



FY 2018

Economic & Revenue Outlook

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Receipts Overview

The Economic and Revenue Outlook is a volume designed to enhance the presentation and transparency of the FY 2018 Executive Budget. The book provides detailed information on the economic and receipt projections underlying the Executive Budget. The economic analysis and forecasts presented in this volume are also used in the development of the expenditure projections where spending trends are impacted by economic conditions.

Executive Budget Financial Plan receipts include a variety of taxes, fees and assessments, charges for State-provided services, Federal grants, and other miscellaneous receipts, as well as collection of a payroll mobility tax on businesses in the MTA region. The Economic and Revenue Outlook includes receipt information required by Article VII of the State Constitution and Section 22 of the State Finance Law and provides information to supplement extensive reporting enhancements undertaken in recent years. The Division of the Budget (DOB) believes the information will aid the Legislature and the public in fully understanding and evaluating the economic assumptions and receipts estimates underlying the FY 2018 Executive Budget. The multi-year tax and miscellaneous receipts estimates are prepared by DOB with the assistance of the Department of Taxation and Finance (DTF) and other agencies which collect State receipts, and are predicated on economic analysis and forecasts. To the extent they are material, sources of receipts not referenced in this volume are discussed in the presentations of the agencies primarily responsible for executing the programs financed by such receipts. The *Economic, Revenue and Spending Methodologies* are available at the Division of the Budget's website at www.budget.ny.gov. The Methodology volume provides a comprehensive review of the methods used in determining the economic and tax receipt projections.

The Economic and Revenue Outlook is presented in the following general sections:

- **Financial Plan Receipts and Projections:** Provides a summary of Financial Plan receipts for the current year and the FY 2018 Budget year by tax category and fund type.
- **FY 2018 Revenue Actions:** Summarizes the revenue actions proposed with the FY 2018 Executive Budget.
- **Economic Backdrop:** Provides a detailed description of the Division's forecast of key economic indicators for the national and New York State economies.
- **Comparison of New York State Tax Structure to Other States:** Compares the New York tax structure and burden to other states.
- **Tax Receipts Explanation:** Provides a detailed report for each tax and miscellaneous receipts source describing historical receipts and projections for the current and upcoming budget years, the impact of legislation proposed with the FY 2018 Executive Budget, and significant legislation that has been enacted.
- **Dedicated Fund Tax Receipts:** Provides a report on dedicated tax receipt estimates, with an emphasis on transportation-related dedicated taxes.

- **Audit and Compliance Receipts:** Provides data and analysis to better understand receipts collections.

Economic Outlook

At the midpoint of its eighth year, the current expansion, now less than two months shy of being the third longest expansion since 1850, maintains its standing as the weakest since the 1930s. Annualized quarterly growth has averaged just above 2 percent over the life of the expansion and has struggled to even reach 2 percent since the beginning of 2015, doing so during only two quarters since 2015Q1. But at the start of each year, expectations mount that the U.S. economy could be at an inflection point and on the verge of finally escaping the low-growth trap that has held the nation in its grip since the technical end of the Great Recession in the middle of 2009. However, economic fundamentals suggest that absent an uptick in global growth and policies squarely aimed at addressing the economy's long-term growth potential, the nation's current slow but steady growth path is unlikely to be significantly altered in 2017 and beyond. Although the Budget Division outlook calls for improved growth over the next two years, growth can be expected to remain well below 3 percent throughout the forecast period. Real growth in U.S. GDP of 2.4 percent is projected for 2017, following growth of 1.6 percent for 2016. The year just ended may yet have the distinction of being the weakest of the current expansion to-date.

Although “animal spirits” have turned markedly more positive in the U.S. since the election, the precise nature and timing of the new administration's future policies remain highly uncertain. Nevertheless, there is still cause for optimism that growth will accelerate in 2017. Even without a major policy shift, the Federal government is expected to make its strongest contribution to national economic growth since 2010. Although job growth is expected to continue to slow further in 2017, average wage growth is expected to post its strongest year since the end of the Great Recession. Importantly, improvement is expected at the low end of the income spectrum, with the minimum wage rising in 20 states at the start of 2017, including New York. With accelerating personal income growth and continued equity and home price growth, household spending is expected to remain the bedrock of the current expansion. Real consumption growth of 2.5 percent is projected for 2017, only slightly below last year's growth of 2.7 percent. Finally, the world's oil producers have entered into an accord to collectively act to firm up global oil prices. Though the agreement is likely to be fragile, higher oil prices have already created some upward momentum within the U.S. energy sector, a development that should prevent non-residential private investment from being the drag on growth that it was in 2016.

Though the current U.S. expansion is expected to remain firmly on track in 2017, annualized quarterly growth going forward is not expected to rise substantially above its 2.1 percent average since the technical end of the recession in the middle of 2009. Sluggish global growth is expected to continue to constrain real U.S. export and corporate profits growth. Accelerating inflation should ensure at least two short-term interest rate hikes in 2017, which will be welcomed by the banking sector but the impact of higher interest rates on both residential and non-residential investment is likely to be negative. Moreover, rising interest rates, combined with the relative strength of the U.S. economy, are likely to continue to strengthen the U.S. dollar, already near a 14-year high, putting further downward pressure on global demand for U.S. goods

and services. All of these forces are expected to keep real growth in private business investment in plant and equipment below 5 percent over the entire span of the forecast horizon, constraining the national economy's capacity for future growth.

Against a backdrop of weakness in both national and global growth, New York State's private sector labor market decelerated in 2016. But private job growth remained well-above historical average rates of growth, and continued to be led by construction; education; transportation and warehousing; leisure and hospitality; health care; and professional and business services. Domestic and international tourism continues to be one of the State's major growth industries, but the strong dollar likely is having a negative impact on job growth in those industries most affected, such as retail trade and leisure and hospitality. Rising interest rates are also likely to reduce the wind in the sails of construction and real estate services. State private sector job growth of 1.5 percent is projected for 2017, following estimated growth of 1.8 percent in 2016. Growth in government jobs of 0.5 percent results in slightly lower overall job growth of 1.3 percent for 2017.

Although New York's Main Street economy remains robust, a turbulent year for Wall Street and the financial markets is estimated to have restrained State wage growth for FY 2017. Equity market prices plunged in early 2016, along with oil prices and economic activity more generally, and failed to mount a sustained rally until late in the year, too late to compensate for earlier weakness. As a result, finance and insurance sector bonuses are estimated to have fallen 0.7 percent for the State fiscal year in progress. Nevertheless, the relative health of the State's labor market is expected to result in non-bonus wage growth of 4.6 percent for FY 2017, lifting overall State wage growth to 4.1 percent. A more supportive environment for financial market activity is projected for 2017, resulting in wage growth of 4.2 percent for FY 2018. Overall personal income growth of 3.7 percent is estimated for FY 2017, accelerating to 4.7 percent for FY 2018. Should the current estimate for State finance and insurance sector bonuses come to pass for the fiscal year in progress, it will represent a third consecutive year of declining bonuses for that sector, unprecedented in the history of the Budget Division's bonus series and highlighting the risk surrounding financial market activity and its impact on the State economy and revenues.

For further details, please see the *Economic Backdrop* section on Page 23 of this volume.

The Revenue Situation

All Funds estimated tax receipts growth of 0.8 percent in FY 2017 is attributable to:

- Uncharacteristically weak withholding growth of 2.8 percent attributable to weak bonus growth;
- An estimated payments decline of five percent resulting from a tax year 2015 personal income tax settlement characterized by a significant decline in extension payments and a decline in current year estimated payments off a high prior year base;
- Consumption/use tax growth of 2.9% that was limited by an accounting shift related to tax law section 184;
- A decline in overall business tax receipts (0.5 percent) due to the corporate franchise business income rate cut, weak corporate performance, and insurance tax credit claims related to the bankruptcy of a life insurance carrier in a prior year; and
- A decline in other tax receipts of 9.4 percent due to the continued phase in of an estate tax cut enacted in 2014.

All Funds projected tax receipts growth of 5.6 percent in FY 2018 is attributable to:

- Personal income tax growth of 6.4 percent consistent with the estimated wage and personal income growth noted in “Economic Outlook” above;
- Consumption/use tax growth consistent with trend growth in taxable consumption and a lack of accounting shifts that suppressed the FY 2016 growth rate;
- A return to growth in business tax receipts as the impact of the tax cuts associated with corporate tax reform diminish and corporate profits growth improves; and
- A more modest decline in estate tax receipts and another year of real estate transfer tax growth.

Overall base growth in tax receipts is dependent on many factors. In general, base tax receipts growth rates are determined by economic changes including, but not limited to, changes in interest rates, prices, wages, employment, non-wage income, capital gains realizations, taxable consumption, corporate profits, household net worth, real estate prices and gasoline prices. Federal law changes can influence taxpayer behavior, which often alters base tax receipts. State taxes account for approximately half of total All Funds receipts.

The projections of Federal receipts generally correspond to the anticipated spending levels of a variety of programs including Medicaid, public assistance, mental hygiene, education, public health, and other activities, including extraordinary aid.

Where noted, certain tables in the following section display General Fund tax receipts that exclude amounts transferred to the General Fund in excess of amounts needed for certain debt service obligations (e.g., PIT receipts in excess of the amount transferred for debt service on revenue bonds).

The following table displays growth rates for actual and base tax receipts for FY 1994 through FY 2021. The forecast growth rates assume continued economic growth. Should a recession occur prior to FY 2021, one or more of these forecast growth rates could be much lower or negative.

ALL FUNDS ACTUAL AND BASE TAX RECEIPTS GROWTH (percent growth)			
State Fiscal Year	Actual Receipts	Base Receipts	Inflation Adjusted Base Receipts
FY 1994	4.3	0.7	(2.0)
FY 1995	0.1	1.5	(0.9)
FY 1996	2.6	3.6	0.7
FY 1997	2.0	2.5	(0.3)
FY 1998	3.7	5.6	3.6
FY 1999	7.2	7.9	6.2
FY 2000	7.5	9.1	6.7
FY 2001	7.9	10.1	6.9
FY 2002	(4.9)	(4.2)	(6.5)
FY 2003	(6.7)	(8.0)	(10.5)
FY 2004	8.2	5.8	3.2
FY 2005	13.4	11.5	8.0
FY 2006	10.2	9.3	5.6
FY 2007	9.7	12.6	9.2
FY 2008	3.7	6.6	3.5
FY 2009	(0.8)	(3.2)	(6.3)
FY 2010	(3.2)	(12.7)	(13.2)
FY 2011	5.6	3.2	1.5
FY 2012	5.6	8.1	4.9
FY 2013	3.1	4.4	2.6
FY 2014	5.1	6.1	4.6
FY 2015	1.9	4.1	3.0
FY 2016	5.1	5.5	5.2
FY 2017*	0.8	1.1	(0.4)
FY 2018**	5.6	5.4	2.9
FY 2019**	4.1	4.4	1.9
FY 2020**	4.8	4.8	2.4
FY 2021**	5.9	5.2	2.8
	Actual Change	Base Change	Adjusted Base Change
Historical Averages			
FY 1994 to FY 2016	4.0	3.9	1.5
Forecast Averages			
FY 2017 to FY 2021	4.3	4.2	1.9
FY 2018 to FY 2021	5.1	5.0	2.5
Historical Recessions	(3.9)	(7.0)	(9.1)
Historical Expansions	5.6	6.2	3.8

*Estimated Receipts

**Projected Receipts

Receipts Overview



All Funds receipts in FY 2017 are projected to total \$153.6 billion, an increase of 0.2 percent from FY 2016 results.

ALL FUNDS RECEIPTS (millions of dollars)											
	FY 2016 Results	FY 2017 Current	Change	FY 2018 Proposed	Change	FY 2019 Projected	Change	FY 2020 Projected	Change	FY 2021 Projected	Change
Personal Income Tax	47,055	47,639	1.2%	50,683	6.4%	53,089	4.7%	55,994	5.5%	60,059	7.3%
Consumption/Use Taxes	15,725	16,184	2.9%	16,998	5.0%	17,697	4.1%	18,239	3.1%	18,815	3.2%
Business Taxes	7,884	7,847	-0.5%	8,253	5.2%	8,359	1.3%	8,723	4.4%	9,039	3.6%
Other Taxes	2,703	2,272	-15.9%	2,179	-4.1%	2,196	0.8%	2,297	4.6%	2,394	4.2%
Payroll Mobility Tax	1,306	1,361	4.2%	1,421	4.4%	1,487	4.6%	1,562	5.0%	1,630	4.4%
Total State Taxes	74,673	75,303	0.8%	79,534	5.6%	82,828	4.1%	86,815	4.8%	91,937	5.9%
Miscellaneous Receipts	27,268	25,439	-6.7%	26,597	4.6%	26,295	-1.1%	26,004	-1.1%	24,986	-3.9%
Federal Receipts	51,324	52,885	3.0%	54,265	2.6%	55,511	2.3%	57,302	3.2%	57,125	-0.3%
Total All Fund Receipts	153,265	153,627	0.2%	160,396	4.4%	164,634	2.6%	170,121	3.3%	174,048	2.3%

State tax receipts are estimated to increase 0.8 percent in FY 2017. The increase in PIT receipts is primarily due to withholding growth and a decline in refunds, while the decline in other taxes is the result of one-time factors affecting FY 2016 and the continued phase-in of the estate tax cut. The miscellaneous receipts decline in FY 2017 is primarily due to the substantial decline in monetary settlement payments from financial institutions.

Consistent with the projected growth in the New York economy over the multi-year Financial Plan period beyond FY 2017, all tax categories are projected to exhibit growth. The “other taxes” category is an exception in FY 2018 due to tax cuts enacted in 2014, but is expected to resume growth in the long term.

After controlling for the impact of tax law changes, base tax revenue increased 5.5 percent in FY 2016, and is projected to increase by 1.1 percent in FY 2017 and 5.4 percent in FY 2018.

Change from Mid-Year Update

Revised Estimates and Projections

CHANGE FROM MID-YEAR UPDATE FORECAST (millions of dollars)								
	FY 2017				FY 2018			
	Mid-Year Update	Executive Budget	Annual \$ Change	Annual % Change	Mid-Year Update	Executive Budget	Annual \$ Change	Annual % Change
GENERAL FUND¹	49,931	49,682	(249)	-0.5%	51,718	52,142	424	0.8%
Taxes	46,744	46,308	(436)	-0.9%	49,232	49,844	612	1.2%
Miscellaneous Receipts	3,187	3,374	187	5.9%	2,486	2,298	(188)	-7.6%
Federal Grants	0	0	0	0.0%	0	0	0	0.0%
ALL FUNDS	153,749	153,627	(122)	-0.1%	159,664	160,396	732	0.5%
Taxes	75,763	75,303	(460)	-0.6%	79,100	79,534	434	0.5%
Miscellaneous Receipts	25,033	25,439	406	1.6%	26,097	26,597	500	1.9%
Federal Grants	52,953	52,885	(68)	-0.1%	54,467	54,265	(202)	-0.4%

¹Excludes Transfers

- All Funds FY 2017 receipts estimates have been reduced by \$122 million from the Mid-Year Update. The decrease is largely related to downward tax revisions of \$436 million resulting from weaker than expected personal income tax and business tax receipts, partially offset by an increase in miscellaneous receipts.
- General Fund FY 2017 receipts have been revised downward by \$249 million, reflecting the downward tax revisions noted above in addition to upward revisions in miscellaneous receipts largely associated with newly identified one-time proceeds from financial settlements.
- All Funds FY 2018 receipts estimates have been increased by \$732 million from the Mid-Year Update, largely the result of tax law changes proposed with this Budget and upward revisions to HCRA resources and SUNY tuition within miscellaneous receipts. In addition, revisions made to State Special Revenue Funds aggregate spending projections, based on typical spending patterns and the observed variance between estimated and actual results over time, drives a corresponding increase in miscellaneous receipts.
- General Fund FY 2018 receipts have been revised upward by \$424 million, largely associated with tax law changes proposed with this Budget.

Proposed Law Changes

The FY 2018 Executive Budget includes changes to tax law that will:

- Provide tax relief proposals to continue improving New York's business climate;
- Strengthen the State's tax revenue enforcement efforts; and
- Improve the fairness of the tax system.

The tax, gaming, and fee policy changes proposed with this Budget are reported in the summary table below.



Receipts Overview

ALL FUNDS LEGISLATION (\$ in millions)*				
	FY 2018	FY 2019	FY 2020	FY 2021
Personal Income Tax	725	3,164	4,308	3,817
Enhance the Child and Dependent Care Credit	0	0	(42)	(42)
Treat Disregarded Entities As A Single Taxpayer for Tax Credit Purposes	0	0	0	0
Require State S-Corporation Conformity with Federal Return	0	5	5	5
Close Co-Op Sale Loophole	10	10	10	10
Close Non-Resident Asset Sale Loophole	10	10	10	10
Require Practitioners to be Compliant with State Tax Obligations before Receiving Excess Medical Malpractice Coverage	1	2	2	2
Require New State Employees to be Compliant with State Tax Obligations	1	2	2	2
Allow Warrantless Bank Account Data Matching	5	15	15	15
Extend the Personal Income Tax Top Bracket for Three Years	683	3,375	4,505	4,029
Make the High Income Charitable Contribution Deduction Limitation Permanent	0	70	140	140
Permanently Extend Warrantless Wage Garnishment	15	15	15	15
Convert New York City Personal Income Tax Rate Reduction Benefit Into a State Personal Income Tax Credit (Credit Portion)	0	(340)	(354)	(369)
Consumption/Use Taxes	111	210	210	210
Close Sales Tax Related Entities Loopholes	9	11	11	11
Modernize Sales Tax Collection to Reflect the Internet Economy	68	136	136	136
Allow Transportation Network Companies to Operate Outside New York City and Impose a State Assessment Fee on Fares	16	32	32	32
Tax and Regulate Vapor Products	3	5	5	5
Reform the Taxation of Cigars	12	23	23	23
Expand Jeopardy Assessments to the Cigarette and Tobacco Tax	2	2	2	2
Clarify the Amount of Untaxed Cigarettes Required to Seize a Vehicle	1	1	1	1
Make Technical Amendments to the State and Local Sales Tax Statute	0	0	0	0
Business Taxes	0	0	(38)	(38)
Establish Life Sciences Tax Credits	0	0	(5)	(5)
Expand the Workforce Training Credit	0	0	0	0
Create Excelsior Business Program	0	0	0	0
Reform the Investment Tax Credit	0	0	20	20
Extend the Empire State Film and Post-Production Tax Credits for Three Years	0	0	0	0
Extend the New York Youth Jobs Program Tax Credit	0	0	(50)	(50)
Extend the Alternative Fuels Property and Electric Vehicle Recharging Property Credit for Five Years	0	0	(3)	(3)
Other Actions	94	131	133	132
Impose the Real Estate Transfer Tax on the Transfer of a Real Estate Business Interest	4	5	5	5
Close the Real Estate Transfer Tax Loophole	2	2	2	2
Reprivatize the New York Racing Association	0	0	0	0
Extend Certain Tax Rates and Certain Simulcasting Provisions for One Year	0	0	0	0
Extend Monticello Video Lottery Terminal Rates for One Year	(2)	0	0	0
Extend the Video Lottery Gaming (VLG) Vendor's Capital Awards Program for One Year	0	0	0	0
Alter Local Gaming Aid Distribution	0	0	0	0
Remove Restriction for a Single Lab Testing Provider	0	0	0	0
Modernize and Consolidate Charitable Gaming Laws	0	0	0	0
Increase Title Fees	74	81	81	81
Implement REAL ID Licenses	7	16	17	17
Realign Production Costs for Realtor Identification Cards	0	0	0	0
Increase the Cap on Divisible Load Permits	1	1	1	1
Apply the Public Safety Communications Surcharge to Prepaid Devices	7	26	26	26
Extend Fees for the Establishment of Oil and Gas Unit of Production Values	0	0	0	0
Establish a Motion Picture Theater Alcohol Permit	0	0	0	0
Establish a Taste-NY Alcohol Permit	0	0	0	0
Total All Funds Legislation Change	930	3,505	4,613	4,121

*Rounded to the nearest million, revenue and gaming proposals only.

Receipts Overview



Personal Income Tax

PERSONAL INCOME TAX (millions of dollars)											
	FY 2016 Results	FY 2017 Current	Change	FY 2018 Proposed	Change	FY 2019 Projected	Change	FY 2020 Projected	Change	FY 2021 Projected	Change
STATE/ALL FUNDS	47,055	47,639	1.2%	50,683	6.4%	53,089	4.7%	55,994	5.5%	60,059	7.3%
Gross Collections	56,600	56,854	0.4%	60,638	6.7%	64,276	6.0%	68,190	6.1%	71,608	5.0%
Refunds (Incl. State/City Offset)	(9,545)	(9,215)	3.5%	(9,955)	-8.0%	(11,187)	-12.4%	(12,196)	-9.0%	(11,549)	5.3%
GENERAL FUND¹	31,957	32,521	1.8%	35,406	8.9%	37,369	5.5%	39,660	6.1%	42,818	8.0%
Gross Collections	56,600	56,854	0.4%	60,638	6.7%	64,276	6.0%	68,190	6.1%	71,608	5.0%
Refunds (Incl. State/City Offset)	(9,545)	(9,215)	3.5%	(9,955)	-8.0%	(11,187)	-12.4%	(12,196)	-9.0%	(11,549)	5.3%
STAR	(3,335)	(3,208)	3.8%	(2,606)	18.8%	(2,448)	6.1%	(2,336)	4.6%	(2,226)	4.7%
RBTF	(11,763)	(11,910)	-1.2%	(12,671)	-6.4%	(13,272)	-4.7%	(13,998)	-5.5%	(15,015)	-7.3%

¹Excludes Transfers.

All Funds PIT receipts for FY 2017 are estimated to be \$47.6 billion, an increase of \$584 million (1.2 percent) from FY 2016 results. This increase includes growth in withholding and delinquency collections, coupled with a moderate decline in total refunds related to the decrease of the administrative refund cap in January to March 2017. Growth in these categories is partially offset by declines in final returns, extension payments attributable to the 2015 tax year, and estimated payments related to the 2016 tax year.

The following table summarizes, by component, actual receipts for FY 2016 and forecast amounts through FY 2021.

ALL FUNDS PERSONAL INCOME TAX FISCAL YEAR COLLECTION COMPONENTS (millions of dollars)						
	FY 2016 Results	FY 2017 Current	FY 2018 Proposed	FY 2019 Projected	FY 2020 Projected	FY 2021 Projected
Receipts						
Withholding	36,549	37,575	39,359	41,214	43,267	44,387
Estimated Payments	16,111	15,306	17,025	18,527	20,175	22,196
Current Year	11,561	11,245	12,379	13,235	14,448	15,767
Prior Year ¹	4,550	4,061	4,646	5,292	5,727	6,429
Final Returns	2,630	2,615	2,836	3,044	3,193	3,403
Current Year	269	287	299	314	329	344
Prior Year ¹	2,360	2,328	2,537	2,730	2,864	3,059
Delinquent	1,310	1,358	1,418	1,491	1,555	1,622
Gross Receipts	56,600	56,854	60,638	64,276	68,190	71,608
Refunds						
Prior Year ¹	5,130	5,235	6,216	6,798	7,388	7,916
Previous Years	618	499	470	495	525	555
Current Year ¹	2,550	1,750	1,749	1,749	1,750	1,750
Advanced Credit Payment	571	883	647	1,247	1,709	479
State/City Offset ¹	675	848	873	898	824	849
Total Refunds	9,545	9,215	9,955	11,187	12,196	11,549
Net Receipts	47,055	47,639	50,683	53,089	55,994	60,059

¹These components, collectively, are known as the "settlement" on the prior year's tax liability.

Withholding in FY 2017 is estimated to be \$1 billion (2.8 percent) higher than FY 2016 results, driven by weak wage growth. Extension payments related to tax year 2015 declined by \$489 million (10.7 percent), primarily due to payment-timing differences relative to tax year 2014 (taxpayers paid a higher percentage of their tax year 2015 liability through estimated payments and a lower percentage through extensions). Estimated payments for tax year 2016 are projected to be \$316 million (2.7 percent) lower, primarily due to a decline in net capital gains income. Final return payments and delinquencies are projected to be \$15 million (0.6 percent) lower and \$48 million (3.7 percent) higher than FY 2016 results, respectively.

The projected decrease in total refunds of \$330 million (3.5 percent) includes a \$105 million increase (2 percent) in prior (tax year 2015) refunds, a \$119 million (19.3 percent) decrease in previous (tax year 2014 and earlier) refunds, an \$800 million (31.4 percent) decline in current (tax year 2016) refunds (due to a decrease in the January to March 2017 administrative refund cap), a \$312 million (54.6 percent) increase in advanced credit payments related to tax year 2016, and a \$173 million (25.6 percent) increase in the state-city offset. The advanced credit payments estimate includes \$98 million in payments attributable to the conversion of the STAR homeowners' benefit to a PIT credit.

General Fund PIT receipts are net of deposits to the STAR Fund, which provides property tax relief, and the Revenue Bond Tax Fund (RBTF), which supports debt service payments on State PIT revenue bonds. General Fund PIT receipts for FY 2017 of \$32.5 billion are estimated to increase by \$564 million (1.8 percent) from FY 2016 results, mainly reflecting the increase in All Funds receipts noted above. RBTF deposits are projected to be \$11.9 billion and the STAR transfer is projected to be \$3.2 billion.

All Funds PIT receipts for FY 2018 of \$50.7 billion are projected to increase by over \$3 billion (6.4 percent) from FY 2017 estimates. Gross receipts are projected to increase 6.7 percent, reflecting withholding that is projected to grow by \$1.8 billion (4.7 percent) and estimated payments related to tax year 2017 that are projected to grow by \$1.1 billion (10.1 percent). The moderate but improved growth in withholding is attributable to the proposed surcharge rate extension and stronger bonus growth. Payments from extensions for tax year 2016 are projected to increase by \$585 million (14.4 percent), and final returns are expected to increase \$221 million (8.5 percent). Delinquencies are projected to increase \$60 million (4.4 percent) from the prior year. Total refunds are projected to increase by \$740 million (8 percent) from the prior year. Legislative proposals included in the FY 2018 Executive Budget increase withholding by \$683 million, current estimated payments related to tax year 2017 by \$20 million, and delinquencies by \$22 million.

General Fund PIT receipts for FY 2018 of \$35.4 billion are projected to increase by nearly \$2.9 billion (8.9 percent). RBTF deposits are projected to be \$12.7 billion, and the STAR transfer is projected to be \$2.6 billion. Proposed legislation within the FY 2018 Executive Budget reduces the STAR transfer by \$351 million.

All Funds PIT receipts in FY 2019 are projected to increase by \$2.4 billion to \$53.1 billion, while General Fund PIT receipts are projected to total nearly \$37.4 billion. The projected growth of 4.7 percent in FY 2019 All Funds PIT receipts is driven by the aforementioned proposed

Receipts Overview



surcharge rate extension, combined with continued phase-in of the FY 2017 Enacted Budget middle income tax cuts. On a net basis, legislation included in the FY 2018 Executive Budget is projected to increase FY 2019 collections by nearly \$3.2 billion.

All Funds PIT receipts in FY 2020 are projected to increase by \$2.9 billion (5.5 percent) to \$56 billion, while General Fund PIT receipts are projected to total \$39.7 billion.

All Funds income tax receipts are projected to increase by \$4.1 billion (7.3 percent) in FY 2021 to reach nearly \$60.1 billion, while General Fund receipts are projected to total \$42.8 billion.

Consumption/Use Taxes

CONSUMPTION/USE TAXES (millions of dollars)											
	FY 2016	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021	
	Results	Current	Change	Proposed	Change	Projected	Change	Projected	Change	Projected	Change
STATE/ALL FUNDS	15,725	16,184	2.9%	16,998	5.0%	17,697	4.1%	18,239	3.1%	18,815	3.2%
Sales Tax	13,359	13,861	3.8%	14,726	6.2%	15,368	4.4%	15,951	3.8%	16,558	3.8%
Cigarette and Tobacco Taxes	1,251	1,227	-1.9%	1,202	-2.0%	1,180	-1.8%	1,134	-3.9%	1,091	-3.8%
Motor Fuel Tax	503	506	0.6%	505	-0.2%	501	-0.8%	496	-1.0%	492	-0.8%
Highway Use Tax	158	140	-11.4%	87	-37.9%	142	63.2%	142	0.0%	144	1.4%
Alcoholic Beverage Taxes	255	258	1.2%	263	1.9%	268	1.9%	273	1.9%	279	2.2%
Medical Marihuana Excise Tax	0	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
Taxicab Surcharge	73	64	-12.3%	64	0.0%	64	0.0%	64	0.0%	64	0.0%
TNC Assessment	0	0	0.0%	16	0.0%	32	100.0%	32	0.0%	32	0.0%
Auto Rental Tax	126	127	0.8%	134	5.5%	141	5.2%	146	3.5%	154	5.5%
GENERAL FUND ¹	6,819	7,082	3.9%	7,514	6.1%	7,841	4.4%	8,109	3.4%	8,390	3.5%
Sales Tax	6,242	6,479	3.8%	6,891	6.4%	7,193	4.4%	7,467	3.8%	7,752	3.8%
Cigarette and Tobacco Taxes	322	345	7.1%	348	0.9%	357	2.6%	346	-3.1%	336	-2.9%
Alcoholic Beverage Taxes	255	258	1.2%	263	1.9%	268	1.9%	273	1.9%	279	2.2%
TNC Assessment	0	0	0.0%	12	0.0%	23	91.7%	23	0.0%	23	0.0%
¹ Excludes Transfers.											

