State of Delaware

Assigned	Rating	Outlook
General Obligation Bonds, Series 2019	AAA	Stable
Affirmed	**Rating**	**Outlook**
General Obligation Bonds	AAA	Stable

Methodology:

U.S. State General Obligation Rating Methodology

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Rating Summary: KBRA's rating is based on the State's very strong financial management policies and practices, its strong financial position and liquidity and a diverse economy anchored by financial services, chemicals and related industries, the healthcare sector and higher education.

The State serves as the legal domicile of over half of the publicly traded firms in the United States; and more than two thirds of the nation's Fortune 500 firms are incorporated in the State. The State's high gross state product (GSP) per capita and high percentage of GSP attributable to the finance and real estate sector reflects the State's unique role as a center of corporate business development and a hub of the financial services industry. In KBRA's view, the State actively manages and protects its position as a leader in these areas through supporting the prompt resolution of disputes by the State's Court of Chancery and by updating its statutes to respond to changing business conditions. The State's economic base has shown growth relative to the region and the nation, as evidenced by its population growth since 2010 and favorable unemployment rates.

KBRA views the State's management structure and policies as providing a very strong framework for managing budgetary and financial operations. The State Constitution limits annual appropriations to 98% of estimated budgetary General Fund revenue and unencumbered cash balance, enhancing financial flexibility. Formal revenue and expenditure estimation is done under the Delaware Economic and Financial Advisory Council (DEFAC). In KBRA's view, the DEFAC process provides comprehensive and frequent revenue forecasts as well as consistent fiscal monitoring and long-term planning. The State has broad authority to take mid-year action to adjust disbursements, which KBRA views positively. Under the State Constitution, at fiscal year-end, excess unencumbered budgetary General Fund cash is transferred to the Budget Reserve Account. The account is not to exceed 5% of estimated budgetary General Fund receipts. Since inception in 1980, the State has not needed to draw on the Budget Reserve Account.

KBRA also views the financial position of the State as very strong based on its conservative budgeting policies, comprehensive and timely process of revenue estimation, high levels of financial reserves and strong liquidity position. In KBRA's view, the State is well focused on budgetary and cost controls. Budgetary General Fund revenue sources reflect the importance of the financial services and corporate activities industry, which relate to 45% of revenues. Historically, these revenues have shown some volatility, however, this is offset by the State's conservative financial management, revenue estimation process and ability to adjust disbursements. Over the last six years, the State has ended the fiscal year with a cash balance of over 10% and an unencumbered cash balance of over 5.5% of budgetary General Fund disbursements, which KBRA considers very strong.

KBRA views the State's tax-supported debt level as high, relative to population, personal income, and GSP. Delaware's high debt ratios reflect the centralized role of the State in financing schools and correctional facilities; projects generally funded by local governments in other states. KBRA views the State's debt structure favorably; all direct debt is fixed rate and is rapidly amortized. The funded ratio of the State's largest pension fund was a favorable 87.5% at June 2018. The State contributes essentially 100% of the actuarially recommended amount to fund its pensions. Debt service, pension contributions and OPEB costs are 8.7% of FY 2018 governmental expenditures, which KBRA considers to be low.

Key Rating Strengths

- Very strong financial management policies and procedures. Comprehensive and timely process for revenue forecasting serves as a vehicle for consistent fiscal monitoring and long-term planning.
- High levels of financial reserves and strong liquidity position.
- Strong funded ratio of 86.5% for primary State pension fund.

Key Rating Concerns

- Economic base is somewhat concentrated in corporate business activities and the financial services industry.
- State tax supported debt ratios are high compared to other states.

Drivers for Rating Change

Not applicable given the AAA rating level.	+
Sustained trend of structural imbalance in the State's budgetary General Fund. Significant sustained deterioration in the level of the State's general reserves. Significant increase in debt burden measures. Significant decline in pension funded ratios.	-

Rating Highlights	
General Fund Revenue Forecasts	6x per year
Reserves as % of Disbursements, FY 2018	
Budget Reserve Account	5.0%
Budget Reserve & Unencumbered Cash	13.7%
Net Tax-Supported Debt Service as a % Govt Expenditures	2.4%
Pension Payment History	Full Payment
Population Growth Rate, 2010 to 2017	
Delaware	6.9%
U.S.	5.3%
Unemployment Rate, Delaware v U.S.	DE Consistently Lower

The **Stable Outlook** reflects the State's strong financial management framework, including the DEFAC revenue estimation process and conservative budgeting practices, which KBRA believes will continue to support the State's strong financial performance. The outlook also reflects KBRA's recognition of the State's ongoing efforts to maintain its leading role in corporate business development and the financial services industry.

Rating Determinants (RD)	
1. Management Structure, Budgeting Practices and Policies	AAA
2. Debt and Additional Continuing Obligations	AA+
3. Financial Performance and Liquidity Position	AAA
4. State Resource Base	AA+

Key Rating Determinants

RD 1: Management Structure, Budgeting Practices and Policies

The Governor serves as the chief executive officer of the State and is elected for a term of four years. Governor John Carney was elected in November of 2016 and took office in January 2017. In addition to the Executive Office of the Governor, which includes the Office of Management and Budget (OMB), there are fifteen cabinet departments including the Department of Finance. The Department of Finance is responsible for State revenue estimation and collection and development of fiscal policy as well as State accounting and bond financing and administration of the State lottery. OMB is responsible for monitoring and controlling State expenditures.

The State's General Assembly consists of a 21-member Senate and a 41-member House of Representatives. The entire House is up for election every two years while the Senate is elected to four-year staggered terms. Regular sessions of the General Assembly convene in January and adjourn by June 30. In Delaware, the State government funds and administers a number of services that are locally managed in other states, including corrections, public health, welfare and transportation. There are three incorporated counties in the State.

State Budget Process

The Governor is constitutionally and statutorily required to submit a balanced budget to the General Assembly and the Legislature must pass a balanced budget. The State's budget process starts in the fall of the fiscal year when each State agency submits to OMB a request for operating and capital funds for the next fiscal year. The Governor's proposed operating and capital budget for State operations are then drafted and presented by the Governor to the General Assembly in January. The proposed budget is amended by action of the Joint Finance and Bond Bill Committees and the budget is expected to be passed prior to July 1 and signed by the Governor shortly thereafter.

Appropriations Limit

The State Constitution limits annual appropriations to 98% of estimated budgetary General Fund revenue, plus the unencumbered budgetary General Fund balance from the previous year. An appropriation exceeding this limit may be made in the event of a declared emergency, with approval of 3/5ths of the members of each House of the Assembly.

The State Constitution was amended in May 1980 to limit new tax and license fees, or increases to existing taxes or fees, unless the measures are passed by a 3/5ths vote of each house of the General Assembly. Other than this restriction, the State has significant flexibility in its ability to raise taxes and other revenues.

State Revenue Estimate Process

The Delaware Economic and Financial Advisory Council (DEFAC) was created in 1977 and is comprised currently of 31 members including five cabinet level officials, the State Treasurer, the Controller General, three legislators and 19 private citizens from the business and academic sectors. All are appointed by the Governor.

DEFAC is mandated by executive order to submit to the Governor and General Assembly budgetary General Fund and Transportation Fund revenue estimates for the current year and the succeeding two fiscal years at regular intervals during a fiscal year (in September, December, March, April May, June). A forecast for the current fiscal year and succeeding four years is generated once a year by October 1. Budgetary General Fund and Transportation Fund expenditure forecasts are submitted for the current fiscal year in December, March, April, May and June.

DEFAC meetings are open to the public and provide a forum for representatives of the private and public sector to provide input and exchange views on the economic and fiscal condition of the State. Working subcommittees include Expenditures and Revenue subcommittees, which meet between public meetings. In KBRA's view, the DEFAC process provides the State with comprehensive and timely revenue forecasts which capture a wide range of input on factors that impact the State's fiscal operations and KBRA views this process as a strong positive credit factor. As part of its regular reports during the fiscal year, DEFAC projects the ending cash balances for the budgetary General Fund based on its current revenue and expenditure estimates.

