

## CREDIT OPINION

10 January 2020

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# Delaware (State of)

## Update to credit analysis

### Summary

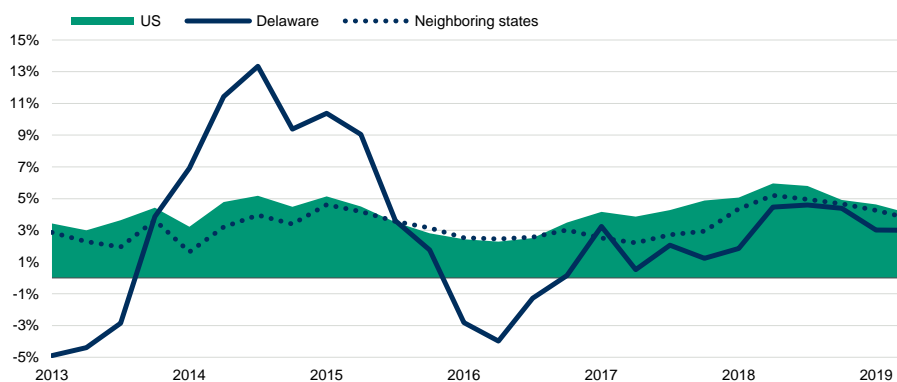
The [State of Delaware](#) (Aaa stable) maintains a strong credit position supported by healthy and stable finances, and strong management and governance. The state's well-established process for monitoring revenue and its statutory limits on annual spending growth are important tools that aid financial management. The state's growing reserves provide a cushion in the event of a revenue downturn, which could be more pronounced in Delaware given its high reliance on business taxes.

The state's economic profile is stable, though it lags the US on several growth measures. Delaware has seen less growth in recent years in its financial services sector, which has slowed the rise in state income relative to the nation. However, certain sectors of the economy have potential to expand and the state's lower business costs and cost of living could continue to attract residents to fill new positions.

Relative to highly rated states, Delaware's leverage is high and consists mostly of unfunded pensions and retiree healthcare liabilities. The high leverage largely stems from the state reporting direct and total responsibility for funding post-employment benefits of local school districts, which is not the case in all states. The state is exploring options for addressing retiree healthcare obligations, which could present it with an opportunity to reduce its overall leverage.

Exhibit 1

### Delaware's economic expansion continues, but has slowed relative to the nation Year-over-year growth in nominal quarterly GDP



Neighboring states are the District of Columbia, Maryland, New Jersey, Pennsylvania and Virginia.

Source: US Bureau of Economic Analysis

## Credit strengths

- » Stable budget reserve account backed by additional unencumbered reserves following strong operations in fiscal years 2018 and 2019
- » Very healthy liquidity and improved GAAP-basis fund balance
- » Strong financial management and governance indicated by frequent revenue forecasting and statutory limit on spending
- » Lower business costs and cost of living relative to neighboring states could continue to attract new residents as certain economic sectors have the potential to expand

## Credit challenges

- » Low industrial diversity among US states given economic concentration in financial services
- » Heavy dependence on business taxes and a sustained role as the preferred legal home of many publicly traded companies
- » Medicaid expenditures are steadily rising and consuming a growing share of the state's total revenue

## Rating outlook

The stable outlook is supported by the state's strong structural governance features, which will help preserve a sound position relative to peers through future economic cycles.

## Factors that could lead to an upgrade

Not applicable.