¹Excludes Transfers.

All Funds consumption/use tax receipts for FY 2017 are estimated to be \$16.2 billion, an increase of \$459 million (2.9 percent) from FY 2016 results. Sales tax receipts are estimated to increase \$502 million (3.8 percent) from the prior year. Base growth (i.e., absent law changes) of 4.6% exceeds cash growth primarily due to agreements between certain mobile telecommunication providers and the State to allow such providers to remit less sales tax for a period in lieu of receiving State refunds due to them under Tax Law Section 184. These agreements resulted from acknowledgement by DTF that a mobile telecommunications provider was not subject to the Tax Law Section 184 franchise tax imposed on them between 2005 and 2014. Cigarette and tobacco tax collections are estimated to decline \$24 million (1.9 percent). This unusually modest decline primarily reflects the decrease in cigar tax refunds to be issued as a result of an Administrative Law Judge Determination (Matter of Davidoff of Geneva, Inc.). Highway use tax collections are estimated to decrease by \$18 million (11.4 percent) due to the reduction in registration and decal fees from \$19 to \$1.50 resulting from the Independent Owner Operator Drivers Association v. New York Department of Taxation and Finance court decision. Motor fuel tax collections are estimated to increase \$3 million (0.6 percent), reflecting slight

growth in both taxable motor fuel consumption and diesel fuel consumption. Taxicab surcharge receipts are estimated to decline by \$9 million (12.3 percent) as the result of consumers choosing alternative transportation services not subject to the surcharge.

General Fund sales and use tax receipts are net of deposits to the Local Government Assistance Tax Fund (25 percent), and the Sales Tax Revenue Bond Fund (25 percent), which support debt service payments on State sales and use tax revenue bonds. Receipts in excess of the debt service requirements of the funds and the local assistance payments to New York City, or its assignee, are transferred back to the General Fund.

General Fund consumption/use tax receipts for FY 2017 are estimated to total nearly \$7.1 billion, an increase of \$263 million (3.9 percent) from FY 2016 results. This increase largely reflects the All Funds sales, cigarette, tobacco and alcoholic beverage tax trends noted above.

All Funds consumption/use tax receipts for FY 2018 are projected to be \$17 billion, an increase of \$814 million (5 percent) from FY 2017. The projected \$865 million (6.2 percent) increase in sales tax receipts reflects sales tax base growth of 4.1 percent, slightly lower than the prior year. Employment and the nominal value of new auto and light truck sales are projected to grow at a slower pace than in FY 2017. Cash growth exceeds base growth primarily due to the above noted agreement between certain mobile telecommunication providers and the State that ends in FY 2017. The proposed Transportation Network Companies (TNC) assessment of 5.5 percent will generate an estimated \$16 million in FY 2018. The All Funds consumption/use tax receipts increase is reduced slightly by trend declines in taxable cigarette consumption that have improved in large part due to enforcement efforts of the Cigarette Strike Force, and by a decline in highway use tax collections as refunds increase significantly as a result of the court decision noted above.

General Fund consumption/use tax receipts are projected to total \$7.5 billion in FY 2018, a \$432 million (6.1 percent) increase from FY 2017. The projected increase largely reflects the trends noted above.

All Funds consumption/use tax receipts for FY 2019 are projected to be \$17.7 billion, an increase of \$699 million (4.1 percent) from FY 2018. The projected \$642 million (4.4 percent) increase in sales tax receipts reflects sales tax base growth of 4 percent. FY 2019 represents the first full year impact of the TNC assessment (\$32 million). FY 2019 General Fund consumption/use tax receipts are projected to increase to over \$7.8 billion, a \$327 million (4.4 percent) increase from FY 2018.

All Funds consumption/use tax receipts are projected to increase to over \$18.2 billion (3.1 percent growth) in FY 2020 and to \$18.8 billion (3.2 percent growth) in FY 2021, largely representing base growth in sales tax receipts, offset slightly by trend declines in cigarette tax collections.

General Fund consumption/use tax receipts are projected to total \$8.1 billion (3.4 percent growth) in FY 2020 and nearly \$8.4 billion (3.5 percent growth) in FY 2021, reflecting the All Funds trends noted above.

Business Taxes

BUSINESS TAXES (millions of dollars)											
	FY 2016 Results	FY 2017 Current	Change	FY 2018 Proposed	Change	FY 2019 Projected	Change	FY 2020 Projected	Change	FY 2021 Projected	Change
STATE/ALL FUNDS	7,884	7,847	-0.5%	8,253	5.2%	8,359	1.3%	8,723	4.4%	9,039	3.6%
Corporate Franchise Tax	4,527	4,129	-8.8%	4,687	13.5%	4,669	-0.4%	5,024	7.6%	5,270	4.9%
Corporation and Utilities Tax	774	738	-4.7%	732	-0.8%	744	1.6%	753	1.2%	763	1.3%
Insurance Tax	1,580	1,502	-4.9%	1,572	4.7%	1,701	8.2%	1,784	4.9%	1,921	7.7%
Bank Tax	(121)	383	416.5%	190	-50.4%	143	-24.7%	71	-50.3%	0	-100.0%
Petroleum Business Tax	1,124	1,095	-2.6%	1,072	-2.1%	1,102	2.8%	1,091	-1.0%	1,085	-0.5%
GENERAL FUND	5,647	5,571	-1.3%	5,955	6.9%	5,972	0.3%	6,310	5.7%	6,595	4.5%
Corporate Franchise Tax	3,763	3,334	-11.4%	3,827	14.8%	3,766	-1.6%	4,084	8.4%	4,300	5.3%
Corporation and Utilities Tax	594	568	-4.4%	559	-1.6%	563	0.7%	569	1.1%	575	1.1%
Insurance Tax	1,419	1,346	-5.1%	1,407	4.5%	1,521	8.1%	1,597	5.0%	1,720	7.7%
Bank Tax	(129)	323	N/A	162	-49.8%	122	-24.7%	60	-50.8%	0	-100.0%
Petroleum Business Tax	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

All Funds business tax receipts for FY 2017 are estimated at over \$7.8 billion, a decrease of \$37 million (0.5 percent) from FY 2016 results. The estimate reflects a combined decrease of \$541 million among all non-bank business taxes, partially offset by an increase in the bank tax of \$504 million,

Corporate franchise tax receipts are estimated to decrease \$398 million (8.8 percent) in FY 2017, reflecting tax year 2016 corporate tax reform tax cuts including: a reduction in the business income tax rate from 7.1 percent to 6.5 percent, and the first year of the capital tax base phase-out. Additionally, December 2016 estimated payments from calendar year filers were weak, declining 23 percent from December 2015. These reductions are partially offset by an increase in expected audit receipts of \$274 million.

Corporation and utilities tax receipts are estimated to decrease \$36 million (4.7 percent) in FY 2017. Gross receipts are expected to increase from FY 2016 results, while audits are expected to decline. In FY 2016 several telecommunication audit cases were closed. This is not expected to recur in FY 2017.

Insurance tax receipts for FY 2017 are estimated to decrease \$78 million (4.9 percent) from FY 2016 results. Projected growth in insurance tax premiums and a positive prior period adjustment resulting from the resolution of an IRS case is more than offset by the first full year impact of the tax credit for assessments paid to the Life Insurance Guaranty Corporation (LIGC). The LIGC exists to protect policyholders from the insolvency of their life insurers. Audits and refunds are expected to reflect historical trends.

Receipts from the repealed bank tax (all from prior liability periods) are estimated to increase by \$504 million in FY 2017. The increase stems from an estimated reduction in prior period adjustments and an increase in audit receipts (\$197 million) from FY 2016 results.

Petroleum Business Tax (PBT) receipts are estimated to decrease \$29 million (2.6 percent) in FY 2017, primarily due to the 5 percent decrease in the PBT rate index effective January 2016, and the estimated 5 percent decrease effective January 2017. These declines are partially offset by estimated slight growth in both taxable motor fuel and diesel fuel consumption.

General Fund business tax receipts for FY 2017 of \$5.6 billion are estimated to decrease \$76 million (1.3 percent) from FY 2016 results, reflecting the All Funds trends discussed above.

All Funds business tax receipts for FY 2018 of \$8.3 billion are projected to increase by \$406 million (5.2 percent) from the current year. The increase in corporation franchise tax receipts of \$558 million (13.5 percent) reflects projected growth in corporate profits following nearly full implementation of corporate tax reform changes and tax cuts as well as higher audit receipts. The corporation and utilities tax receipts decline of \$6 million (0.8 percent) is attributable to a reduction in receipts from Section 181 which was repealed as part of Corporate Tax Reform. This reduction is partially offset by an increase in projected receipts from regulated public utilities.

Insurance tax receipts for FY 2018 of \$1.6 billion are projected to increase \$70 million (4.7 percent) from the current year. Projected growth in insurance tax premiums combined with lower expected LIGC credit claims contribute to year-over-year growth. Bank tax receipts are projected to decrease by \$193 million (50.4 percent), due to lower projected audit receipts. PBT receipts are projected to decline \$23 million (2.1 percent) in FY 2018, primarily due to the estimated 5 percent decrease in the PBT rate index effective January 2017 noted above and a projected slight decline in taxable motor fuel consumption. This would be partially offset by the projected 5 percent increase in the PBT rate index effective January 2018 and projected growth in diesel fuel consumption.

General Fund business tax receipts for FY 2018 of \$6 billion are projected to increase \$384 million (6.9 percent), reflecting the All Funds trends discussed above.

All Funds business tax receipts for FY 2019 of \$8.4 billion are projected to increase by \$106 million (1.3 percent) from the previous year. The projection primarily reflects insurance tax receipts growth. Projected growth in insurance tax premiums combined with lower expected LIGC credit claims contribute to the year-over-year increase. This increase is partially offset by a combined decrease of \$23 million among all other business taxes.

All Funds business tax receipts for FY 2020 and FY 2021 reflect projected trends in corporate profits, taxable insurance premiums, electric utility consumption and prices, the consumption of taxable telecommunications services, and automobile fuel consumption and fuel prices. All Funds business tax receipts are projected to increase to \$8.7 billion (4.4 percent growth) in FY 2020, and increase to \$9 billion (3.6 percent growth) in FY 2021. General Fund business tax receipts are projected to increase to \$6.3 billion (5.7 percent growth) in FY 2020 and \$6.6 billion (4.5 percent growth) in FY 2021.

Other Taxes

OTHER TAXES (millions of dollars)											
	FY 2016 Results	FY 2017 Current	Change	FY 2018 Proposed	Change	FY 2019 Projected	Change	FY 2020 Projected	Change	FY 2021 Projected	Change
STATE/ALL FUNDS	2,703	2,272	-15.9%	2,179	-4.1%	2,196	0.8%	2,297	4.6%	2,394	4.2%
Estate Tax	1,521	1,114	-26.8%	949	-14.8%	911	-4.0%	962	5.6%	1,007	4.7%
Real Estate Transfer Tax	1,163	1,138	-2.1%	1,210	6.3%	1,265	4.5%	1,315	4.0%	1,367	4.0%
Pari-Mutuel Taxes	17	17	0.0%	17	0.0%	17	0.0%	17	0.0%	17	0.0%
All Other Taxes	2	3	50.0%	3	0.0%	3	0.0%	3	0.0%	3	0.0%
GENERAL FUND¹	1,540	1,134	-26.4%	969	-14.6%	931	-3.9%	982	5.5%	1,027	4.6%
Estate Tax	1,521	1,114	-26.8%	949	-14.8%	911	-4.0%	962	5.6%	1,007	4.7%
Pari-Mutuel Taxes	17	17	0.0%	17	0.0%	17	0.0%	17	0.0%	17	0.0%
All Other Taxes	2	3	50.0%	3	0.0%	3	0.0%	3	0.0%	3	0.0%

¹Excludes Transfers.

All Funds other tax receipts for FY 2017 are estimated to be nearly \$2.3 billion, a decrease of \$431 million (15.9 percent) from FY 2016 results. This largely reflects an estimated decline in estate tax receipts of \$407 million (26.8 percent) from the continued phase-in of the increased filing threshold, and an expected decline in the number of super large payments (over \$25 million) to average historical levels. Additionally, real estate transfer tax receipts are projected to decrease \$25 million (2.1 percent) primarily due to the combination of a small estimated decrease in the volume of transactions in New York City and a large estimated decrease in housing starts statewide. The transaction decline is largely due to a building permit shift from FY 2017 into FY 2016 caused by the uncertainty that surrounded the extension of New York City property tax abatement legislation.

General Fund other tax receipts are estimated to be slightly above \$1.1 billion in FY 2017, a \$406 million (26.4 percent) decrease from FY 2016 results, reflecting the decrease in estate tax receipts noted above.

All Funds other tax receipts for FY 2018 are projected to be just under \$2.2 billion, a decrease of \$93 million (4.1 percent) from the current year. Estate tax receipts are projected to decrease by \$164 million (14.7 percent) reflecting the continued phase-in of the increased filing threshold, partially offset by projected growth in household net worth. Real estate transfer tax receipts are projected to increase by \$72 million (6.3 percent), reflecting projected growth in housing prices.

General Fund other tax receipts for FY 2018 are projected to decrease by \$165 million (14.8 percent), due to the projected decline in estate tax receipts noted above.

All Funds other tax receipts for FY 2019 are projected to be nearly \$2.2 billion, a \$17 million (0.8 percent) increase from FY 2018. Estate tax receipts are projected to decrease by \$38 million (4 percent) reflecting the conclusion of the incremental impact of the increased filing threshold, partially offset by projected growth in household net worth. Real estate transfer tax receipts are projected to increase by \$55 million (4.5 percent), reflecting projected growth in housing starts

and prices. General Fund other tax receipts for FY 2019 are projected to decrease by \$38 million (3.9 percent), due to the projected decline in estate tax receipts noted above.

All Funds other tax receipts for FY 2020 and FY 2021 reflect projected trends in household net worth, housing starts, and housing prices. All Funds other tax receipts are projected to increase by \$101 million (4.6 percent growth) in FY 2020, and by \$97 million (4.2 percent growth) in FY 2021. General Fund other tax receipt estimates for FY 2020 are projected to increase by 5.5 percent and increase by 4.6 percent in FY 2021, reflecting the household net worth trends noted above.

Miscellaneous Receipts Federal Grants

All Funds miscellaneous receipts include moneys received from HCRA financing sources, SUNY tuition and patient income, lottery receipts for education, assessments on regulated industries, tribal-state compact revenue, monetary settlements and a variety of fees and licenses.

MISCELLANEOUS RECEIPTS (millions of dollars)											
	FY 2016 Results	FY 2017 Current	Change	FY 2018 Proposed	Change	FY 2019 Projected	Change	FY 2020 Projected	Change	FY 2021 Projected	Change
ALL FUNDS	27,268	25,439	-6.7%	26,597	4.6%	26,295	-1.1%	26,004	-1.1%	24,986	-3.9%
General Fund	5,842	3,374	-42.2%	2,298	-31.9%	2,290	-0.3%	2,175	-5.0%	2,051	-5.7%
Special Revenue Funds	17,117	16,897	-1.3%	16,622	-1.6%	16,472	-0.9%	16,362	-0.7%	16,126	-1.4%
Capital Projects Funds	3,822	4,679	22.4%	7,218	54.3%	7,075	-2.0%	7,008	-0.9%	6,357	-9.3%
Debt Service Funds	487	489	0.4%	459	-6.1%	458	-0.2%	459	0.2%	452	-1.5%

All Funds miscellaneous receipts are estimated to total \$25.4 billion in FY 2017, a decrease of 6.7 percent from FY 2016 results. This decrease is primarily due to the impact of extraordinary monetary settlements received in the General Fund during FY 2016, as described earlier in this Executive Budget Financial Plan. In addition to the impact of monetary settlements, declining FY 2017 miscellaneous receipts are driven in part by year-to-year variations in health care surcharges and other HCRA resources, bond proceeds, and tuition income revenue.

All Funds miscellaneous receipts are projected to increase to \$26.6 billion (4.6 percent growth) in FY 2018, largely reflecting the projected timing of bond proceed reimbursement for capital expenditures, and remain relatively flat in FY 2019 and FY 2020.

Receipts Overview



FEDERAL GRANTS (millions of dollars)											
	FY 2016	FY 2017		FY 2018		FY 2019		FY 2020		FY 2021	
	Results	Current	Change	Proposed	Change	Projected	Change	Projected	Change	Projected	Change
ALL FUNDS	51,324	52,885	3.0%	54,265	2.6%	55,511	2.3%	57,302	3.2%	57,125	-0.3%
General Fund	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Special Revenue Funds	49,105	50,651	3.1%	52,099	2.9%	53,347	2.4%	55,082	3.3%	54,893	-0.3%
Capital Projects Funds	2,146	2,161	0.7%	2,093	-3.1%	2,091	-0.1%	2,147	2.7%	2,159	0.6%
Debt Service Funds	73	73	0.0%	73	0.0%	73	0.0%	73	0.0%	73	0.0%

Aid from the Federal government helps to pay for a variety of programs including Medicaid, public assistance, mental hygiene, school aid, public health, transportation, and other activities. Annual changes to Federal grants generally correspond to changes in federally-reimbursed spending. Accordingly, DOB typically projects Federal reimbursements will be received in the State fiscal year in which spending occurs, but due to the variable timing of Federal grant receipts, actual results often differ from the projections.

All Funds Federal grants are projected to grow to \$57.1 billion by FY 2020, primarily reflecting the continuation of growth in Federal Medicaid spending related to Federal health care transformation initiatives, partly offset by the projected phase-down of Federal disaster assistance aid. All Federal receipts are subject to continuing administration and Congressional authorization, appropriations and budget action.

Many of the policies that drive Federal aid are subject to change when a new presidential administration and Congress begin in January 2017. It is not possible at this time to assess the potential fiscal impact of policies that may be proposed and adopted by the new administration and Congress.

Revenue Actions

Revenue Actions



The FY 2018 Budget includes a net positive increment of \$930 million in FY 2018 All Funds receipts reflecting the revenue actions contained in this budget. The accompanying table summarizes the revenue proposals by type of action required and provides a short description of the proposal, the date that the proposal will become effective, the Fund type where revenue will be deposited, and the incremental revenue gain or loss from the proposed action. This table represents gross revenue adds and reductions without any adjustments for associated spending changes, movements across funds or General Fund spending offsets. For more detailed explanations on these actions, please see The Revenue Actions and STAR section of the Executive Budget Briefing Book.

REVENUE ACTIONS (millions of dollars)								
Agency		Description	Effective Date	Fund Type	General Fund		All Funds	
					FY 2018	FY 2019	FY 2018	FY 2019
Tax Cuts and Credits								
DTF	Establish Life Sciences Tax Credits	1/1/2018	GFTX	-	-	-	-	
DTF	Enhance the Child and Dependent Care Credit	1/1/2018	GFTX	-	-	-	-	
DTF	Expand the Workforce Training Credit	4/1/2017	GFTX	-	-	-	-	
Tax Reform Actions								
DTF	Create Excelsior Business Program	4/1/2017	GFTX	-	-	-	-	
DTF	Treat Disregarded Entities As A Single Taxpayer for Tax Credit Purposes	4/1/2017	GFTX	-	-	-	-	
DTF	Require State S-Corporation Conformity with Federal Return	1/1/2018	GFTX	-	5	-	5	
DTF	Reform the Investment Tax Credit	1/1/2018	GFTX	-	-	-	-	
DTF	Close Co-Op Sale Loophole	1/1/2017	GFTX	10	10	10	10	
DTF	Close Non-Resident Asset Sale Loophole	1/1/2017	GFTX	10	10	10	10	
DTF	Close Sales Tax Related Entities Loopholes	4/1/2017	GFTX/SRTX	8	10	9	11	
DTF	Modernize Sales Tax Collection to Reflect the Internet Economy	9/1/2017	GFTX/SRTX	64	128	68	136	
DTF	Allow Transportation Network Companies to Operate Outside New York City and Impose a State Assessment Fee on Fares	7/1/2017	GFTX/SRTX	12	23	16	32	
DTF	Tax and Regulate Vapor Products	10/1/2017	GFTX	3	5	3	5	
DTF	Reform the Taxation of Cigars	9/1/2017	GFTX	12	23	12	23	
DTF	Impose the Real Estate Transfer Tax on the Transfer of a Real Estate Business Interest	4/1/2017	GFTX	4	5	4	5	
Enforcement Initiatives								
DTF	Require Practitioners to be Compliant with State Tax Obligations before Receiving Excess Medical Malpractice Coverage	4/1/2017	GFTX	1	2	1	2	
DTF	Require New State Employees to be Compliant with State Tax Obligations	6/1/2017	GFTX	1	2	1	2	
DTF	Allow Warrantless Bank Account Data Matching	4/1/2017	GFTX	5	15	5	15	
DTF	Expand Jeopardy Assessments to the Cigarette and Tobacco Tax	4/1/2017	SRTX	-	-	2	2	
DTF	Clarify the Amount of Untaxed Cigarettes Required to Seize a Vehicle	4/1/2017	GFTX	-	-	1	1	
DTF	Close the Real Estate Transfer Tax Loophole	4/1/2017	GFTX	2	2	2	2	
Key:								
CF = Capital Projects Fund		GF = General Fund		SF = Special Revenue Funds				
DF = Debt Service Fund		MR = Miscellaneous Receipt		TX = Tax				

				General Fund		All Funds		
Agency		Description	Effective Date	Fund Type	FY 2018	FY 2019	FY 2018	FY 2019
Tax Law Extenders								
DTF	Extend the Personal Income Tax Top Bracket for Three Years		1/1/2018	GFTX	683	3,375	683	3,375
DTF	Make the High Income Charitable Contribution Deduction Limitation Permanent		1/1/2018	GFTX	-	70	-	70
DTF	Extend the Empire State Film and Post-Production Tax Credits for Three Years		1/1/2020	GFTX	-	-	-	-
DTF	Extend the New York Youth Jobs Program Tax Credit		1/1/2018	GFTX	-	-	-	-
DTF	Extend the Alternative Fuels Property and Electric Vehicle Recharging Property Credit for Five Years		1/1/2018	GFTX	-	-	-	-
DTF	Permanently Extend Warrantless Wage Garnishment		4/1/2017	GFTX	15	15	15	15
School Tax Relief (STAR) Program Actions								
DTF	Convert New York City Personal Income Tax Rate Reduction Benefit Into a State Personal Income Tax Credit - Credit Portion		1/1/2017	GFTX	-	(340)	-	(340)
DTF	Convert New York City Personal Income Tax Rate Reduction Benefit Into a State Personal Income Tax Credit - Spending Savings		1/1/2017	GFTX	277	352	-	-
DTF	Allow Taxpayers to Make Partial Real Property Tax Payments		1/1/2019	GFTX	-	-	-	-
DTF	Maintain Basic and Enhanced Exemption Benefit at Existing Levels		4/1/2017	GFTX	50	98	-	-
DTF	Make Participation in Income Verification Program (IVP) Mandatory		4/1/2017	GFTX	24	24	-	-
DTF	Allow for Confidential Intergovernmental Sharing of STAR Information		4/1/2017	GFTX	-	-	-	-
DTF	Make Technical Amendments to Co-op STAR Credit		Various	GFTX	-	-	-	-
Gaming Initiatives								
Gaming	Reprivatize the New York Racing Association		4/1/2017	SFMR	-	-	-	-
Gaming	Extend Certain Tax Rates and Certain Simulcasting Provisions for One Year		4/1/2017	GFTX	-	-	-	-
Gaming	Extend Monticello Video Lottery Terminal Rates for One Year		4/1/2017	SFMR	-	-	(2)	-
Gaming	Extend the Video Lottery Gaming (VLG) Vendor's Capital Awards Program for One Year		4/1/2017	SFMR	-	-	-	-
Gaming	Alter Local Gaming Aid Distribution		4/1/2017	SFMR	-	-	-	-
Gaming	Remove Restriction for a Single Lab Testing Provider		4/1/2017	SFMR	-	-	-	-
Gaming	Modernize and Consolidate Charitable Gaming Laws		4/1/2017	SFMR	-	-	-	-
Fee Actions								
DMV	Increase Title Fees		4/1/2017	CFMR	-	-	74	81
DMV	Implement REAL ID Licenses		4/1/2017	CFMR	-	-	7	16
DOS	Realign Production Costs for Realtor Identification Cards		4/1/2017	SFMR	-	-	0	0
DOT	Increase the Cap on Divisible Load Permits		4/1/2017	CFMR	-	-	1	1
DTF	Apply the Public Safety Communications Surcharge to Prepaid Devices		4/1/2017	CFMR	3	11	7	26
DTF	Extend Fees for the Establishment of Oil and Gas Unit of Production Values		12/1/2017	GFMR/SFMR	-	-	-	-
SLA	Establish a Motion Picture Theater Alcohol Permit		4/1/2018	SFMR	0	-	0	-
SLA	Establish a Taste-NY Alcohol Permit		4/1/2017	GFMR	0	-	0	-
Technical Amendments								
DTF	Make Technical Amendments to the State and Local Sales Tax Statute		4/1/2017	GFTX	-	-	-	-
TOTAL TAX REFORM, REVENUE ACTIONS, and STAR					1,184	3,845	930	3,505

Key:

CF = Capital Projects Fund
DF = Debt Service Fund

GF = General Fund
MR = Miscellaneous Receipt

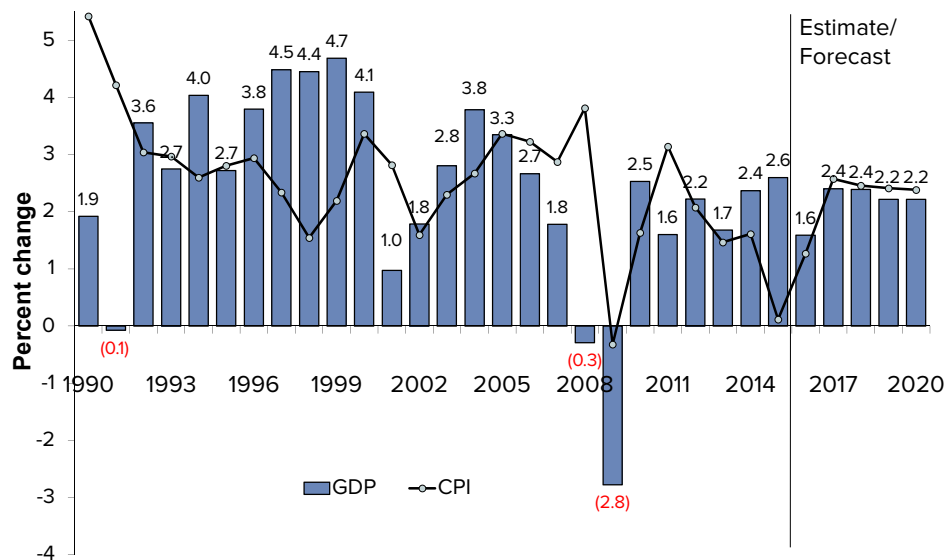
SF = Special Revenue Funds
TX = Tax

Economic Backdrop

Overview

At the midpoint of its eighth year, the current expansion, now less than two months shy of being the third longest expansion since 1850, maintains its standing as the weakest since the 1930s. Annualized quarterly growth has averaged just above 2 percent over the life of the expansion and has struggled to reach 2 percent since the beginning of 2015, doing so during only two quarters since 2015Q1. But at the start of each year, expectations mount that the U.S. economy could be at an inflection point and on the verge of finally escaping the low-growth trap that has held the nation in its grip since the technical end of the Great Recession in the middle of 2009. However, economic fundamentals suggest that absent an uptick in global growth and policies squarely aimed at addressing the economy's long-term growth potential, the nation's current slow but steady growth path is unlikely to be significantly altered in 2017 and beyond. Although the Budget Division outlook calls for improved growth over the next two years, growth can be expected to remain well below 3 percent throughout the forecast period. Real growth in U.S. GDP of 2.4 percent is projected for 2017, following growth of 1.6 percent for 2016 (see Figure 1). The year just ended may yet have the distinction of being the weakest of the current expansion to-date.

Figure 1
Outlook for Real U.S. GDP Growth and Inflation



Note: Displayed values pertain to GDP growth.
Source: Moody's Analytics; DOB staff estimates.

Although consumer and business sentiment have turned markedly more positive in the U.S. since the election, uncertainty surrounding the new administration's future policies remains high. Consequently, the Budget Division's baseline U.S. macroeconomic forecast does not assume any major discontinuities in Federal fiscal policy. Nevertheless, there is still cause for optimism that growth will accelerate in 2017. Even without a major policy shift, the Federal government is expected to make its strongest contribution to national economic growth since 2010. Although job

growth is expected to continue to slow further in 2017, average wage growth is expected to post its strongest year since the end of the Great Recession. Importantly, improvement is expected at the low end of the income spectrum, with the minimum wage rising in 20 states at the start of 2017, including New York. With accelerating personal income growth and continued equity and home price growth, household spending is expected to remain the bedrock of the current expansion. Real consumption growth of 2.5 percent is projected for 2017, only slightly below last year's growth of 2.7 percent. Finally, the world's oil producers have entered into an accord to collectively act to firm up global oil prices. Though the agreement is likely to be fragile, higher oil prices have already created some upward momentum within the U.S. energy sector, a development that should prevent non-residential private investment from being the drag on growth that it was in 2016.