The Department of Finance also publishes a monthly financial report which tracks the year to date receipts and disbursements of the budgetary General Fund and measures these numbers against comparable year to date receipts and disbursements from the prior year. Based on the assessment of the State's fiscal operations through the DEFAC process, the State, though the Governor's office and OMB, has broad authority to take action during the fiscal year to adjust disbursements, which KBRA views very positively. Historically, OMB has instituted a range of actions to control disbursements, as necessary, including implementing a hiring freeze and imposing strict controls on State travel and spending. Based on conversations with the State Department of Finance, the General Assembly has not been asked to take action to adjust a current year budget in a number of years. Given the appropriation limit of 98% of estimated General Fund receipts in a given budget, the State starts a fiscal year with a cushion equal to 2% of receipts.

Expansion of Fiscal Controls

On June 30, 2018, Governor Carney signed Executive Order 21, an effort to improve fiscal controls and establish a budgetary smoothing mechanism. The Executive Order establishes a Budget Stabilization Fund to be used for reporting and budget planning purposes and allocates to it a portion of the unencumbered cash balance of the General Fund in the Governor's proposed budget. Under the Executive Order, DEFAC is charged with calculating a benchmark index, based on State economic indices, used to establish an advisory benchmark appropriation. Based on discussions with the State, the intention is to improve the State budget process and create a more sustainable long-term approach to annual budgeting by better aligning expenditures to projected revenues. The Governor made these changes after the legislature did not proceed with a proposed Constitutional amendment that sought to initiate this process.

Under Executive Order 26, signed November 26, 2018, beginning March 2019, DEFAC will submit general fund expenditure forecasts for both the current year (as previously required) and the subsequent fiscal year. KBRA believes this will further enhance the state's ability to identify and respond to budgetary trends.

Budget Reserve Account

The Budget Reserve Account, or Rainy-Day Fund, was created in 1980 to provide an operating reserve for unanticipated revenue shortfalls. The State Constitution requires that the excess unencumbered cash balance in the budgetary General Fund at the end of a fiscal year be transferred to the Budget Reserve Account until the amount of funds in the Budget Reserve Account reaches 5% of the estimated budgetary General Fund receipts. Funds from the Budget Reserve Account may be appropriated by a 3/5ths vote of each house of the General Assembly to fund an unanticipated General Fund deficit. No funds have been withdrawn from the Budget Reserve Account since its inception.

State Debt Limits

In 1991, the State enacted a three-pronged debt limit, to be calculated at the time of budget adoption, which KBRA views as a conservative approach to debt management.

- The aggregate principal amount of new tax supported obligations of the State (defined in statute as State general obligation debt) which may be authorized in a fiscal year may not exceed 5% of estimated budgetary General Fund receipts in that year. For FY 2020, new tax supported debt authorizations of $228.2 million is estimated.

- No tax supported obligations and no Transportation Trust Fund (TTF) debt may be issued if the aggregate maximum annual debt service payments on the combined amount of outstanding debt exceeds 15% of the estimated budgetary General Fund revenues plus estimated TTF revenues in the fiscal year following issuance of the debt.

- No State general obligation debt may be issued if the maximum annual debt service payable in any fiscal year will exceed the estimated cash balance (including all reserves) of the budgetary General Fund, as estimated by the Department of Finance, for the fiscal year following issuance.

Based on the foregoing, KBRA views the State's management structure, budgeting practice, and policies as consistent with a AAA rating determinant rating.

Bankruptcy Assessment

Under Chapter 9 of U.S. bankruptcy code, state governments are not permitted to petition courts for protection from creditors, including holders of their general obligation debt.

RD 2: Debt and Continuing Obligations

KBRA views the State's debt and continuing obligation profile as strong relative to most other states based on a high but manageable debt burden, well-funded pensions, and moderate fixed cost burden with debt service on direct debt, actuarially recommended pension contributions, and pay-go other post-employment benefit (OPEB) contributions accounting for a very manageable 8.7% of FY 2018 governmental expenditures.

Tax-Supported Debt

As of January 2019, the State's tax-supported debt is $3.0 billion, including $2.0 billion in general obligation bonds and $913 million in Delaware Transportation Authority (DTA) debt. DTA borrowings are payable from dedicated sources including toll revenues, motor fuel tax taxes, and DMV fees but are included in the tax-supported debt figure because a portion of resources available for payment are derived from non-pledged operating resources of the State.

Delaware's tax-supported debt level is higher than most other states. Debt ratios comparing the tax-supported debt burden to population, personal income, and gross state product each place Delaware within the top 20% of the most indebted U.S. states (Figure 1). Delaware's high debt burden reflects the centralized role of the State government in financing capital projects that are generally funded by local governments in other states, such as schools and correctional facilities. This offset is evidenced by the State's somewhat more favorable debt rankings when assessed on the basis of aggregate state and local debt.

FIGURE 1
Debt Ratios
(in dollars)

	Delaware[1]	Average of U.S. States	Delaware Rank Among the 50 States[1]
Tax-Supported Debt:			
Per Capita	$3,216	$1,589	Highest 15%
as a % of Personal Income	6.5%	3.0%	Highest 15%
as a % of GSP	4.3%	2.7%	Highest 20%
Aggregate State and Local Debt:			
Per Capita	$7,965	$9,167	Highest 35%
as a % of Personal Income	16.5%	18.4%	Highest 35%
as a % of GSP	10.8%	15.8%	Highest 50%

Source: U.S. Census Bureau, U.S. Bureau of Economic Activity, Credit Scope, and Annual Disclosures.

[1]Tax-Supported Debt includes current offering.

A substantial portion of the State's general obligation debt, approximately 25%, consists of school bonds that are fully paid from local school district property taxes that are transferred to the State. KBRA includes the full amount of debt service paid on the $2.0 billion in general obligation debt in calculation of direct debt service, but notes that the school districts have historically funded their share of debt service.

The State's direct debt structure is conservative, consisting of entirely fixed rate debt and descending debt service. The State Constitution requires that all bonds mature within 20 years of their date of issuance and consequently, 70% of outstanding principal is scheduled to mature within the next decade and 100% within 20 years. Fiscal 2018 debt service totaled $257 million, which represents 3.2% of total governmental fund expenditures, which KBRA considers low. In fiscal 2018 the local school districts transferred $63.6 million of property tax revenue to the State for debt service. Net of the school district property tax support, net debt service is 2.4% of total governmental expenditures.

Unique Role in School Construction Funding

The State issues bonds on behalf of school districts to provide lower capital financing costs for the State's school districts. State laws are established to foster prudent financing of school projects and include the following requirements: The State Department of Education must issue a Certificate of Necessity for the school capital project, and then the project must pass in a local voter referendum. Depending on the local school district's ability, the State funds between 60% to 80% of the cost of capital improvements for public schools with the local school district paying the balance.

Of the State's approximately $2.0 billion of general obligation debt outstanding, $501 million are bonds payable by local school districts and supported by property tax collections of local school districts. The property tax collections are deposited into the State's local school district fund (within the State Special Funds), and then transferred to the State General Fund to pay the districts' required share of debt service. In FY 2019, $63.4 million of property tax revenue is to be transferred to the General Fund, which represents 25% of debt service expenditures.

