# State of Delaware

| **Ratings** | |
|---|---|
| **State of Delaware** | |
| **Assigned** | |
| **Long-Term Rating** | **Outlook: Stable** |
| General Obligation Bonds | AAA |

*KBRA's long-term ratings do not apply to bonds backed by a letter of credit or liquidity facility, unless otherwise noted.*

**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 continues to serve 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 (43%) 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 its position as a leader in these areas through supporting the prompt resolution of disputes by the State's Court of Chancery and by continuing to update its statutes to respond to changing business conditions, both of which mitigate the risk of concentration of these industries in the State's economic base. The State's economic base has shown growth relative to the region and the nation, as evidenced by its population growth since 2010 and its growth in employment since 2014.

KBRA views the State's management structure and policies as providing a very strong framework for managing the State's budget and financial operations. The State Constitution limits annual appropriations to 98% of estimated budgetary General Fund revenue and unencumbered cash balance, which provides financial flexibility going into a fiscal year. A key element in the State's financial management process is the State's formal revenue estimation process under the Delaware Economic and Financial Advisory Council (DEFAC). DEFAC is mandated by executive order to submit to the Governor and General Assembly revenue and expenditure estimates for the current year and the succeeding two fiscal years at regular intervals during a fiscal year. In KBRA's view, the DEFAC process provides the State with comprehensive and timely revenue forecasts as well as a vehicle for consistent fiscal monitoring and long-term planning. The State has broad authority to take action during the fiscal year to adjust disbursements, which KBRA views very positively. The State Constitution created the Budget Reserve Account in 1980 and 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. The State has not needed to draw on the Budget Reserve Account since its inception.

KBRA views the financial position of the State as very strong based on its conservative budgeting policies, its comprehensive and timely process of revenue estimation, high levels of financial reserves and strong liquidity position. The State's budgetary General Fund revenue sources reflect the importance of the financial services and corporate activities industry and historically these revenues have shown some volatility. In KBRA's view, the State is somewhat reliant on these revenue sources for its budgetary General Fund operations; however, this concern is offset by the State's conservative management of its finances, its revenue estimation process and the State's ability to adjust disbursements. In each of the last five years, the State has ended the fiscal year with an ending cash balance of over 10% and an unencumbered cash balance of over 5.5% of budgetary General Fund disbursements, which KBRA considers a very strong level of reserves. The State's Budget Reserve Account is maintained in an amount not to exceed 5% of estimated budgetary General Fund receipts.

KBRA views the State's level of tax-supported debt to be high when compared with other states, based on measures of debt relative to population, personal income, and GSP. Delaware's high debt ratios reflect the centralized role of the State government in financing certain capital projects that are generally funded by local governments in other states, such as schools and correctional facilities. KBRA views the State's debt structure favorably; the State's direct debt is 100% fixed rate and the State has no exposure to any debt related derivatives. The funded ratio of the State's largest pension fund was 86.5% as of June 2017, which KBRA considers to be strong. The State consistently contributes 100% of the actuarially recommended amount to fund its pensions. The aggregate of debt service, pension contributions and pay-as-you-go OPEB costs represented 8.6% of total governmental expenditures in FY 2017, which KBRA considers to be low.

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.

**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 Downgrade**

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

## 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.

## Recent Actions

On June 30, 2018, Governor Carney signed Executive Order 21 to implement recommendations of the advisory panel to DEFAC to study potential fiscal controls and budget smoothing mechanisms. 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. The Executive Order also charges DEFAC with creating a benchmark index, based on State economic indices, to inform the annual budget development process. 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.

## 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 2019, new tax supported debt authorizations of $215.8 million is permitted.
- 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.

## <u>RD 2: Debt and Continuing Obligations</u>

**Tax-Supported Debt**
KBRA views the State's debt burden as high but manageable. Total tax supported debt per capita is $3,032 and debt as a percentage of State personal income is 6.2%, which puts the State in the top 15% of states on both measures. Total tax supported debt as a percentage of GSP at 4.0% is in the top 20% of all states. 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.

**FIGURE 1**

| Debt Ratios | | | |
|---|---|---|---|
| | Delaware | Average of U.S. States | of 2017 U.S. Percentile |
| Tax Supported Debt per Capita | $3,032 | $1,879 | Top 15% |
| Tax Supported Debt as a % of Personal Income | 6.2% | 3.5% | Top 15% |
| Tax Supported Debt as a % of GSP | 4.0% | 2.8% | Top 20% |

Source: US. Census Bureau, Bureau of Economic Analysis, Credit Scope, and Annual Disclosures

[1] As of September 2018.

The State's total tax supported debt includes approximately $2 billion of State general obligation debt and $913 million of Delaware Transportation Authority debt. The State's direct debt is comprised entirely of State general obligation debt and includes the locally supported share of State debt issued for school facilities. Currently, 25% of outstanding direct State debt is supported by local school district property taxes which translates into 25% of direct State debt service being funded by transfers of local property taxes to the State to pay debt service. State tax supported debt ratios, net of the 25% of State general obligation debt that is payable by local school districts, are $2,511 per capita and 5.1% as a percentage of State personal income, which is in the top 20% for all states.