Though the current U.S. expansion is expected to remain firmly on track in 2017, annualized quarterly growth going forward is not expected to rise substantially above its 2.1 percent average since the technical end of the recession in the middle of 2009. Sluggish global growth is expected to continue to constrain real U.S. export and corporate profits growth. Accelerating inflation should ensure at least two short-term interest rate hikes in 2017, which will be welcomed by the banking sector but the impact of higher interest rates on both residential and non-residential investment is likely to be negative. Moreover, rising interest rates, combined with the relative strength of the U.S. economy, are likely to continue to strengthen the U.S. dollar, already near a 14-year high, putting further downward pressure on global demand for U.S. goods and services. All of these forces are expected to keep real growth in private business investment in plant and equipment below 5 percent over the entire span of the forecast horizon, constraining the national economy's capacity for future growth.

Against a backdrop of weakness in both national and global growth, New York State's private sector labor market decelerated in 2016. But private job growth remained well-above historical average rates of growth, and continued to be led by construction; education; transportation and warehousing; leisure and hospitality; health care; and professional and business services. Domestic and international tourism continues to be one of the State's major growth industries, but the strong dollar likely is having a negative impact on job growth in those industries most affected, such as retail trade and leisure and hospitality. Rising interest rates are also likely to reduce the wind in the sails of construction and real estate services. State private sector job growth of 1.5 percent is projected for 2017, following estimated growth of 1.8 percent in 2016. Growth in government jobs of 0.5 percent results in slightly lower overall job growth of 1.3 percent for 2017.

Although New York's Main Street economy remains robust, a turbulent year for Wall Street and the financial markets is estimated to have restrained State wage growth for FY 2017. Equity market prices plunged in early 2016, along with oil prices and economic activity more generally, and failed to mount a sustained rally until late in the year, too late to compensate for earlier weakness. As a result, finance and insurance sector bonuses are estimated to have fallen 0.7 percent for the State fiscal year in progress. Nevertheless, the relative health of the State's labor market is expected to result in non-bonus wage growth of 4.6 percent for FY 2017, lifting overall State wage growth to 4.1 percent. A more supportive environment for financial market activity is projected for 2017, resulting in wage growth of 4.2 percent for FY 2018. Overall personal income growth of 3.7 percent is estimated for FY 2017, accelerating to 4.7 percent for FY 2018. Should the current estimate for State finance and insurance sector bonuses come to pass for the fiscal year in progress, it will

represent a third consecutive year of declining bonuses for that sector, unprecedented in the history of the Budget Division's bonus series and highlighting the risk surrounding financial market activity and its impact on the State economy and revenues.

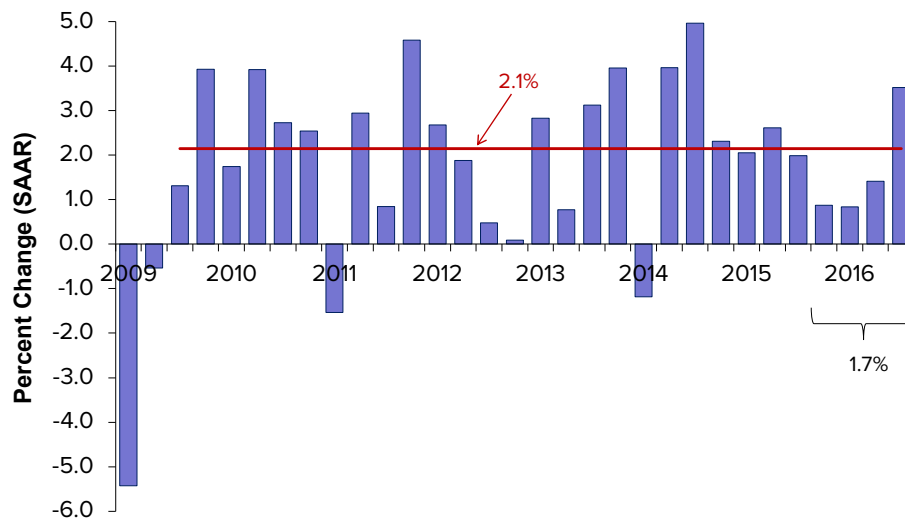
The National Economy

The U.S. economy has been stuck at just above stall speed since the end of the Great Recession in mid-2009. As illustrated in Figure 2, annualized quarterly growth over the life of the current expansion has averaged a meager 2.1 percent. Not only has the economy's rate of expansion failed to sustainably improve, growth actually decelerated to an average of 1.7 percent during the four quarters ending in 2016Q3, the most recent for which data are available. The solution to this puzzle may lie with the substantial headwinds buffeting the economy as it emerged from the worst downturn since the 1930s, reeling from the loss of more than eight million jobs and a collapse in home prices that severely hobbled a highly overleveraged banking system. Research indicates that recoveries from financial crises tend to be slow and, when associated with housing slumps, also tend to be both protracted and weak.¹ Moreover, it is likely that a weak recovery is more vulnerable to adverse shocks, and the list of those that have rocked the national economy since 2009 is a long one, including severe weather, an earthquake in Japan, debt crises both here and in Europe, and a plunge in oil prices. The Great Recession and the home price collapse in particular were in fact global phenomena and, correspondingly, a pervasive weakness has engulfed the entire international economy, making the export sector a drag on national economic growth for the much of the life of the recovery. Finally, after the winding down of the American Recovery and Reinvestment Act of 2009 (ARRA) near the end of the 2010 Federal fiscal year, the Federal government too became a consistent drag on U.S. growth, its contribution to real GDP contracting four consecutive years from 2011 through 2014, improving to flat in 2015.

As we enter 2017, several of the above factors are unwinding, which should improve the economy's growth prospects going forward. There is evidence that the euro zone, which as a bloc is one of the nation's largest trading partners, will see stronger growth in 2017. Greater global demand for domestically produced goods can be expected to enhance growth in exports, corporate profits, and equity prices. Moreover, even without a major shift in fiscal policy, the Federal government is expected to contribute modestly, but positively, to economic growth for the first time in six years. Finally, with oil prices on the rise, consistently remaining above \$50 per barrel since early December, energy sector employment has stabilized. The oil rig count has risen for five consecutive months, though as of December the number of oil rigs in operation was still 70 percent below its October 2014 peak. However, the positive signals from these sources will be at least partially offset by rising interest rates and the strong value of the dollar, which is nearing its most recent 14-year high.

¹ Carmen M. Reinhart and Kenneth S. Rogoff (2009), *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press; Greg Howard, Robert Martin, and Beth Anne Wilson (2011), "Are Recoveries from Banking and Financial Crises Really So Different?" *International Finance Discussion Papers 2011-1037*, Board of Governors of the Federal Reserve System, Washington, D.C. For a more detailed discussion, see *2012-13 Executive Budget Economic and Revenue Outlook*, Box 2, Financial Crises, Housing, and the Business Cycle, page 73.
<<http://www.budget.ny.gov/pubs/archive/fy1213archive/eBudget1213/economicRevenueOutlook/economicRevenueOutlook.pdf>>.

Figure 2
Real US GDP Growth Remains Stuck in Low Gear



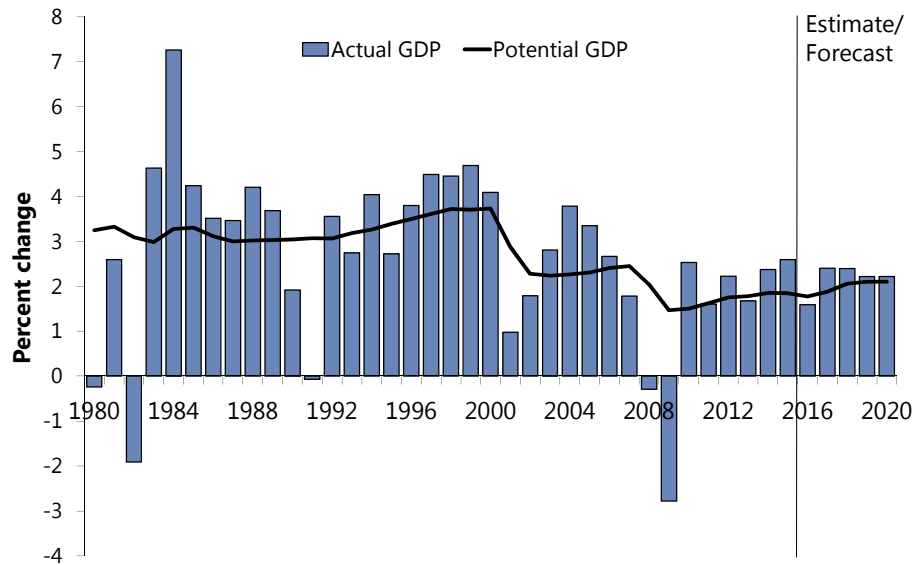
Source: Moody's Analytics.

An unfortunate consequence of a protracted period of slow economic growth has been a slide in rates of investment growth. Real quarterly growth in non-residential investment has averaged 4.3 percent over the current expansion and only 0.2 percent over the most recent eight quarters of available data. These weak rates of investment growth imply slow growth in the business sector's stock of plant and equipment, which in turn reduces growth in the economy's long-run production capacity, a concept known as "potential GDP growth." The essential components of potential GDP growth are the size of the labor force, the capital stock, and productivity, as they determine the economy's long-run capacity to produce. As illustrated in Figure 3, potential GDP growth tends to fall during recessions, as discouraged workers drop out of the labor force and investment falls, and rise during expansions as workers re-enter the labor force and firms step up business spending anew. Economic growth tends to exceed potential growth during expansions, but can only do so for short periods before inflationary pressures build. The economy's growth rate must eventually converge to its potential growth rate, keeping the economy on a relatively modest growth path, with inflation well within the Federal Reserve's target range.

Figure 3 indicates that potential GDP growth is expected to gradually rise as the expansion continues, plateauing at an annualized rate of only 2.2 percent, the weakest of the postwar period. Although weak labor force growth related to retiring baby boomers is in part responsible for weak potential growth, continued low rates of investment growth also play a critical part. Even with a reversal of the recent two-year contraction in energy mining and extraction, real growth in nonresidential investment is not expected to exceed 5 percent over the span of the forecast horizon. These developments suggest that the trajectories of labor force and investment growth will have to shift upward in order to increase the economy's long-term rate of growth much beyond 2.2 percent. Government policy can play such a role, but policies that fail to raise potential GDP growth by either promoting investment in plant, equipment, and infrastructure; raising productivity

growth; or raising labor force participation rates are unlikely to have more than a temporary impact on growth since rising inflation and interest rates will tend to choke off any lasting impact.

Figure 3
Real Growth in Actual and Potential U.S. GDP



Note: Displayed values pertain to GDP growth.

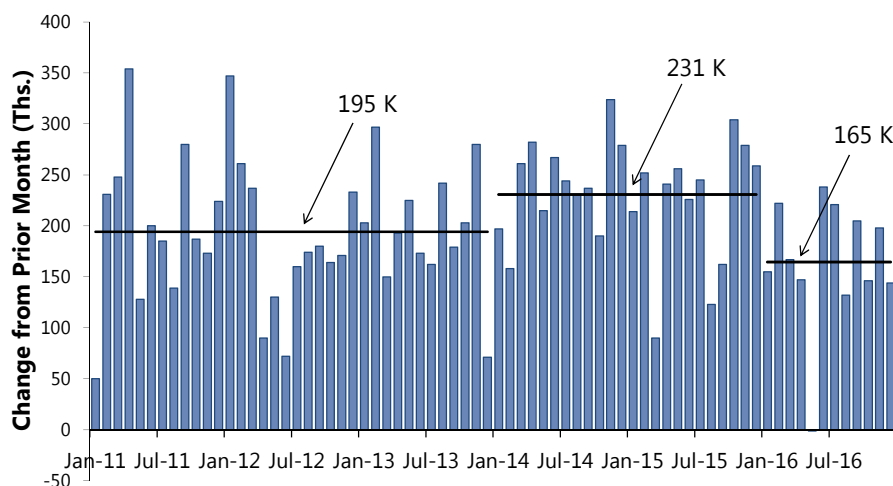
Source: Moody's Analytics; Congressional Budget Office; DOB staff estimates.

The Labor Market to Ease Further

On the heels of two strong years of job creation, the labor market slowed in 2016. Monthly private sector job gains fell from an average of 230,700 over 2014 and 2015 to 164,500 in 2016 (see Figure 4). As the expansion continues to mature, employment is expected to slow further in 2017, with private nonagricultural job growth of 1.5 percent projected for the current year on an annual average basis, following growth of 2.4 percent and 1.9 percent for 2015 and 2016, respectively. In contrast, monthly public sector gains accelerated from an average of 9,300 jobs over 2014 and 2015, to 15,300 in 2016. Public sector job growth of 0.9 percent is projected for the current year, following growth of 0.6 percent and 0.7 percent for 2015 and 2016, respectively. On balance, total employment growth is projected to fall to 1.4 percent in 2017, following growth of 2.1 percent in 2015 and 1.8 percent in 2016. Slower job growth combined with faster output growth implies improved productivity growth for this year.

Figure 4

U.S. Private Sector Employment Gains



Source: Moody's Analytics.

Employment gains in 2016 were widespread, but lower or flat growth relative to 2015 was exhibited almost across the board except for retail trade, finance and insurance, real estate, and education services (see Table 1). However, even the latter four sectors failed to show significant acceleration over the course of last year and are expected to slow along with the rest of the labor market going forward. Professional and technical services is expected to remain the labor market's fastest growing sector, contributing to greater productivity growth economy-wide in 2017. Construction, management and administrative support, and health care will also lead private job growth this year. A further acceleration in public sector job growth will support government's expanding contribution to the overall economy in 2017.

Table 1
JOB GROWTH TO SLOW FURTHER IN 2017

	2015	2016	2017	
	%Change	%Change	Jobs Added	% Change
Total Private	2.4	1.9	1,862	1.5
Natural Resources and Mining	(7.9)	(15.0)	(11)	(1.6)
Utilities	1.3	1.2	4	0.6
Construction	4.8	3.4	150	2.3
Manufacturing	1.1	(0.2)	(35)	(0.3)
Wholesale Trade	1.1	0.9	51	0.9
Retail Trade	1.8	1.9	178	1.1
Transportation and Warehousing	3.9	1.2	64	1.3
Information	0.9	0.8	10	0.4
Finance and Insurance	1.8	1.9	94	1.5
Real Estate, Rental, and Leasing	2.0	2.3	33	1.5
Professional and Technical Services	3.5	3.4	251	2.8
Management, Admin. Support, and Waste Services	3.0	2.5	252	2.2
Education Services	1.4	2.1	70	2.0
Health Care and Social Assistance Services	3.1	3.0	413	2.2
Leisure, Hospitality, and Other Services	2.4	2.2	339	1.6
Government	0.6	0.7	195	0.9
Total	2.1	1.7	2,058	1.4

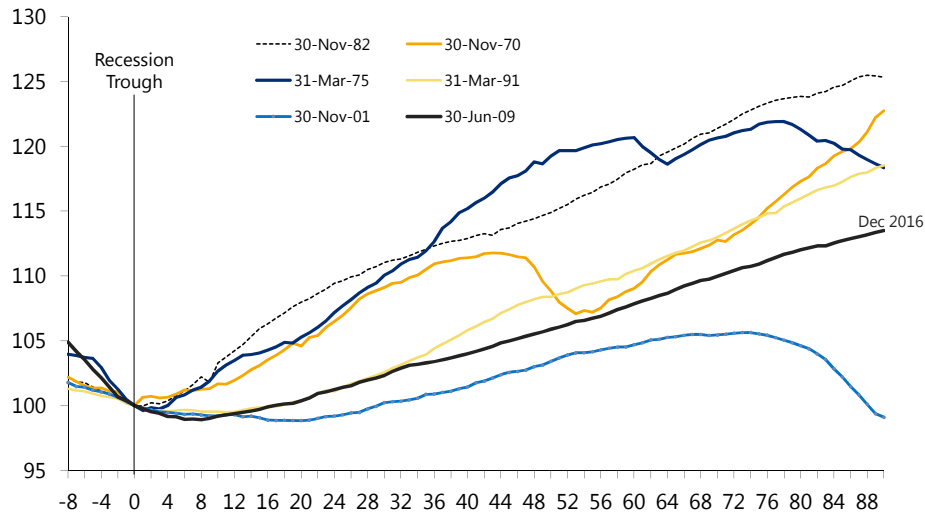
Note: Data are based on employment data through November, 2016.

Source: Moody's Analytics; DOB staff estimates.

With continued, albeit slower growth in employment, the Budget Division projects the national unemployment rate to continue its downward path from an average of 4.9 percent for 2016 to 4.6 percent in 2017. The pace at which the nation's unemployment rate can improve will slow as it gets close to the non-accelerating inflation rate of unemployment, or NAIRU, i.e., the unemployment rate below which inflationary pressures begin to build. However, the precise value of the NAIRU remains uncertain as policymakers continue to debate just how much slack remains in the labor market after three years of strong job growth. The Budget Division estimate for this year's annual average unemployment rate is inching closer to the prerecession low of 4.4 percent, but further analysis suggests that there may still be some slack in the labor market.

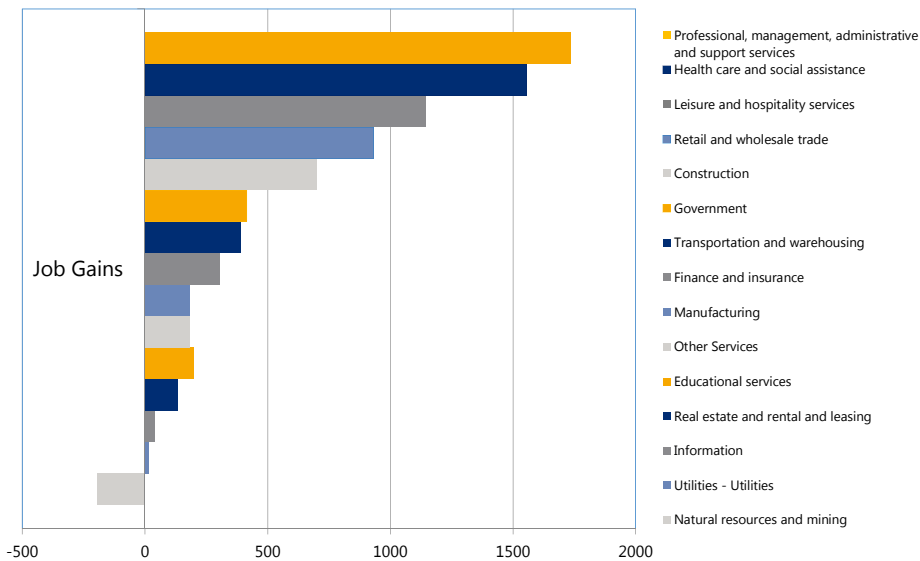
It should be remembered that despite the significant acceleration in job growth in 2014 and 2015, the current expansion boasts the second weakest labor market recovery of the postwar era, with only the 2002-07 expansion exhibiting slower growth (see Figure 5). The labor market may still be making up for lost ground. Slack remains in the form of both unemployment and underemployment, with an elevated number of employees working in low-wage and part-time jobs. Healthcare and social assistance, leisure and hospitality, and retail and wholesale trade combined account for 47 percent of job gains since January 2014, but accounted for only 39 percent of the 2007 employment base (see Figure 6). These industries pay among the lowest wages, which are a proxy for productivity. Finally, the percentage of the labor force working part-time remains elevated. As of December 2016, the unemployment rate had unwound 95 percent of its 5.6 percentage point recession-based increase but the 3.7 percentage point increase in the share of part-time employment has only come down by 62 percent (see Figure 7).

Figure 5
Current Rate of Cumulative Private Job Growth Among the Weakest on Record



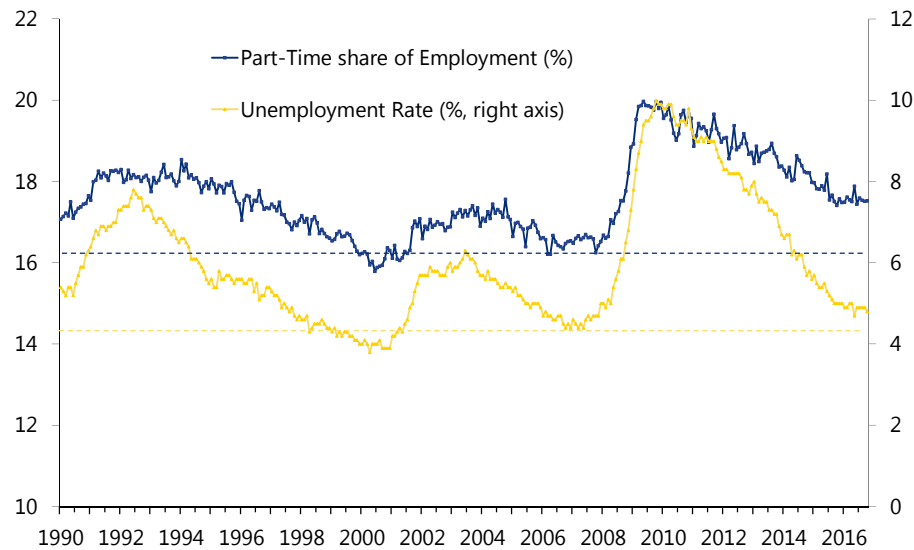
Note: Zero point represents the recession troughs.
Source: Moody's Analytics; DOB staff estimates.

Figure 6
Much of the Recent Job Gains Have Been in Low Productivity Industries
(Jan 2014 - Dec 2016, jobs in thousands)



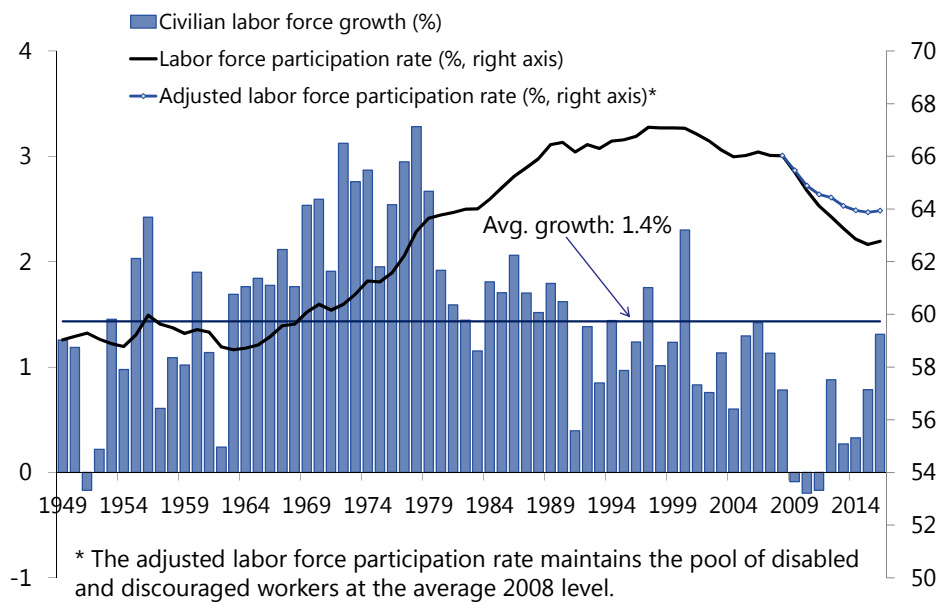
Source: Moody's Analytics

Figure 7
The Share of Part-Time Work Remains Elevated



Note: Dotted lines denote pre-recession lows.
Source: Moody's Analytics

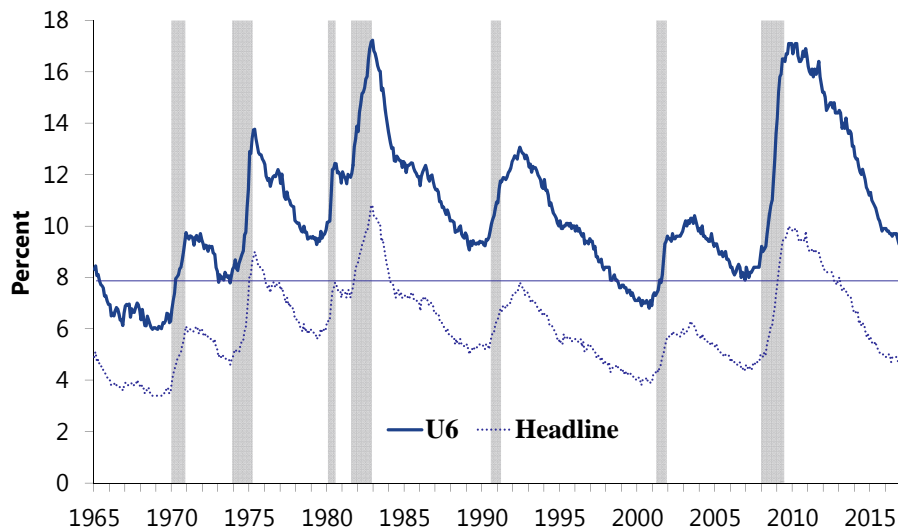
Figure 8
National Labor Force Trends



Source: Moody's Analytics.

Labor force data suggest that there are indeed individuals who either are not in the labor force but wish to be, or are already in the labor force but wish to work more. The labor force participation rate (LFPR) is defined as the percentage of the population 16 and older who either are employed or seeking employment. As illustrated in Figure 8, the LFPR has fallen precipitously since the start of the Great Recession. At the end of 2016, the labor force participation rate stood at 62.7 percent, down 4.6 percentage points from its most recent 2000 peak and down 3.7 percentage points from its pre-recession peak in 2007. Research points to both secular and cyclical factors to explain the long-term decline in the labor force participation rate that started on the eve of the 2001 recession but clearly accelerated after 2007. Understanding these reasons are critical to assessing the degree of slack that exists in the labor market and, in turn, how much room there is for the unemployment rate to fall before the inflation rate can be expected to accelerate.

Figure 9
The Underutilization of Labor (U6)



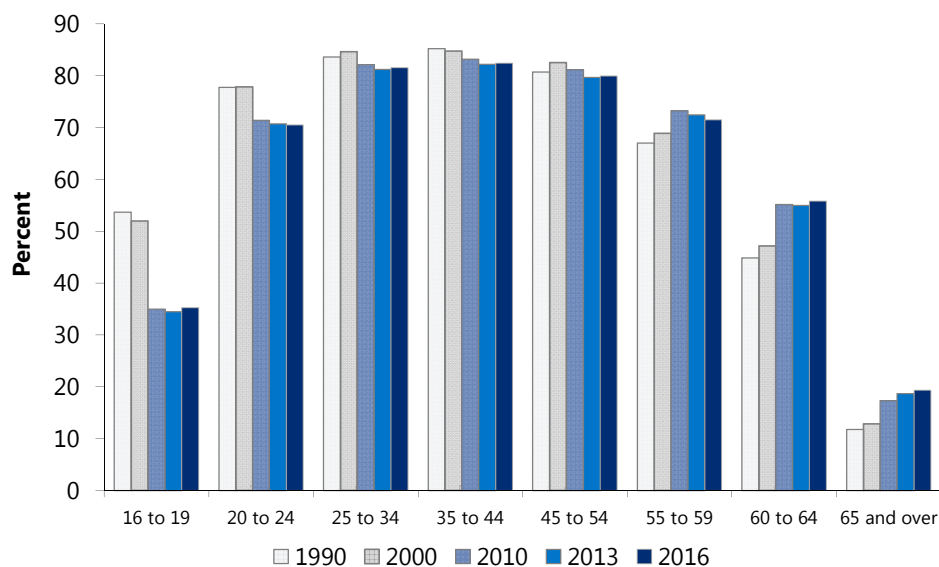
Note: The underutilization of labor (U6) is the number of unemployed and marginally attached for economic reasons as a percent of labor force plus marginally attached; shaded areas represent U.S. recessions.
Source: Moody's Analytics.

Cyclical factors play a primary role in determining labor force dynamics. During economic downturns, adults age 16 and older are less likely to enter the labor force, while the long-term unemployed may leave the labor force altogether, either temporarily or permanently. The most widely reported "headline" unemployment rate measures the number of unemployed, defined as those without a job but actively seeking one as a percentage of the total labor force. But the U.S. Bureau of Labor Statistics also publishes a measure of labor underutilization known as U6 that includes the number of unemployed; those workers considered to be only "marginally attached" to the labor force for example, discouraged workers; and those working part-time for "economic reasons," as a percent of the labor force plus the marginally attached.² Figure 9 compares the

² More precisely, U6 measures the total number of people who are unemployed, who are marginally attached to the labor force (not currently looking for work but willing and able to work and have looked in the past 12 months), and

history of U6 with that of the headline unemployment rate. Evidence of the severity of the last recession can be seen in the extended period during which U6 remained elevated. And while the extent of the series' decline over the course of the expansion to-date is plainly visible, as of December 2016, the mid-point of the eighth year of the expansion, U6 was still 1.1 percentage points higher than it was on the eve of the recession. As discussed above, the headline rate is only a few tenths higher than its pre-recession peak. As the economy continues to strengthen, potential workers who are now only marginally attached to the labor force will start actively looking for jobs, driving the LFPR rate higher.

Figure 10
Labor Force Participation Rates
by Age Group



Source: U.S. Bureau of Labor Statistics.

Secular factors, such as the aging of the baby boomer generation, have also contributed to the decline in the LFPR, and many of these older workers who left the labor force are unlikely to return no matter how strong the economy. As demonstrated in Figure 10, labor force participation rates tend to fall substantially for older workers. The participation rate for those aged 55 to 59 was above 70 percent in 2016, but only slightly above 19 percent among those 65 and over. Thus, as the very large baby boom generation moves through those age cohorts with declining labor force participation rates, overall labor force participation rates will fall, all else constant. The CBO and the Council of Economic Advisors (CEA) both conclude in their research that about half of the decline in labor force participation after the fourth quarter of 2007 can be attributed to the aging of the population.³ Baby boomers will continue to reach retirement age in elevated numbers until

those who work part time for economic reasons, i.e. because they could not find full-time employment, as a percentage of the labor force plus the marginally attached workers.