Capital Priorities

The State's current capital priorities focus on education, strong communities, economic development and environmental needs. The 2019 Capital Budget totals $816 million, including $368 million for transportation projects. General obligation bond authorizations are $218 million and General Fund spending provides $189 million of funding. The pay-go funding provides for a number of small projects, with the largest project ($12.5 million) being for the Delaware Strategic Fund, which is managed by the State's Economic Development Office. Primary and secondary school projects represent the major portion of the bond financing, accounting for 60% of FY 2019 general obligation bond authorizations. The capital improvement plan is updated annually as part of the budget process. In addition to proposed projects and funding sources for the coming year, the Governor's recommended capital budget also includes projects for the two subsequent years. The Governor's recommended FY 2020 capital budget totals $679 million, including $333 million for transportation projects.

Delaware Public Employees Retirement System

The Delaware Public Employees' Retirement System (DPERS) includes several plans which are administered by the State Board of Pension Trustees (the Board). Approximately 98% of total membership participate in the State Employees' Pension Plan (the State Plan), a cost sharing multiple-employer defined-benefit plan established in the Delaware Code. Plan management is the responsibility of the Board, which is comprised of five members appointed by the Governor and confirmed by the State Senate, plus two ex-officio members. The daily operation of the State Plan is the responsibility of the Office of Pensions. In 2011, the State undertook pension reforms and a second benefit tier for new employees was created. Employees hired on or after January 1, 2012 vest with 10 years of service, whereas pre-2012 hires require only 5 years of service. Additionally, employees hired post-2011 may not include overtime pay in their final average compensation calculation.

Actuarial assumptions currently include a 7.0% investment rate of return and a 20 year amortization period. Open amortization weakens the State Plan's ability to reduce its unfunded liabilities and improve funding. The State Plan provides no automatic cost of living increases. The assumed investment rate (discount rate) was lowered to 7.0% from 7.2% in FY 2017, which increased plan liabilities by $212 million. The Plan's unfunded actuarial liability at June 30, 2018 was $1.29 billion and the actuarially determined funded ratio was 86.0%. Although the funded level has weakened over the last ten years, KBRA still views the funded ratio as strong.

As shown in the table below, the State contributes at the actuarially recommended amount, which KBRA considers a credit positive. The State has a small, closed plan which it funds on a pay go basis. As reported in the State's FY 2018 CAFR, the State's $226 million required pension contribution in FY 2018 was a manageable 2.9% of governmental expenditures.

FIGURE 2

State Pension Contributions[1]

$ in thousands

FYE June 30	2013	2014	2015	2016	2017	2018[2]
Actuarial Recommended Contributions	184,370	197,991	200,939	201,839	207,697	226,350
Actual Contributions	181,738	195,768	197,929	201,606	204,469	223,548
Percent Contributed	99%	99%	99%	100%	98%	99%

[1] State Employees, New State Police, Judiciary and Closed State Police Plans.

[2]Reflects etimate.

Source: State of Delaware Comprehensive Annual Financial Report

Based on GASB 68 reporting requirements, as utilized in the State's FY 2018 comprehensive annual financial report (CAFR), the total governmental activities net pension liability (NPL) of was $1.7 billion. KBRA considers the pension burden represented by the State's combined NPL to be moderate.

FIGURE 3

Net Pension Liability (NPL) Ratios[1]
(in dollars)

	Delaware 2017	Average of U.S. States 2017[2]	Delaware Rank Among the 50 States
Net Pension Liability:			
Per Capita	$1,797	$2,060	Highest 35%
as a % of Personal Income	3.6%	3.9%	Highest 35%
as a % of GSP	2.4%	3.5%	Highest 45%

Source: Credit Scope, FY 2017 Data. All figures represent the Net Pension Liablity as reported in the Statement of Net Position per GASB 68.

Other Post-Employment Benefits

The State funds OPEB on a pay-as-you-go basis. In the FY 2018 CAFR, the State's contribution to OPEB costs was $203 million which represented 2.6% of FY 2018 total governmental expenditures.

The State established an OPEB trust fund and has made ad hoc contributions since 2007. As of June 30, 2018, the plan's funded ratio was 5.0% and the unfunded actuarial accrued liability was $7.2 billion, which reflects a $1.1 billion decline from the prior year. Several assumption changes contributed to the liability decline, including changes in the health cost assumption, an increase in the discount rate to 3.87% and changes in medical and pharmacy trends.

The State has enacted a number of reforms to stem the growth of the OPEB liability, including cost sharing and restrictions on eligibility. Depending on the date of hire and the years of service, the State pays between 0% and 100% of retiree premiums. Conditions have been also established for retirees to pay a portion of the Medicare supplement.

Total State healthcare plan membership, including active and retired members was 61,884 at July 1, 2018. KBRA views membership as sizable (6.4% of the statewide population), but recognizes that OPEB membership also encompasses the State's component units and affiliated agencies, such as the public universities. The high OPEB liability also reflects relatively high medical costs statewide.

Total Fixed Costs

The aggregate of debt service, pension contributions and pay-as-you-go OPEB costs represent a low 8.7% of total governmental expenditures in FY 2018.

Based on the foregoing, KBRA's views the State of Delaware's debt and other continuing obligations to be consistent with an AA+ rating for this determinant.

RD 3: Financial Performance and Liquidity Position

The State records its major financial activities in either the budgetary General Fund or the budgetary Special Funds. The budgetary General Fund is the chief operating fund of the State. It accounts for the cost of the State's general operations and receives all taxes and other receipts of the State not dedicated to a specific purpose. The General Assembly must authorize all disbursements from the budgetary General Fund through the appropriations process. The focus of the KBRA analysis will be the operations of the budgetary General Fund.

The receipts into the Special Funds are designated by statute for specific purposes. Certain uses of funds within the Special Funds are authorized by appropriation while use of funds for other purposes are considered non-appropriated funds, including certain federal payments for services provided and unemployment compensation payments. Other uses of the budgetary Special Funds include certain State parks operations, and fees charged by the Public Service Commission.

The State created the Transportation Trust Fund (TTF) to finance Delaware's transportation system. The sources of revenue in the TTF include motor vehicle fees, tolls and concessions, motor fuel taxes and other transportation revenue The Transportation Trust Fund Act gives the Delaware Transportation Authority the power to issue bonds payable from and secured by these revenues. Revenues in excess of debt service are used to fund Delaware DOT operations and the State Capital Transportation Program.

The State budgets and operates on a cash basis of accounting for its fiscal year (July 1-June 30). Cash disbursements from State funds are controlled by an encumbrance accounting system that tracks the extent of the State's ongoing financial obligations, primarily based on purchase orders issued, to ensure that the State will have sufficient funds to pay all obligations when due. At fiscal year-end, a certain portion of the ending cash balance is reserved to pay these outstanding encumbrances and continuing appropriations, mainly for goods and services. These budgetary General Fund encumbrances and continuing appropriations are carried over into the subsequent fiscal year. The State also publishes annual financial statements prepared in accordance with GAAP accounting principles (modified accrual and full accrual).

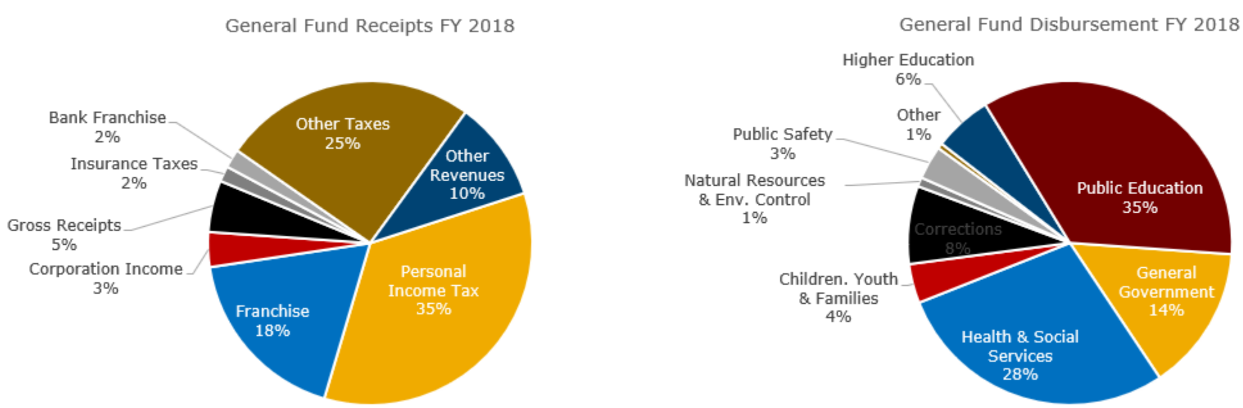
State Revenue Forecasts

DEFAC is mandated by executive order to submit to the Governor and General Assembly budgetary General Fund revenue estimates six times each year, the estimates cover the current year and the succeeding two fiscal years. Budgetary General Fund expenditure forecasts for the current fiscal year are submitted four times each year.