## Factors that could lead to a downgrade

- » Growth in spending that the state accommodates with nonrecurring resources or a material use of reserves
- » A sustained and material slowdown in economic expansion that is a drag on revenue growth
- » Growth in long-term liabilities that outpaces expansion of the state's economy

## Key indicators

Exhibit 2

Delaware (State of)	2015	2016	2017	2018	2019	50-State Median (2018)
Operating Fund Revenues (000s)	4,749,041	4,816,998	4,854,688	5,265,653	5,438,612	11,520,082
Available Balances as % of Operating Fund Revenues	21.9%	13.6%	5.7%	13.0%	18.6%	7.8%
Nominal GDP (billions)	70.9	70.4	72.2	75.0	77.2	234.5
Nominal GDP Growth	5.5%	-0.7%	2.5%	3.9%	3.0%	4.6%
Total Non-Farm Employment Growth	2.3%	1.0%	0.8%	1.1%	1.0%	1.1%
Fixed Costs as % of Own-Source Revenue	13.8%	13.7%	14.2%	13.2%	12.4%	8.2%
Adjusted Net Pension Liabilities (000s)	3,859,643	3,406,059	6,373,422	5,827,393	5,361,945	12,209,760
Net Tax-Supported Debt (000s)	2,789,718	2,939,056	2,985,593	3,101,007	3,202,999	4,146,966
(Adjusted Net Pension Liability + Net Tax-Supported Debt) / GDP	9.4%	9.0%	13.0%	11.9%	11.1%	7.8%

Source: Delaware's audited financial statements, the US Bureau of Economic Analysis and Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Profile

Delaware is the sixth-smallest state in the US, based on its estimated population of just under 975,000. The state's gross domestic product, currently about \$75 billion, ranks 41st among states. Delaware's personal income per capita is \$54,200, or roughly 95% of the national level.

## Detailed credit considerations

### Economy

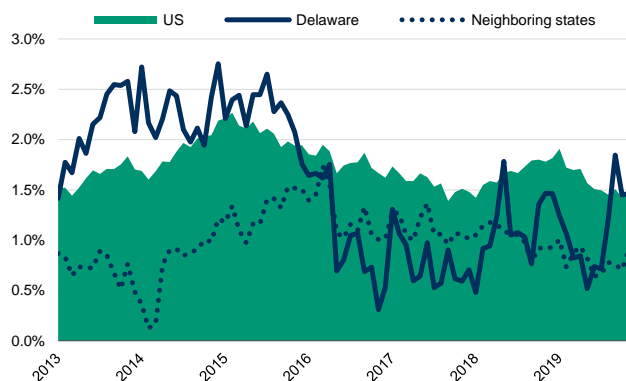
Delaware's economic profile remains sound. Although economic growth has lagged that of the US in recent years, this is balanced by several bright spots in the economy and potential for accelerated growth in the coming years.

As Exhibit 1 above and Exhibits 3 and 4 below illustrate, Delaware saw growth in GDP, employment and income that surpassed that of the US in years past. However, the state's expansion relative to the US slowed more recently. Contributing to slower overall growth over the past couple years was limited expansion of the state's large finance industry. There were more job gains in the leisure/hospitality sector than in the finance sector in recent years.

Exhibit 3

### Delaware's job growth picked up at the close of 2019

Year-over-year growth in monthly nonfarm employment



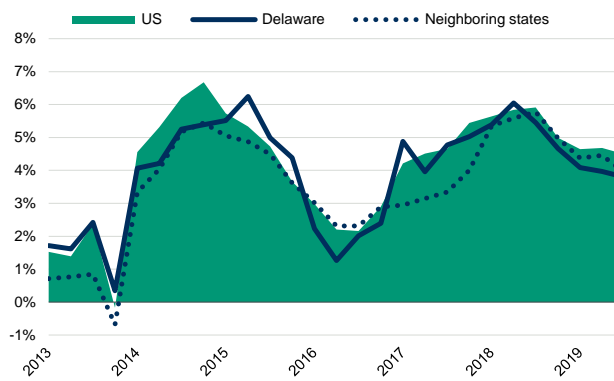
Neighboring states are the District of Columbia, Maryland, New Jersey, Pennsylvania and Virginia.