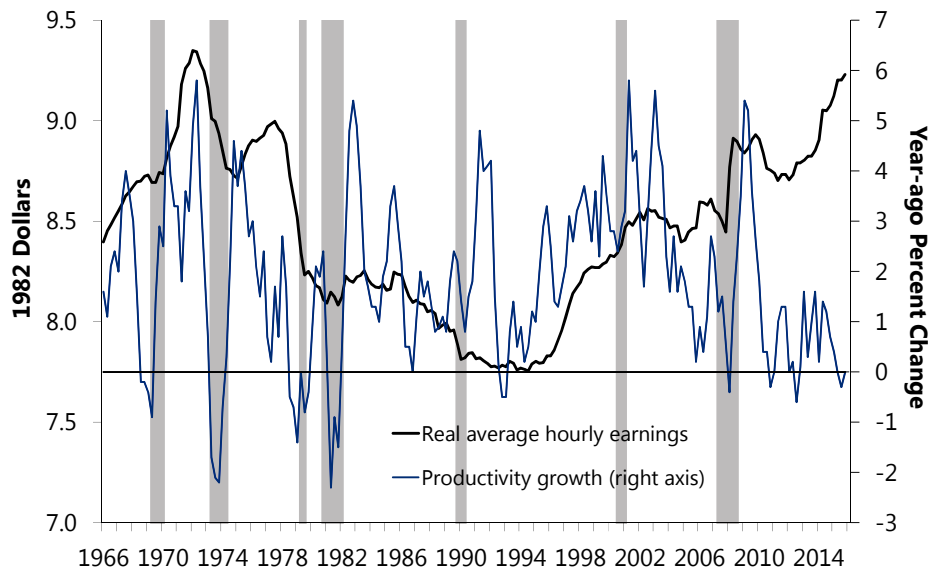
³ Congressional Budget Office "The Slow Recovery of the Labor Market", Congress of the United States, February 2014; Council of Economic Advisers, "The Labor Force Participation Rate Since 2007: Causes and Policy Implications." July 2014.

2029; correspondingly, the decline in labor force participation attributable to aging is expected to continue, potentially at a more rapid pace in the coming years.

Some additional labor market trends are illuminated in Figure 10. Over the decades, participation rates of younger cohorts have declined as more young people attend school, and participation rates among the two oldest cohorts have increased as better health and higher life expectancy increased both the ability and the need for a longer work life. Participation rates among those aged 55 to 59 has continued to fall in recent years, most likely because this group found it difficult to find a job during and following the recession. However, participation rates among all three prime working age groups (ages 25–54) were also lower in 2016 than they were during the first full year of the expansion in 2010, further evidence of the corrosive impact that weak economic growth has had on the labor market. On a more optimistic note, the participation rate for each of these groups rose, albeit slightly, between 2013 and 2016, perhaps signaling that stronger economic growth will indeed draw more workers into the labor force. But the process will likely be slow, as the stigma associated with long-term unemployment, together with the erosion of job skills over time, can make it difficult for the long-term unemployed to find new work, leading many to drop out of the labor force permanently.

Another development associated with the decline in labor force participation among prime age workers is an increase in the number of working-age people in the U.S. who are not in the labor force for reasons of disability. Since 2010 more than three million working-age people have left the labor force due to disability, representing 2.0 percent of the labor force. BLS data indicate that the combined total of discouraged workers and workers not in the labor force because of disability has grown 13.7 percent since the recession's first year (2008). If that total had remained at its 2008 level, the labor force participation rate would have been an estimated 1.2 percentage points higher in 2016 (see Figure 8).

Figure 11
Productivity Growth and Real Private Average Hourly Earnings



Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics.

As the unemployment rate has fallen and job opportunities have become more plentiful, nominal wage rates are finally coming under upward pressure; however inflation-adjusted wage rates appear to have been rising since early 2012. As indicated in Figure 11, real private hourly wages eroded during the high-inflation period in the 1970s and early 1980s, but gained ground again during the 1990s, a period of strong labor market growth and relatively calm price growth. Historically, wages also align with productivity growth. Labor productivity was strong coming out of the recession as employment continued to fall even as output was starting to rise, but then declined sharply in line with the weak rates of output and investment growth that have characterized this expansion. Productivity growth has remained unexpectedly weak throughout the slow but steady expansion, mustering only 0.5 percent growth on average since the first quarter of 2011. Despite the lack of improvement in labor productivity, real average hourly earnings have been trending upward due largely to historically low rates of inflation (more recently associated with energy price gyrations); state-level minimum wage increases; and nominal wage gains as labor markets have tightened. The Budget Division projects nominal average wage growth to accelerate in 2017 to 3.1 percent from 2.7 percent in 2016. However, slower job growth in 2017 will lead to total wage growth of 4.4 percent, up only a slightly from 4.2 percent growth in 2016. Total personal income growth of 4.4 percent is projected for 2017, up from 3.5 percent in 2016.

Persistently low productivity growth has presented a puzzle for much of the expansion. Even within the manufacturing sector, where production is highly automated, productivity growth remains unusually flat. Some research points to a secular decline owing to the notion that transformational advances like those of the late 19th and early 20th centuries that spawned decades of high productivity growth are unlikely to be mimicked going forward. Productivity growth, defined as

output per worker, can be decomposed into its two component parts, output growth and employment growth. If the former exceeds the latter, then productivity growth will rise, if job growth exceeds output growth, then productivity growth will fall as it did fairly early on in the current expansion. If productivity tends to be supply-side driven, then employment will rise in advance of a rise in output and productivity will fall, or if workers are replaced with robots, employment will fall in advance of (or possibly simultaneously with) output growth and productivity will rise. But if productivity tends to be demand side driven, then output growth will tend to lead employment growth, causing productivity to rise. Statistical test results indicate that output growth does tend to lead job growth, suggesting that it may be the low growth environment itself that is restraining growth in productivity.⁴

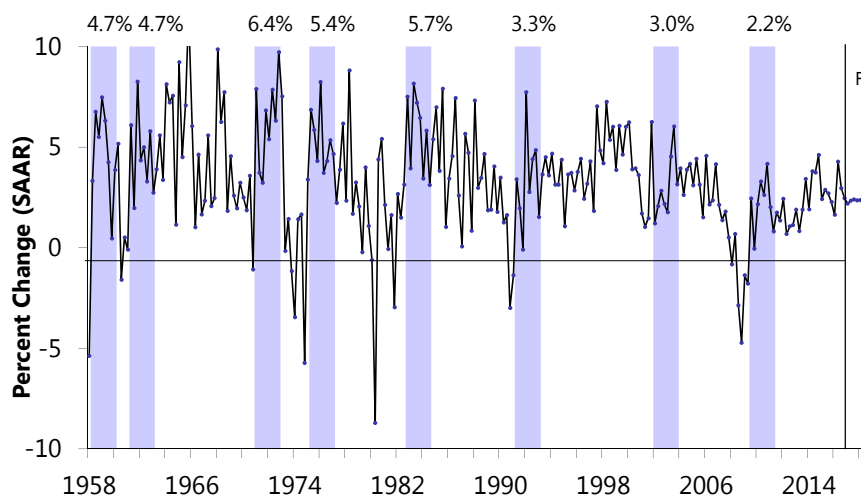
⁴ A Granger causality test was performed using real U.S. GDP and private sector employment over the period from 1990Q1 through 2016Q3. The null hypothesis that employment growth does not Granger cause output growth could not be rejected at the 5 percent level; the null hypothesis that output growth does not Granger cause employment growth is rejected at less than the 1 percent level, with an optimal lag length of six quarters.

Household Spending and the Slow Housing Recovery

With the labor-market growth in 2014 growth in household spending finally came to life. But compared with prior expansions, real growth in household spending has been anemic at best. With the release of pent-up demand at the end of a recession, household spending typically bolts out of the gate, exhibiting high rates of growth before reverting to its long-term trend growth. At the end of the Great Recession, that growth spurt never took place. Figure 12 compares average real growth in consumption spending over the first eight quarters immediately following the last eight US recessions, excluding the brief 1980 recession. Although all of the last three recoveries exhibit slow starts relative to the remainder of the postwar period, the start of the current expansion was particularly slow. This observation is consistent with the research findings cited above that recoveries from recessions associated with housing slumps tend to be especially weak. For lower- and middle-income home owning households, those homes tend to be the most important and, in many cases, only asset.

The health of the household balance sheet has continued to improve as the current expansion has matured, the unemployment rate has fallen, and real estate and financial equity has strengthened. Real consumption growth accelerated from average annual growth of 1.8 percent over the first four full years of the expansion, 2010 through 2013, to 2.9 percent over the most recent three years. The Budget Division projects real growth in consumption spending of 2.5 percent for 2017, following growth of 2.7 percent for 2016. Growth is expected to fall below 2.5 percent over the remainder of the forecast horizon as overall economic growth converges to the economy's long-run potential (see Figure 13).

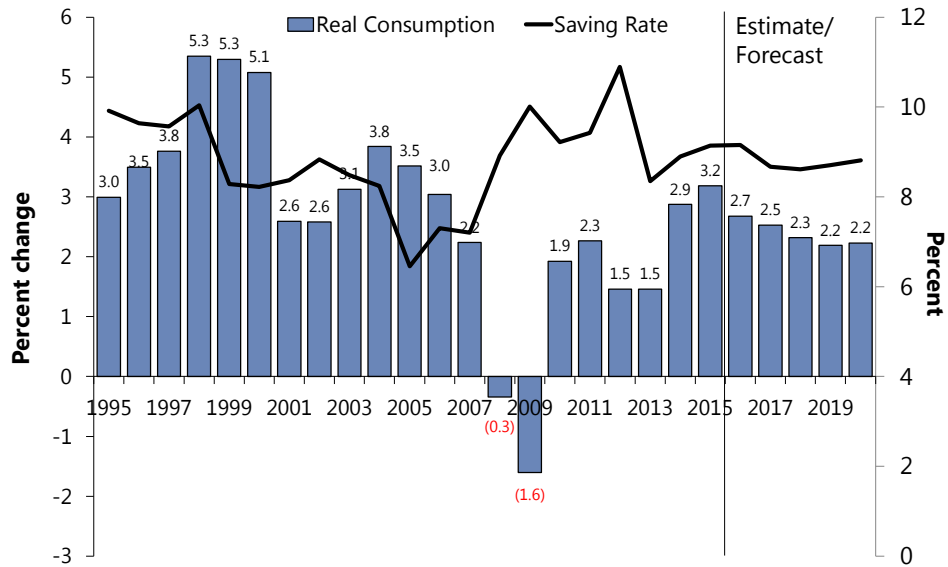
Figure 12
Household Spending Growth
Average Over the First Eight Quarters Following a Recession



Note: Shaded areas represent the eight quarters following the last eight US recessions, excluding the brief 1980 recession.

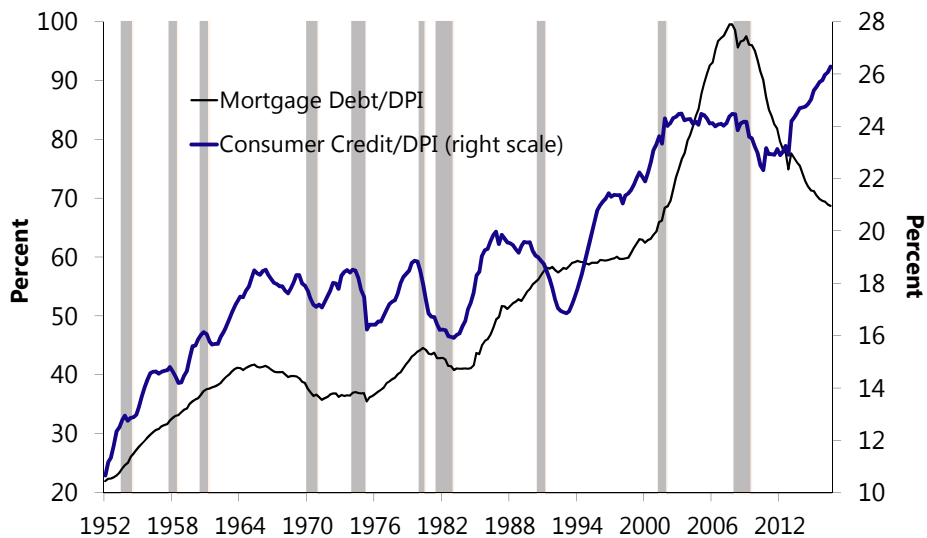
Source: Moody's Analytics.

Figure 13
Household Spending and the Saving Rate



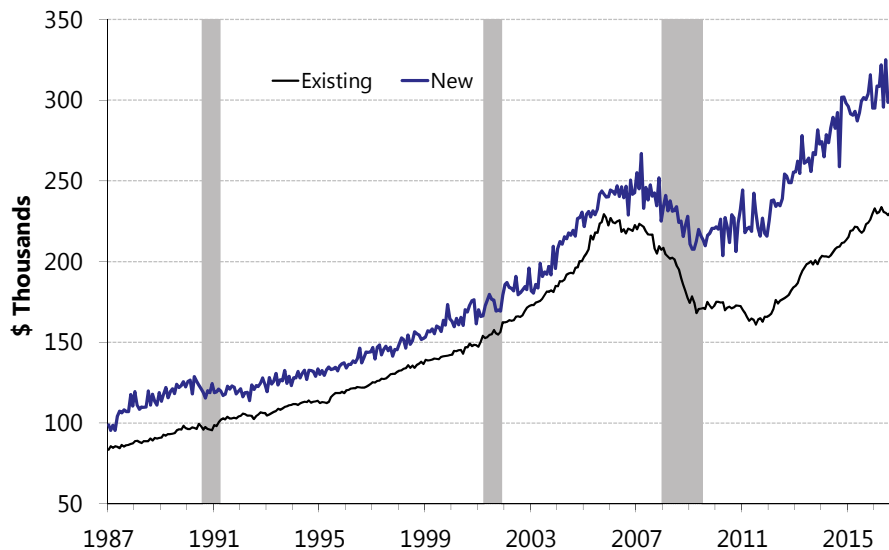
Note: Displayed values pertain to real consumption growth.
Source: Moody's Analytics; DOB staff estimates.

Figure 14
Home Mortgage Debt and Consumer Credit Relative to Disposable Income



Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics.

Figure 15
U.S. Median Home Prices Rebounding

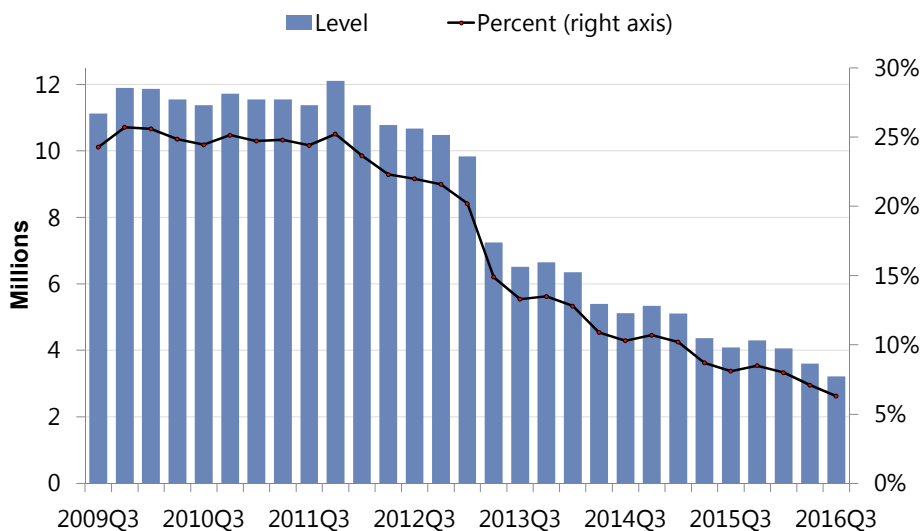


Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics.

Nevertheless Figure 14 illustrates the cataclysmic impact that the collapse of the housing bubble is still having on household spending behavior. More than seven years into the expansion, mortgage debt as a share of disposable personal income has continued to fall, even as other consumer debt has continued to rise. This pattern distinguishes the current expansion from virtually all other postwar expansions. Nevertheless, the recovery in home prices is playing a major role in the repair of household balance sheets, though that recovery has been uneven. Figure 15 depicts the disparity between the rates of recovery of existing home prices versus new home prices. The median existing home price did not recover the \$68,000 lost between the October 2005 peak of \$229,000 and the July 2011 trough of \$161,000 until December 2015. But the median price of new homes, which represents a much smaller share of the residential housing market, rose above its pre-recession peak as early as April 2013. There is evidence that the new home market has been dominated by large expensive homes purchased by wealthier households for whom it is still easier to obtain a mortgage. The slow financial recovery of low-income households has likely been a critical factor explaining the weakness in household spending growth during this expansion.

Figure 16 illustrates that despite their limited recovery, rising existing home prices still have dramatically reduced the number of residential properties with negative equity, i.e. properties where mortgage debt exceeds the market value. The number of mortgages “underwater” fell from 12.1 million at the end of 2011 to 3.2 million by the third quarter of 2016, reducing the share of underwater mortgages from 25.2 percent to 6.3 percent. Thus, more homeowners looking to sell their homes are able to do so without incurring a loss, increasing the inventory of homes for sale. However, there is evidence that a large proportion of the homes still underwater are owned by lower-income households.

Figure 16
Negative Equity:
Number and Percentage of Mortgages “Under Water”



Source: Corelogic.

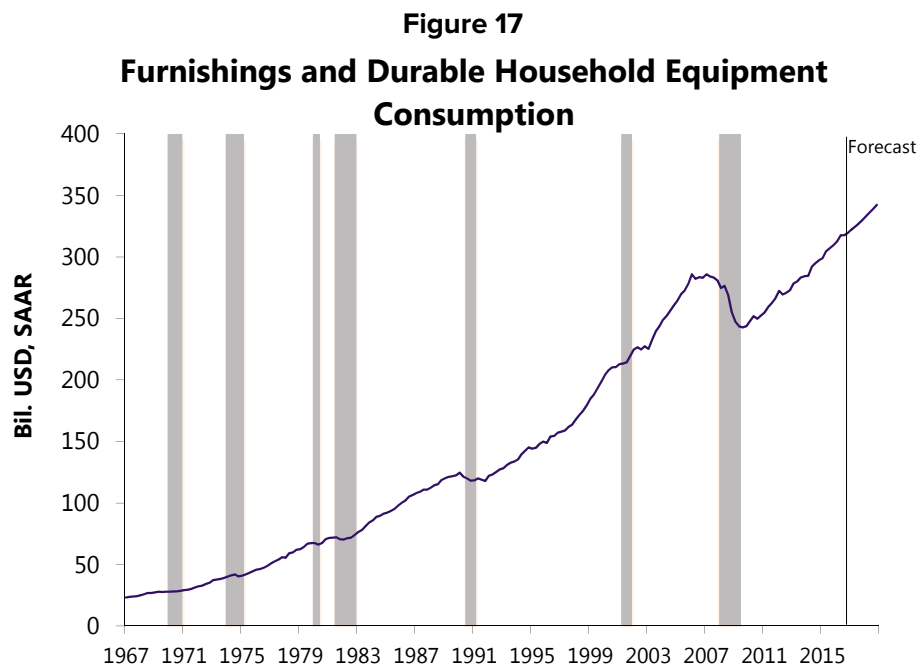
The continued recovery of the housing market will be critical to strengthening the momentum of the economic recovery. As suggested above, real estate is the main source of wealth for many households in the United States. Households lost \$12.5 trillion in total net worth between the second quarter of 2007 and the first quarter of 2009 as the value of both their financial assets and real estate wealth fell as the housing bubble collapsed.⁵ By the third quarter of 2016, households had gained \$33.9 trillion in net worth, or \$21.4 trillion above the previous peak. But this buildup was almost entirely based on the recovery of financial wealth. Financial assets bottomed out in the first quarter of 2009 and by the second quarter of 2011 exceeded their 2007 prior peak. In contrast, real estate wealth declined continuously through the second quarter of 2011 and, by the third quarter of 2016, had just recovered the \$6.9 trillion lost between 2006 and 2011. Meanwhile financial asset wealth had risen approximately \$19 trillion above its prerecession peak.

The strong recovery of financial wealth is a tide that has not lifted all boats. Indeed, there is evidence that financial assets have become even more concentrated among high-income households. In contrast, holdings related to home ownership appear relatively more evenly distributed. Thus, declines in home values and the resulting destruction of real estate wealth is likely to have had its greatest impact on households with the lowest incomes and, thus, the highest marginal propensity to consume. Correspondingly, the rise in equity market values would not fully compensate for the loss of real estate wealth since financial assets tend to be much more concentrated among those households with the highest marginal propensities to save. Therefore, the disparity in wealth holdings has profound implications for the strength of the recovery and is a

⁵ Net worth data are based on Moody's Analytics' smoothed estimates of the Federal Reserve flow of funds data.

reminder of how critical a full recovery of the housing market is to the continued recovery of household spending.

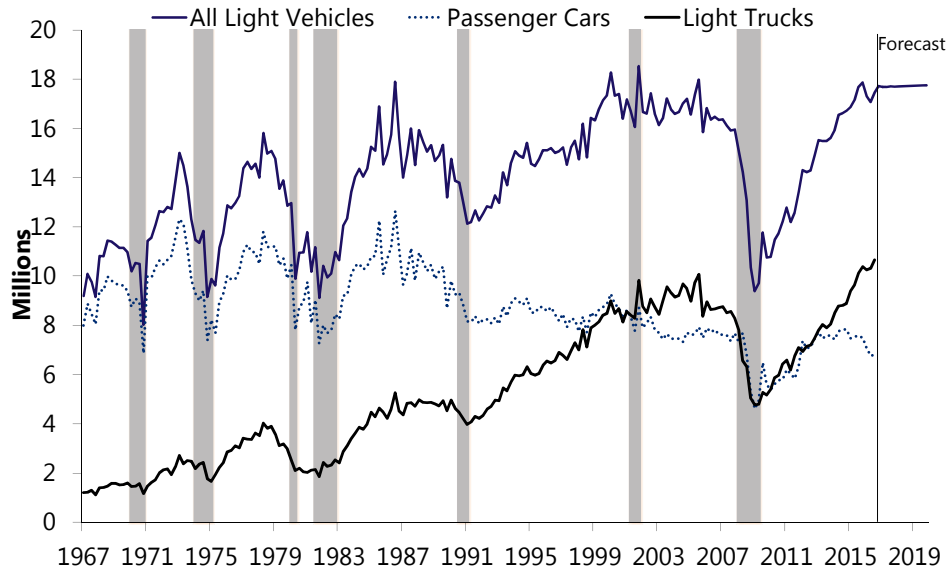
In tandem with an improving labor market, the upturn in housing is expected to fuel consumption growth not only through the wealth effect but also by increasing the demand for complementary durable goods, such as furniture, appliances and autos. Figure 17 shows the steep decline in nominal consumption of furnishings and durable household equipment following the housing market crisis. This spending has trended upward since the third quarter of 2009 and returned to its pre-crisis level by the second quarter of 2014. Similarly, Figure 18 shows the steep decline in passenger car and light truck sales following the housing market decline, during which the average age of light vehicles on the road lengthened, rising from 9.5 years in 2005 to 10.8 years in 2011. Light vehicle sales have risen significantly since 2009, surpassing pre-recession highs by the third quarter of 2015. Passenger car sales declined afterwards, but light truck sales continued to grow, thanks to rising housing starts that stimulated truck purchases by construction workers, who may have been delaying the replacement of aging vehicles in the wake of the housing collapse and the resulting lull in building activity. This development should provide support for the Budget Division outlook for continued high level of light vehicle sales going forward. However, despite the strongest selling rate for new cars and light trucks in more than a decade, the average age of vehicles on American roads rose to a record 11.6 years in 2016.



Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics; DOB staff estimates.

Figure 18

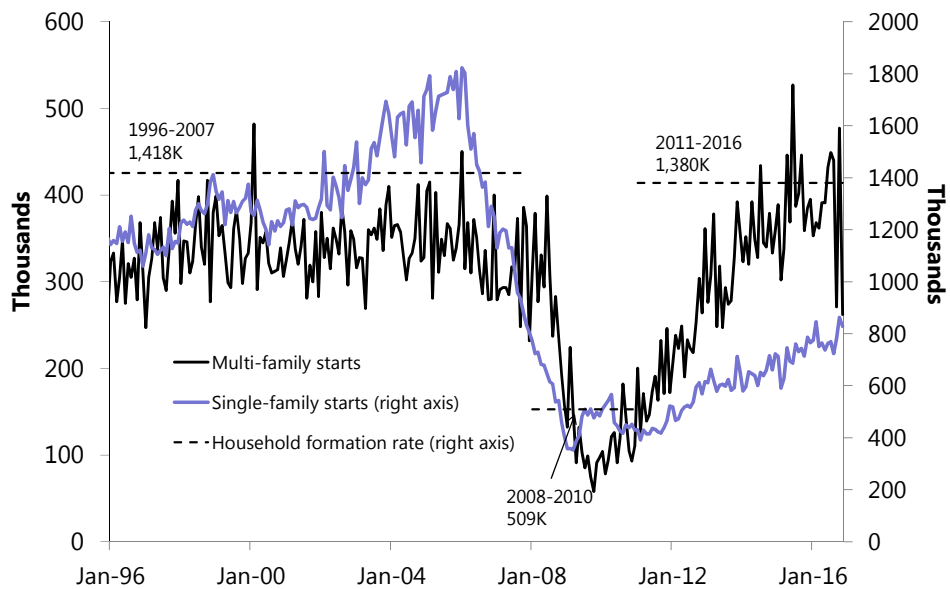
Passenger Car and Light Truck Sales



Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics; DOB staff estimates.

Figure 19

Household Formation Recovering But Multi-families Still Outpacing Single-family Construction



Source: Moody's Analytics.

A key trend supporting continued strength in residential housing is the rise in the household formation rate since the depths of the recession, illustrated in Figure 19. The average rate of household formation for the period from 2011 through 2016, the most recent for which data is available, is close to the pre-recession period. While much of the housing bubble originated from a building boom in single-family homes, the collapse and the ensuing tight market for mortgage credit resulted in a significant decrease in both single-family and multi-family starts. The recovery, however, has been substantially stronger for multi-family housing, indicating a shift in household preferences away from home ownership but toward renting. But as single-family home buying continues to accelerate, consumer spending on furniture and household equipment is likely to strengthen further since homeowners are likely to spend more on home improvement than are renters.

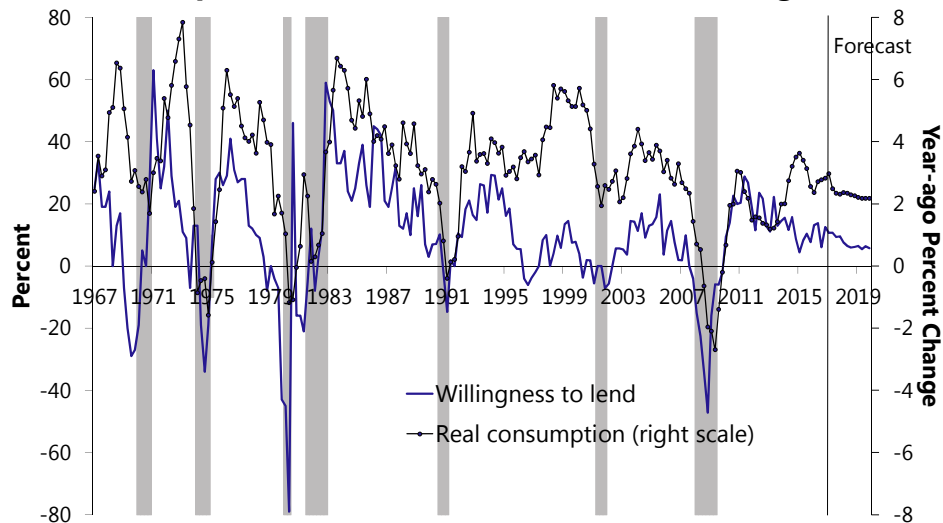
The Budget Division's outlook for an improvement in both household spending and the demand for new residential construction is predicated on a sustained rise in home prices, a diminishing volume of negative equity, and significantly higher real disposable income and wealth. The Budget Division projects growth in real private residential investment of 4.9 percent for 2017, following 4.8 percent growth in 2016. As employment and income prospects improve, household formation is expected to remain well above the recession lows, fueling the demand for new home construction.

Consistent with a pickup in the single family housing market, the Budget Division is projecting quarterly growth in real residential fixed investment of above 6.0 percent through the end of 2017. This growth is from extremely low levels of investment. At the height of the housing boom in 2005, real private residential construction represented 6.1 percent of total real GDP. This share is only 3.6 percent based on the most recent four quarters of available data through 2016Q3. Given the delay with which the housing market has joined the recovery, this critical market can be expected to continue to provide future stimulus to the expansion as it matures, creating upside risk to the longer-term forecast.

As credit markets are the life-blood of any economy, their health is critical to the advance of the current expansion. Figure 20 compares real consumption growth to bank willingness to lend to consumers, as measured by the Federal Reserve Board's Senior Loan Officer Survey. The figure indicates that credit market conditions are improving but still are tight for consumers compared to earlier expansions. Banks' desire to lend to households improved over the past six years, but the pace has slowed significantly since 2015 and we expect this to continue. The two most important determinants of banks' willingness to extend consumer credit are short-term interbank borrowing costs, which are expected to increase now that the Federal Reserve has started to normalize the federal funds rate, and default risk, which tends to be inversely related to economic growth. Higher interbank borrowing costs could be especially detrimental to the supply of mortgage lending if long-term rates do not rise and the yield curve should narrow. In contrast, default rates are expected to continue falling. On balance, credit conditions are expected to be looser in 2017, but the rate of improvement is expected to slow.