**Debt Structure and Amortization**

KBRA views the State's debt structure favorably. Debt service is declining after 2018 and all debt is fixed rate. Debt is rapidly retired, with 70% retired in ten years and 100% retired in twenty years. Fiscal 2017 debt service totaled $251 million, which represents 3.2% of total governmental fund expenditures, which KBRA considers low. In FY 2017 the local school districts transferred $64.8 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 billion of general obligation debt outstanding, approximately $0.5 billion 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 2017, $64.8 million of property tax revenue was 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 estimated at $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.

**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. The management of the Plan 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 an amortization period of no more than 20 years, which KBRA views favorably; however, 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 fiscal 2017 actual market investment return was 11.0%. The 7% 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, 2017 was $1.36 billion. and the actuarily determined funded ratio was 86.5%. While 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 consistently contributes at the actuarially recommended amount, which KBRA considers a credit positive.

**FIGURE 2**

**State Pension Contributions[1]**

$ in thousands

| FYE June 30 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| Actuarial Recommended Contributions | 181,738 | 195,359 | 198,102 | 201,839 | 204,586 |
| Actual Contributions | 181,650 | 195,359 | 198,102 | 201,839 | 204,586 |
| Percent Contributed | 100% | 100% | 100% | 100% | 100% |

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

*Source: State of Delaware Comprehensive Annual Financial Report*

Based on GASB 68 reporting requirements, as utilized in the State's comprehensive annual financial report (CAFR), the total net pension liability (NPL) of the State Plan at June 30, 2017 was $1.47 billion, of which the State general government's share is $1.27 billion. The CAFR's reporting is based on the 2016 actuarial valuation report updated to reflect the reduced assumed investment rate of return. KBRA considers the pension burden represented by the State's combined NPL to be moderate to high, compared to other states, based on the ratio of NPL to population, personal income, and the GSP measures, as shown below.

**FIGURE 3**

**Net Pension Liability Ratios**

| | Delaware | Average of U.S. States | of 2017 U.S. Percentile |
|---|---|---|---|
| Net Pension Liability per Capita | $1,795 | $2,144 | Top 35% |
| Net Pension Liability as a % of Personal Income | 3.7% | 4.2% | Top 35% |
| Net Pension Liability as a % of GSP | 2.3% | 3.7% | Top 45% |

*Source: US. Census Bureau, Bureau of Economic Analysis, Credit Scope, and Annual Disclosures*

**Other Post-Employment Benefits**

The State funds OPEB on a pay-as-you-go basis. In 2017, the State's contribution to OPEB costs was $225 million which represented 2.7% of FY 2017 total governmental expenditures.

The State established an OPEB trust fund and has made ad hoc contributions since 2007. As of a July 1, 2017 valuation, the funded ratio of the trust fund was 4.1% and the net OPEB Liability was $8.3 billion. The actuarial assumptions include a 3.75% investment rate of return and 30-year open amortization.

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 62,023 at June 30, 2017. KBRA views membership as sizable (6.4% of the statewide population), but recognize 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.

Statewide, per-capita health care costs in Delaware are more than 27% above the U.S. average and the third highest among states in the nation. In February 2018, the State authorized the Department of Health and Social Services (DHSS) to establish a health benchmark, with a growth rate for health care spending linked to growth in the State economy, as a first step in a State driven initiative to control healthcare costs. DHSS will select the methods to measure and report on the total cost of health care and identify metrics to measure and track spending and quality across our health care system. Governor Carney established the Health Care Delivery and Cost Advisory Group to assist in this process, which is currently ongoing.

**Total Fixed Costs**
The aggregate of debt service, pension contributions and pay-as-you-go OPEB costs represent a relatively low 8.6% of total governmental expenditures in FY 2017.

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.

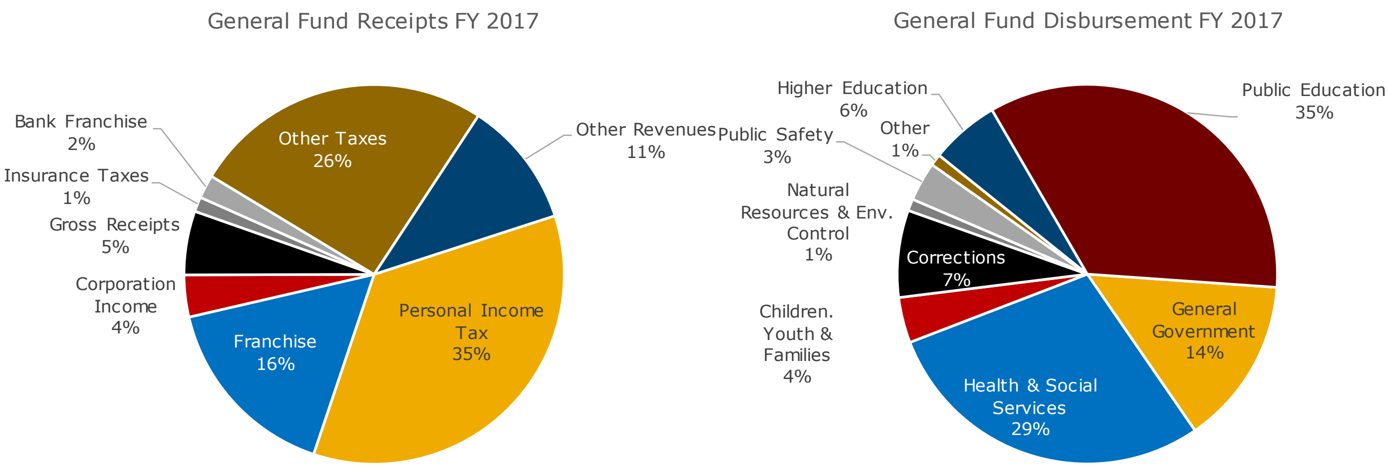
The State budgets and operates on a cash basis of accounting for its fiscal year (July 1-June 30). Cash disbursements from State funds are controlled by an encumbrance accounting system that tracks the extent of the State's ongoing financial obligations, primarily based on purchase orders issued, to 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**
As discussed previously, DEFAC is mandated by executive order to submit to the Governor and General Assembly budgetary General Fund revenue estimates at regular intervals during the fiscal year for the current year and the succeeding two fiscal years. Budgetary General Fund expenditure forecasts for the current fiscal year are submitted four times during the fiscal 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, as discussed previously, 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. Based on comparisons between revenue projections available at the time of budget development and actual fiscal year results, the variance for total budgetary General Fund receipts in the adopted budget and the total actual fiscal year end receipts has been less than 1% in four out of the last five years. Generally, the December DEFAC revenue estimates, with timely modifications, serve as the basis for budget development.