DEFAC relies on a diverse range of information for its revenue forecasts including economic trends developed by IHS Global Insight, the State Department of Finance's econometric model, projections generated by the Department of Transportation and, input from its members on aspects of the State's economy and structure of the State's revenue base. The DEFAC budgetary General Fund revenue projections cover the significant budgetary General Fund revenue sources as well as total budgetary General Fund revenues. Historically, the DEFAC process has generally been successful in accurately projecting the State's total budgetary General Fund receipts. The variance between total budgetary General Fund receipts in the adopted budget versus actual receipts is typically less than 1%. Generally, the December DEFAC revenue estimates, with timely modifications, serve as the basis for budget development.

Based on its December 2018 revenue estimates, DEFAC projects FY 2019 budgetary General Fund receipts will increase 1.7% from FY 2018 levels. DEFAC projects that total budgetary General Fund revenues will increase by 2.1% and 1.9% in FYs 2020 and 2021, respectively. On the expenditure side, DEFAC projects base budgetary General Fund expenditures will increase 4.0% in FY 2019, and 2.5% and 2.6% in FY 2020 and FY 2021, respectively. As part of its regular reports during the fiscal year, DEFAC projects the ending cash balances for the budgetary General Fund.

FIGURE 4



Source: State of Delaware Official Statement General Obligation Bonds, Series 2019

Budgetary General Fund Revenues

KBRA views the profile of the revenue sources in the budgetary General Fund as balanced between the relatively stable personal income tax receipts and the more volatile corporate and bank related tax receipts. The category of other taxes (25% of total receipts), shown in Figure 4, includes revenues generated by abandoned property in the State while other revenues (10%) is composed largely of lottery revenues. The State does not levy a general retail sales tax.

The State's budgetary General Fund revenue sources reflect the State's position as the legal domicile of U.S corporations as well as the importance of the financial services industry, including commercial banks, credit card banks and savings banks. Personal income taxes are levied at a rate of 6.6% on incomes over $60,000. Taxable income consists of federal adjusted gross income, with certain modifications, less itemized or standard deductions. Corporation franchise taxes consist of an annual franchise tax levied on corporations organized under State law, excepting banking institutions. The corporation franchise tax is based on either its total number of capital stock shares or the assumed par value of its stock. The corporation income tax is levied at a rate of 8.7% on the net taxable income of both foreign and domestic corporations derived from sources within the State. The State's gross receipts tax consists of annual license fees on businesses and occupations plus a tax on gross receipts. Bank franchise taxes are levied on the taxable income of banks with rates ranging from 1.7% to 8.7%.

Abandoned property represents a debt or obligation, including securities, which has gone unclaimed for a certain period defined by statute. In Delaware, this period is generally 3-5 years. Based on U.S Supreme Court decisions and Delaware law, this property is considered the property of the State based on the last known address of the holder and the holder's incorporation status in the State. For FY 2018, abandoned property actions generated $552 million in budgetary General Fund receipts (12.6% of General Fund receipts). The State recognizes that future revenues may be impacted by pending legal challenges, which have been accepted for consideration by the US Supreme Court. The State is currently litigating claims involving 30 states on its right to retain one type of abandoned property, that being "official checks". The State's position is that abandoned property should be the property of the state where the property holder is incorporated. The State has stated that it cannot predict the timing of the decision or the potential financial impact, however, based on discussions with State officials, it seems probable that the resolution of these challenges is likely at least a year away.

Lottery revenues comprise the bulk of the other General Fund receipts shown in Fig.4. Delaware's lottery includes a number of game options including a traditional lottery and a range of casino operations. DEFAC closely monitors the State's gaming operations and includes related revenue estimates in revenue estimate reports.

The history of budgetary General Funds receipts is shown in Figure 5. Total budgetary General Fund receipts increased at an average annual rate of 3.5% from FY 2013 through FY 2018. Over this period, personal income taxes increased in every year, with a 4.5% average annual increase. Most of the business and corporate related taxes have generally shown volatility. Corporate franchise taxes have increased in every year, with an average annual rate of 7.4%, though the rate of increase has fluctuated year to year. Collections from franchise, corporate, limited partnerships & LLCs, business entity fees, UCC fees and abandoned property represent approximately 45% of FY 2018 budgetary General Fund receipts. In KBRA's view, the State is somewhat reliant on these relatively volatile business and corporate revenue sources for its budgetary General Fund operation, however, this concern is offset by the State's conservative fiscal management.

Budgetary General Fund Disbursements

Disbursements for K-12 education represent 35% of FY 2018 budgetary General Fund disbursements. In FY 2017, the State funded 59% of overall education costs, with local school districts and the federal government funding 32% and 9%, respectively. The State funds between 60% and 80% of school construction costs. Health and Social Services accounted for 28% of FY 2018 budgetary General Fund disbursements. The portion of the cost for health and social services programs paid by the federal government is accounted for in the State's budgetary Special Funds. Corrections represented 8% of budgetary General Fund disbursements. The State is the only correction agency in the State; there is no county or municipal jail system. Total budgetary General Fund disbursements increased at an average rate of 2.4% from FY 2013 through FY 2018.

FIGURE 5

General Fund Receipts (budgetary/cash basis)

	2018	% Chg.	2017	% Chg.	2016	% Chg.	2015	% Chg.	2014	% Chg.
Tax Revenue (000's)										
Personal Income	1,641,398	6.0%	1,548,053	3.4%	1,496,898	3.6%	1,444,278	4.3%	1,384,985	5.0%
Franchise	856,734	19.9%	714,471	1.0%	707,685	4.8%	675,490	8.0%	625,643	3.3%
Corporation Income	165,065	4.9%	157,368	-29.0%	221,615	-27.4%	305,226	73.9%	175,514	-14.7%
Gross Receipts	244,986	2.3%	239,465	2.3%	234,072	4.8%	223,411	-1.4%	226,524	0.1%
Insurance Taxes	73,432	32.8%	55,295	3.0%	53,692	-2.0%	54,815	3.5%	52,962	-1.8%
Bank Franchise	89,240	1.2%	88,189	-4.6%	92,485	-2.6%	95,002	-7.5%	102,695	-0.8%
Other Taxes	1,203,036	6.8%	1,126,724	3.5%	1,088,342	6.7%	1,020,416	10.2%	926,103	-5.9%
Total Taxes	4,273,891	8.8%	3,929,565	0.9%	3,894,789	2.0%	3,818,638	9.3%	3,494,616	-0.1%
Tax Refunds (-)	354,188	-9.2%	390,149	-1.8%	397,189	23.4%	321,844	-10.1%	357,952	52.1%
Net Taxes	3,919,703	10.7%	3,539,416	1.2%	3,497,600	0.0%	3,496,794	11.5%	3,136,664	-3.9%
Other Revenues	473,274	-0.1%	473,679	5.9%	447,191	-2.4%	458,333	5.1%	435,991	-6.7%
Total Receipts	**$ 4,392,977**	**9.5%**	**$ 4,013,095**	**1.7%**	**$ 3,944,791**	**-0.3%**	**$ 3,955,127**	**10.7%**	**$ 3,572,655**	**-4.2%**