Figure 20

Improvement in Credit Conditions Slowing



Note: Senior Loan Officers Survey data measures net percentage of banks reporting increased willingness to lend to consumers; shaded areas represent US recessions.
Source: Moody's Analytics; DOB staff estimates.

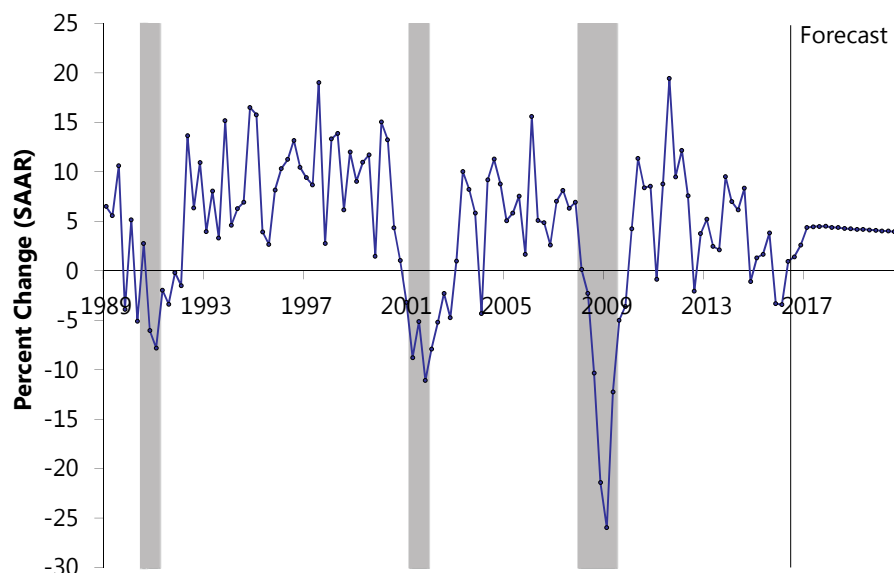
With all of these supports in place, household spending is expected to continue to grow robustly. Real spending for services and nondurable goods is projected to rise 2.1 percent in 2017, following growth of 2.3 percent for 2016. Real growth of 6.4 percent is projected for the more cyclical durable goods component for 2017, following a 5.6 percent increase in 2016. However, there are both downside and upside risks to the forecast. Mortgage rates have been rising since the election and, at just above 4 percent, the 30-year mortgage rate has reached its highest level since early 2014. It is too early to tell if the Federal Reserve's second rate hike in two years and the recent rise in long-term rates are having a negative impact on home sales. As prospective home buyers anticipate even higher rates in the future, home sales may get pulled forward in order to take advantage of what are still historically low rates. But higher mortgage rates will ultimately hurt affordability and limit housing price increases and real estate transactions going forward.

Crude oil prices also recovered sharply during 2016, nearly doubling from their low in January, 2016. Higher energy costs may restrain consumers and businesses spending on other goods and services, in particular on products that are complementary to energy use, such as automobiles, transportation services, and leisure activity. Going forward, the Budget Division expects oil prices to rise only slowly to \$60 per barrel. However, any development that substantially reduces world oil supplies, including further resolve on the part of oil producing nations to prop up prices, could result in a surge of oil prices and crimp household spending.

Awaiting a Rebound in Business Fixed Investment

Coming out of the Great Recession, when business fixed investment plummeted, this component of real GDP seemed poised to make a comeback. Figure 21 shows the dramatic fall-off in business investment spending during the depths of the recession and the partial recovery in the early years of the subsequent expansion (using quarterly percentage changes). But since then business investment has been weak, failing to regain its pre-recession peak until the first quarter of 2013. More recently, investment actually fell in 2015Q4 and 2016Q1 before returning to weak growth later in 2016. However, the Budget Division sees this real GDP component experiencing faster growth in the near term: growth of 3.5 percent is projected for 2017, after a decline of 0.4 percent in 2016. Real growth in structures is expected to increase to 3.7 percent in 2017 after falling 2.8 percent in 2016, while real growth in equipment moves up to 2.6 percent in 2017, reversing a decline of nearly the same size in 2016. Real growth in intellectual property products is expected to slow to 4.6 percent in 2017 from 4.9 percent growth in 2016. The more rapid increase in real nonresidential fixed investment in the Budget Division's forecast stems in part from the recent more-secure footing of the long economic expansion and from an expected uptick in energy-related investment.

Figure 21
Real Nonresidential Fixed Investment Remains Subdued



Source: Moody's Analytics; DOB staff estimates.

The recent relatively slow increase in investment has not been for lack of resources. Strong earnings growth early in the recovery allowed large businesses to accumulate funds that could have been used for capital spending. However, the financial environment is only one component of a complex array of factors that firms consider when contemplating investment in factories, department stores, and other structures, as well as equipment and software.

Standard economic theory posits that profit-maximizing firms are assumed to choose a level of investment that achieves an optimal long-run relationship between the expected level of sales and the stock of plant and equipment for a given set of current and expected future input and output prices. In addition, decreases in the cost of acquiring and using capital goods (the “user cost of capital”) also induce firms to increase investment spending. Factors that reduce the user cost of capital include a decline in the prices of new investment goods, falling inflation-adjusted borrowing costs, increasing equity prices, and changes in the tax code, such as the creation of investment tax credits.

Thus, low interest rates and favorable tax treatment programs support investment growth, and have existed in abundance since early in the recovery. However, anticipated growth in sales is also necessary to induce investment. This helps to explain the relatively tepid growth of real investment recently – with weak and uneven growth coming out of the Great Recession, real investment has also generally been sluggish. In the absence of a reliable customer base, no business can be induced to spend, tax incentives notwithstanding.

The link between real output growth and real investment growth was demonstrated empirically in recent research at the Federal Reserve Bank of St. Louis based on use of the Granger causality test.⁶ Generally, one variable is said to “Granger cause” another variable if past values of the first variable are useful in predicting the second variable. Wen (2007) used quarterly real U.S. GDP minus inventory investment for output; real business fixed investment as the investment concept; and real consumption of nondurable goods and services for real consumption. Using some 50 years of quarterly data, the Budget Division finds that Wen’s results continue to hold, namely that 1) real consumption growth in the previous period “causes” current output growth in the Granger sense; 2) growth of real output in the previous period “Granger causes” real investment in the current period; 3) therefore, since the relationships are transitive, they imply that past real consumption growth also “Granger causes” contemporaneous real investment growth. Thus, anticipated lukewarm growth in consumption bolsters the case for slow growth in real investment.

Additional testing also reaffirmed Wen’s assessment that the Granger causation is one-way, i.e., investment does not Granger cause consumption. Applying Wen’s methods to real consumption of durable goods finds that the same relationships hold for that series as well. While the decision to invest in nonresidential structures and equipment is a complex one, involving considerations of tax policy, interest rates, profitability and other factors, these results indicate that the macroeconomic environment also plays a key role in real business fixed investment growth.

There are signs of a reversal of some of these trends. Inventories/sales ratios of retailers and of wholesalers, which had been moving upward since mid-2014, began to reverse course in 2016. The wholesale ratio, which reached a post-recession peak of 1.37 in January 2016, had slipped to 1.31 by October (its lowest since May 2015), while the retail ratio, also at a post-recession high of 1.52 in March, faded to 1.47 (also in October) and its lowest value since August 2015.

⁶ Li Wen, “Granger Causality and Equilibrium Business Cycle Theory,” *Federal Reserve Bank of St. Louis Review*, volume 89, number 3, 195-205, May/June 2007. Available at <http://research.stlouisfed.org/publications/review/07/05/Wen.pdf>

Statistical tests also indicate that real interest rates Granger cause real investment; thus, it can also be expected that with the Federal Reserve having begun its monetary policy normalization process, which will bring interest rates up to more “usual” levels, a further restraining influence will be in place.

Real fixed business investment in structures not only failed to attain a new peak during the recovery, but by the second quarter of 2016 had lost the ground it had made up from 2013Q3 to 2014Q4. It fell in every quarter of 2015 and in the second quarter of 2016, increasing just 0.1 in the first quarter of that year before a surprise 12.0 percent gain in the third quarter. Its level as of 2016’s third quarter (the last for which we have BEA data) is about where it was three years earlier.

In part this likely reflects a certain amount of “payback” for overbuilding associated with the real estate boom just prior to the Great Recession. Economists at the Federal Reserve Bank of Cleveland estimate that overbuilding of nonresidential structures accelerated in the first half of the 2000s and began to decline just before the start of the recession.⁷ They obtain an estimate of the overhang of structures as the percentage difference between the actual stock of structures and their optimal level. The optimum stock of structures is based on the idea that a firm should construct a new building only if it expects that the cost of doing so will be smaller than the discounted value-added the building will likely generate in the future. Disaggregating by industry sectors the authors show that by 2008 the overhang in retail trade was close to 50 percent (in other words that the actual stock of retail buildings was nearly 50 percent higher than what economic conditions and growth prospects called for) and about 25 percent in manufacturing. While they also show that these overhangs tended to fall during and after the Great Recession, the high pre-recession levels of investment in structures are not likely to reappear anytime soon, given their relatively long lives, which the authors estimate at 24 years on average.

The more recent collapse of oil prices also took a toll on investment in structures because the mining exploration, shafts and wells category is a component of real structures investment. Mining exploration, shafts and wells, which made up nearly 30 percent of real nonresidential investment in structures in the third quarter of 2014, fell to just 10.0 percent by 2016’s third quarter. It contributed negatively to investment in structures throughout 2015 and continued to do so through the first three quarters of 2016.

In addition to the effects on structures, the oil price decline also affected real investment in equipment. The value of manufacturers’ shipments of mining, oilfield and gas field machinery, which reached an unadjusted series peak of \$3.2 billion in December 2013 had fallen 76.1 percent by July 2016 to \$777 million, the lowest value since February 2005. These shipments, which enter into the real GDP computations, increased 14.2 percent on a year-over-year basis as recently as April 2014, only to turn negative by October of that year and have remained so since; in November 2016, the most recent data available show oil- and gas-related machinery shipments down 39.1 percent on a 12-month basis.

⁷ Filippo Occhino and Margaret Jacobson, “The Overhang of Structures before and since the Great Recession,” *Economic Commentary*, 2014-04, Federal Reserve Bank of Cleveland. Available at <https://www.clevelandfed.org/Newsroom%20and%20Events/Publications/Economic%20Commentary/2014/The%20Overhang%20of%20Structures%20before%20and%20since%20the%20Great%20Recession.aspx>

While global oil prices are not expected to rebound quickly there are indications that they are firming and beginning to rise after reaching nearly 13-year lows early in 2016. The Federal Reserve's industrial production report for July noted that its index for mining (which includes oil-well drilling and servicing, as well as oil extraction) began to move up earlier in the year after falling some 17 percent between December 2014 and April 2016. The index for mining increased 1.1 percent in November and 1.9 percent in October, though not all of the increases can be laid to higher domestic production of oil (in fact the Fed noted that crude oil extraction had declined in October). Thus some positive effects on equipment and structures investment can be anticipated as higher prices call forth increased U.S. production.

Will Inflation Finally Come Back?

One year ago, an online business publication said that “The year 2016 will be all about inflation,” inadvertently pointing out the hazards of forecasting inflation, especially in the wake of the Great Recession.⁸ The same article cited two analysts from Goldman Sachs who looked for the Federal Open Market Committee (FOMC) to raise the federal funds rate target four times in 2016, in part as inflation escalated. Based on the first 11 months of data, inflation, as measured by the Consumer Price Index (CPI), posted an estimated 1.3 percent in 2016, while the FOMC raised its short-term target rate but once, and not until the final month of the year. These caveats notwithstanding, inflation is expected to accelerate to 2.6 percent in 2017, with the FOMC expected to raise its federal funds target rate twice.

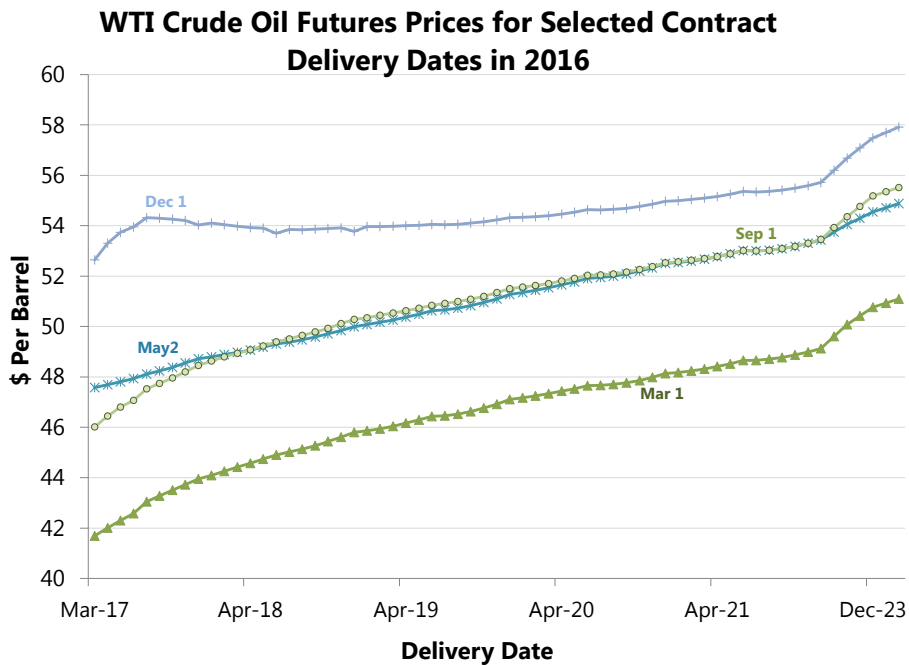
Inflation did rise toward the end of 2016, largely driven by a surge in energy prices, and with those increases expected to be sustained, higher inflation in 2017 on an annual average basis is almost a mathematical certainty. However, recent research by economists at the Federal Reserve Bank of Cleveland questions whether the FOMC will be able to achieve its 2.0 percent inflation target in the near term (over the next two to three years).⁹ Using the price index for personal consumption expenditures (PCE) rather than the CPI and running six different models to forecast PCE inflation, they report that the likelihood that PCE inflation will be at least 2.0 percent by the end of 2017 ranges from 11 percent to 49 percent; it is 16 percent to 51 percent by the end of 2018; and the likelihood is estimated to be 18 percent to 49 percent by the end of 2019. They note though that the probability bands around the forecasts are wide, indicating “a considerable degree of uncertainty.”

One potential source of inflation is energy prices which during 2016 began to show signs of slow resurgence. While February’s \$30.32 per barrel for West Texas Intermediate crude oil represented a fall from a recent local high of \$59.82 in June 2015 and was the lowest monthly price since September 2003, by November the price had recovered to \$45.66 while spot prices tended to close above \$50 per barrel during December. Meanwhile the Consumer Price Index for gasoline increased 16.1 percent over the three-month period ending in November.

⁸ Myles Udland, “Inflation will be the biggest economic story in 2016,” *Business Insider*, December 26, 2015, at < <http://www.businessinsider.com/biggest-economic-story-of-2016-inflation-2015-12> >, accessed December 29, 2016.

⁹ Ellis W. Tallman and Saeed Zaman, “The Likelihood of 2 Percent Inflation in the Next Three Years,” *Economic Commentary*, Number 2016-14, November 29, 2016, at < <https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/2016-economic-commentaries/ec-201614-likelihood-of-2-percent-inflation-next-3-years.aspx> >, accessed December 5, 2016.

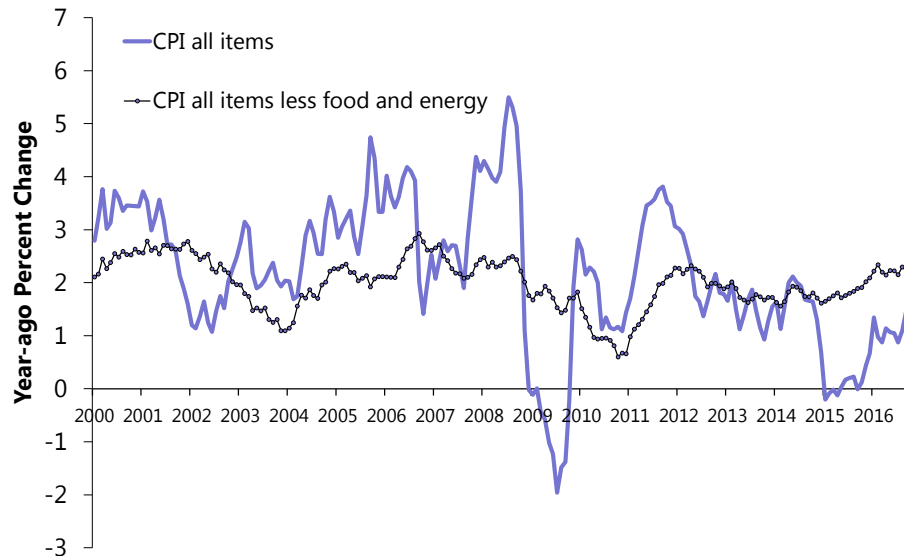
Figure 22



Due to the extreme volatility in global energy prices, the Budget Division uses the most recent futures contract curve to guide its oil price forecast. Figure 22 indicates just how changeable market participants' expectations have been over the course of 2016. Contract prices negotiated in March for delivery one year out in March 2017 settled below \$42 per barrel, while that same contract negotiated in December settled a full \$10 higher. The Budget Division anticipates that oil prices, as represented by the refiners' acquisition price for a barrel of imported oil, will average \$49.0 in 2017, up from \$38.7 in 2016.

According to the federal Energy Information Administration (EIA), a \$1-per-barrel change in the price of crude oil translates into a change of about 2.4 cents per gallon of gasoline. The EIA says that in addition to the price of crude oil, retail gasoline prices also reflect refining costs and profit margins; retail and distribution costs and associated profit margins; and taxes. The latter two factors reflect the retail contribution and are more stable relative to the first two more-volatile factors, which the EIA says cause most of the variation in gasoline prices at the pump. Thus while gasoline prices move with crude oil prices the effect is not as pronounced. The EIA's latest *Short-Term Energy Outlook*, issued in early January 2017, anticipated an average regular gasoline price of \$2.38 per gallon at the pump nationwide in 2017, up from an average of \$2.15 per gallon in 2016.

Figure 23
General vs. Core Inflation

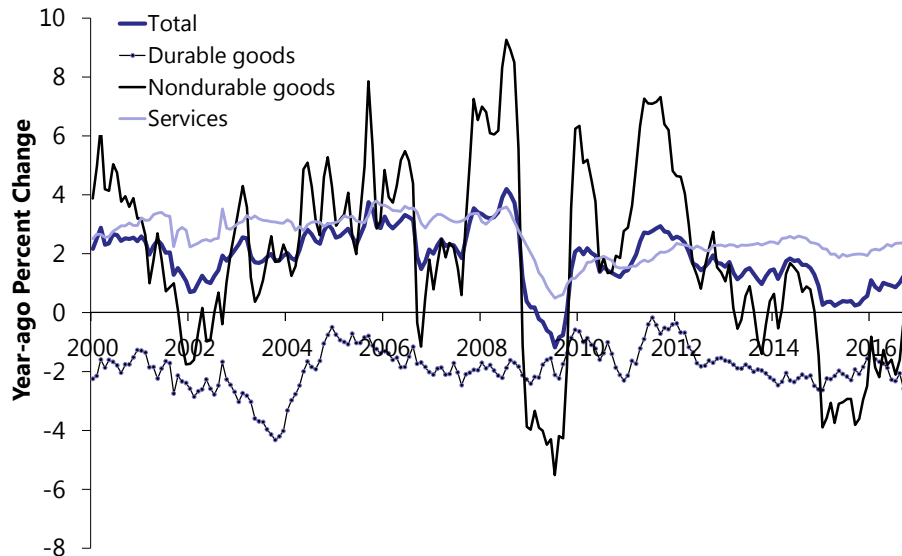


Source: Moody's Analytics.

Recently, 12-month changes in the all-item CPI and in “core CPI” -- the all-items index minus the energy and food components -- have been converging, with the CPI 1.7 percent higher than in November 2015 while the core CPI was up 2.1 percent from its year-ago level. This is in contrast to the situation that developed in December 2014 and prevailed until late 2016 when CPI and core CPI growth rates were quite different. For example in January 2015 the CPI was 0.2 percent lower than its year-ago level while core CPI was 1.6 percent higher (see Figure 23). A closer look at the CPI shows that besides the downward pressure that the energy component had been exerting (and which is now weakening), year-over-year changes in the food component have fallen from a recent high of 3.4 percent in December 2014 to a decline of 0.4 percent this past November. The index for food at home has fallen each month since December 2015 on a year-over-year basis through November. It's the longest spell of food price deflation since the 1950s. Recent values for the price index for personal consumption expenditures (PCE), a measure of inflation closely watched by the Federal Reserve, likewise show a similar but less dramatic trend: the all-items PCE index rose 1.4 percent in November while the core index grew 1.6 percent, but in January 2015 the all-items index was only 0.3 percent higher than its year-ago value while the core PCE index was up 1.4 percent (see Figure 24).

Figure 24

Price Index for Personal Consumption Expenditures (PCE)



Source: Moody's Analytics.

An analysis of recent trends in PCE inflation of the U.S. by the Federal Reserve Bank of St. Louis shows quite different behaviors among the three major PCE categories: consumer durable goods, consumer nondurable goods and services (see Figure 24). For example, in November 2016 while the overall PCE index was 1.4 percent higher than its year-ago level, the index for services grew 2.4 percent while the nondurables index was up 0.2 percent; the PCE index for durable goods fell 2.5 percent. Consumer durable goods prices have been falling since the mid-1990s. This trend continues, with a major factor being ongoing declines in prices for consumer electronics. In contrast, prices of nondurables have been much more volatile than either durable goods or services prices. Note that nondurables account for some 25 percent of consumer expenditures, as opposed to the roughly 10 percent share that goes to durable goods. Services, which account for some two-thirds of total PCE, have also seen their stable price growth downshift recently. But since housing and health care are two major items in this expenditure category, increased upward pressure on PCE inflation can be anticipated.¹⁰

Outside of special factors that have affected the supply of energy, general weakness in the global economy likely remains one of the most important factor keeping inflation low, in spite of the Federal Reserve's efforts at spurring inflation. A stronger dollar, which results in lower import prices, has also been an important factor, as has the meek response of wage gains as slack in the labor market gradually fades.

¹⁰ "Durable Goods Prove a Drag on Inflation," Fernando Martin, On the Economy blog, December 5, 2016, Federal Reserve Bank of St. Louis, at https://www.stlouisfed.org/on-the-economy/2016/december/durable-goods-prove-drag-inflation?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_content=&utm_campaign=ontheeconomy, accessed 12/29/2016.

While other components have been restraining the general inflation rate, housing costs have been one factor that has been working to push inflation higher. The year-over-year change in the CPI shelter index breached 2.0 percent in January 2012 following much slower increases in the wake of the Great Recession and by September 2014 was at 3.0 percent. By November 2016, the most recent data available, the shelter index rose 3.6 percent on a 12-month basis with owners' equivalent rent (the largest component) up 3.5 percent. Meanwhile the CPI for rents has been growing more quickly, 3.9 percent higher than in November 2015, likely due in part to an increased preference for renting that has manifested itself after the recession.

Prior to the Great Recession the medical component of the CPI was growing at a rapid pace, prompting concern and straining the budgets of both consumers and governments. But growth in the medical CPI became much more restrained during the recession -- as shown in Figure 25, the decline in price growth was accompanied by a decline in utilization, as represented by the inflation-adjusted health care component of personal consumption expenditures (PCE). But this trend has been reversing. Real health care spending growth increased at a 3.2 percent average (year-over-year monthly rates) in 2014, rising to 5.4 percent in 2015 before easing to 4.4 percent average growth during the first 11 months of 2016. At the same time the medical CPI averaged 2.4 percent growth in 2014 and 2.6 percent growth in 2015, accelerating to average growth of 3.8 percent in the first 11 months of 2016.

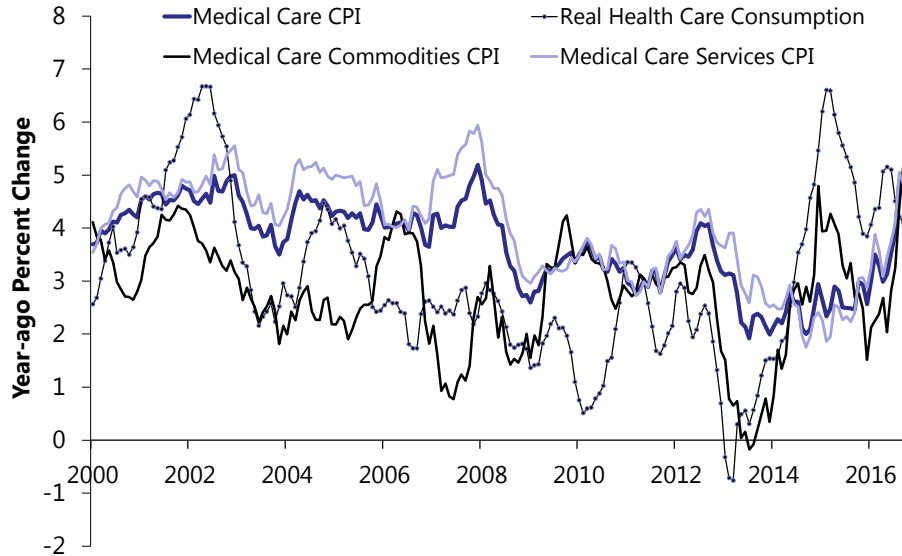
Some of the slower growth in consumption after the recession was no doubt due to the slow implementation of the ACA, combined with uncertainty stemming from legal challenges to the law and political backlash against it, as well as tightened family budgets in the aftermath of the recession. However the Budget Division projects the medical component of the CPI to rise 3.2 percent in 2017, but accelerating to an increase of 3.5 percent in 2018.

Between the two components of medical care CPI, commodities and services, the former (which includes medicinal drugs, medical equipment and supplies) has recently accelerated more significantly (see Figure 25). While medical care services inflation averaged 2.4 percent in both 2014 and 2015, it sped up to average 3.9 percent over the available 11 months of data for 2016; since services account for over 75 percent of the medical care CPI weight, this brought up the medical care CPI as well. These increases are believed to be linked to the increased availability of care under the ACA.

Commodities inflation increased to an average of 3.3 percent in 2016, about the same as 2015's average but up from 2.5 percent in 2014. This increase likely is partly due to a combination of short supply and reduced competition as pharmaceutical companies have pursued acquisitions. But in addition to changes in the structure of the industry, there has been an upsurge in approvals by the federal Food and Drug Administration (FDA) of so-called "specialty drugs" in recent years, which the federal Centers for Medicare and Medicaid Services defines as drugs costing more than \$600 per month.

Figure 25

Medical Care Spending and Prices



Source: Moody's Analytics.

In conclusion, while the food component of the CPI may well continue to exert restraint on overall inflation, it appears that the energy component and the core CPI are poised to produce further upward pressure on the overall CPI in 2017, while the influence coming from continued employment and wage growth on inflation is expected to be limited. Box 1 contains an analysis of the relative size of the impacts of labor market tightening, inflation expectations, productivity growth, and energy and non-energy import prices on core inflation. Results indicate that the impact from a tight labor market is trivial in comparison with other factors.

Box 1

IS LOW UNEMPLOYMENT A THREAT TO DOMESTIC INFLATION?

With the national economic expansion now in the middle of its seventh year, the unemployment rate has fallen from its October 2009 peak of 10.0 percent to 5.0 percent, which is believed to be very close to the so-called non-accelerating inflation rate of unemployment, or NAIRU. Capacity utilization is up 10.1 percentage points from its June 2009 trough, though it is still 4.0 points below its pre-recession peak. With real earnings starting to pick up, domestic prices should rise in theory. However, with the U.S. far more integrated into the global economy, global prices now play a larger role in determining the domestic price level than ever before. With global energy inventories in excess supply, global economic growth relatively weak, and the dollar significantly strengthened, both energy and non-energy import prices have fallen precipitously. With a statistical model that accounts for all of these factors, we examine how much of a threat a tightening labor market may be to core inflation.

The following model estimates the impact of both domestic and global factors on core price inflation. When the economy is expanding, it should be easier for firms to pass along higher costs to consumers than during a slowdown. Similarly, with employment and wages growing, consumers would be willing to pay more as well. Thus, when the unemployment rate falls below NAIRU, core inflation should be higher. In addition, if firms expect high future inflation, they may feel more comfortable raising prices today without risking market share, since with wages growing, consumers, who presumably are also expecting future prices to be higher, are willing to pay those higher prices. In contrast, when productivity growth is high, firms can absorb higher costs without sacrificing profits, removing the necessity of raising output prices and possibly risk losing market share. When the prices of the imported goods that compete with domestically produced products grow at a pace below that of core inflation, core inflation can be expected to decelerate. Statistical model results appear below:

$$\begin{aligned} INF_t^C = & 0.01 (U_t - U_t^{NAIRU}) - 0.72 (U_t - U_t^{NAIRU}) D1983Q4_t + 0.03 (INF_{t-1}^{IM} - INF_{t-1}^C) + 0.30 INF_{t-1}^C + 0.82 \hat{INF}_{t+4} \\ & (0.09) \quad (0.16) \quad (0.02) \quad (0.07) \quad (0.10) \\ & + 0.18 PDL(24, 2, INF_{t-1}^E - INF_{t-1}^C) - 0.20 PDL(24, 2, (INF_{t-1}^E - INF_{t-1}^C) D1980Q2_t) - 0.12 PDL(12, 2, PROD_t) \\ & (0.02) \quad (0.02) \quad (0.04) \end{aligned}$$

$$\bar{R}^2 = 0.84 \quad DW = 1.97 \quad 1957Q2 - 2015Q3$$

INF_t^C = Core CPI inflation, current qtr.