Source: US Bureau of Labor Statistics

Exhibit 4

### Personal income growth has slightly lagged that of the US over the past couple years

Year-over-year growth in quarterly personal income



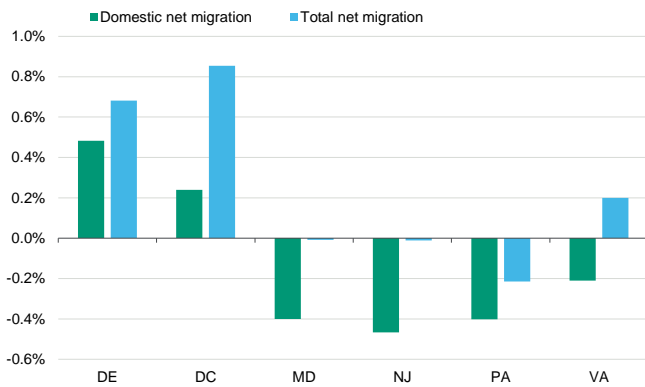
Neighboring states are the District of Columbia, Maryland, New Jersey, Pennsylvania and Virginia.

Source: US Bureau of Economic Analysis

Employment in banking began to rise more quickly, however, toward the close of 2019 and the state is seeing more growth in its financial technology sector. The healthcare sector may also expand with the state remaining an attractive, low-tax destination for retirees. There will also be gains from the expansion of the Port of Wilmington. The port operator, GulfTainer, assumed operations of the port in 2018 and is in the process of making a \$600 million upgrade of the port's facilities. The upgrade will enhance the port's capacity to accommodate the larger ships that are now capable of crossing the expanded Panama Canal.

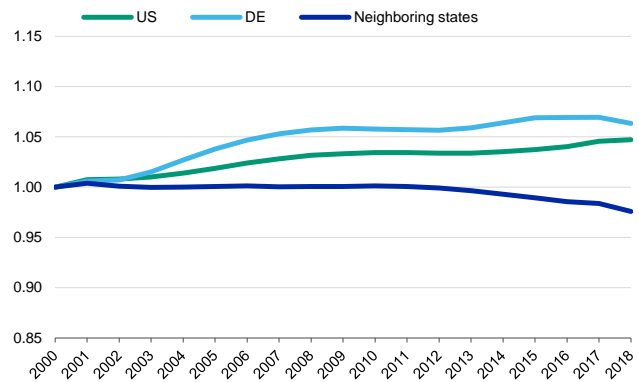
As certain sectors of the state's economy expand, they will benefit from the positive in-flow of new residents partly drawn to the state's low costs and low taxes. Aside from the [District of Columbia](#) (Aaa stable), Delaware is unique in its Mid-Atlantic locale for its positive net migration, both on a domestic basis and total basis (Exhibit 5). Delaware's population of residents aged 25-54 (prime working age) is also trending more favorably relative to its neighbors (Exhibit 6).

**Exhibit 5**  
**Net migration, both domestic and total, is more positive in Delaware than most of its neighbors**  
 Five-year average annual migration as percentage of state population



Source: Moody's Analytics

**Exhibit 6**  
**Delaware's prime working age population grew faster than peers over the past several years**  
 Prime working age population relative to the year 2000



Neighboring states are the District of Columbia, Maryland, New Jersey, Pennsylvania and Virginia.  
 Source: Moody's Analytics

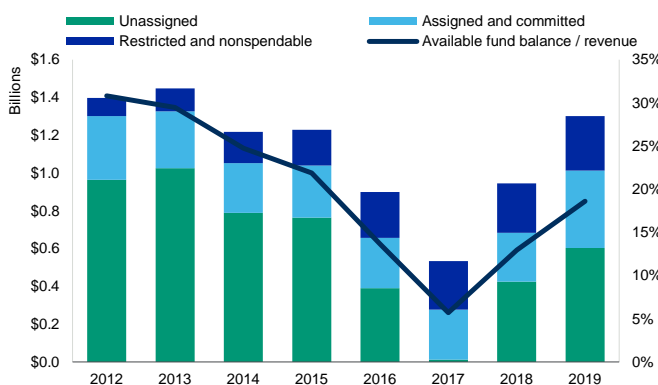
**Finances**

Delaware's finances are strong. The state carries a solid GAAP-basis fund balance in its general fund, its budgetary-basis reserves are healthy and growing, and liquidity in the general fund and across governmental activities is ample (Exhibits 7-9).