General Fund Disbursements (budgetary/cash basis)

	2018	% Chg.	2017	% Chg.	2016	% Chg.	2015	% Chg.	2014	% Chg.
General Government	598,525	1.9%	587,361	1.6%	578,267	-1.6%	587,508	1.2%	580,432	5.9%
Health & Social Services	1,167,364	-1.1%	1,179,778	5.4%	1,119,041	2.0%	1,096,818	0.9%	1,087,203	2.4%
Children, Youth & Families	161,308	1.3%	159,231	5.0%	151,699	1.8%	149,053	-0.3%	149,517	5.4%
Corrections	320,176	5.0%	304,842	5.2%	289,899	2.5%	282,769	3.4%	273,474	3.2%
Natural Resources & Env. Control	37,580	-9.0%	41,298	7.3%	38,499	-7.5%	41,600	-16.1%	49,598	11.2%
Public Safety	137,972	0.9%	136,783	3.9%	131,691	-0.1%	131,766	-9.5%	145,584	0.9%
Other	22,108	-45.4%	40,517	47.7%	27,429	-16.0%	32,650	4.9%	31,115	-2.6%
Total Departments	2,445,033	-0.2%	2,449,810	4.8%	2,336,525	0.6%	2,322,164	0.2%	2,316,923	3.5%
Higher Education	238,238	-1.2%	241,045	2.2%	235,818	1.4%	232,637	-0.9%	234,645	3.5%
Public Education	1,434,814	1.4%	1,415,294	5.5%	1,341,382	5.0%	1,277,809	2.8%	1,242,567	4.1%
Total Expenditures	**$4,118,100**	**0.3%**	**$4,106,149**	**4.9%**	**$3,913,725**	**2.1%**	**$3,832,610**	**1.0%**	**$3,794,135**	**3.7%**

Source: State of Delaware Official Statement General Obligation Bonds, Series

Historical Reserve Levels

In each of the last five years, the State's FYE cash balances were over 10% of disbursements, which KBRA considers strong. A portion of the ending cash balance is reserved for encumbrances and to fund continuing appropriations, and these items are carried over into the subsequent fiscal year. The State's Budget Reserve Account is a dedicated cash balance maintained from excess unencumbered cash, in an amount not to exceed 5% of estimated budgetary General Fund receipts. Over the last five years, the budgetary General Fund year end combined Budget Reserve Account balance and unencumbered cash balance has exceeded 5.5%. No funds have been withdrawn from the Budget Reserve Account since inception in 1980.

FY 2018 ended with an operating surplus of $275 million and a cash balance of $750 million or 18.2% of budgetary General Fund disbursements. The combined Budget Reserve Account plus unencumbered cash balance represented 13.7% of budgetary General Fund disbursements. Based on the State's FY 2018 CAFR (GAAP basis), the General Fund balance was $944.7 million, and the unassigned fund balance was $424.4 million.

Figure 6

Budgetary General Fund (Cash Basis) Receipts, Disbursements and Ending Cash Balances									
$ in 000s	**FY 2018**	**% chg.**	**FY 2017**	**% chg.**	**FY 2016**	**% chg.**	**FY 2015**	**% chg.**	**FY 2014**
Beginning Balance (July 1)	474,927	-16.4%	567,981	5.8%	536,915	29.6%	414,398	-34.8%	635,878
Receipts	4,392,977	9.5%	4,013,095	1.7%	3,944,791	-0.3%	3,955,127	10.7%	3,572,655
Disbursements	4,118,085	0.3%	4,106,149	4.9%	3,913,725	2.1%	3,832,610	1.0%	3,794,135
Operating Surplus/ (Deficit)	274,892		(93,054)		31,066		122,517		(221,480)
Ending Balance (June 30)	749,818	57.9%	474,927	-16.4%	567,981	5.8%	536,915	29.6%	414,398
Less Continuing Appropriations & Encumbrances	(184,100)		(178,600)		(181,500)		(201,300)		(194,800)
Less Budget Reserve Account	(231,600)		(221,100)		(214,700)		(212,500)		(201,700)
Unencumbered Cash Balance	334,100		75,200		171,800		123,100		18,000
Ending Balance as % of Disbursements	18.2%		11.6%		14.5%		14.0%		10.9%
Budget Reserve Acct plus Unencumbered Balance as a % of Disbursements	13.7%		7.2%		9.9%		8.8%		5.8%

Source: State of Delaware GO Bond Official Statements

FY 2018 Fiscal Operations

FY 2018 operations closed with strong year end results. The adopted FY 2018 budget for the budgetary General Fund addressed a projected $400 million budget shortfall through a range of spending reductions and new revenues. Actual total FY 2018 disbursements were a modest 0.3% increase over the prior year. FY 2018 ended the year with a $274.9 million operating surplus and $749.8 million ending cash balance, or 18% of budgetary General Fund disbursements, which KBRA considers to be very strong. Total budgetary General Fund receipts increased 9.5% from FY 2017 levels. Personal Income taxes increased 6.0% due in part to the effects of statutory repatriation of certain hedge fund profits. Franchise taxes increased 20%, due in part to rate increases. There were also increases in other business-related taxes. Revenue increases included an increase in corporate franchise tax rates, a 1% increase in realty transfer tax and increases in cigarette and alcoholic beverages taxes.

Liquidity Position

The State's available cash includes the combined budgetary General Fund and Special Funds cash balances. As of June 30, 2018, the combined cash balance was $2.5 billion, which KBRA considers to be a strong level of liquidity. The State is authorized to issue Tax and Revenue Anticipation Notes (TRANS) for cash flow purposes but has not issued TRANS since 1977.

Adopted FY 2019 Budget

The December 2018 DEFAC forecast of budgetary General Fund operations indicates a modest operating surplus is expected in FY 2019. The FY 2019 budget, signed by the Governor on June 28, 2018, limits operating budget growth to 3.99% and only appropriates 97% of estimated revenues compared to the constitutional limit of 98% of estimated revenue. The reduction of the appropriation limit to 97% of estimated revenues increases the budget cushion going into FY 2019. The budget increases funding for K-12 education, including special education programs, and child care programs. With supplemental appropriations net of prior year carry over, FY 2019 budgeted expenditures are an 8% increase over the prior year. The supplemental appropriations include a one-time appropriation for employee and retiree bonuses.

Proposed 2020 Budget

On January 24, 2019 the Governor announced his proposed FY 2020 budget. The $4.43 billion general fund operating budget reflects 3.8% growth; in combination with appropriations of $95.0 million cash funding for capital project, one-time supplemental appropriations and a set aside for grants in aid, the total recommended FY 2020 General Fund appropriations are $4.62 billion. Total appropriations represent 96.1% of estimated General Fund revenues, which is more conservative than the constitutionally mandated set aside, and leaves $92.1 million unappropriated.

Approximately half of the recommended operating fund growth is for education. The budget reflects a new education funding program, the Opportunity Funding program, a weighted funding plan, which will direct $60 million over the next three years to low-income students and English learners. Other education spending includes $20 million for a 2% pay increase for public school educators. In addition, the recommended budget reflects $15 million for a higher education economic development investment fund and $21 million for higher education capital needs.

DEFAC's projections for FY 2020 revenue assumes the State's economy will be in line with the broader national economy. The State's population growth, employment growth and personal income growth assumptions are largely the same as the FY 2019 assumptions. The State's dominant revenue, personal income taxes, is projected to increase 5.3%, comparable to the 5.1% growth forecast for FY 2019.