U_t = Unemployment rate, current qtr.

U_t^{NAIRU} = NAIRU, current qtr.

INF_{t-1}^{IM} = Non-oil import price inflation, prior qtr.

$PROD_t$ = Nonfarm business productivity growth, current qtr.

INF_{t-1}^E = Energy CPI inflation, prior qtr.

\hat{INF}_{t+4} = Expected annual inflation, 4 qtrs. ahead

$PDL(l, d, var)$ = Polynomial distributed lag (l = number of lags; d = degree of polynomial)

$D1983Q4_t$ = Break point dummy {= 1 for $t \leq 1983Q4$; 0 otherwise}

$D1980Q2_t$ = Break point dummy {= 1 for $t \geq 1980Q2$; 0 otherwise}

Note: All inflation and growth rates are annualized from prior quarter; standard errors are in parentheses.

(continued on next page)

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The results above indicate that if non-oil import price growth drops below core inflation, then core inflation will be negatively affected, though the effect is small and statistically indistinguishable from zero. A similar drop in energy price growth will put downward pressure on core inflation as well, though the size of that impact has fallen since 1980Q1, consistent with the economy becoming more energy efficient since the oil shocks of the 1970s. Model results also show a negative impact of labor market slack on core inflation, but based on a test for a change in the structure of that relationship, the impact appears to have become statistically indistinguishable from zero after 1983Q4. This result suggests that tight labor markets have a much smaller impact on core inflation than in the past and suggest that any future upward pressure on core inflation is likely to arise from either rising non-oil import prices or rising energy prices. Finally, the large coefficient on inflation expectations highlights the critical role of expectations in keeping core inflation in check. Since we do not expect a significant acceleration in either energy or non-oil import prices anytime soon, the Federal Reserve can afford to take a gradual path toward interest rate normalization, as long as the central bank succeeds in keeping inflation expectations securely anchored.

Monetary Policy: Continued Slow Normalization

The Federal Reserve's policy-setting Federal Open Market Committee (FOMC) finally took a second step toward interest rate normalization in December 2016, raising the target band for the federal funds rate to a range of 50 to 75 basis points. Monetary policy essentially remained on "hold" throughout 2016 after the first increase in the federal funds target rate since June 2006 took place in December 2015. The Federal Reserve's Federal Open Market Committee (FOMC) at that time raised the target range to 25 to 50 basis points from its seven-year-long setting of zero to 25 basis points.

With the FOMC remaining very cautious, the Budget Division expects that it will raise the target band only twice in 2017, likely at the June and December meetings when press conferences by the FOMC chair are scheduled. The effective federal funds rate is anticipated to end 2017 at 1.0 percent in 2017, rising to 1.9 percent in 2018. Meanwhile an average 10-year Treasury yield of 2.8 percent is projected for 2017, climbing to 3.2 percent in the following year. .

The Budget Division's federal funds rate forecasts are below what the monetary policy committee participants themselves have projected, at least as of the December release of the "Summary of Economic Projections," or SEP. The median federal funds rate for year's end 2017 was seen as 1.4 percent while the median for 2018 was 2.1 percent. But FOMC meeting participants were similarly optimistic in the December 2015 SEP as well. The Budget Division's forecast thus projects that the FOMC will behave more cautiously than the December SEP indicates as 2017 unfolds.

Several factors appear to have delayed the FOMC from proceeding with a widely anticipated second rate hike in 2016. Real GDP growth sharply slowed in 2015's fourth quarter to just 0.9 percent, which the FOMC was not aware of at the time of its target range increase. That was followed by just 0.8 percent growth in the first quarter of 2016 before a bit of a rebound to growth of 1.4 percent in the second quarter. Those were the three slowest quarters of growth since the final three quarters of 2012. While the unemployment rate remained relatively unchanged, growth in nonfarm payrolls also sharply slowed in the first half of the year, dropping to a seasonally adjusted increase of just 24,000 in May from a gain of 233,000 in February while other labor market indicators (such as hires and quits) also deteriorated. In addition, while the FOMC appears essentially to have reached its unemployment rate goal, inflation remains below its 2 percent target, and signs that it may accelerate remain inconsistent.

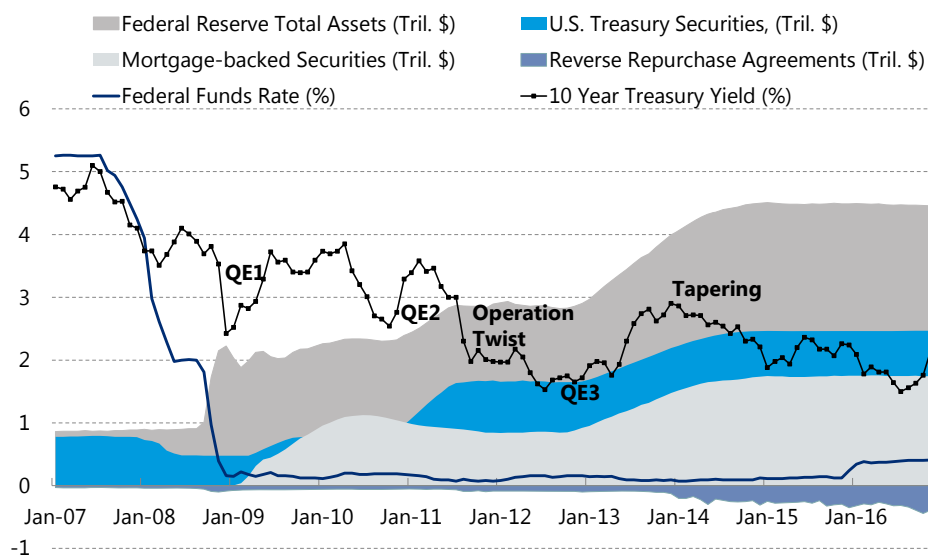
As if these domestic concerns were not enough, world financial markets were thrown into shock by the June 23 vote in the United Kingdom to leave the European Union. While financial markets in the U.S. had largely recovered from the selloff by early July, plenty of uncertainty remains as to how rapidly the exit will take place and under what conditions. And as the year ends there is new uncertainty about the economic policies that a new Republican administration will introduce in 2017.

The FOMC is in a bit of a quandary as the new year begins. In its own policy statements late in 2016 it began to note that "the case for an increase in the federal funds rate has strengthened" (September) and that the case "has continued to strengthen" (November). Minutes of FOMC meetings show that members were concerned about the Fed's credibility as well. But independent

of official monetary policy, interest rates have been moving up --while the 10-year Treasury touched an all-time low of under 1.4 percent in July 2016, by early December it was at 2.4 percent. It appears that market participants, looking at the incoming president's economic and tax policies, see inflation heating up and so are beginning to demand higher returns for holding the paper. Those rising interest rates pose a threat to the housing recovery through their effects on mortgage rates, and potentially slowing the economy before the 2-percent inflation target has been reached.

On the other hand Federal Reserve Chair Janet Yellen, looking at slow growth and poor productivity in the wake of the Great Recession, has suggested that a “high-pressure economy” may be needed as a way to encourage business investment and thus spur productivity gains. The idea is that the monetary authority, by temporarily stimulating aggregate demand and thus maintaining a tight labor market, could induce firms to boost investment, thus repairing some of the damage to aggregate supply caused by the recession. As Yellen notes, this argues for being more accommodative during recoveries than is usually the case. Whether these thoughts are an indication that policy normalization will continue at a snail's pace remains to be seen.

Figure 26
Monetary Policy, Federal Reserve Balance Sheet
and Interest Rates



Source: Moody's Analytics.

Figure 26 shows a looming future problem for the FOMC, namely dealing with the outsized balance sheet that is a legacy of the Great Recession and near-collapse of the housing market and financial system. The chart shows the effects the various quantitative easing (QE) programs and “Operation Twist” have had on the portfolio of the Federal Reserve System. The Fed’s assets, at \$875 billion at the start of 2007, grew by just over five times to \$4.5 trillion near the end of 2016. With recent improvements in the economy the balance sheet essentially stopped expanding by the end of 2014. How the Fed will unwind its huge balance sheet and to what extent will be challenges for the FOMC as policy normalization proceeds. Past policy pronouncements have indicated that the



Economic Backdrop

FOMC would not begin to shrink the balance sheet until monetary policy normalization is well under way -- which is not yet the case at present.

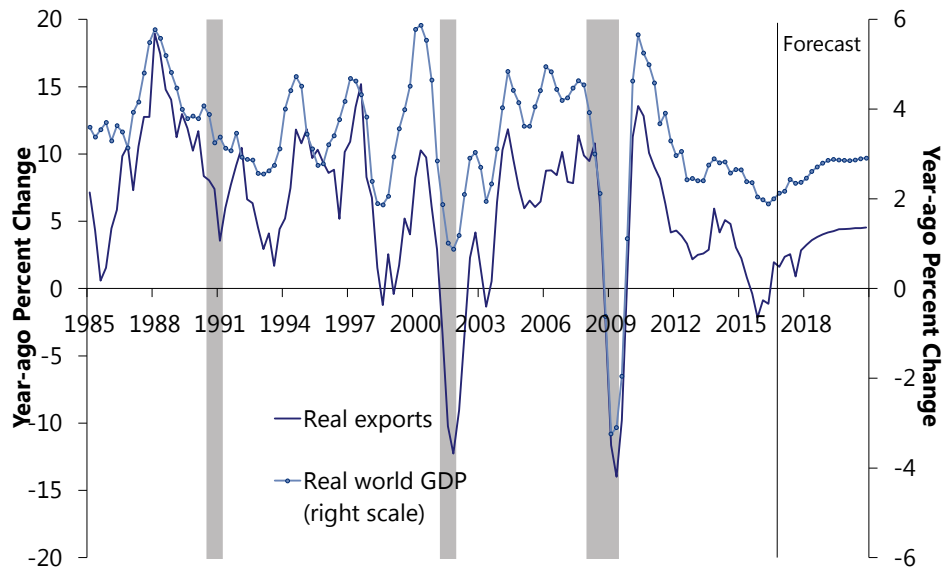
The International Economy

Notwithstanding signs that European economies are improving, the health of the global economy remains a serious risk to the U.S. economy. The myriad risks to the global economy include the reemergence of inflationary pressure, a particular risk for developing countries that have undergone a major currency depreciation and/or are sensitive to recent oil price increases; a severe economic slowdown and concomitant capital outflows in China; the increasing risk of political crises resulting from mass migrations and rising terrorism threats to the Eurozone's economic recovery; rising tension in the South China Sea that could hurt trade throughout Asia; and geopolitical upheavals in the Middle East or an escalation of the wars in Syria and Iraq that could threaten oil supplies. Moreover, policy shifts by the new administration could create world trade conflicts in the coming years. Finally, the U.K.'s decision to exit the European Union last June leaves uncertain the future shape of trade between the U.K. and the remaining EU members, which may dampen prospects for improved economic growth throughout Europe.

Weakness in the rest of the world has resulted in an appreciation of the U.S. dollar with negative implications for U.S. exports. Year-ago growth in real world GDP fell from a local peak of 5.7 percent in the second quarter of 2010 to 2.0 percent by the third quarter of 2016 (see Figure 27). Correspondingly, real U.S. export growth fell from 13.6 percent to 2.0 percent over the same period. With US monetary policy now on a tightening cycle, the dollar is likely to further strengthen this year. Consequently, the Budget Division expects real U.S. export growth to be subdued, though on an upswing, going forward. This forecast is predicated on the assumption that none of the above risks becomes fully realized and real world GDP keeps rising.

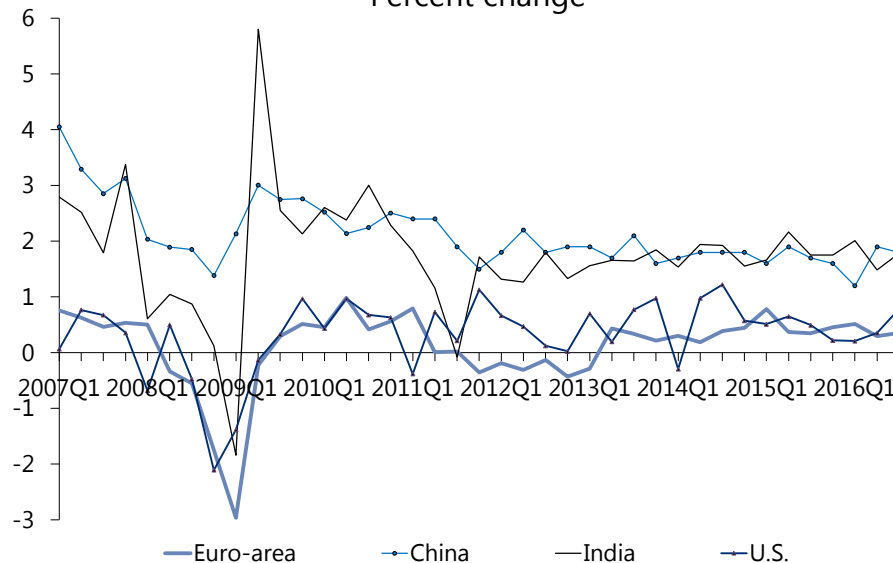
The U.S. trade balance depends primarily on the economic conditions of its largest trading partners: Canada, the Eurozone, Mexico, China and Japan. Among those, China probably poses the largest risk to global growth and U.S. trade at this time. Overcapacity adjustment and domestic rebalancing have increased uncertainty about the underlying economic growth prospects of the world's second largest economy. China and India, due to sheer size and past brisk rates of growth, have been engines of global economic growth. Recent structural changes in the Chinese economy have resulted in slowing economic growth over the past few years, as can be seen in Figure 28, which illustrates co-movements in real GDP growth for the Eurozone, the U.S., China, and India. While India has been able to sustain growth, China's growth has struggled, and recent developments have cast doubt on whether China will be able to maintain even these lower recent GDP growth rates going forward. China's struggle has resulted in reduced demand for commodities and contributed to tumbling commodity prices across the board with grave consequences for economic growth in commodity-exporting emerging markets.

Figure 27
Real Export and World GDP Growth



Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics; IHS Economics; DOB staff estimates.

Figure 28
Quarterly GDP Growth for Selected Areas
Percent change



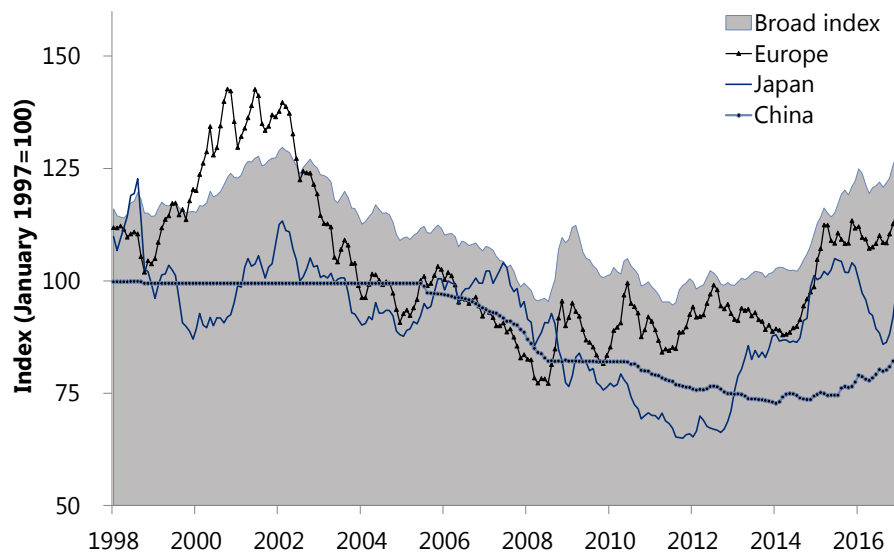
Note: Growth rates are not annualized.
Source: OECD.

The Eurozone's growth in the aftermath of the recession has been anything but robust. To keep it from sliding back into recession the European Central Bank (ECB) has engaged in easy monetary

policy, cutting its main interest rates and expanding its asset purchasing program, both with some success. According to the October outlook from the International Monetary Fund (IMF), the Euro area is expected to grow 1.7 percent in 2016 and prospects for continued growth in 2017 are good, suggesting little need for additional stimulus by the ECB. This should help stabilize the euro against the dollar. The United Kingdom is projected to experience growth rates of 1.8 percent and 1.1 percent in 2016 and 2017, respectively, slower than in 2015. The impact of the large influx of refugees from Syria and other war-torn countries in the Middle East and North Africa remains a major source of uncertainty for Europe. Japan, the fourth largest U.S. trading partner, has been struggling to avoid a recession for several years. Easy monetary policy appears to have had some impact recently, with the IMF estimating 0.5 percent growth for 2016 and stronger growth going forward.

Economic conditions in Canada and Mexico, America's neighbors and first and third largest trading partners, are favorable for continued, albeit subdued, growth in U.S. exports. Canada's economy is expected to expand at a weak pace due to weakness in oil prices, with 2016 growth estimated at 1.2 percent, following 1.1 percent growth in 2015 and 2.4 percent growth in 2014. The IMF expects output growth in Canada to pick up momentum again with 1.9 percent growth projected for 2017. The Mexican economy is expected to benefit from a stronger U.S. economy and a weaker peso, with GDP growth of 2.3 percent projected for 2017, following 2.1 percent growth for 2016.

Figure 29
Foreign Exchange Value of U.S. Dollar



Note: The Broad Index is a trade weighted index of major trading partners.
Source: Moody's Analytics.

Solid economic growth in the U.S. stands in contrast to the rather lackluster performance of much of the rest of the world. As a consequence, the dollar has been appreciating against most other currencies (see Figure 29). The Broad Index, a trade-weighted index of the nation's major trading partners, shows that the dollar has risen 24.3 percent just since January 2014, surging to a more

than 13-year high. Compared to the Chinese yuan, the dollar appreciated 4.2 percent in 2015 and another 7.3 percent in 2016. Despite extraordinary monetary easing and weak economic growth in Japan, the Japanese yen appreciated 16.8 percent against the dollar in the first eight months of 2016, reaching the highest level in more than two years. The yen's upward trend was mainly a result of rising aversion to global risk thanks to uncertainty around Britain's vote to leave the European Union. Since August 2016, however, the yen has dropped by 14.6 percent compared to the dollar. After the presidential election the dollar rallied against most major currencies as well as emerging-market currencies in part because of growing anticipation of expansionary fiscal policy. With rising inflation expected to bolster the case for lifting interest rates by the U.S. Federal Reserve Board, the dollar is anticipated to appreciate further in 2017. However the rising dollar and sluggish overseas growth present risks to the forecast for U.S. exports.

Table 2 illustrates how demand for U.S. goods exports has shifted proportionately away from the developed world and towards large emerging economies. Between 2007 and 2016, exports of goods to China grew 81.1 percent, versus overall growth of 27.3 percent, and China's share of total U.S. exported goods increased by 1.8 percentage points. That share is still small compared to the export shares of Canada or the European Union, even after considerable declines of 3.2 percentage points for Canada and 2.6 percentage points for the European Union.

Table 2

THE CHANGING FACE OF US EXPORTS

	2007-2016		
	Percent Growth	2007 Share	2016 Share
Brazil	25.9%	2.1%	2.1%
Canada	8.5%	21.8%	18.6%
China	81.1%	5.4%	7.6%
European Union	11.7%	21.4%	18.8%
Mexico	69.0%	12.0%	16.0%
Total	27.3%	-	-

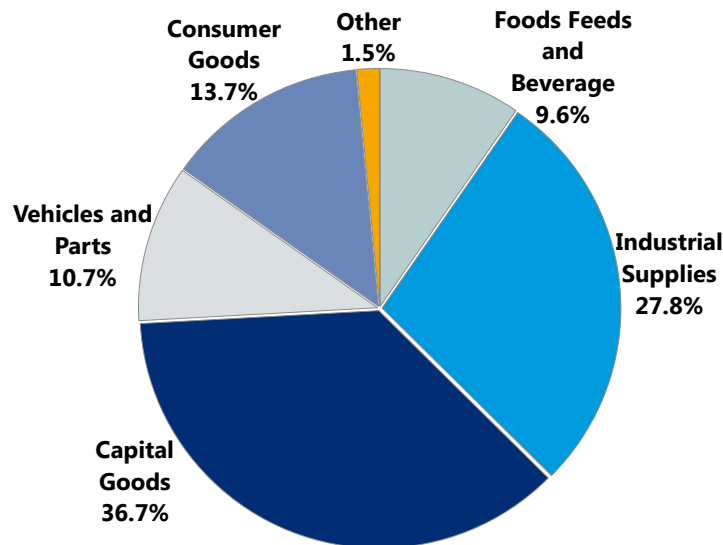
Note: Values are based on the first 10 months of data.

Source: U.S. Census Bureau, Foreign Trade Division.

Weak economic growth globally and among its main trading partners impacts U.S. exports, though the export sector of the United States is one of the smallest as a share of gross domestic product (GDP) among the major world economies. U.S. exports of goods and services were 12.6 percent of GDP in 2015; among the major global economies only Japan, at 17.9 percent, had a share nearly that small. In contrast, South Korea's export sector was 45.9 percent of its GDP while Germany's was 46.8 percent. That share for the United Kingdom was at 27.2 percent, Canada and Mexico were just over 30 percent, while China's share was 22.1 percent. Nevertheless, the importance of the export sector to large segments of the U.S. economy, particularly the high-productivity manufacturing sector, cannot be overstated. Moreover, it is estimated that roughly half of the earnings of S&P 500 firms stem from their overseas operations. As a result, depressed global demand can impact the U.S. household sector indirectly through the wealth effect.

As suggested above, some sectors of the U.S. economy are more affected by global demand than others. Manufactured goods represented 73 percent of total U.S. exported goods in the first 10 months of 2016, making the manufacturing sector very sensitive to changes in the world economy and foreign demand for U.S. products. Given the weakness in global demand and the strong dollar, goods exports fell 4.7 percent over the first 10 months of 2016, compared with the same period in 2015. Figure 30 decomposes U.S. goods exports by end-use category and thus highlights those areas of the domestic manufacturing sector that are affected by changes in global demand and the exchange rate. For example, based on the first 10 months of data, exports of foods, feeds and beverages accounted for 9.6 percent of goods exports in 2016, an increase of 0.9 percentage points from 2015. This was driven by unusually strong soybean demand diverted to the U.S. after a weak harvest in South America.

Figure 30
2016 Share of Exported Goods by End-Use Category



Note: Values are based on the first 10 months of data.
Source: Moody's Analytics.

On the other hand, with a strengthening U.S. economy and a strong dollar, real growth in imports is projected to accelerate to 3.2 percent in 2017, following estimated growth of only 0.7 percent in 2016. Weakening import growth following the recession had a favorable impact on the current account trade deficit. While the deficit reached a low point of 2.2 percent of nominal GDP in 2013Q4, it increased to an average of 2.6 percent in 2015 and 3.0 percent in the first three quarters of 2016. Import growth has also increased due to renewed increases in crude oil imports as relatively high-priced domestic production struggles to compete in the current low-price environment. Though imports are a subtraction from U.S. output growth, they are also a signal of strength in consumer and business sector demand.

Global holdings of Treasury securities increased by 1.2 percent in 2016, based on the first 10 months of data, after rising 2.1 percent in 2015, according to data from the U.S. Treasury (see Table

3). The two biggest holders of U.S. Treasuries now are net sellers. Japan, the largest single holder based on data through October, cut its holdings by 2.2 percent in 2015 and another 4.5 percent by October 2016, while China, the second largest holder, saw a drop in its foreign reserves by 3.5 percent by October 2016 following a decrease of 0.5 percent in 2015. Central banks tend to sell foreign currency when their own domestic currency is under too much selling pressure. Currently, China is experiencing capital outflows as investors abandon the yuan for U.S. dollars and euros to invest elsewhere, and the People's Bank of China has responded by selling foreign currency and buying yuan in order to avoid inflation. Russia, the eighteenth largest holder of U.S. Treasury securities based on the most recent data, decreased its holdings by 22 and 29 percent in 2014 and 2015 respectively, and only partially made up for the decline with an 8 percent increase by October 2016. Treasury securities holdings by twelve major oil-exporting nations fell 4.4 percent in 2016 through October, following 5.2 and 14.5 percent growth in 2014 and 2015 respectively.

Table 3

MAJOR FOREIGN HOLDERS OF TREASURY SECURITIES*
(\$ Billions)

	Japan		Mainland China		United Kingdom		Oil Exporters**		Grand Total***	
	<u>Level</u>	<u>Change</u>	<u>Level</u>	<u>Change</u>	<u>Level</u>	<u>Change</u>	<u>Level</u>	<u>Change</u>	<u>Level</u>	<u>Change</u>
Jan-15	1,238.6	7.7	1,239.1	(5.2)	207.4	18.5	266.7	5.6	6,218.3	62.3
Feb-15	1,224.4	(14.2)	1,223.7	(15.4)	194.0	(13.4)	272.9	6.2	6,163.4	(54.9)
Mar-15	1,224.7	0.3	1,261.0	37.3	200.4	6.4	273.0	0.1	6,172.6	9.2
Apr-15	1,215.9	(8.8)	1,263.4	2.4	185.8	(14.6)	271.3	(1.7)	6,137.9	(34.7)
May-15	1,214.9	(1.0)	1,270.3	6.9	190.2	4.4	274.9	3.6	6,134.8	(3.1)
Jun-15	1,197.1	(17.8)	1,271.2	0.9	205.3	15.1	275.4	0.5	6,163.1	28.3
Jul-15	1,200.8	3.7	1,268.8	(2.4)	203.4	(1.9)	277.3	1.9	6,120.0	(43.1)
Aug-15	1,197.0	(3.8)	1,270.5	1.7	213.1	9.7	272.6	(4.7)	6,102.1	(17.9)
Sep-15	1,177.1	(19.9)	1,258.0	(12.5)	203.9	(9.2)	271.8	(0.8)	6,105.9	3.8
Oct-15	1,149.2	(27.9)	1,254.8	(3.2)	200.6	(3.3)	272.1	0.3	6,047.2	(58.7)
Nov-15	1,144.9	(4.3)	1,264.5	9.7	204.5	3.9	269.7	(2.4)	6,125.2	78.0
Dec-15	1,122.4	(22.5)	1,246.1	(18.4)	207.1	2.6	271.3	1.6	6,146.2	21.0
Jan-16	1,123.6	1.2	1,238.0	(8.1)	209.6	2.5	272.0	0.7	6,183.0	36.8
Feb-16	1,133.1	9.5	1,252.3	14.3	230.6	21.0	261.1	(10.9)	6,242.0	59.0
Mar-16	1,137.1	4.0	1,244.6	(7.7)	226.4	(4.2)	248.5	(12.6)	6,284.8	42.8
Apr-16	1,142.8	5.7	1,242.8	(1.8)	216.3	(10.1)	-	-	6,237.2	(47.6)
May-16	1,133.2	(9.6)	1,244.0	1.2	217.0	0.7	-	-	6,207.5	(29.7)
Jun-16	1,147.7	14.5	1,240.8	(3.2)	231.3	14.3	-	-	6,280.0	72.5
Jul-16	1,154.6	6.9	1,218.8	(22.0)	209.9	(21.4)	-	-	6,247.3	(32.7)
Aug-16	1,144.0	(10.6)	1,185.1	(33.7)	204.8	(5.1)	-	-	6,196.4	(50.9)
Sep-16	1,136.4	(7.6)	1,157.0	(28.1)	217.5	12.7	-	-	6,154.9	(41.5)
Oct-16	1,131.9	(4.5)	1,115.7	(41.3)	207.2	(10.3)	-	-	6,038.9	(116.0)

* Estimated foreign holdings of U.S. Treasury marketable and nonmarketable bills, bonds and notes are based on Treasury Foreign Portfolio Investment survey benchmarks and on monthly data reported under the Treasury International Capital (TIC)

** Oil exporters include Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Algeria, Gabon, Libya, and Nigeria.

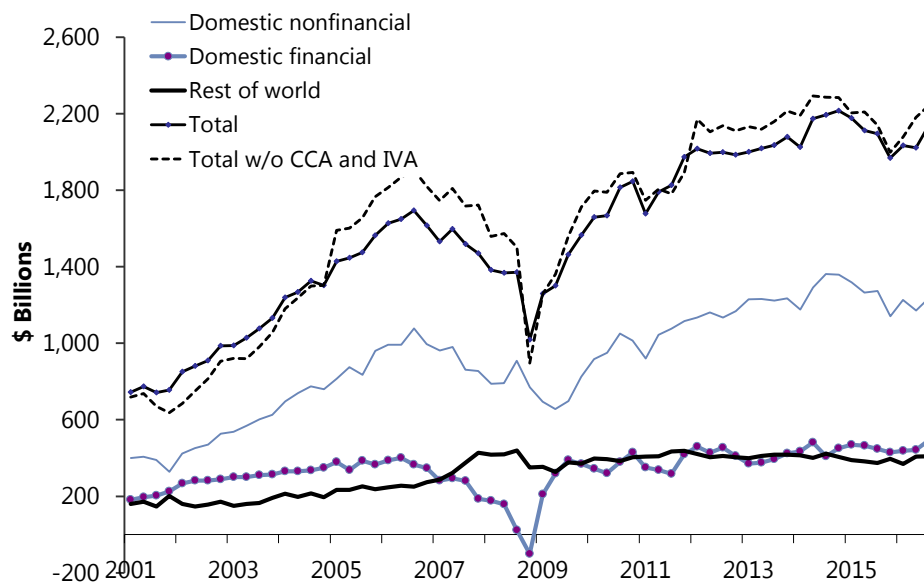
*** Grand Total is the total of all 27 countries included in the Portfolio Investment Survey.