Based on its June 2018 revenue estimates, DEFAC projected that FY 2018 budgetary General Fund receipts will increase 9.5% from FY 2017 levels, due to certain increases in revenue sources that will be discussed later in this section. DEFAC currently projects that total budgetary General Fund revenues will be flat in FY 2019, compared to FY 2018, and then increase by 3.7% in FY 2020. On the expenditure side, DEFAC projects that budgetary General Fund expenditures will increase .5% in FY 2018 from FY 2017 levels and 2.5% and 2.6% in FY 2019 and FY 2020, 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 2018 A&B, dated February 7, 2018*

**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 (26% of total receipts), shown in Figure 4, includes revenues generated by abandoned property in the State while other revenues (11%) is composed largely of lottery revenues. The State does not levy a general retail sales tax. Total budgetary General Fund receipts totaled $4 billion in FY 2017.

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 2017, abandoned property actions generated $554 million in budgetary General Fund receipts (13.5% of General Fund receipts) and approximately the same amount is projected for FY 2018. 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 will take a significant period of time.

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 below in Figure 5. Total budgetary General Fund receipts have increased at an average annual rate of 2% from FY 2013 through FY 2017, which KBRA views as slow growth. Personal income taxes have increased in every year between FY 2013 and FY 2017 for an average annual increase of 4.1%. Most of the business and corporate related taxes have generally shown volatility over the last five years. Corporate franchise taxes have increased in every year, with an average annual rate of 4.3%, though the rate of increase has fluctuated year to year. Total business and corporate related taxes represented approximately 40% of budgetary General Fund receipts in FY 2017. This percentage includes the receipts related to abandoned property and other taxes included in the category of other taxes in Fig. 5. 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**

As shown in Fig 4, disbursements for K-12 education represented 35% of budgetary General Fund disbursements in FY 2017. In FY 2016, the State funded 60% of these costs overall with the local school districts funding 31% and the federal government funding 9%. The State also funds between 60% and 80% of school construction costs. Health and Social Services accounted for 29% of FY 2017 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. The portion paid by the State is accounted for in the budgetary General Fund. Corrections represented 7% of budgetary General Fund disbursements in FY 2017. 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 2.9% from FY 2013 through FY 2017.