Based on the foregoing, KBRA views the State's financial performance and liquidity position as consistent with an AAA rating determinant rating

RD 4: State Resource Base

The Delaware General Corporation Law is considered to be the most modern and flexible in the nation and the State updates its statutes on an ongoing basis to respond to changing business conditions. The State's Division of Incorporations maintains an ongoing focus on efficient and timely service delivery. The State's Court of Chancery, with its extensive body of case law in corporate governance and its history of prompt resolution of commercial and corporate disputes is a key element in the State's role as a leader in new business formation activity.

The State has long focused on financial institutions as a key element of its economic base. In 1981, legislation was passed that opened the State to interstate banking, modernized the State's banking laws and permitted creation of new types of special purpose intermediaries. The State updates its banking statutes to maintain the State's role as a financial services center. The State is currently home to about 80 banks, including commercial banks, credit card banks, limited purpose trust companies and federal and state savings banks.

Delaware has a long history in the chemical and advanced materials industry dating back to the establishment of DuPont in 1802. In 2017, Delaware based Dupont completed the merger with Dow Chemical of Michigan to form the world's largest chemicals company, based on sales. Dow Dupont then separated into three companies: agricultural and chemical, material sciences and specialty products, with two of the three business lines (agriculture and specialty product) remaining in Delaware. Prior to the merger, DuPont spun off Chemours, which continues to operate in Delaware. Chemours manufactures performance chemicals and is the world's largest producer of titanium dioxide. Current State economic development initiatives strategically capitalize on the State's industry strengths, including several collaborations with the chemical materials research and development community and the University of Delaware.

The resource base is further supported by the presence of the Dover Air Force Base, the Port of Wilmington and tourism. Visitors are drawn to the state's 26 miles of beaches, various craft breweries, the Dover International Speedway, NASCAR races and the Firefly Music Festival.

Delaware ranks 49th in size for states based on an area of approximately 1,955 square miles. The State is comprised of three counties including Kent, New Castle, and Sussex. Its three principal cities are Wilmington (2017 population 71,104), Dover (population 37,109), and Newark (population 33,243). The State is characterized by relatively strong population growth, a somewhat above average median age, and moderate incomes that in the context of the State's business friendly environment and low cost of living relative to the Mideast region supports a strong economic base.

FIGURE 7

	2017 Population	Chg. from 2010	2017 Age Dependency Ratio[2]	Chg. from 2010[3]	2017 Population w / B.A. Degree of Higher[4]	Chg. from 2010[3]	2017 Poverty Level	Chg. from 2010[3]
Delaware	961,939	6.9%	64.6%	5.1%	31.5%	3.7%	13.6%	1.8%
Mideast Region[1]	49,368,668	2.4%	59.9%	2.7%	36.1%	4.0%	10.9%	-2.2%
United States	325,719,178	5.3%	61.8%	3.0%	32.0%	3.8%	13.4%	-1.9%
Delaware as a % of Mideast	N/A		108%		87%		125%	
New Jersey as a % of U.S.	N/A		104%		98%		101%	

Source: U.S. Census Bureau

	2017 Personal Income ($ billions)	Chg. from 2010	2017 Per Capita Personal Income	Chg. from 2010	2017 Real Gross State Product ($ billions)	Chg. from 2010	2017 Real GSP Per Capita (2012 dollars)	Chg. from 2010
Delaware	$48	30.2%	$49,673	21.8%	$64	6.5%	$63,891	6.5%
Mideast Region[1]	$3,016	34.2%	$61,099	27.8%	$3,211	10.5%	$65,035	7.9%
United States	$18,051	30.9%	$51,640	27.4%	$18,051	15.7%	$55,418	9.9%
Delaware as a % of Mideast	N/A		81%		N/A		98.2%	
Delaware as a % of U.S.	N/A		96%		N/A		115.3%	

Source: U.S. Bureau of Economic Analysis

[1] Mideast region is defined as Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.

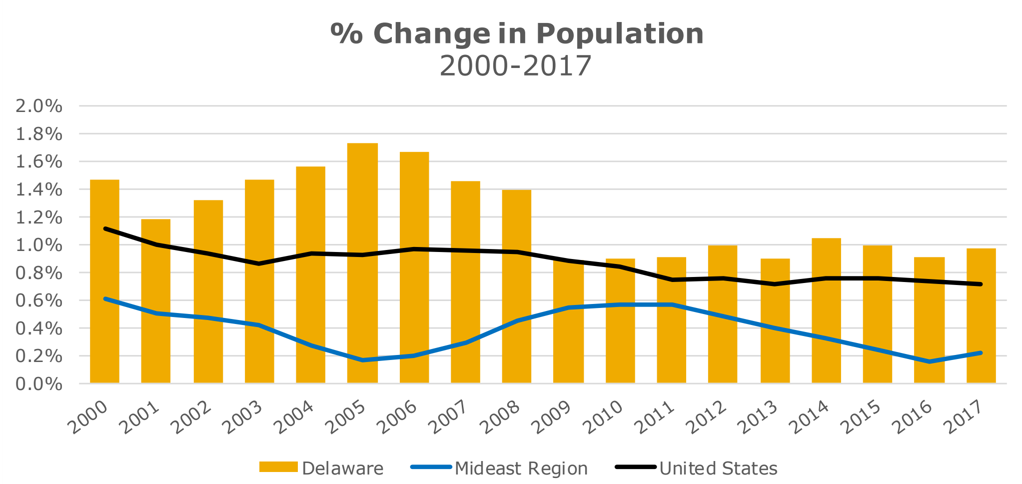
[2] Age dependency ratio is the sum of the population under 18 yrs and over 65 yrs divided by persons age 18 to 64 yrs.

[3] Nominal change in percentage points.

[4] Population aged 25 and over.

State population growth has exceeded the U.S. average each year since 2000 despite some moderation over the last decade. State population increased by a robust 6.9% since 2010 compared to growth in the Mideast region of 2.4% and U.S. growth of 5.3%. KBRA believes the State's diverse employment base, strong business environment, a good affordability relative to regional peers as contributing to favorable demographic trends. According to the Tax Foundation's 2018 State Business Tax Climate Index, Delaware placed among the best states with a ranking of 15.

FIGURE 8



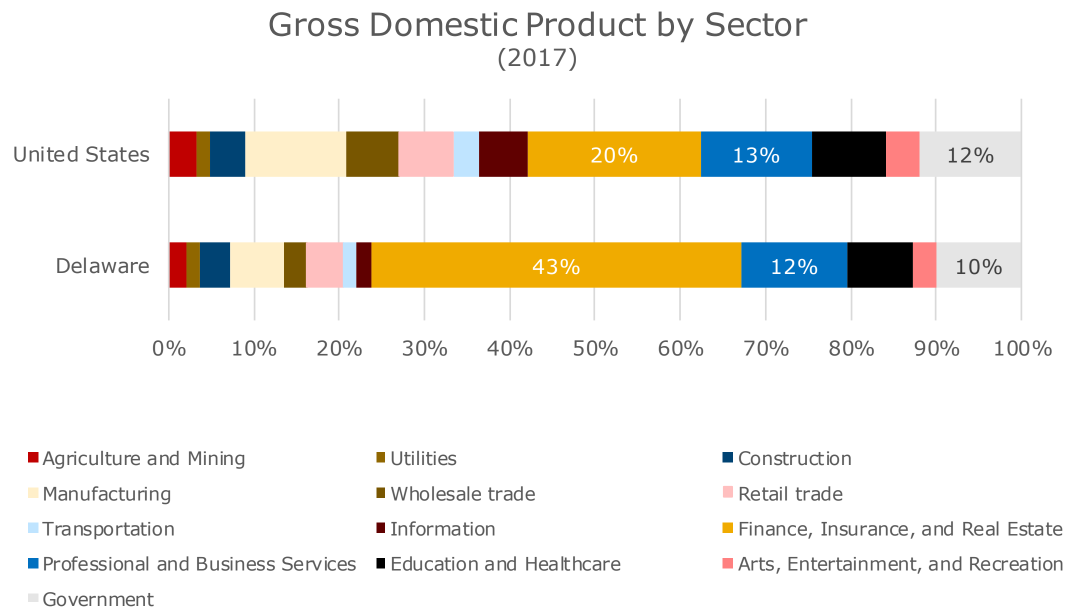
Source: U.S. Bureau of Economic Analysis

Real Gross State Product

In 2017, the State's real GSP per capita ranked fifth in the nation at $63,955 and third in the region behind the District of Columbia ($159,607) and New York ($65,220). The State's per capita GSP is a high 125% of the national average.