In fiscal 2019, the state set aside about \$126 million in a new budget stabilization fund separate from its long-maintained budgetary reserve account. At the close of fiscal 2019, the state's budgetary reserve account, its new budget stabilization fund and other unencumbered cash summed to just over \$600 million and almost 14% of general fund revenue. The state is on pace to add to this total in fiscal 2020.

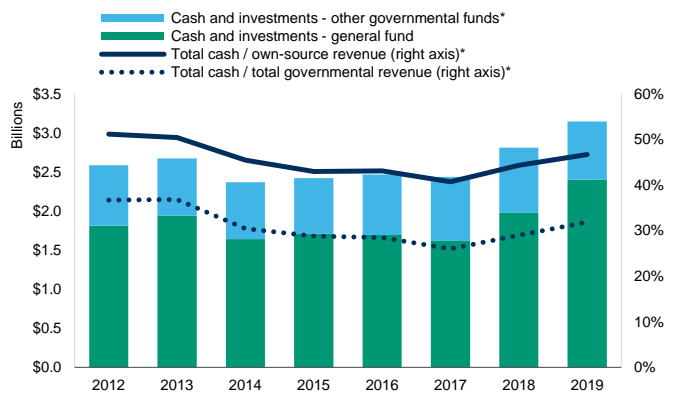
The Delaware Economic and Financial Advisory Council (DEFAC) updated its revenue forecast in late December. The council currently projects 3.4% growth in general fund revenue for fiscal 2020. Over the past few years, actual revenue collections have routinely surpassed DEFAC's projections (Exhibit 10).

**Exhibit 7**  
**A mix of spending cuts and tax increases supported fund balance growth after fiscal 2017**  
 Components of general fund balance by fiscal year



Source: Delaware's audited financial statements and Moody's Investors Service

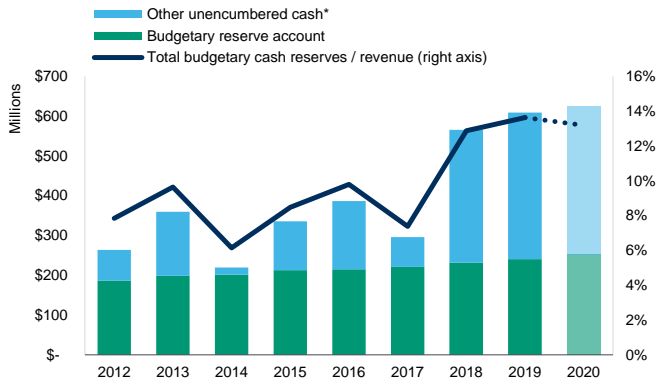
**Exhibit 8**  
**Governmental fund liquidity remains ample**  
 Cash and investments by fiscal year



\* Includes the Department of Transportation, which is reported as a propriety fund in the state's financial statements.  
 Source: Delaware's audited financial statements and Moody's Investors Service

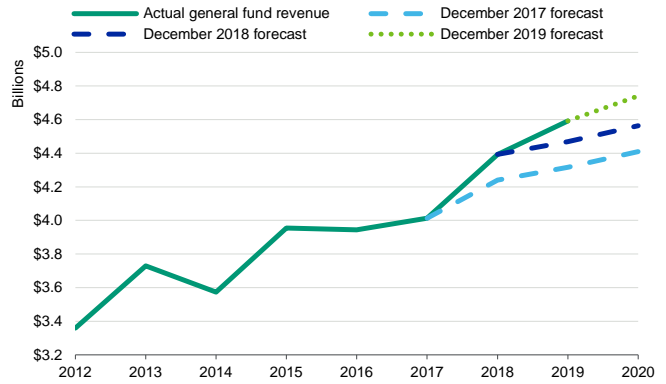
Exhibit 9  
**Delaware added to its budgetary reserves over the past couple years...**