Source: U.S. Department of the Treasury/Federal Reserve Board.

Outlook for U.S. Corporate Profits and the Stock Market

After exhibiting remarkable strength during the early phase of the recovery, U.S. corporate profits were in a virtual recession from the first quarter of 2015 through the first half of 2016 (see Figure 31). Profits grew at an annual average rate of 9.3 percent from the first full year of the expansion (2010) through 2014, but as of the third quarter of 2016, the most recent quarter for which data are available, are down 3.5 percent relative to 2014Q4. Domestic financial sector profits have been particularly volatile, falling in all of the last three quarters of 2015, growing very weakly in the first half of 2016, but reaching a new record high by 2016Q3. As the global economy got weaker in 2015, “rest-of-world” profits, derived from activity outside of U.S. borders, also restrained overall growth. However, domestic nonfinancial profits have proven to be the biggest drag on total growth, their 2016Q3 level down 8.9 percent from 2014Q4. As a result, U.S. corporate profit growth is estimated to be flat on an annual basis in 2016, after falling 3.0 percent in 2015.

Figure 31
U.S. Corporate Profits



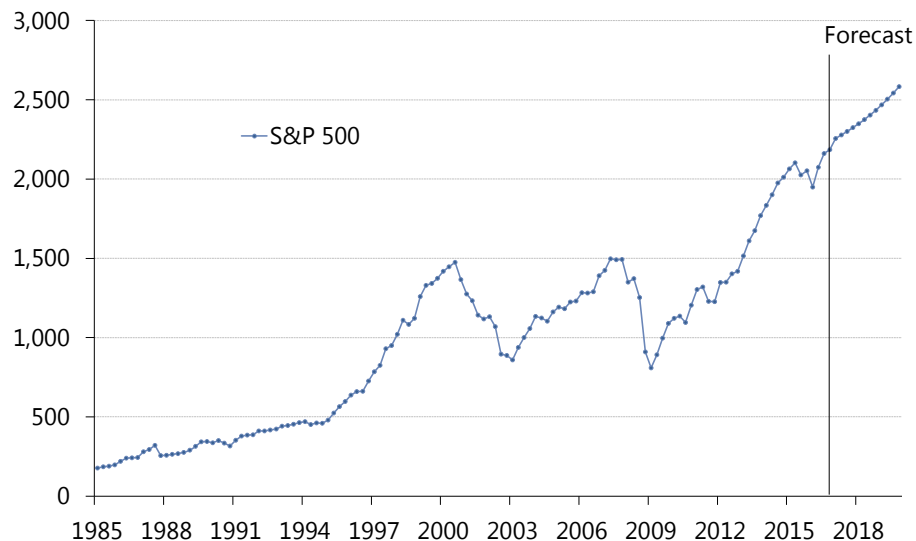
Source: Moody's Analytics.

After coming back to life during the second half of last year, U.S. corporate profits are expected to significantly improve in 2017, led by the financial sector as the yield curve steepens, but with moderate growth in all major components. As a result, U.S. corporate profits from current production, which includes the inventory valuation and capital consumption adjustments, are projected to grow 7.1 percent in 2017. This growth rate is still below the historical average of 7.3 percent from 1948 to 2015, a period that includes nine recessions.

Equity market turbulence has remained a constant throughout this recovery (see Figure 32). Although markets have generally risen since their March 2009 troughs, there have been two major corrections along the way: a 16 percent correction between April 23, 2010, and July 2, 2010; and a

19 percent correction between July 7, 2011, and October 3, 2011. Given that equity price fluctuations over that part of the recovery were more reflective of the fear surrounding both the euro-debt crisis and domestic political strife than the path of corporate earnings, much of the recent run-up likely reflects a diminishing of the risk aversion that plagued the market for so long.

Figure 32
Equity Market Growth

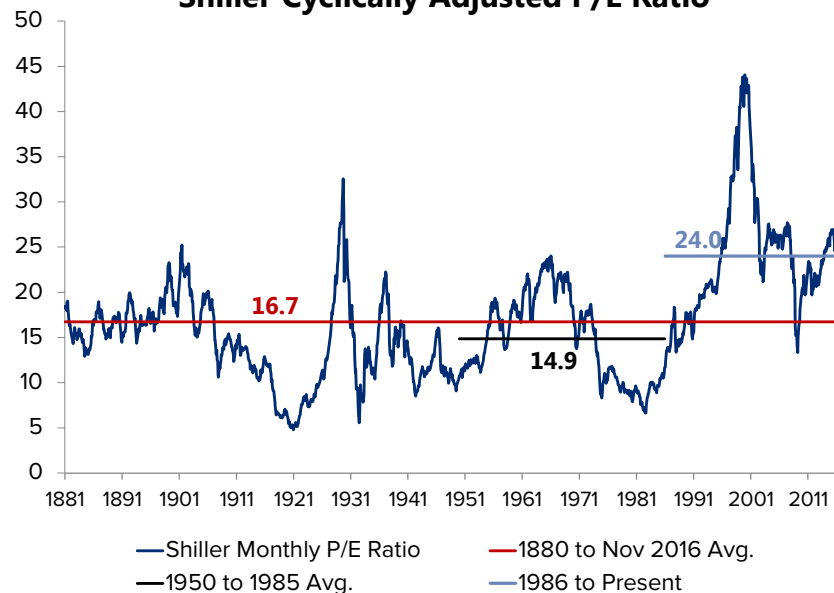


Source: Moody's Analytics; DOB staff estimates.

Over the long term, equity market price growth is expected to be consistent with growth in corporate earnings, discounted by the change in interest rates. Figure 33 presents the long-term history of the S&P 500 price-to-earnings ratio adjusted for inflation, where earnings are measured by the trailing 10-year moving average. The November 2016 level was above the 24.0 average from 1986 to that month, a period that contained the high-tech/Internet bubble of the late 1990s. This level compares to an average over the entire history of the series of 16.7, and an average over the early postwar period of 14.9. However, more recent ratios between equity prices and corporate earnings suggest a possible disconnect due to a period of extraordinarily low earnings thanks to write downs of "toxic assets" in the depths of the financial crisis during 2008 and 2009. Nevertheless, these results suggest caution, particularly in an environment of rising interest rates and relatively weak domestic and global growth. The Budget Division projects equity market growth of 9.4 percent for 2017 on an annual average basis, following growth of 1.5 percent in 2016.

Figure 33

Shiller Cyclically Adjusted P/E Ratio



Source: Robert Shiller; DOB staff estimates.

Outlook for Government Spending

State and local government spending declines came to an end in the third quarter of 2014 after 18 consecutive negative growth quarters, with year-over-year growth accelerating over the following quarters (see Figure 34). The National Association of State Budget Officers (NASBO) shows that state spending in fiscal year 2015 was at a 10-year high and increased at the fastest clip since 1992, largely because of strong growth in federal funds to states from increased Medicaid enrollment during the first full year of the Affordable Care Act, and because of moderate growth in own funds.¹¹ Unlike Federal government spending, state and local government expenditures are constrained by revenue flows, federal funds to states, and statutory balanced-budget requirements. The total state spending growth rate slowed in fiscal year 2016. Medicaid continued to increase as a share of total state spending, while K-12 remained the largest category from state funds. Transportation led the way in spending growth from state funds in both fiscal 2015 and fiscal 2016, while Medicaid experienced the largest gains from all funds. Revenue growth slowed considerably in fiscal 2016 as states saw weaker collections from sales, personal income, and corporate income taxes. The Budget Division projects state and local government spending to grow 0.7 percent in 2017, following 1.0 percent growth in 2016. Clearly, these growth rates fall short of average growth in state and local government spending for the period from 1965 to 2015 of 2.2 percent.

The Federal spending sequester and the pullback in the nation's military efforts as the high budget deficit met with resistance from policymakers resulted in a significant decline in the NIPA component of Federal spending. As a consequence of the slowdown in Federal spending, the

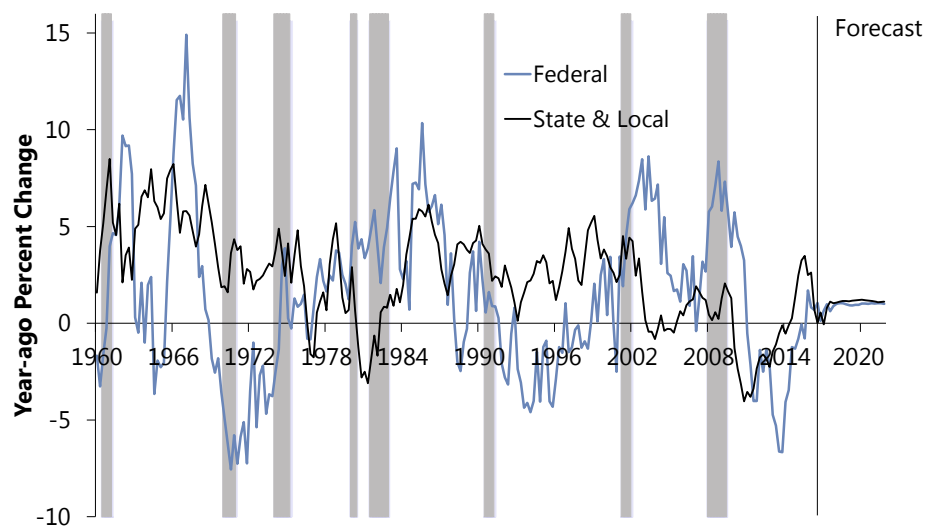
¹¹ The National Association of State Budget Officers, *State Expenditure Report*, 2016.

Federal budget deficit fell from \$1,300 billion in Federal fiscal year 2011, the equivalent of 8.7 percent of nominal GDP, to \$680 billion or 4.1 percent of nominal GDP two years later, and to \$587 billion or 3.2 percent of nominal GDP in Federal fiscal year 2016. Based on the Budget Division baseline forecast, the federal contribution to real U.S. GDP is projected to grow 0.8 percent in CY 2017, following growth of 0.7 percent in 2016. These growth rates follow flat growth in 2015 and four consecutive years of decline prior to that.

The federal budget for fiscal year 2017 overlaps the end of the Obama administration and the beginning of the Trump administration, with final appropriations legislation expected to pass during the beginning of the latter. The President's submitted budget for 2017 proposes spending of \$4.2 trillion and expects to raise \$3.6 trillion in tax revenue. The budget lifts sequestration in 2018 and beyond, and drives down deficits. Congress did not pass a regular budget resolution for the 2017 fiscal year. On September 28, 2016, Congress passed a continuing resolution which extended funding at previous year's levels up until December 9, 2016. The continuing resolution avoided a government shutdown and directed funding specifically for protection against the Zika virus (\$1.1 billion) and flood relief in Louisiana and other states (\$500 million). Shortly after the November 2016 presidential election, the incoming Trump administration advocated for a second continuing resolution funding the government only until the end of March, to allow the incoming administration to have an impact on the 2017 budget. The House Republican leadership agreed to this plan, although some lawmakers expressed concern that delaying the final appropriations legislation would distract Congress from other priorities during the beginning of Trump's administration. The final bill, the Further Continuing and Security Assistance Appropriations Act, 2017, extended funding through April 28, 2017. It was passed by the House and Senate on December 8 and 9, 2016, respectively.

Figure 34

Real Government Spending Over the Business Cycle



Note: Shaded areas represent U.S. recessions.
Source: Moody's Analytics; DOB staff forecast.

Comparison with Other Forecasters

Table 4 compares the Budget Division's (DOB) forecast for a selection of U.S. indicators with those of other forecasting groups. The 2017 forecasts for real U.S. GDP growth fall into a tight range from 2.3 percent (IHS Economics and Blue Chip Consensus) to a high of 2.4 percent (Macroeconomic Advisers and DOB). The DOB 2017 inflation forecast of 2.6 percent is at the top of the range along with Macroeconomic Advisers, while the Blue Chip Consensus is at the bottom at 2.4 percent, again an unusually tight range for this early in the year. DOB's unemployment rate forecast for 2017, at 4.6 percent, is right in line with the other forecasters.

Table 4

U.S. ECONOMIC FORECAST COMPARISON

	2016	2017	2018
Real Gross Domestic Product (GDP) (2009 chained percent change)			
DOB	1.6	2.4	2.4
Blue Chip Consensus	NA	2.3	2.4
IHS Economics	1.6	2.3	2.6
Macroeconomic Advisers	1.6	2.4	2.0
Consumer Price Index (CPI) (percent change)			
DOB	1.3	2.6	2.5
Blue Chip Consensus	NA	2.4	2.3
IHS Economics	1.3	2.5	2.1
Macroeconomic Advisers	1.3	2.6	2.1
Unemployment Rate (percent)			
DOB	4.9	4.6	4.4
Blue Chip Consensus	NA	4.6	4.5
IHS Economics	4.9	4.6	4.3
Macroeconomic Advisers	4.9	4.5	4.2

Source: New York State Division of the Budget, December 2016; *Blue Chip Economic Indicators*, January 2017; IHS Economics, *US Forecast Summary*, January 2017; and Macroeconomic Advisers, *Economic Outlook*, December 2016.

For a brief description of the methodology used by the Budget Division to construct its macroeconomic model for the national economy (DOB/US), see Box 2. For a more detailed description, see *New York State Economic, Revenue, and Spending Methodologies*, November 2016.¹²

¹² See <<http://www.budget.ny.gov/pubs/supporting/MethodologyBook.pdf>>.

Risks to the U.S. Forecast

The Budget Division baseline forecast assumes no major shifts in Federal tax or spending policies at this juncture. The precise shape of any such policy changes is highly uncertain and the timing such that their impact on the forecast for the current year is likely to be small; taken as a whole, the policy announcements issued to-day by the incoming administration create both upside and downside risks to the forecast. The current outlook calls for stronger growth in 2017 than in 2016, as the strength of the domestic labor and housing markets competes with weak demand from overseas. But there are a number of significant risks to the forecast. The euro-area economy is still growing slowly, while the true underlying growth rate in China is highly uncertain. If growth in either area is even more sluggish than expected, the implications for emerging markets and the global economy more generally will be negative, and will likely result in slower export and corporate profits growth than reflected in this forecast. The impact will reverberate through U.S. labor and financial markets, resulting in slower growth than anticipated. On the other hand, if either area is stronger than expected, the implications for the forecast will be quite positive.

Oil prices are expected to stabilize as U.S. energy production cuts put downward pressure on supply. But continued tepid global growth anticipated for this year, along with strategic behavior on the part of sovereign energy producers could send oil prices even lower, which could have a deleterious effect on both business hiring and investment, as well as on equity markets. Alternatively, if consumers choose to spend more of the energy dividend than expected, household spending could be stronger than anticipated.

Finally, the Federal Reserve has begun to execute its exit from six and a half years of unconventional policy use and unprecedented balance sheet expansion. The central bank has confirmed that the future path of that strategy remains data dependent, and highly uncertain at this stage. If that exit is rockier than anticipated, and long-term interest rates start to rise more quickly than expected, the impact on the entire global economy – both real and financial – could be quite negative. Alternatively, a smooth exit could play a critical role in putting the current expansion on the road to becoming one of the longest since the middle of the 20th century. Either way, the experience will continue to be one for the history books.

Box 2 **THE DIVISION OF THE BUDGET U.S. MACROECONOMIC MODEL**

Macroeconomic modeling has undergone a number of important changes over the last four decades, primarily as a result of developments in economic and econometric theory. These developments include the incorporation of both rational expectations and micro-foundations based on the long-run optimizing behavior of firms and households. In addition, analysts now employ more flexible specifications of behavioral relations within a vector autoregressive (VAR) model framework. Recent developments also include a more rigorous analysis of the time series properties of commonly used macroeconomic data series, as well as the implications of these properties for model specification and statistical inference. There has also been a significant improvement in the understanding of the long-run equilibrium relationships among macroeconomic data series and the predictive power of these relationships in constraining economic dynamics.

The Budget Division's U.S. macroeconomic model (DOB/U.S.) incorporates the theoretical advances described above in an econometric model used for forecasting and policy simulation. The model contains 132 core equations, of which 37 are behavioral. In addition, there are hundreds of auxiliary forecasting equations that incorporate the results from the core model as inputs. The current estimation period for the model is 1965:1 through 2016:3. Our analysis borrows heavily from the Federal Reserve Board model which was redesigned during the 1990s using the most up-to-date advances in modeling techniques. We are grateful to Federal Reserve Board economists for providing guidance and important insights as we developed the DOB/U.S. macroeconomic model.

In economic parlance, DOB/U.S. could be termed a neoclassical model. Agents optimize their behavior subject to economically meaningful constraints. Households exhibit optimizing behavior when making consumption and labor supply decisions, subject to a wealth constraint. Expected wealth is, in part, determined by expected future output and interest rates. Likewise, firms maximize profits when making labor demand and investment decisions. The value of investment is affected by the cost of capital, as well as expectations about the future path of output and inflation. The economy's long-run growth path converges to an estimate of potential GDP growth. Monetary policy is administered through adjustments to the federal funds rate, as guided by Taylor's Rule. Current and anticipated changes in this rate influence agents' expectations and the rate of return on various financial assets.

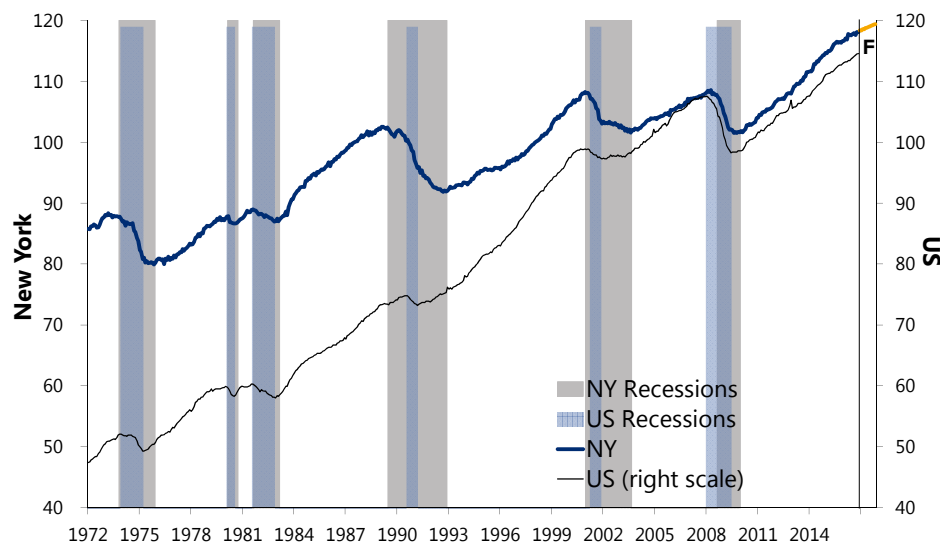
DOB/U.S. incorporates three key theoretical elements into this neoclassical framework: expectations formation, equilibrium relationships, and dynamic adjustments (movements toward equilibrium). The model addresses expectations formation by first assuming that expectations are rational and then specifying a common information set that is available to economic agents who incorporate all relevant information when forming and making their expectations. Long-run equilibrium is defined as the solution to a dynamic optimization problem carried out by households and firms. The model structure incorporates an error-correction framework that ensures movement back to long-run equilibrium.

The model structure reflects the microeconomic foundations that govern optimizing behavior, but is sufficiently flexible to capture the short-run fluctuations in employment and output caused by economic imbalances (such as those caused by sticky prices and wages). DOB/U.S. incorporates dynamic adjustment mechanisms that reflect the fact that while agents are forward looking, they do not adjust to changes in economic conditions instantaneously. The presence of frictions (costs of adjusting productive inputs, sticky wages, persistent spending habits) governs the adjustment of nonfinancial variables. These frictions, in turn, create imbalances that constitute important signals in the setting of wages and prices. In contrast, the financial sector is assumed to be unaffected by frictions due to the negligible cost of transactions and the presence of well-developed primary and secondary markets for financial assets.

The New York State Economy

Although the New York State labor market has slowed against a backdrop of weak national and global growth, State private sector employment continues to enjoy historically strong growth. On a year-ago basis, private sector employment grew 1.8 percent in the second quarter of last year, the most recent period for which detailed data are available. Growth continues to be led by the construction sector, fueled in turn by a thriving real estate market, but health care; private education; and leisure and hospitality have also been leading sectors. Private sector employment is estimated to grow 1.8 percent for all of 2016, a sixth consecutive year of above-average job growth. Consistent with the slowdown in national employment growth, State private sector job growth is expected to ease further to growth of 1.5 percent in 2017, still above-average.

Figure 35
New York State Index of Coincident Economic Indicators



Note: NY recession dates are DOB staff estimates; NY forecast (in gold) is derived from the New York State Leading Index.

Source: Moody's Analytics; DOB staff estimates.

After six straight years of decline then flat growth for 2015, the State's public sector has started to contribute positively to overall job growth. Government employment grew 0.6 percent in the first half of 2016, bringing overall State employment growth to 1.8 percent for the period and an estimated 1.7 percent for all of last year. Consistent with a moderate fall off in private sector growth, total State job growth of 1.3 percent is expected for 2017. In contrast with decelerating job growth, wage growth is expected to accelerate from 3.4 percent for CY 2016 to 4.3 percent for 2017. These apparently contradictory trends are an artifact of a decline of 6.4 percent in finance and insurance sector bonuses estimated for 2016 compared with growth of 4.0 percent projected for 2017. The decline for 2016 is due in part to weak financial sector revenues in 2015 and 2016, but also because of an expected delay in year-end bonus payouts until 2017 so that employees can take advantage of potentially lower Federal personal income tax rates in 2017.

Box 3

NEW YORK STATE INDICES OF COINCIDENT AND LEADING ECONOMIC INDICATORS

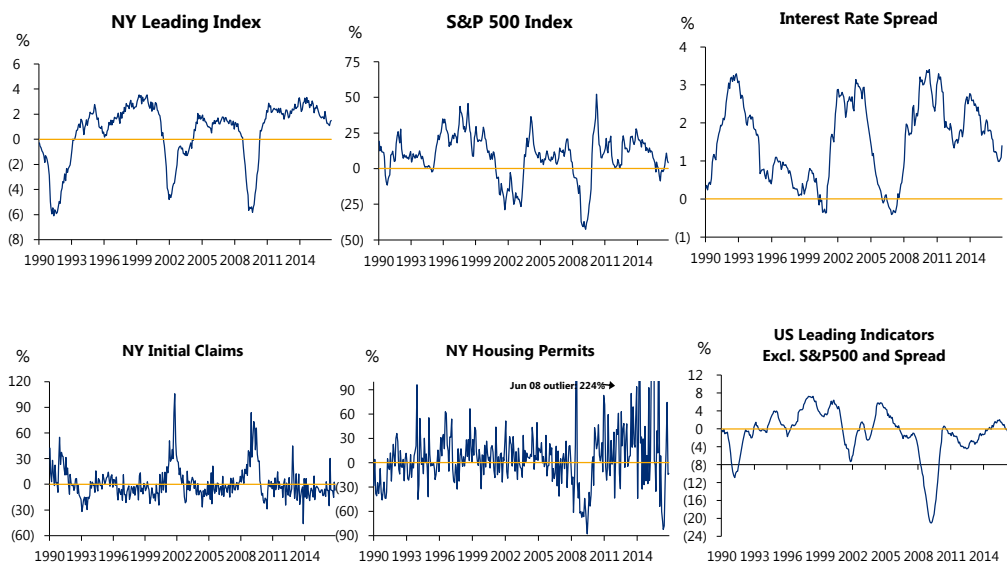
In the absence of an official mechanism for dating business cycles at the sub-national level, DOB staff constructed a New York State Index of Coincident Economic Indicators measuring overall economic conditions for New York.¹ The methodology used to construct the index is based on the Stock and Watson methodology and rests on the notion that co-movements in many macroeconomic time series can be captured by a single unobserved variable representing the overall state of the economy.² Four State data series – private sector employment, hours worked in the manufacturing sector, the unemployment rate, and sales tax receipts (as a proxy for retail sales) – are combined into a single index using the Kalman filter, a common approach to the estimation of unobserved variables. Based on the DOB Coincident Index, six business cycles have been identified for New York since the early 1970s, as reported in the table below. A recession is judged to have begun if the DOB Coincident Index sustains three to five consecutive declines of significant depth. A similar approach is used to date business cycle troughs. The last column of the table below reports the number of private sector jobs lost due to the recession, although labor market cycles do not always coincide precisely with the technical business cycle dates.

NEW YORK STATE BUSINESS CYCLES

Peak Date	Trough Date	Recession Length (in months)	Private Sector Job Losses
October 1973	November 1975	25	384,800
February 1980	September 1980	7	54,800
August 1981	February 1983	18	76,600
June 1989	November 1992	41	551,700
December 2000	August 2003	32	329,300
August 2008	December 2009	16	352,700

Source: DOB staff estimates.

Variables Used in New York Index of Leading Indicators



Note: All percent changes are from prior year; the June 2008 outlier in housing permits is removed.

Source: Moody's Analytics; DOB staff estimates.

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In order to gauge the future direction of the State economy, the Budget Division produces the New York State Index of Leading Economic Indicators, which yields a forecast for the Coincident Index up to 12 months ahead. The forecasting model includes the following five leading economic variables in a vector autoregressive framework: the U.S. Index of Leading Economic Indicators (excluding stock prices and the interest rate spread), New York housing permits, New York initial unemployment insurance claims, stock prices, and the spread between the 10-year and one-year U.S. Treasury rates.

The long lag with which the New York economy entered the last recession contrasts sharply with the experience of the prior five downturns. As illustrated in Figure 35 on page 73, the State entered three of the five prior recessions earlier than the nation as a whole, and entered the remaining two only one month later. The State's estimated business cycle trough date is December 2009, which implies that New York's recession was two months shorter than that of the nation as a whole.

¹ R. Megna and Q. Xu (2003). "Forecasting the New York State Economy: The Coincident and Leading Indicators Approach," *International Journal of Forecasting*, Vol 19, pages 701-713.

² J.H. Stock and M.W. Watson (1991), "A Probability Model of the Coincident Economic Indicators," in K. Lahiri and G. H. Moore (eds.), *Leading Economic Indicators: New Approaches and Forecasting Records*, New York: Cambridge University Press, pages 63-85.

The Budget Division uses the New York State Index of Coincident Economic Indicators to determine the State's business cycle turning points (see Box 3). The index's level and growth are plotted in Figure 35 along with the turning points for both the New York and U.S. business cycles. The New York State Leading Index combines five high frequency data series to signal that either a pickup or a slowdown in economic activity can be expected six to 12 months down the road. The coincident index exhibits average monthly growth of 0.1 percent for the last twelve months through November 2016, the final one for which complete data are available. The leading index implies average monthly growth of 0.1 percent for the twelve months through November 2017, a signal that we can expect slow but steady growth over the near-term.

New York State is home to arguably the world's financial capital, and while that status confers many benefits, historically it has also imparted a high degree of employment and wage volatility. However since the recent financial crisis the changing regulatory environment has altered the pattern of risk-taking behavior by Wall Street firms. Although the net impact of these changes on finance sector employment and wages has been negative, a side benefit has emerged in the form of lower wage volatility. A standard deviation is a simple statistic that when doubled defines a range of values within which a measure has a 67 percent chance of falling. The wider is the range, the more volatile the series. During the six bonus seasons that preceded the worst of the financial crisis, finance and insurance sector bonus growth exhibited a standard deviation of 20.4 percent; in the six seasons that followed, the standard deviation dropped to 13.0 percent. Thus, the State economy appears to be undergoing a period of adjustment, during which above-average private sector job growth has coupled with a less volatile and more diversified wage base.

Outlook for Employment

Since the end of the recession, the State's labor market has enjoyed strong private sector job growth. Table 5 presents a current profile of the job market by comparing year-ago growth rates for the second quarter of 2016, the most recent for which detailed QCEW (Quarterly Census of Employment and Wages) data are available, against U.S. employment growth for the same period;

private employment grew 0.2 percentage points faster for the U.S. than for New York. Table 5 reveals additional differences between New York and the nation. In the second quarter of 2016, New York led the nation in four sectors: construction; transportation and warehousing; private educational services; and government. Growth in the construction industry benefited from a strong real estate market, particularly in New York City.

Table 5

YEAR-AGO PERCENT CHANGE IN EMPLOYMENT FOR 2016Q2: NYS v. US

	NYS	US
Total Private	1.8	2.0
Utilities	(2.0)	1.2
Construction	4.7	3.6
Manufacturing and Mining	(1.4)	(0.3)
Wholesale Trade	(0.9)	0.9
Retail Trade	(0.6)	2.1
Transportation and Warehousing	1.9	1.1
Information	(1.1)	0.9
Finance and Insurance	0.4	2.0
Real Estate and Rental and Leasing	1.4	2.3
Professional, Scientific, and Technical Services	1.3	3.4
Management, Administrative, and Support Services	1.8	2.4
Educational Services	2.4	2.3
Healthcare & Social Assistance Services	3.1	3.1
Leisure, Hospitality and Other Services	2.1	2.3
Government	0.5	0.4
Total	1.6	1.8

Note: Management, and administration and support services includes NAICS sectors 55 and 56; sum of sectors may not match the total due to the exclusion of unclassified.