**FIGURE 5**

| General Fund Receipts for FY 2013 - FY 2017 (budgetary/cash basis) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **2017** | **% Chg.** | **2016** | **% Chg.** | **2015** | **% Chg.** | **2014** | **% Chg.** | **2013** |
| **Tax Revenue (000's)** | | | | | | | | | |
| Personal Income | 1,548,053 | 3.4% | 1,496,898 | 3.6% | 1,444,278 | 4.3% | 1,384,985 | 5.0% | 1,318,915 |
| Franchise | 714,471 | 1.0% | 707,685 | 4.8% | 675,490 | 8.0% | 625,643 | 3.3% | 605,594 |
| Corporation Income | 157,368 | -29.0% | 221,615 | -27.4% | 305,226 | 73.9% | 175,514 | -14.7% | 205,696 |
| Gross Receipts | 239,465 | 2.3% | 234,072 | 4.8% | 223,411 | -1.4% | 226,524 | 0.1% | 226,254 |
| Insurance Taxes | 55,295 | 3.0% | 53,692 | -2.0% | 54,815 | 3.5% | 52,962 | -1.8% | 53,942 |
| Bank Franchise | 88,189 | -4.6% | 92,485 | -2.6% | 95,002 | -7.5% | 102,695 | -0.8% | 103,531 |
| Other Taxes | 1,126,724 | 3.5% | 1,088,342 | 6.7% | 1,020,416 | 10.2% | 926,103 | -5.9% | 984,110 |
| Total Taxes | 3,929,565 | 0.9% | 3,894,789 | 2.0% | 3,818,638 | 9.3% | 3,494,616 | -0.1% | 3,498,042 |
| Tax Refunds (-) | 390,149 | -1.8% | 397,189 | 23.4% | 321,844 | -10.1% | 357,952 | 52.1% | 235,400 |
| Net Taxes | 3,539,416 | 1.2% | 3,497,600 | 0.0% | 3,496,794 | 11.5% | 3,136,664 | -3.9% | 3,262,642 |
| Other Revenues | 473,679 | 5.9% | 447,191 | -2.4% | 458,333 | 5.1% | 435,991 | -6.7% | 467,109 |
| **Total Receipts** | **$4,013,095** | **1.7%** | **$3,944,791** | **-0.3%** | **$3,955,127** | **10.7%** | **$3,572,655** | **-4.2%** | **$3,729,751** |
| **General Fund Disbursements for FY 2013 - FY 2017 (budgetary/cash basis)** | | | | | | | | | |
| | **2017** | **% Chg.** | **2016** | **% Chg.** | **2015** | **% Chg.** | **2014** | **% Chg.** | **2013** |
| General Government | 587,361 | 1.6% | 578,267 | -1.6% | 587,508 | 1.2% | 580,432 | 5.9% | 548,248 |
| Health & Social Services | 1,179,778 | 5.4% | 1,119,041 | 2.0% | 1,096,818 | 0.9% | 1,087,203 | 2.4% | 1,061,885 |
| Children. Youth & Families | 159,231 | 5.0% | 151,699 | 1.8% | 149,053 | -0.3% | 149,517 | 5.4% | 141,895 |
| Corrections | 304,842 | 5.2% | 289,899 | 2.5% | 282,769 | 3.4% | 273,474 | 3.2% | 264,989 |
| Natural Resources & Env. Control | 41,298 | 7.3% | 38,499 | -7.5% | 41,600 | -16.1% | 49,598 | 11.2% | 44,602 |
| Public Safety | 136,783 | 3.9% | 131,691 | -0.1% | 131,766 | -9.5% | 145,584 | 0.9% | 144,288 |
| Other | 40,517 | 47.7% | 27,429 | -16.0% | 32,650 | 4.9% | 31,115 | -2.6% | 31,944 |
| Total Departments | 2,449,810 | 4.8% | 2,336,525 | 0.6% | 2,322,164 | 0.2% | 2,316,923 | 3.5% | 2,237,851 |
| Higher Education | 241,045 | 2.2% | 235,818 | 1.4% | 232,637 | -0.9% | 234,645 | 3.5% | 226,714 |
| Public Education | 1,415,294 | 5.5% | 1,341,382 | 5.0% | 1,277,809 | 2.8% | 1,242,567 | 4.1% | 1,193,976 |
| **Total Expenditures** | **$4,106,149** | **4.9%** | **$3,913,725** | **2.1%** | **$3,832,610** | **1.0%** | **$3,794,135** | **3.7%** | **$3,658,541** |

*Source: State of Delaware Official Statement General Obligation Bonds, Series 2018 A&B, dated February 7, 2018*

**FIGURE 6**

**Budgetary General Fund (Cash Basis)**
**Receipts, Disbursements and Ending Cash Balances**
**For FY 2013 - FY 2017**

| **Amount in ($000)** | **FY 2017** | **% chg.** | **FY 2016** | **% chg.** | **FY 2015** | **% chg.** | **FY 2014** | **% chg.** | **FY 2013** |
|---|---|---|---|---|---|---|---|---|---|
| Beginning Cash Balance (July 1) | 567,981 | 5.8% | 536,915 | 29.6% | 414,398 | -34.8% | 635,878 | 12.6% | 564,668 |
| Total Receipts | 4,013,095 | 1.7% | 3,944,791 | -0.3% | 3,955,127 | 10.7% | 3,572,655 | -4.2% | 3,729,751 |
| Total Disbursements | 4,106,149 | 4.9% | 3,913,725 | 2.1% | 3,832,610 | 1.0% | 3,794,135 | 3.7% | 3,658,541 |
| Operating Surplus/ Deficits | (93,054) | | 31,066 | | 122,517 | | (221,480) | | 71,210 |
| Ending Cash Balance (June 30) | 474,927 | -16.4% | 567,981 | 5.8% | 536,915 | 29.6% | 414,398 | -34.8% | 635,878 |
| Less Continuing Appropriations & Encumbrances | (178,600) | | (181,500) | | (201,300) | | (194,800) | | (276,500) |
| Less Budget Reserve Account | (221,100) | | (214,700) | | (212,500) | | (201,700) | | (198,900) |
| Unencumbered Cash Balance | 75,200 | | 171,800 | | 123,100 | | 18,000 | | 160,500 |
| Ending Cash Balance as % of Total Disbursements | 11.6% | | 14.5% | | 14.0% | | 10.9% | | 17.4% |
| Budget Reserve Fund plus Unencumbered Cash Balance plus as a % of Total Disbursements | 7.2% | | 9.9% | | 8.8% | | 5.8% | | 9.8% |

Source: State of Delaware Official Statements for General Obligation Bonds, Series 2018 A&B (p.50), Series 2016 A,B&C (p.46), Series 2016 D (p.45), Series 2014 (p.42)

## Historical Reserve Levels

As shown in Figure 6, the State has ended the fiscal year with an ending cash balance of over 10% in each of the last five years, which KBRA considers a strong level of reserves. As discussed earlier in this section, a certain portion of the ending cash balance in a given fiscal year is reserved to pay outstanding encumbrances and fund continuing appropriations and these items are carried over into the subsequent fiscal year. The State's Budget Reserve Account is a dedicated portion of the State's year end cash balances and is maintained from excess unencumbered cash balances in an amount not to exceed 5% of estimated budgetary General Fund receipts in each fiscal year. Over the last five years, the State's budgetary General

Fund ended the fiscal year with a combined Budget Reserve Account balance and unencumbered cash balance of over 5.5%. No funds have been withdrawn from the Budget Reserve Account since 1980.