**Budgetary-basis reserves by fiscal year**



\* Includes the state's budget stabilization fund.  
 Source: State of Delaware budget documents

Exhibit 10  
**...and revenue has tended to outperform projections**  
**Actual general fund revenue compared to certain DEFAC forecasts**

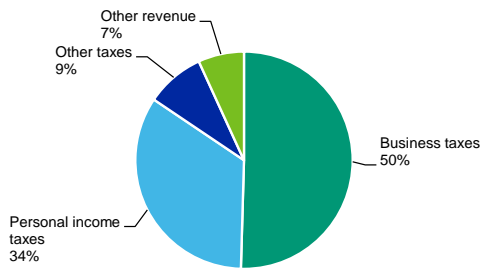


Source: DEFAC

The state constitution limits the budgetary reserve account to 5% of estimated general fund revenue. Drawing these funds requires approval by three-fifths of both legislative chambers. The state also adheres to a strong limit on appropriations. The state can only appropriate 98% of estimated available funds (sum of general fund revenue and unencumbered cash outside of the budgetary reserve account), and this can only be waived with approval of three-fifths of the legislature.

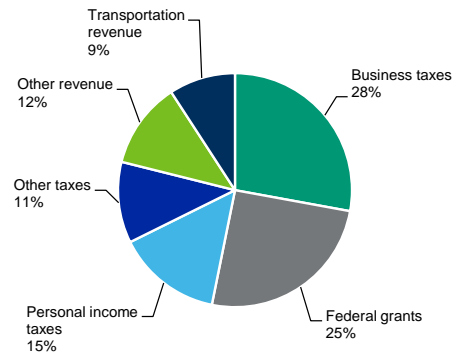
The limit on appropriations creates a buffer against revenue underperformance. Delaware is preferred legal home for publicly traded companies and is dependent on taxes it levies on businesses. The state derives half of its general fund revenue and more than a quarter of its total governmental revenue from potentially volatile taxes on businesses (Exhibits 11-12). The two largest components of business-related revenue are franchise taxes levied on corporations based in the state and abandoned property revenue.

Exhibit 11  
**Business taxes make up half of Delaware's general fund revenue...**  
**Components of projected fiscal 2020 general fund revenue**



Source: DEFAC

Exhibit 12  
**...and more than a quarter of total state revenue**  
**Components of fiscal 2019 total governmental revenue\***



\* Includes the Department of Transportation, which is reported as a propriety fund in the state's financial statements.  
 Source: Delaware's fiscal 2019 audited financial statements

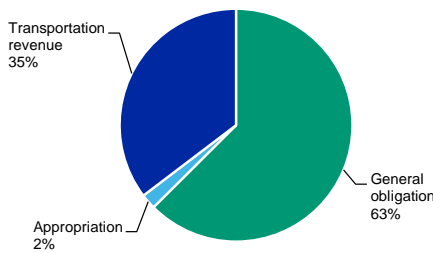
**LIQUIDITY**

As discussed above, Delaware's liquidity is strong and the state reports most of its pooled cash and investments in its general fund. Across governmental activities, liquidity has remained stable for several years and Delaware has not had to issue bond- or revenue-anticipation notes in more than 40 years.

**Debt and pensions**

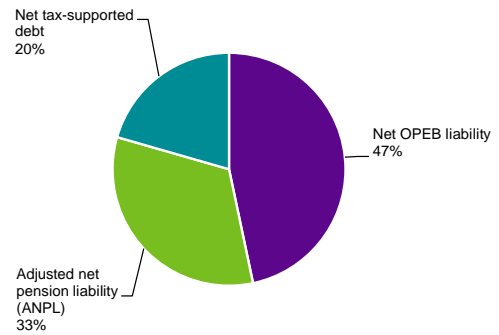
General obligation bonds account for nearly two-thirds of Delaware's outstanding net tax-supported debt, but unfunded post-employment benefits liabilities comprise a much larger share of total leverage (Exhibits 13-14). Delaware's total leverage is high relative to GDP among states, but, relative to revenue, Delaware's burden is much closer to the state median (Exhibits 15-16). A share of Delaware's revenue is derived from economic activity outside the state because of the state's taxes and franchise fees on businesses incorporated in the state. This largely accounts for the difference in the debt and pension burdens as shares of GDP and revenue relative to other states.

