significant general revenue streams

include abandoned property and lottery receipts. Delaware does not levy ad valorem taxes on real or personal property and does not impose a general sales or use tax. The budget reserve account has been a stabilizing factor to the state's overall financial profile and liquidity. The budget reserve account, or rainy-day fund, is funded at 5% of estimated budgetary general fund revenues. Officials can appropriate this money only with the approval of a three-fifths vote of the members of each house of the general assembly, and they can only use the money to fund an unexpected budgetary deficit or to provide funds required due to the enactment of legislation reducing revenue. Officials have not withdrawn any funds from the budgetary reserve account since its inception in 1980. In addition, Delaware has the authority to inter-fund borrow from special funds, which are available to meet the state's liquidity needs; Delaware has not needed to issue external revenue anticipation notes for liquidity since fiscal 1977.

The state's fiscal 2018 enacted operating budget totals \$4.2 billion (including grants in aid and dedicated cash to the bond and capital improvement acts). The budget fully funds the rainy-day fund at \$231.6 million, or a good 5.5% of operating expenditures. This reserve balance is 4.7% higher than the \$221.1 million balance in fiscal 2017 and 7.9% higher than the \$214.7 balance in fiscal 2016. Public education, higher education, and health and social services represent 34.5%, 5.8%, and 28.7% of the base budget, respectively, and together represent 69.0% of it.

DEFAC estimates from Sept. 19, 2017, increased estimated general fund revenues for fiscal 2018 and fiscal 2019. The forecast for fiscal 2018 was raised by \$242.5 million, or a considerable 5.7% of the \$4.2 billion of revenue expected for the fiscal year. Similarly, fiscal 2019, estimates were raised by \$278.4 million or a large 6.5% of the estimated \$4.3 billion of revenue. The most significant changes to the revenues in both fiscal 2018 and fiscal 2019 were increases to net franchise taxes at \$122.1 million and \$126.9 million, respectively. Realty transfer tax revenues were also raised by \$62.6 million in fiscal 2018 and \$72.9 million in fiscal 2019.

DEFAC estimates indicate general fund revenues are growing on a year-over-year basis with fiscal 2019 revenues 1.2% higher than fiscal 2018, and fiscal 2018 revenues 5.6% higher than actual fiscal 2017 collections. The committee meets six times a year to prepare revenue estimates for the state budget, with its next meeting scheduled for December.

### **Fiscal 2016 audited results**

The fiscal 2016 (June 30) general fund decreased by \$329.7 million over the previous fiscal year bringing the ending unassigned general fund balance to \$390.4 million, or a strong 8% of general fund expenditures (on a generally accepted accounting principles basis). Total general fund revenues increased by \$24 million (0.6%), primarily due to \$49 million of increases due to a combination of increased business taxes, other tax revenue and rentals, and sales and other revenue. These increases were offset by a decrease in personal income tax of \$27.9 million due to increased personal tax refunds. In terms of general fund expenditures, they increased by \$361.5 million, or 7.7% over the previous fiscal year. This was primarily due to increases in general government spending and education spending of \$255.1 million and \$90.7 million, respectively. The increase in expenditures relating to general government spending was in part due to increased expenditures and liability relating to the state's abandoned property program. Education spending increased as the result of additional salaries and benefits expended to serve a growing student population.

On a four-point scale, where '1.0' is the strongest and '4.0' is the weakest, S&P Global Ratings has assigned an overall score of '1.3' to Delaware's budgetary performance.



## **Debt And Liability Profile**

The state has focused its attention on reducing debt over time with clearly defined debt affordability parameters and a commitment to cash-funding capital projects, especially when the economy is performing well. We believe that this and rapid amortization of principal outstanding will contribute to a stable debt profile. We view total tax-supported debt, including GO and transportation bonds, as moderately high. Delaware issues debt for political subdivisions. It pays from 60%-80% of the cost of capital improvements for public school districts on approval of such costs; the school districts pay the remaining portions supported by local property taxes.

State-supported GO debt was almost \$1.4 billion as of June 30, 2016, excluding \$517 million, which is supported by the local school districts. Delaware's other major bonding program is associated with the Delaware Transportation Authority, which issues revenue bonds supported primarily by motor fuel taxes, motor vehicle fees, and turnpike tolls. Total tax-supported debt in fiscal 2016, including GO, transportation, and appropriation obligations, is moderately high relative to that of state peers, at \$2,487 per capita and 5.2% of personal income. We estimate total tax-supported debt service carrying charges, after excluding the local school district support, were a moderate 5.2% of governmental spending in fiscal 2016. Debt amortization is rapid, in our opinion, with about 66% of state supported debt scheduled to retire in the next 10 years.

The capital budget for fiscal 2018 totals \$590 million. The fiscal 2018 plan includes GO bond authorization of \$207 million and an authorization of \$318 million from the transportation trust fund. Statutes provide for public-private partnerships but the state has not historically pursued such financings. Currently, the Diamond State Port Corp., a public instrument of the state, is seeking public private partnership financing for port-related infrastructure. Delaware does not have any variable-rate debt outstanding, and it has not entered into any interest-rate swap agreements or related derivative transactions. The state's GO qualified zone academy bonds (series 2002, 2003, and 2004) were privately placed. The total amount outstanding is \$2.6 million, but this is not a concern given the state's strong liquidity position.