FY 2017 ended with an operating deficit of $93 million and an ending cash balance of $475 million or 11.6% of budgetary General Fund disbursements. The combined Budget Reserve Account plus unencumbered cash balance represented 7.2% of budgetary General Fund disbursements.

Based on the FY 2017 CAFR for the State of Delaware (GAAP basis), the total fund balance for the General Fund for FY 2017 was $534.6 million and the unassigned fund balance was $11.4 million.

**FY 2018 Fiscal Operations**
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. Growth in total FY 2018 disbursements were limited to 0.29%. 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.

As part of the FY 2018 budget, the Governor also signed an executive order creating the Government Efficiency and Accountability Review Board (GEAR), which committed the State to a long-term plan to study cost savings, efficiencies and ways to improve the delivery of services across state government.

Based on the Department of Finance monthly financial report as of June 30, 2018, FY 2018 ended the year with an operating surplus of $274.9 million and an ending cash balance of $749.8 million, or 18% of budgetary General Fund disbursements, which KBRA considers to be very strong. Based on the June 2018 DEFAC revenue estimates, total budgetary General Fund receipts increased 9.5% from FY 2017 levels. Personal Income taxes increased 6.3% due in part to the effects of statutory repatriation of certain hedge fund profits. Franchise taxes increased 20% and 49%, respectively, due in part to increases in tax rates included in the FY 2018 budget. There were also increases in other business-related taxes.

The impact of the federal Tax Cuts and Jobs Act passed in 2017 on the financial operations of the State was limited. The impact on individuals was primarily through limitations on itemized deductions (mainly the SALT deduction). Business impacts included depreciation related provisions and limits on interest deductions. The projected impact on the State' revenues included a modest loss of $14.5 million in FY 2018 and a gain of $9.1 million in FY 2019 and $39.7 million in FY 2020.

**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 FY 2019 budget was signed by the Governor on June 28, 2018. The FY 2019 budget 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.

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 has three counties; Kent, New Castle, and Sussex counties and has three major cities; Dover, Wilmington, and Newark. Delaware's population of 952,065 represents 1.9% of the Mideast region[1] of the U.S.

[1] Mideast includes New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia, as per the U.S. Bureau of Economic Analysis.

### FIGURE 7

| | 2016 Population | Chg. from 2010 | 2016 Age Dependency Ratio [1,2] | Chg. from 2010 | 2016 Population w/ B.A. Degree or Higher [2,4] | Chg. from 2010 | 2016 Poverty Level [2] | Chg. from 2010 |
|---|---|---|---|---|---|---|---|---|
| Delaware | 952,065 | 5.8% | 63.8% | 4.4% | 31.0% | 3.1% | 11.7% | -0.1% |
| Mideast | 49,123,667 | 1.9% | 59.1% | 2.1% | 35.6% | 3.4% | 12.8% | -0.2% |
| United States | 323,127,515 | 4.5% | 61.3% | 2.5% | 31.3% | 3.1% | 14.0% | -1.3% |
| Delaware as % of Mideast | N/A | | 107.9% | | 87.0% | | 91.2% | |
| Delaware as % of U.S. | N/A | | 104.0% | | 99.0% | | 83.6% | |
| | 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 | Chg. from 2010 |
| Delaware | $47.26 | 27.8% | $49,125 | 19.5% | $61.5 | 8.8% | $63,955 | 1.8% |
| Mideast | $2,902.03 | 27.1% | $58,783 | 24.1% | $2,982.9 | 9.2% | $60,421 | 6.6% |
| United States | $16,413.55 | 31.7% | $50,392 | 25.1% | $16,721.5 | 14.3% | $51,337 | 8.6% |
| Delaware as % of Mideast | N/A | | 83.6% | | N/A | | 105.8% | |
| Delaware as % of U.S. | N/A | | 97.5% | | N/A | | 124.6% | |