As discussed previously, the State's prominence as a financial and business center is anchored by the banking and credit card industries and the State's business-friendly legal system. Consequently, the finance, insurance, real estate sector accounts for an outsized percentage of Delaware's GSP (43%), well in excess of the national percentage (20%).

FIGURE 9

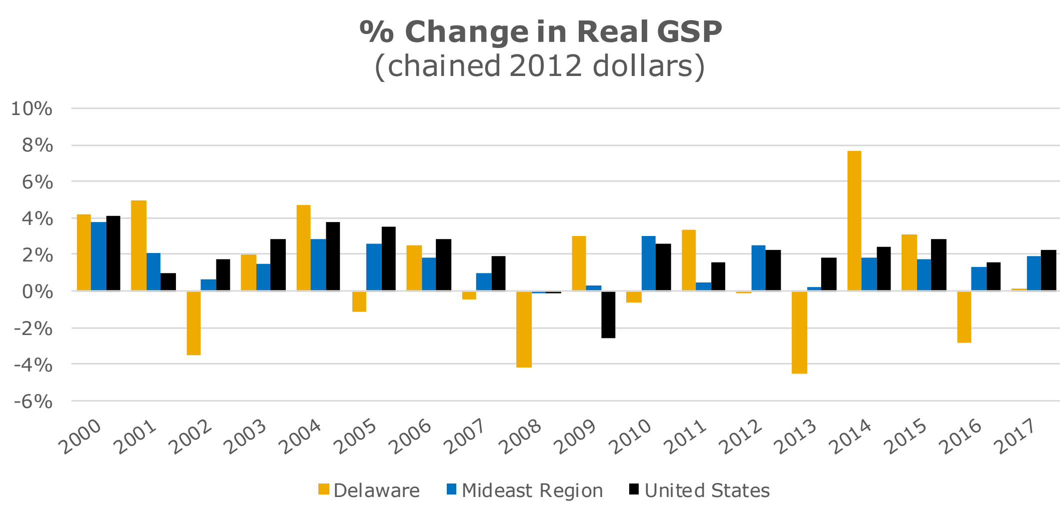


Source: Bureau of Economic Analysis

Delaware's real (inflation deflated) GSP experienced a deeper decline and a slower recovery following the 2007-08 economic downturn than either the region or the nation. This performance reflects several factors including the State's above average reliance on the financial sector which contracted more than the economy overall following the downturn.

The State's GSP growth of 8.8% from 2010 to 2017 was slower than the region and nation. While core areas of the State's economy such as finance, business services and education have performed well, the manufacturing and wholesale trade sectors contracted in that period. In 2017 the State restructured its economic development efforts through the creation of a new public-private entity, the Delaware Prosperity Partnership, to promote entrepreneurship and better leverage of resources.

FIGURE 10



Source: U.S. Bureau of Labor Statistics

Employment

The State's employment opportunities are diverse. Education and health services is among the largest employment sectors (17%), and this sector has also shown the strongest growth. Delaware is home to the Christiana Care Health

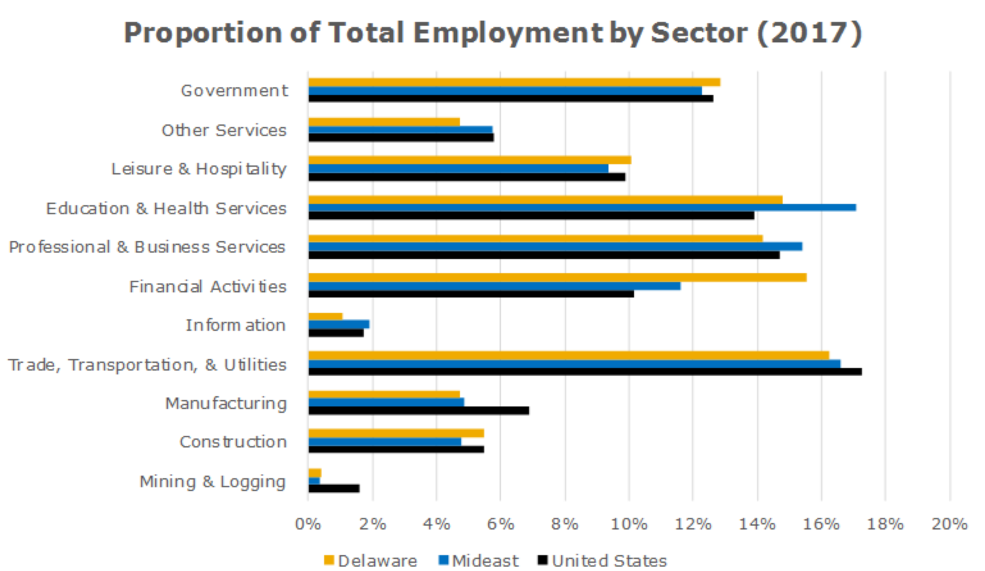
System, which is ranked in the top 25 for hospital admissions in the nation. The health system includes a major teaching hospital, affiliated with Thomas Jefferson University's Sidney Kimmel Medical College. Financial activities accounted for 15.5% of non-farm employment in 2017, compared to the national average of 10.1% which reflects types and level of employment at corporate headquarters.

The University of Delaware (the University), a leading public university, also plays a role in various industries across the State. The University's 272-acre Science, Technology and Advance Research (STAR) campus has several notable expansions underway: a state of the art, ten-story tower for classrooms and high tech commercial tenants, a biopharmaceutical innovation building and the Chemours Company's Discovery Hub for global chemical research. The STAR campus is also home to the Delaware Health Science Alliance, which focuses on biomedical research.

The trade, transportation and utilities sector are another important source of employment, and includes activities associated with the Port of Wilmington. The Port has the nation's largest dockside refrigerated complex and is one of the world's largest importers of containerized bananas and other fruit. Manufacturing employment within the State contracted from 2000 to 2010, but has since been relatively stable.

The State is also home to the 3,900-acre Dover Airforce base which is in the city of Dover. The base is the nation's busiest military cargo terminal and has approximately 6,400 military personal. The State estimates that the air force base provides $466 million annually to the local economy.

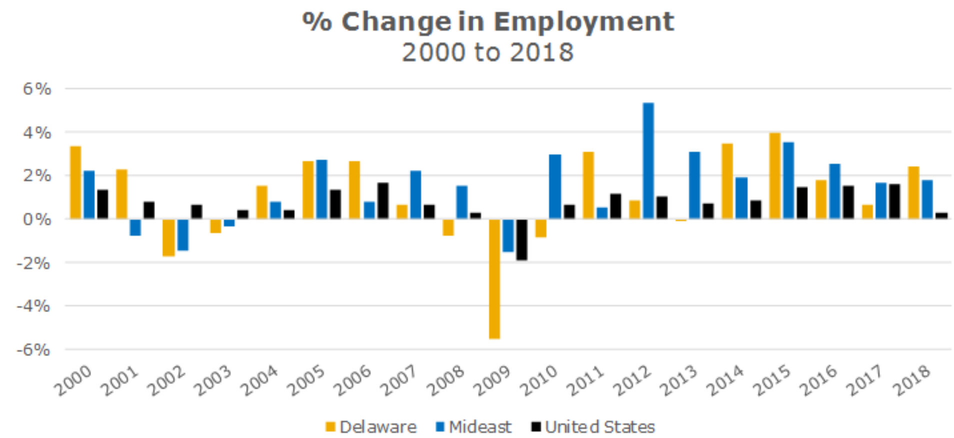
FIGURE 11



Source: U.S. Bureau of Economic Analysis

The State is in its fifth year of strong employment growth, with education and health services, along with the leisure and hospitality sector, serving as important contributors to employment growth. The State experienced three consecutive years of employment declines as a result of the recession, registering a steeper decline than the nation, but since 2010, statewide employment has grown 17%, well in excess of regional and national growth rates.