### **Pensions**

Compared with other state pension systems, Delaware has funded its pension system well, in our opinion. The Delaware Public Employees' Retirement System (DPERS) consists of nine separate pension funds, of which the state reports a liability for five. The state employees' pension plan, a multi-employer, cost-sharing plan, is the largest plan and represents 74.2% of the state's net pension liability. Delaware also reports liability for several single-employer plans: special, new state police, judiciary, and closed state police.

Delaware's unfunded pension liability represents its proportionate share of the state employees' plan and the unfunded liability for its four other single-employer plans for which the state reports a liability. We consider Delaware's three-year-average, pension-funded ratio across its five pension plans to be good at 84%.

The state lowered its long-term investment return assumption for DPERS's state employees' pension plan to 7.0% from 7.2% in fiscal 2017, which we view as conservative and note is below that of most other states. The plan has reduced its discount rate several times in recent years including a reduction to 7.2% from 7.5% in fiscal 2015. Notably, the discount rate stood at 8.0% in fiscal 2011. The lower assumed discount rate is expected to increase required employer

contribution rates in future fiscal years.

Contributions for the state employees', special, new state police, and judiciary plans are actuarially based and funding has been historically met at 100% of the actuarially determined contribution (ADC), which we view as a credit positive. However, the closed state police plan is financed on a pay-as-you-go basis. The plan, which was closed in 1980, has a 0.8% funded ratio that we consider weak, and an unfunded liability of \$393 million that we consider significant. DPERS's comprehensive annual financial report (CAFR) reports an ADC for the plan based on an entry age normal, open 20-year, level-dollar amortization method with 20 years remaining. Contributions were 100% in 2016 and about 90% in recent prior years.

We note that aggregate annual plan contributions across the five plans were under our calculation of amounts necessary for the plans to cover a portion of the amortization in unfunded liability as well as certain cost drivers of the annual change in the liability, which we believe could weaken the strength of the state's pension liability profile over time

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. DPERS's state employees plan assumes an open 20-year amortization and the "level percentage of pay" method, which assumes rising future payroll and results in escalating pension contributions over time. The plan reported an actual 4.8% five-year average rate of return in its fiscal 2017 CAFR, which is below its actuarial assumed rate of return of 7.0%. 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 1.38, which is slightly below the median national ratio of 1.50 and we believe it is not a weakness because the plan maintains a good pension-funded ratio, in our opinion. We believe the system incorporates experience trends and industry standards in its experience study and we view favorably its practice of producing an experience study every four years.

## **Other Postemployment Benefits**

The state faces a large OPEB liability that has grown despite active reform efforts in recent years. Delaware began pre-funding the obligation with lump sum payments and contributions based on a percentage of payroll in 2002 and 2003. It also established an OPEB trust in 2007. However, at this time we consider the funding for this trust to have limited assets; the funded ratio is a very low 4.1% as of June 30, 2017, under GASB 74 reporting. In 2011, the governor modified employee health insurance and pension plan programs to establish a fixed-cost share in health insurance programs (for both active employees and retirees) and increased the time to vest for retiree health care benefits. In 2013, the state participated in an employee group waiver plan that shifted the costs of pharmacy benefits to the Centers for Medicare and Medicaid Services.

Delaware has implemented updated OPEB reporting standards under GASB Statement No.74 and reports a collective NOL of \$8.3 billion as of June 30, 2017, which we consider significant. On a per-capita basis, we estimate the NOL to be \$8,671 and rank it among the highest in the nation. The state's liability has grown 16% in fiscal 2017 compared with the \$7.15 billion unfunded liability reported for fiscal 2016 under previous GASB reporting standards. This growth is due in part to a decrease in the discount rate to 3.58% from 3.75% after incorporating a 20-year 'AA' muni bond rate

rather than the previous blended rate. The discount rate was previously lowered to 3.75% from 4.25% in fiscal 2016; the reported unfunded liability rose 19% from 2015 to 2016. In addition, Delaware's contributions to its OPEB plan have historically been below the annual required contribution (ARC), which we expect will lead to further increases in the state's NOL in the future. Delaware's reported contributions of \$237.4 million in fiscal 2017 represent 43.8% of the ARC, lower than the 50%, 55%, and 48% in past fiscal years 2016, 2015, and 2014, respectively.

We understand that there are no immediate plans to introduce additional OPEB reforms, although the state successfully implemented reform and made various changes to benefits in previous years to actively manage the estimated liability.

On a four-point scale, where '1.0' is the strongest and '4.0' is the weakest, S&P Global Ratings has assigned an overall score of '2.6' to Delaware's debt and liability profile.

Ratings Detail (As Of November 27, 2017)		
Delaware GO bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
<b>Sustainable Energy Util, Inc., Delaware</b>		
State of Delaware, Delaware		
Sustainable Energy Utility, Inc. (Delaware) rev		
<i>Long Term Rating</i>	AA+/Stable	Affirmed

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