Source: US Census Bureau and Bureau of Economic Analysis

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

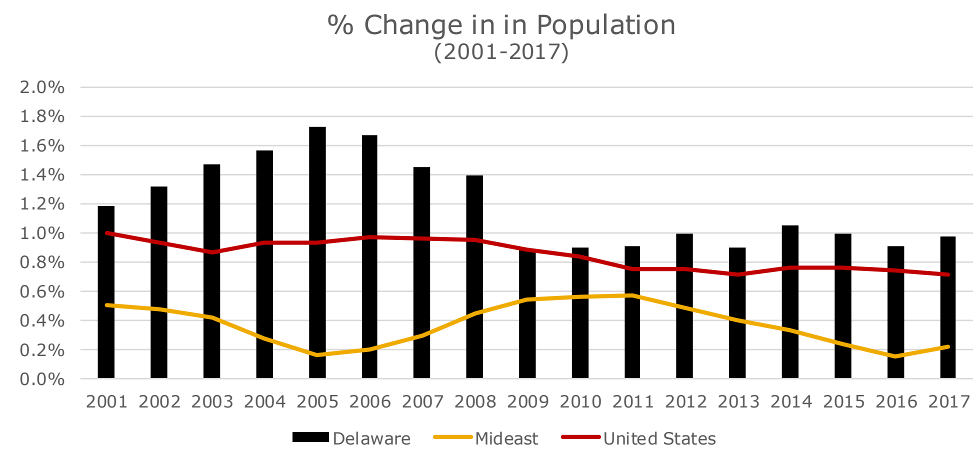
[2] Year over year change shown as nominal change in percentage points.

[3] Mideast is defined as defined as New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia

[4] Percent of the population aged 25 and over.

Over the past sixteen years, the State experienced stronger population growth than the region and the nation. In 2017, the State's growth rate was approximately 3 times greater than the region. KBRA believes the State's diverse employment and strong business environment, along with its affordability compared to other states in the region, contribute to the population growth. 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: Bureau of Economic Analysis

The strongest population growth is occurring in the southern most county of Sussex, fueled by its attractiveness to retirees for its proximity to the ocean and its affordability. The 2016 median age of Sussex County was 47.6 years, relative to the statewide and national medians of 39.6 years and 37.7 years, respectively. The State's somewhat elevated median age contributes to the it's higher than average age dependency ratio.

**FIGURE 9**

| Delaware Counties | | | | | | |
|---|---|---|---|---|---|---|
| | Kent | | New Castle | | Sussex | |
| | Population | Income per capita | Population | Income per capita | Population | Income per capita |
| 2016 | 174,827 | $25,528 | 556,987 | $33,446 | 220,251 | $32,235 |
| 2015 | 173,533 | $26,387 | 556,779 | $33,135 | 215,622 | $31,134 |
| 2014 | 171,987 | $25,751 | 552,778 | $32,030 | 210,849 | $30,311 |
| 2013 | 169,416 | $25,192 | 549,684 | $32,498 | 206,649 | $24,986 |
| 2012 | 167,626 | $24,363 | 546,076 | $30,888 | 203,390 | $26,420 |
| 2011 | 164,834 | $22,319 | 541,971 | $31,767 | 200,330 | $27,567 |
| 2010 | 162,912 | $23,170 | 538,986 | $30,250 | 197,871 | $24,614 |
| % Change 2016-2010 | 7.3% | 10.2% | 3.3% | 10.6% | 11.3% | 31.0% |