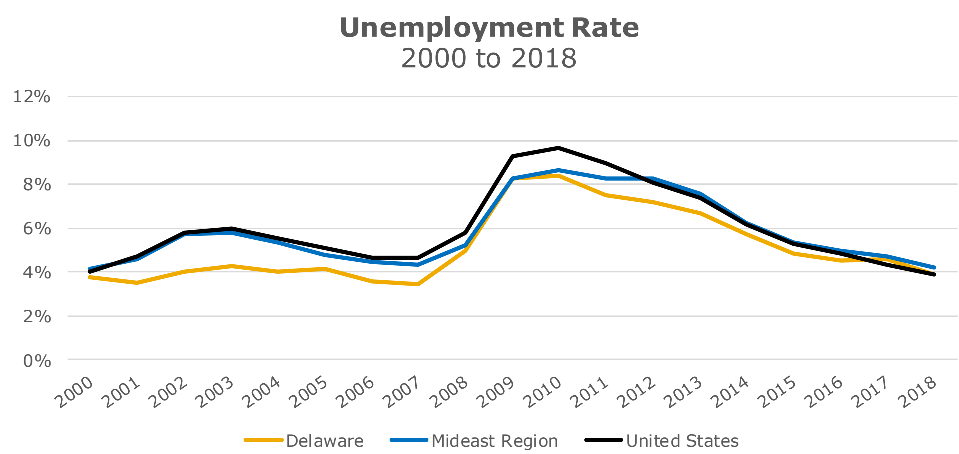
FIGURE 12



Source: U.S. Bureau of Labor Statistics

As shown in the table below, Delaware's unemployment trends compare favorably to the nation. Unemployment rates in the State remained below the highs experienced by both the nation and region during the great recession.

FIGURE 13

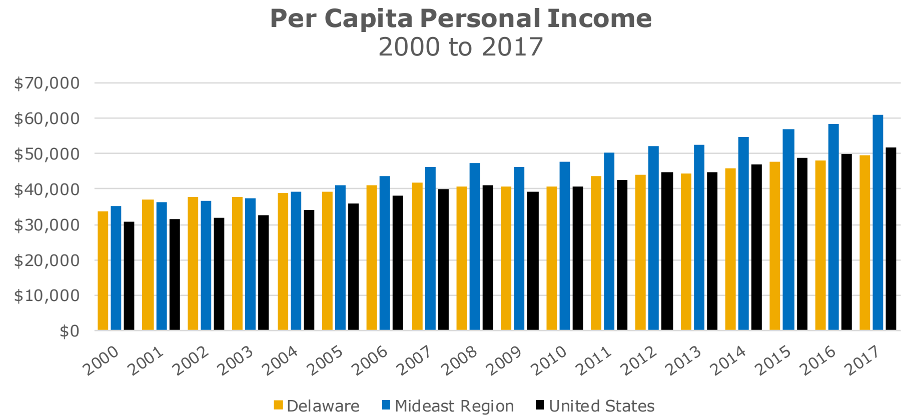


Source: U.S. Bureau of Labor Statistics

Per Capita Personal Income

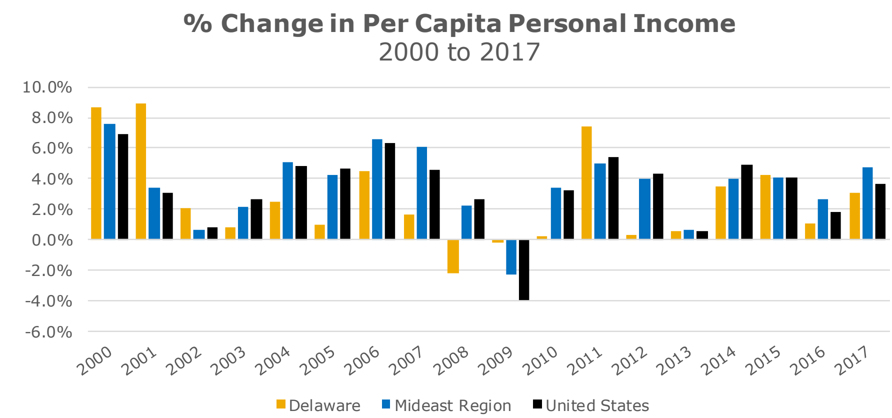
Wealth levels in Delaware are moderately strong especially relative to housing costs and the cost of living in the State. The State's per capita personal income has historically been lower than the region; however, KBRA notes that the region has four of the top ten highest per capita personal income states; District of Columbia ($76,986), New Jersey ($62,554), New York ($60,991), and Maryland ($59,524).

FIGURE 14



Source: U.S. Bureau of Labor Statistics

FIGURE 15

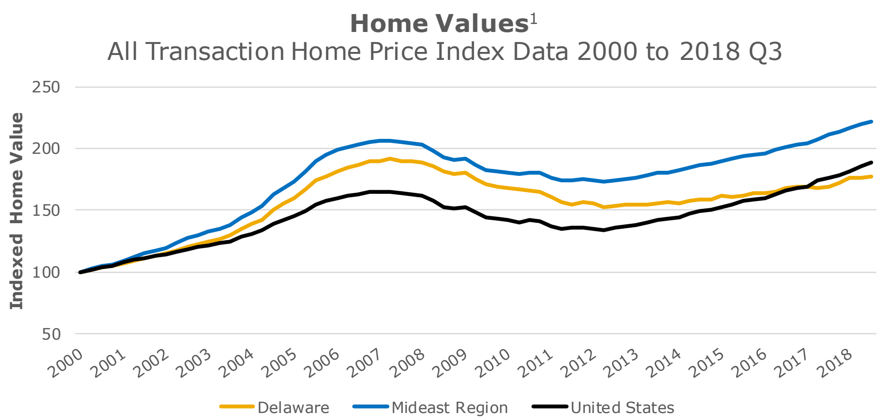


Source: Bureau of Economic Activity

Housing Market

The State's housing market experienced a more protracted recessionary decline when compared to the region, with home values declining over a longer period and the recovery also taking longer. According to the Federal Housing Finance Agency home values declined 20.4% from the 2007 Q2 peak to 2012 Q2 trough whereas the region and national peak to trough declines were 16.3% and 18.9%, respectively. The State's housing market also has had a slower recovery. As of Q3 2018, the State's home values had recovered to 92.8% of their prior peak compared to the Mideast region at 107.6% and the U.S. average at 114.0%. At the end of 2015, in conjunction with the merger with Dow, DuPont announced the layoff of approximately 6,100 Delaware employees, which likely suppressed the State's housing recovery.

FIGURE 16



Source: Federal Housing Finance Agency

[1] Mideast Region data is based on a simple average of values for DE, DC, MD, NJ, NY, and PA.

Based on the foregoing, KBRA views the State's resource base as being consistent with a AA+ rating determinant rating.

Conclusion

Based on the foregoing analysis, KBRA has assigned a long-term rating of **AAA** and **Stable Outlook** to the State of Delaware General Obligation Bonds, Series 2019 and affirmed the long-term rating of AAA and stable outlook on the State's outstanding general obligation debt.