Exhibit 13  
**The majority of tax-supported debt consists of general obligation bonds...**  
 Composition of Delaware's bonded debt



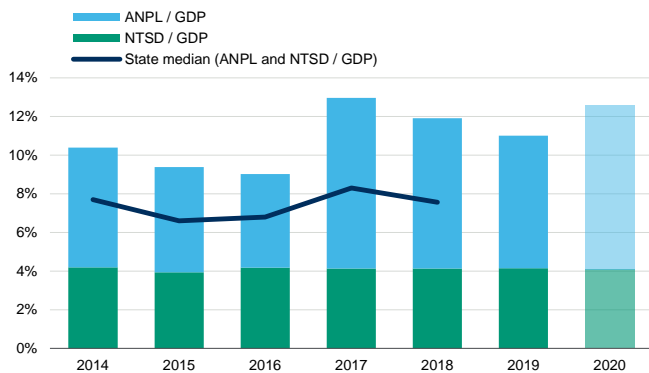
As of the close of fiscal 2019, plus transportation bonds issued just after the close of fiscal 2019.  
 Source: Delaware's audited financial statements and Moody's Investors Service

Exhibit 14  
**...while the principal components of leverage are unfunded post-employment benefits liabilities**  
 Composition of Delaware's total leverage



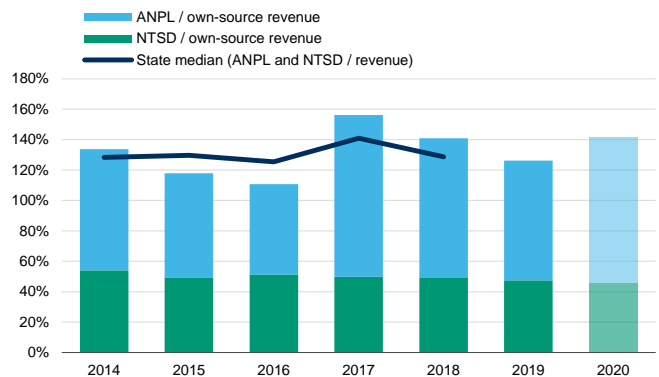
Source: Delaware's audited financial statements and Moody's Investors Service

Exhibit 15  
**Delaware's debt and pension burden is well above the state median relative to GDP...**



NTSD is net tax-supported debt. ANPL is adjusted net pension liability. 2020 ratios assume growth in state GDP equal to the average growth rate of the past three years. Sufficient information is not yet available for all states to compute medians for 2019 and 2020.  
 Source: Delaware's audited financial statements, the US Bureau of Economic Analysis and Moody's Investors Service

Exhibit 16  
**...but much more aligned with other states when compared to state revenue**



NTSD is net tax-supported debt. ANPL is adjusted net pension liability. 2020 ratios assume growth in state revenue equal to the average growth rate of the past three years. Sufficient information is not yet available for all states to compute medians for 2019 and 2020.  
 Source: Delaware's audited financial statements and Moody's Investors Service

Aside from general obligation bonds, net tax-supported debt mostly consists of bonds issued by the [Delaware Transportation Authority](#), a component of the Delaware Department of Transportation. The state has a small amount of debt outstanding secured by annual appropriations of the legislature. The state's general obligation bonds include about \$500 million of bonds paid with school

district property taxes. The state accounts for the property taxes in its audited financial statements and, because the taxes are part of the state's revenue base, we include these bonds in net tax-supported debt.

It is important to note that Delaware's pension and OPEB burdens account for all assets and liabilities of plans covering employees of local school districts, which is not the case for all states. Despite remaining above the annual state median, Delaware's combined debt and pension burden is not on a rapidly growing path.