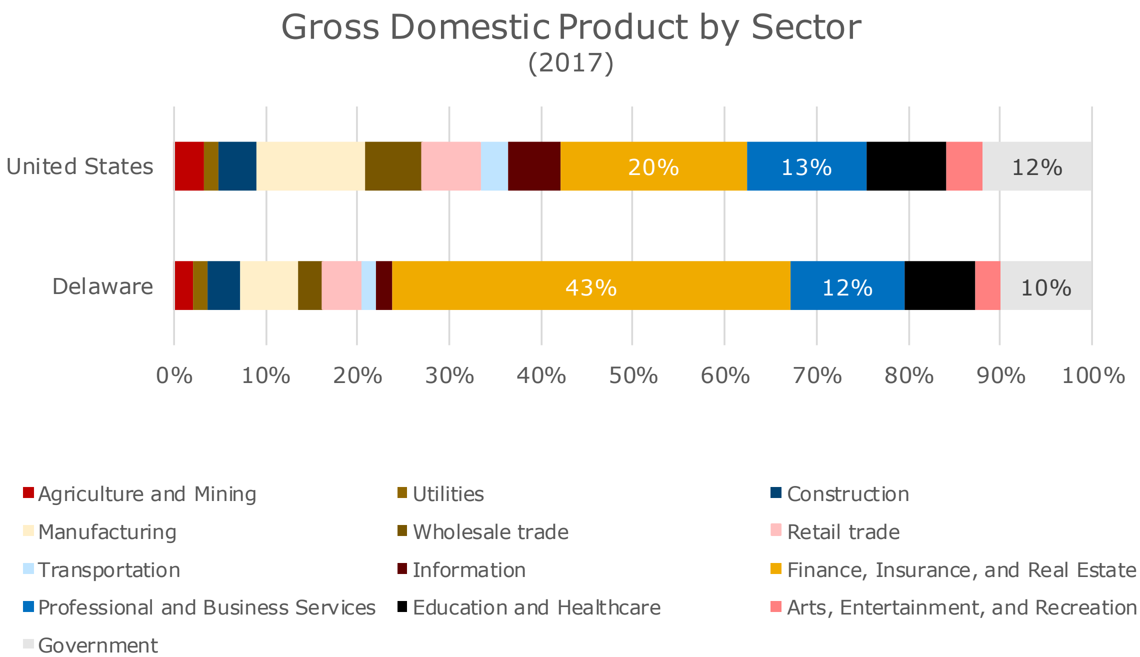
Source: US Census Bureau

**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 10**

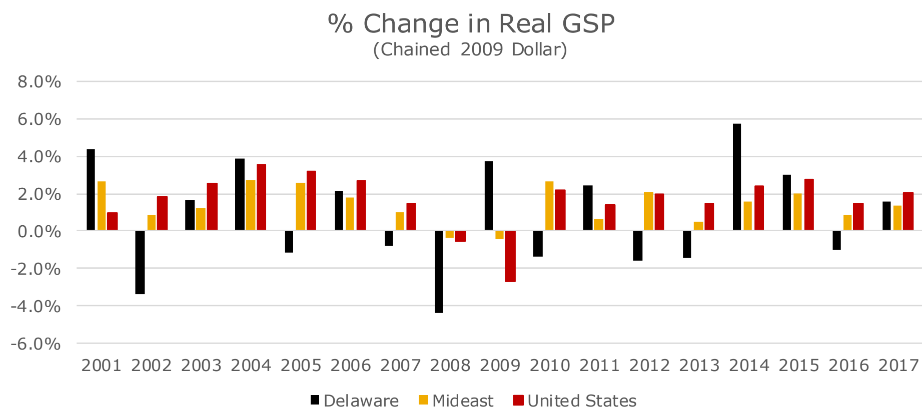



Source: Bureau of Economic Analysis

Delaware's GSP (chained 2009 dollar) 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 11**




Source: Bureau of Economic Analysis

**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 10% of employment in 2017, compared to the national average of 5.8% which reflects types and level of employment at corporate headquarters.

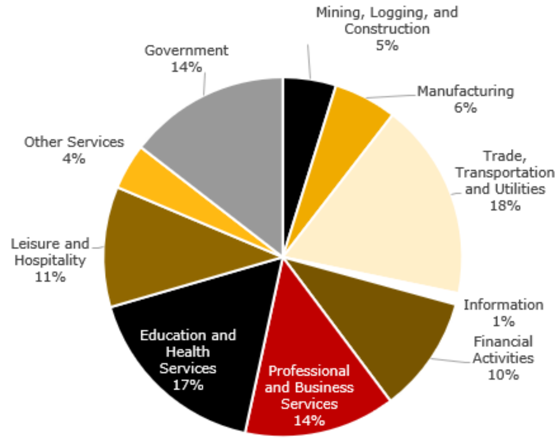
The University of Delaware (the University), a leading public university, also plays a role in various industries across the State. The University's 272-acre Science, Technology and Advance Research (STAR) campus has several notable expansions underway: a state of the art, ten-story tower for classrooms 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 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 12**

**Total Non-Farm Employment by Sector, 2017**




*Source: Bureau of Labor Statistics*

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 almost 19%, well in excess of regional and national growth rates.

**FIGURE 13**

**Total Employment**
**(Not Seasonally Adjusted)**

| | Delaware | % Chg. | Mideast* | % Chg. | U.S. (000s) | % Chg. |
|---|---|---|---|---|---|---|
| 2000 | 398,027 | | 22,091,414 | | 136,901 | |
| 2001 | 407,033 | 2.3% | 22,119,838 | 0.1% | 136,939 | 0.0% |
| 2002 | 400,019 | -1.7% | 22,098,149 | -0.1% | **136,481** | -0.3% |
| 2003 | **397,472** | -0.6% | **22,025,755** | -0.3% | 137,729 | 0.9% |
| 2004 | 403,599 | 1.5% | 22,286,202 | 1.2% | 139,240 | 1.1% |
| 2005 | 414,465 | 2.7% | 22,635,760 | 1.6% | 141,710 | 1.8% |
| 2006 | 425,399 | 2.6% | 22,893,187 | 1.1% | 144,418 | 1.9% |
| 2007 | 428,312 | 0.7% | 23,004,171 | 0.5% | 146,050 | 1.1% |
| 2008 | 424,914 | -0.8% | 23,121,783 | 0.5% | 145,373 | -0.5% |
| 2009 | 401,312 | -5.6% | 22,394,464 | -3.1% | 139,894 | -3.8% |
| 2010 | 397,869 | -0.9% | 22,281,934 | -0.5% | 139,077 | -0.6% |
| 2011 | 410,086 | 3.1% | 22,352,607 | 0.3% | 139,885 | 0.6% |
| 2012 | 413,457 | 0.8% | 22,558,433 | 0.9% | 142,475 | 1.9% |
| 2013 | 413,119 | -0.1% | 22,734,395 | 0.8% | 143,941 | 1.0% |
| 2014 | 427,386 | 3.5% | 22,950,656 | 1.0% | 146,317 | 1.7% |
| 2015 | 444,404 | 4.0% | 23,287,735 | 1.5% | 148,845 | 1.7% |
| 2016 | 452,434 | 1.8% | 23,471,723 | 0.8% | 151,440 | 1.7% |
| 2017 | 455,427 | 0.7% | 23,588,870 | 0.5% | 153,337 | 1.3% |
| Jun-18 | 471,712 | 3.6% | 23,873,654 | 1.2% | 155,181 | 1.2% |
| Change from 2010 | 73,843 | 18.6% | 1,591,720 | 7.1% | 16,104 | 11.6% |