#### DEBT STRUCTURE

All of Delaware's debt is fixed rate.

#### DEBT-RELATED DERIVATIVES

The state is not party to any debt-related derivative agreements.

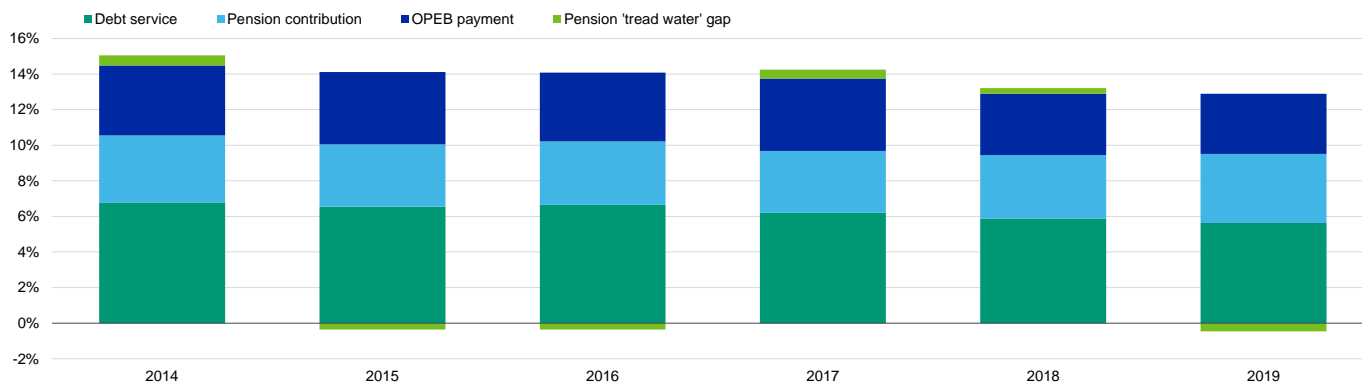
#### PENSIONS AND OPEB

Available financial statements of Delaware's pension plans indicate the state's ANPL increased in the plans' most recently completed fiscal year. This ANPL will be reported in the state's fiscal 2020 financial statements.<sup>1</sup> The growth in the ANPL is largely due to a reduction in the market-based interest rate we use to discount accrued pension liabilities and the decline in the discount rate [will have a similar effect on other governments' ANPLs](#).

Delaware's fiscal 2019 fixed costs were 12.4% of its own-source revenue, which consists of all governmental revenue and transportation revenue less federal revenue (Exhibit 17). Fixed costs consist of debt service, pension contributions and payments of other post-employment benefits (OPEB). For the pension contribution, we calculate a pension "tread water" indicator, which is an estimate of the payment to a government's pension plans that keeps reported net pension liabilities from growing, assuming other actuarial assumptions hold. For fiscal 2019, we estimate Delaware's "tread water" indicator at about \$230 million. The state's actual pension contribution was \$261 million .

Exhibit 17

**Delaware's fixed cost burden is trending downwards while pension contributions tend to be close to or exceed the "tread water" benchmark**  
Components of fixed costs as a share of own-source revenue



Source: Delaware's audited financial statements and Moody's Investors Service

In September 2019, the governor reissued an executive order creating a Retirement Benefit Study Committee and directing that committee to identify options for eliminating or reducing the state's unfunded OPEB liability. The order directs the committee to commence regular meetings no later than September 30, 2019 and to present preliminary findings no later than March 2020. Given the lack of a constitutional protection of retiree healthcare benefits in Delaware, it is possible that the committee could determine a reduction in benefits or a shift in the financing of benefits from the state to employees and retirees to be prudent options and recommend those actions to the governor. There could still be political obstacles to implementing these kinds of adjustments, but they would present the state with some options to reduce its obligations without a significant increase in spending.

## ESG considerations

### Environmental

As a US state with a wealthy and diverse economy, the flexibility to raise revenue, and support from the federal government, Delaware will continue to demonstrate high resilience to environmental risks. In general, US states face low credit risk stemming from environmental events, the most likely to occur being natural disasters. When disaster strikes, states typically incur minimal costs, with the federal government, via FEMA, taking a large role in funding recovery.

That said, Delaware's small size and location on the Atlantic Ocean raises its exposure to flood and storm risk relative to many states. An estimated 10% of Delaware's dwelling units are located in a 100/500 year floodplain, which is equal to the median ratio among states with coastlines. Statewide, close to 10% of wages are earned in hurricane storm surge flood zones according to the US Bureau of Labor Statistics, though nearly half of this exposure is located in zones vulnerable only to the highest category of storm.

### Social

Key social considerations for US states include demographics, health services and housing. As discussed above, Delaware's population trends remain stable and employment and income are growing, albeit more slowly than the US overall. Support for health services by the federal government, mainly through Medicaid grants, represents a vulnerability for states and Delaware is no exception. Delaware is no more vulnerable to federal funding decisions in this regard than most states. Housing affordability has not fallen in Delaware as it has in many part of the US. The state's strong demographics could boost the housing market in the coming years, but it will likely take much more rapid growth to significantly deteriorate housing affordability in the state.

### Governance

Delaware's Aaa rating is supported in large part on legal and governance provisions that will encourage the state to maintain a strong financial profile over a long period. The DEFAC, a panel of 31 gubernatorial appointees, provides the state's revenue estimates and calculates its spending authority. This panel, which includes officials from the public and private sector, meets six times each year and issues revenue and expenditure forecasts used by both the executive and legislative branches of government during the budget process.

The state's requirements for consensus forecasts, well-managed expenditure growth, and a limit on appropriations support long-term prospects for financial strength. Delaware's otherwise strong management profile is tempered by a constitutional requirement that tax increases be approved by a three-fifths legislative majority, which reduces the state's financial flexibility.



## Rating methodology and scorecard factors

The US States and Territories Rating Methodology includes a scorecard, which summarizes the 10 rating factors generally most important to state and territory credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 18

### US state and territories rating methodology scorecard

Delaware (State of)

Rating Factors	Measure	Score
<b>Factor 1: Economy (25%)</b>		
a) Per Capita Income Relative to US Average [1]	95.0%	Aa
b) Nominal Gross Domestic Product (\$ billions) [1]	\$75.0	Aaa
<b>Factor 2: Finances (30%)</b>		
a) Structural Balance	Aaa	Aaa
b) Fixed Costs / State Own-Source Revenue [2]	12.4%	Aa
c) Liquidity and Fund Balance	Aaa	Aaa
<b>Factor 3: Governance (20%)</b>		
a) Governance / Constitutional Framework	Aaa	Aaa
<b>Factor 4: Debt and Pensions (25%)</b>		
a) (Moody's ANPL + Net Tax-Supported Debt) / State GDP [2] [3]	11.1%	Aa
<b>Factors 5 - 10: Notching Factors [4]</b>		
Adjustments Up: None	0	
Adjustments Down: Pension or OPEB Characteristics	-0.5	
<b>Rating:</b>		
a) Scorecard-Indicated Outcome		Aa1
b) Actual Rating Assigned		Aaa

[1] Economy measures are based on data from the most recent year available.

[2] Fixed costs and debt and pensions measures are based on data from the most recent debt and pension medians report published by Moody's.

[3] ANPL stands for adjusted net pension liability.

[4] Notching factors 5-10 are specifically defined in the US States and Territories Rating Methodology.

Source: US Bureau of Economic Analysis, Delaware's audited financial statements and Moody's Investors Service

## Endnotes

- The state's pension reporting lags the financial reporting of its pension plans by one year. The total pension liability and plan fiduciary position included in the plans' available fiscal 2019 audited financial statements will be incorporated in the state's fiscal 2020 audited financial statements. We use the plans' fiscal 2019 reports to calculate the state's fiscal 2020 ANPL.

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