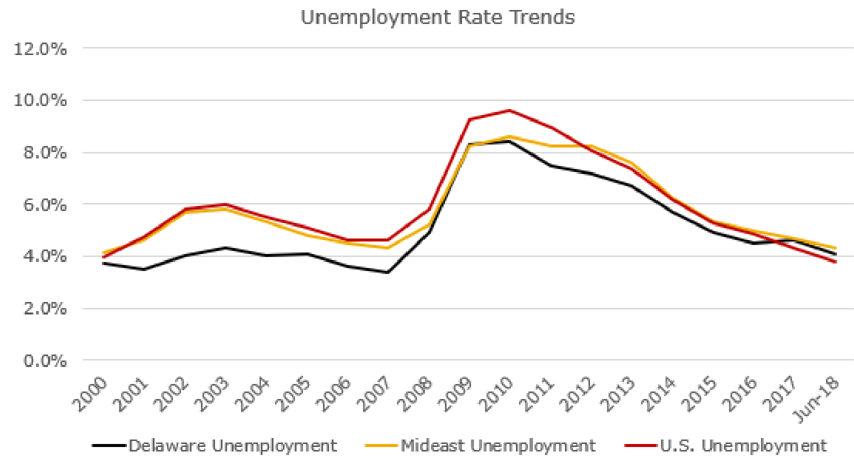
Source: Bureau of Labor Statistics

**Bold figures represents lowest employment figure**

* Mideast region is defined as New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia

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 the both the nation and region during the great recession.

**FIGURE 14**



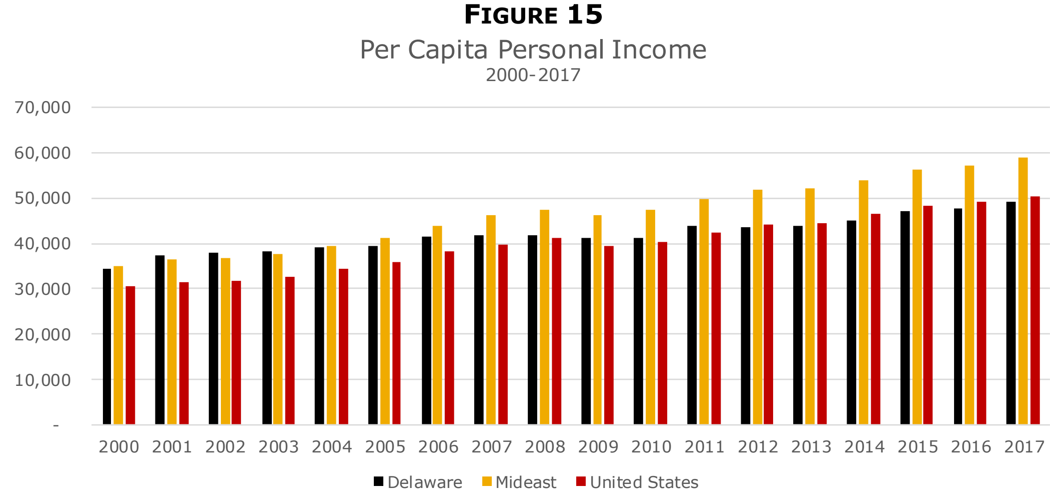

Source: Bureau of Labor Statistics

* Mideast region is defined as New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia

## 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 15**

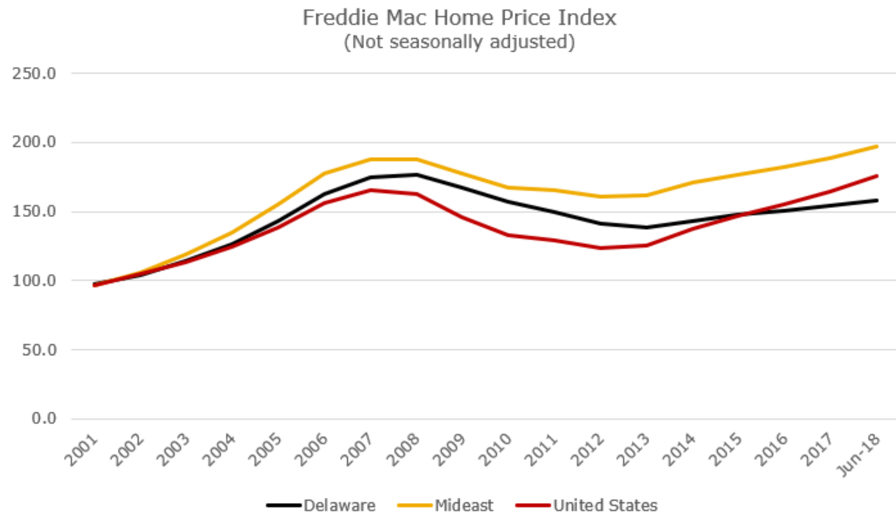



Source: Bureau of Economic Analysis

## 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 Freddie Mac Home Price Index, from 2007 to 2012 housing prices decreased 21.8%, whereas the region and national peak to trough declines were 14.2% and 24.1%, respectively. The State's housing market also has had a slower recovery. As of June 2018, the State's home price index was 94% of its 2007 pre-recession peak, compared to the nation and region where values are 117% and 112% of the prerecession peak, respectively. 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. Recently monthly data show favorable gains in housing values within the State.

**FIGURE 16**




Source: Freddie Mac Home Price Index

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 its overall rating of AAA on the general obligation debt of the State of Delaware

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