Source: NYS Department of Labor; DOB staff estimates.

Going forward the Budget Division projects total State employment growth of 1.3 percent for 2017, following growth of 1.7 percent for 2016. Private sector job growth of 1.5 percent is projected for 2017, after growth of 1.8 percent in 2016. The State's maturing labor market recovery compares with overall national job growth for 2017 of 1.4 percent and private growth of 1.5 percent.

Table 6 shows projected changes in employment for 2017 by sector. The education and health care industries are expected to continue their strong growth during the current year. A growing national economy will continue to support the demand for services produced by New York's large business service sector, thus professional and business services will continue to be a growth engine. Tourism will continue to be a key source of strength, supporting strong job growth in the leisure and hospitality sector, despite headwinds from a stronger dollar and weak but improving growth in overseas economies.

Table 6

CHANGE IN NEW YORK STATE EMPLOYMENT FOR 2017

	Percent	Levels
Total Private	1.5	114,389
Utilities	(0.2)	(58)
Construction	2.2	8,220
Manufacturing and Mining	(0.1)	(431)
Wholesale Trade	(0.0)	(117)
Retail Trade	0.9	8,312
Transportation and Warehousing	0.8	2,003
Information	0.2	495
Finance and Insurance	0.6	3,136
Real Estate and Rental and Leasing	0.9	1,736
Professional, Scientific, and Technical Services	1.6	10,757
Management, Administrative, and Support Services	1.8	11,445
Educational Services	2.6	9,140
Healthcare & Social Assistance Services	2.5	35,747
Leisure, Hospitality and Other Services	1.9	24,003
Government	0.5	6,916
Total	1.3	121,305

Note: Management, and administration and support services includes NAICS sectors 55 and 56; sum of sectors may not match the total due to the exclusion of unclassified.

Source: NYS Department of Labor; DOB staff estimates.

The Continuing Transformation of the Securities Industry

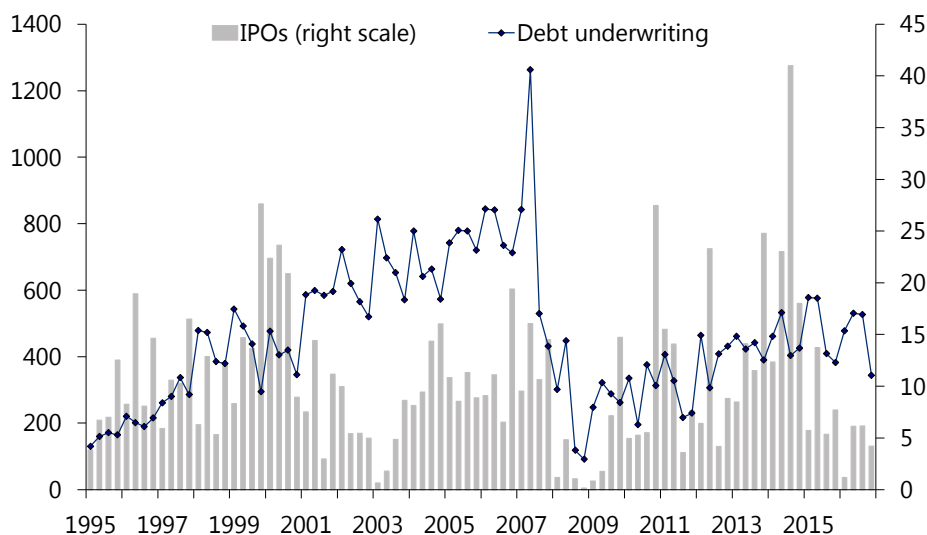
Financial market activity continues to be volatile as recent events have illustrated. Some of this volatility is evident in two important drivers of securities industry revenues and profits: initial public offerings (IPOs) and corporate debt underwriting. While debt underwriting is closely linked to interest rates and the overall level of economic activity, IPOs tend to rise and fall with the secondary equity market. The spikes that appear in Figure 36 correspond to the historically large offerings that gained much attention in recent years, such as the \$15.8 billion General Motors IPO in November 2010, the notorious Facebook offering in May 2012, the public sale of Twitter in November 2013, and the record-setting \$21.8 billion Alibaba IPO in September 2014.

Despite record equity market highs, U.S. IPO proceeds in 2016 fell to their lowest level since 2003 and the number of deals was the lowest since 2009. Following a 65.6 percent decline in 2015, U.S. IPOs posted yet another decline of 45.7 percent in 2016, driven by at least three factors: the market freefall in the first quarter, resulting in numerous postponements; the Brexit vote in the second quarter; and (possibly) fallout from the US presidential election in the fourth quarter. A large number of IPOs were withdrawn in the final quarter of the year, perhaps in anticipation of lower Federal capital gains tax rates in 2017. Debt underwriting posted a 3.4 percent decline in 2016.

In contrast, 2016 was an active year for merger and acquisition (M&A) activity. In the first half of the year, M&A activity was down from the same period a year ago due to extreme market volatility

early in the year and growing uncertainty surrounding the global economy. However, in the second half of the year, and despite election uncertainty, M&A activity started to accelerate at a fast pace, October's value being the greatest in at least 12 years. The rise in M&A activity can be attributed to the bull market in the second half of the year, low interest rates, and fear of the end of the low interest rate era, and puts the M&A market in stark contrast with that for IPOs. With rising interest rates expected for next year, the deal market is expected to weaken in 2017.

Figure 36
Major Drivers of Financial Market Activity
\$ Billions

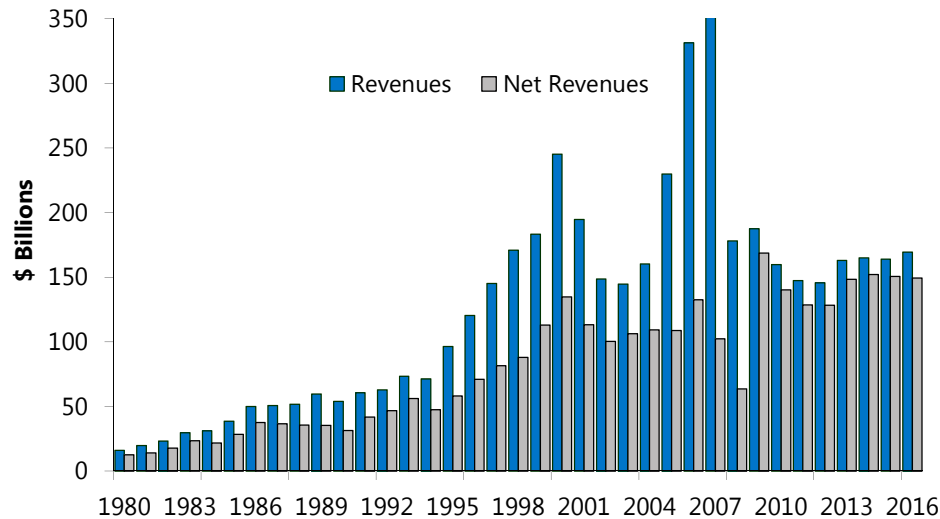


Source: Securities Industry and Financial Markets Association (SIFMA).

Despite the surge in M&A activity, overall securities industry revenue and profits were lackluster in 2016 due to disappointing IPO volume and volatile equity markets, particularly early in the year. Figure 37 shows New York Stock Exchange member-firm revenues before and after subtracting interest costs. Total revenues are estimated to have risen 3.3 percent in 2016, following a 0.6 percent decline in 2015. More generally, total revenues have been deteriorating since 2009. Estimated revenues for 2016 remain 9.6 percent below their 2009 levels and 51.9 percent below 2007 levels.

Table 7 lists the primary sources of revenue and expenses for NYSE member-firms over the last ten years. Clearly, the three greatest areas of improvement in industry balance sheets after 2008 are the decline in interest expenses, due to historically low interest rates; increasing gains from equity underwriting; and the growth in fee and asset management revenues.

Figure 37
NYSE Member Firm Revenues



Note: Estimate for 2016 is based on three quarters of actual data and one quarter estimated; net revenues exclude interest expenses.
Source: SIFMA.

Table 7

NYSE MEMBER FIRM FINANCIAL RESULTS (\$ Billions)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Revenues	352.0	178.1	187.5	159.8	147.3	145.7	162.8	165.0	164.0	169.4
Commissions	28.8	30.2	26.3	25.0	25.7	19.4	23.1	23.0	22.7	21.7
Trading Gain (Loss)	(10.3)	(71.8)	27.4	16.7	1.5	14.0	11.1	11.5	8.4	13.4
Underwriting Revenue	23.2	16.5	19.8	20.3	18.3	20.8	24.9	25.5	22.6	19.3
Fees, Asset Management	21.6	20.9	17.5	20.6	25.7	24.7	33.2	38.2	40.9	42.2
All Other	288.8	182.3	96.5	77.1	76.1	66.7	70.5	66.8	69.4	72.8
Expenses	363.4	220.7	128.1	134.7	139.5	123.6	145.8	148.7	148.8	148.4
Total Compensation	69.6	59.8	62.4	66.9	68.0	60.2	70.4	72.7	73.9	73.5
Interest Expense	249.8	114.5	18.7	19.6	18.7	17.3	14.4	13.1	13.4	20.0
All Other Expenses	44.0	46.3	46.9	48.2	52.8	46.1	61.0	63.0	61.5	54.9
Pre Tax Net Income	(11.3)	(42.6)	59.4	25.1	7.7	22.1	17.0	16.3	15.2	21.0

* Estimate for 2016 is based on three quarters of actual data and one quarter estimated.
Source: SIFMA.

Table 7 also highlights some of the sources of the recent weakening in securities industry revenues. Industry trading gains fell dramatically in 2010 and 2011, and have remained relatively low for the past five years for a number of reasons. Equity markets have been volatile due to repeated cycles of panic in response to sovereign debt concerns both here and in the euro-zone;

concerns about the Chinese economy; the strengthening dollar; the price of oil; the Brexit vote; and the U.S. presidential election. With long-term interest rates remaining stubbornly low, gains from fixed-income trading and from lending have also been weak. The evolving regulatory environment under Dodd-Frank has had a particularly large impact on bank behavior since it was signed into law in July 2010.

Some of the key goals of the Dodd-Frank reform were strengthening bank capital requirements; limiting counterparty risk; and, ultimately, systemic risk. One of the major provisions of Dodd-Frank required the formulation of regulations to enforce the so-called “Volcker Rule,” which put limits on proprietary trading on the banks’ own account. Final regulations were released and adopted by regulatory agencies in December 2013; however in December 2014 the Federal Reserve decided to give banks until July 21, 2016, to conform investments made prior to December 31, 2013, with the regulations. But banks still had to cease proprietary trading activities by July 2015. They also had to divest themselves of any interest in private equity, venture capital funds and hedge funds made after December 2013 by that deadline. The results presented in Table 7 illustrate the impact that reform has had on the way Wall Street is conducting business.

In addition to Dodd-Frank, implementation of Basel III, the third incarnation of the Basel Accords establishing global regulatory standards for managing bank risk, was to start in 2013, but the implementation date has since been extended to 2019. Basel III specifically aims at improving the ability of banks to withstand periods of systemic economic and financial stress through more stringent capital and liquidity requirements. But these strengthened requirements will tend to put further pressure on revenue-generating activity and bank profitability by reducing leverage ratios, thus intensifying the pressure that already exists in the current environment of low long-term interest rates.

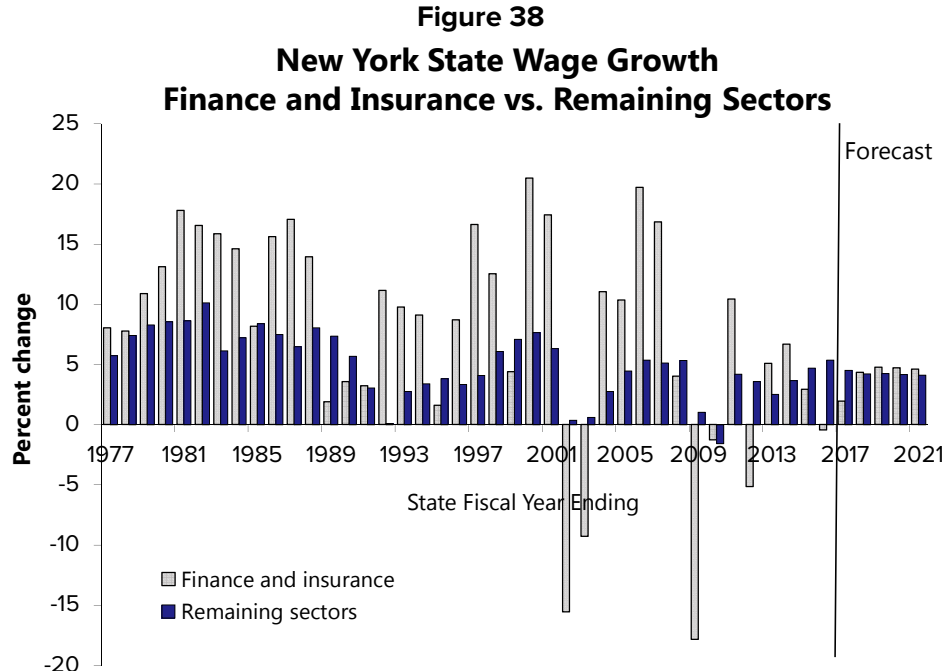
The new regulatory environment appears to have altered bank business practices in two fundamental ways. First, the composition of executive compensation has evolved away from cash in favor of deferred compensation and stock grants, thus more closely tying pay to the long-term performance of the firm. As a result, the revenue growth estimated for 2016 may not translate into an equivalent rise in taxable bonus pay for the current 2016-17 bonus season. The deferral of compensation will tend to smooth out bonus payments, as the cash portion of current-year compensation packages combines with the deferred portions of prior years.

Secondly, in order to reinforce such long-term incentives, compensation packages now include claw-back provisions that allow firms to take back a portion of bonus pay if actions taken by an employee are ultimately judged to have been too risky. Firms therefore are expected to continue to alter their business practices in favor of less risky behavior both by reducing leverage and by engaging in fewer risky trades. The upward trend of revenue generated by less risky fees and asset management supports this claim.

Outlook for State Income

The Budget Division projects total personal income growth of 4.8 percent for 2017, much stronger than the 3.2 percent growth in 2016. These growth rates are driven mainly by wages, the largest component of personal income. New York State wages are estimated to have risen 3.4 percent in 2016, with growth of 4.3 percent projected for this year. The wage outlook for 2017 reflects a much smaller decline in finance and insurance sector bonuses for the 2016-17 bonus season in progress, as well as a suspected shift in the timing of a portion of year-end bonus payouts from the last quarter of 2016 to the first quarter of 2017 in anticipation of potentially lower personal income tax rates in 2017. In addition, the government sector is expected to continue to add jobs. Private sector wages are projected to grow 4.5 percent for 2017, while government sector wage growth is projected at 3.0 percent in 2017, following growth of the same magnitude in 2016.

Because the state-level wage data published by the U.S. Bureau of Economic Analysis have proven unsatisfactory for the purpose of forecasting State tax liability, the Budget Division constructs its own wage and personal income series based on Quarterly Census of Employment and Wage (QCEW) data. Moreover, because of the importance of trends in variable income – composed of stock-related incentive income and other one-time bonus payments – to the understanding of trends in State wages overall, the Budget Division has developed a methodology for decomposing wages into bonus and non-bonus series. For a detailed discussion, see Box 4. The Budget Division's outlook for State income is based on these constructed series.

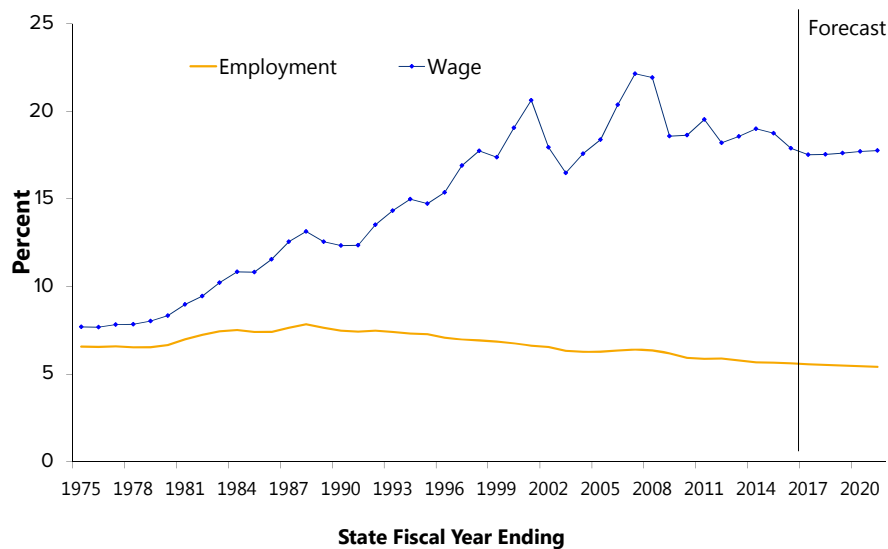


Source: NYS Department of Labor; DOB staff estimates.

New York State employment and incomes are profoundly affected by the fortunes of the financial markets. As illustrated in Figure 38, finance and insurance sector wages have historically tended

to grow much faster than wages outside of that sector. However, not only has this trend become much more muted since the end of the financial crisis, as the chart makes clear, it actually reversed during the 2014-15 and 2015-16 State fiscal years and is projected to do so again for the year in progress. From FY 1977 through FY 2008, the last complete fiscal year before the fall of Lehman Brothers, average annual growth in finance and insurance sector wages was 4.1 percentage points above that of the remaining industrial sectors. However, over the seven years since the worst of the crisis, (excluding FY 2009 when finance and insurance sector wages fell 17.8 percent) average finance and insurance sector wage growth was 0.6 percentage points below that of the remaining sectors. For the out-years, finance and insurance wage growth is expected to exceed growth for the remaining sectors by an average of 0.5 percentage points, putting financial sector wage growth much more in line with nonfinancial sector wage growth. Moreover, the finance industry's share of total wages is not projected to reach its 2006-07 peak at any point over the forecast horizon.

Figure 39
Finance and Insurance Sector Employment and Wages as Share of State Total



Source: NYS Department of Labor; DOB staff estimates.

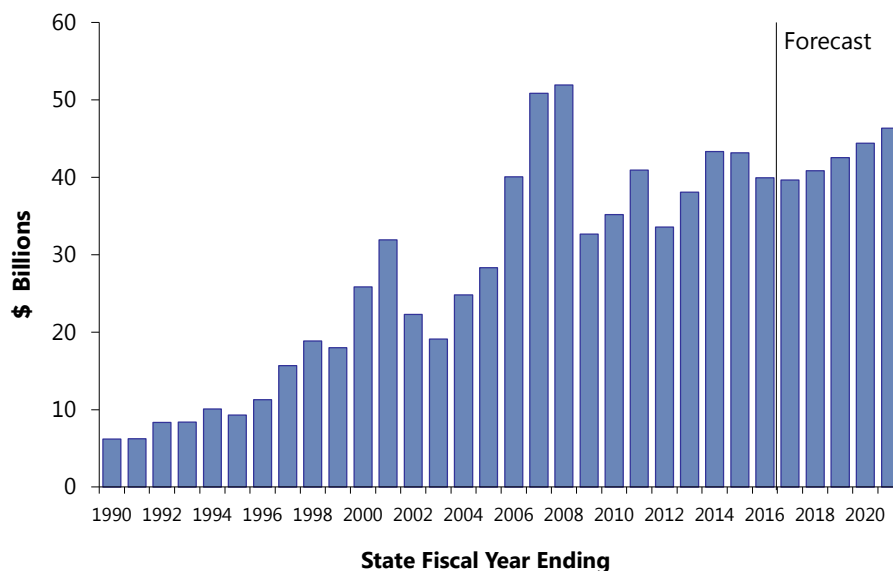
Figure 39 shows how the substantially higher wage growth in the finance and insurance sector caused it to increase its share of total State wages over time on a State fiscal year basis to a peak of 22.1 percent in 2006-07, but the share has since fallen and is unlikely to revisit that peak in the near future. The industry's employment share is substantially lower than its wage share at only 5.6 percent of total State employment in 2015-16 and is expected to continue its downward trend. Nevertheless, finance sector workers continue to be, on average, very highly compensated. Even after falling to \$174,000 in 2008-09 in the wake of the financial crisis, finance and insurance sector average wages were still 247 percent higher than the average wage for the rest of the State economy. By 2016-17, the industry's average wage is projected to rise to approximately \$218,000, which would be 261 percent above that of the remaining sectors. Financial market wages have an important effect on employment and income in New York City and its surrounding suburbs, both

directly – through compensation paid to finance sector workers and purchases made by finance sector firms, and indirectly – as finance sector workers spend their incomes on housing, entertainment, and other goods and services.

Variable Income Growth

Variable income is defined as that portion of wages derived primarily from bonus payments, stock incentive income, and other one-time payments. Firms tend to grant employee bonus packages during either the fourth quarter of a given year or the first quarter of the following year, as a form of performance incentive for the prior calendar year. Although the cash component of bonus income is unambiguously counted as wages (and taxes are withheld) in the quarter in which it was granted by the firm, stock incentive income typically is not. Stock grants do not appear in the wage data until they are vested. Nevertheless, variable income payments are sufficiently concentrated in the fourth and first calendar-year quarters to make the State fiscal year a logical period of analysis for discussing the determinants of variable income growth.¹³

Figure 40
New York State Finance and Insurance Sector Bonuses



Source: NYS Department of Labor; DOB staff estimates.

¹³ See Box 4 on page 62 for a more detailed discussion of bonus estimation.

Box 4

THE CONSTRUCTION OF NEW YORK STATE WAGES AND THE ESTIMATION OF VARIABLE INCOME

Trends in State wages are critical to an accurate analysis and forecast of personal income tax liability and collections. To improve the link between the economic and tax variables on a quarterly basis, the Division of the Budget (DOB) constructs its own wage series from the available primary data sources. This series differs from the data published by the U.S. Bureau of Economic Analysis (BEA).

The DOB uses only New York data to construct its State wage series. The primary source is data collected under the Quarterly Census of Employment and Wages (QCEW) program. In contrast, the BEA uses national information to adjust the quarterly values for seasonal variation, as well as to ensure that state level wages add up to national estimates. The consequence is often a significant difference between the two series in both the quarterly pattern and the annualized growth rates. For example, according to staff estimates based on the QCEW data, wage growth rates for the first and second quarters of 2000, on a year-ago percent-change basis, were 18.3 percent and 8.5 percent, respectively. The comparable growth rates originally published by the BEA were 2.4 percent and 5.4 percent. These estimates have since been revised up to 7.3 percent and 9.2 percent, respectively. However, the lack of timeliness in the revision process limits the usefulness of BEA data for state forecasting purposes.

A comparison with yet another source of wage data also demonstrates the greater accuracy of the QCEW data. Since the amount of wages withheld for personal income tax purposes varies systematically with wages itself, withholding data provide a useful guide for estimating State wage growth. For example, wages withheld during the first quarter of 2000 were 18.6 percent above withholding for the same quarter of the previous year. This estimate is much more consistent with the growth rate derived from the QCEW data than with the BEA's estimate of 2.4 percent.

Once an entire year of QCEW data becomes available, the BEA revises its state level wage data to be more consistent with that data source. For this reason, DOB's method performs well in anticipating the BEA's revised estimates of annual growth in New York wages. To make the actual magnitudes of the Division's wage series more strictly comparable to the BEA wage series, non-covered and unreported legal wages must be added to wages taken directly from the QCEW data. The addition of these components typically changes the annual growth rate for State wages by no more than two tenths of one percentage point.

An increasing portion of New York State wages has been paid on a variable basis, in the form of either bonus payments or proceeds derived from the exercise of stock options. Because no government agency collects data on variable income as distinct from ordinary wages, it must be estimated. DOB derives its bonus estimate from firm level data collected under the QCEW program. This method allows a large degree of flexibility as to when individual firms actually make variable income payments. However, as with any estimation method, some simplifying restrictions are necessary. DOB's method incorporates the assumption that each establishment makes variable income payments during at most two quarters of the year. However, the determination as to which quarters contain these payments is made at the firm level.

Firms report their wages to the QCEW program on a quarterly basis. A firm's average wage per employee is calculated for each quarter. The average over the two quarters with the lowest average wages is assumed to reflect the firm's base pay, that is, wages excluding variable pay. If the average wage for either of the remaining quarters is significantly above the base wage, then that quarter is assumed to contain variable income.¹ The average variable payment is then defined as total average wage minus the base average wage, after allowing for an inflation adjustment to base wages. Total variable pay is then calculated by multiplying the average bonus payment by the total number of firm employees. It is assumed that only private sector employees earn variable pay.

¹ The threshold adopted for this purpose was 25 percent. However, the variable income estimates are fairly robust to even a five-percentage-point swing in this criterion.

The Budget Division projects total State variable income to rise 3.9 percent for 2017-18, following estimated 0.8 percent growth in the current fiscal year, mainly due to a projected decline in finance and insurance sector bonuses. Figure 40 portrays how dramatically variable income paid to employees in the finance and insurance industry has grown since 1990. An incentive-based payment structure allows employers to share with employees the risks of doing business and is particularly attractive to the securities industry, given the degree of volatility in industry profits.

The cash portion of finance and insurance sector bonuses is estimated to decline 0.7 percent for the current 2016-17 bonus season, resulting in a payout of \$39.6 billion. This would follow a 7.4 percent decline estimated for 2015-16. While the finance industry continued to benefit from low interest rates in 2016 on the expense side, as discussed above, weak and turbulent equity markets resulted in similarly weak revenue growth. Volatility in long-term interest rates slammed trading gains on the fixed income side as well.

Equity market growth is projected to be stronger in 2017, even as interest rates begin to rise and the Federal Reserve pursues its policy of interest rate normalization. The Budget Division expects long-term rates to rise with short-term rates, steepening the yield curve and making lending more profitable. A reduction in the intense volatility that characterized financial markets in 2016 is anticipated, resulting in stronger NYSE member-firm revenue growth for 2017. The Budget Division projects finance and insurance sector bonus growth of 3.0 percent for 2017-18, representing a payout of \$40.8 billion, or \$1.2 billion above 2016-17.

The Budget Division's model for finance and insurance sector bonuses is based on an underlying volume of revenue-generating activity that includes corporate equity and debt underwriting. As indicated in Figure 36 on page 78, 2016 was the worst year for IPO proceeds since 2003. Debt underwriting also posted 3.4 percent decline. Weak global growth and rising interest rates in the U.S. are expected to lead to another year of weak demand for debt underwriting. All of these factors are expected to contribute to modest bonus growth for 2017-18.

All of the uncertainty surrounding the macroeconomic outlook for the national and global economies becomes amplified in the financial markets. Additional layers of uncertainty are added by the shift in monetary policy and the change in federal administration. The extraordinary actions taken by the central bank over the last seven years were intended to pull forward economic activity in order to get the economy moving and it is unknown how the unwinding of those efforts will affect current levels of activity. The evolution or destruction of Dodd-Frank under a new administration also creates new risks in financial markets. Thus a substantial degree of uncertainty surrounds the Budget Division outlook.

Nonbonus Wages

Unlike the variable component of income, nonbonus wages are driven by changes in employment and nonbonus average wages and are therefore relatively more stable. After adjusting for inflation, the nonbonus average wage for each of the State's industrial sectors is believed to have a stable long-run relationship with the real U.S. average wage, which in turn is determined by labor productivity. However, State real average wages can deviate from their long-run trend due to short-term fluctuations related to business cycles, shocks to the regional economy, or shocks to a

specific industrial sector that is relatively more important to the State economy, such as finance and insurance. Nonbonus average wages are projected to rise 3.0 percent for the 2017 calendar year, surpassing an estimated 2.7 percent increase in 2016. With an annual average unemployment rate of 4.7 percent projected for 2017, total nonbonus wages are projected to grow 4.3 percent for 2017, following an increase of 4.4 percent for 2016.

Average Wages and Inflation

With the estimated shifting of some bonus income from the 2016 tax year into the current year, average wages are projected to increase 2.9 percent for 2017, following an estimated 1.7 percent gain for 2016, which also saw weak finance and insurance sector bonus growth early in the year. The Budget Division projects 2.7 percent growth in the composite CPI for New York in 2017, following 1.2 percent growth for 2016. Projected 2017 inflation for New York is consistent with that for the nation.

Nonwage Income

Growth in the nonwage components of State personal income is projected to accelerate from 3.0 percent in 2016 to 5.3 percent in 2017. This increase is in large part due to an acceleration in property income growth from 2.1 percent in 2016 to 6.1 percent in 2017. Property income, one of the largest components of nonwage income at the State level, comprises interest, dividend, and rental income, with interest income being the largest subcomponent based on State income tax return data. Interest income is expected to accelerate in 2017 due to rising rates engendered by the shift in monetary policy and bond market expectations for higher inflation in 2017. Growth in dividend income, estimated to be the next largest subcomponent of State property income, is also expected to accelerate for both the State and the nation, consistent with stronger growth in equity prices and U.S. corporate profits.

Proprietors' income is expected to accelerate to 5.2 percent growth this year in New York, following growth of 4.6 percent in 2016, consistent with a strengthening national economic backdrop. The employee contribution to Social Security is expected to rise 5.0 percent in 2017, following growth of 4.6 percent in 2016. Transfer income is expected to grow 5.1 percent in 2017, following growth of 3.1 percent in 2016.

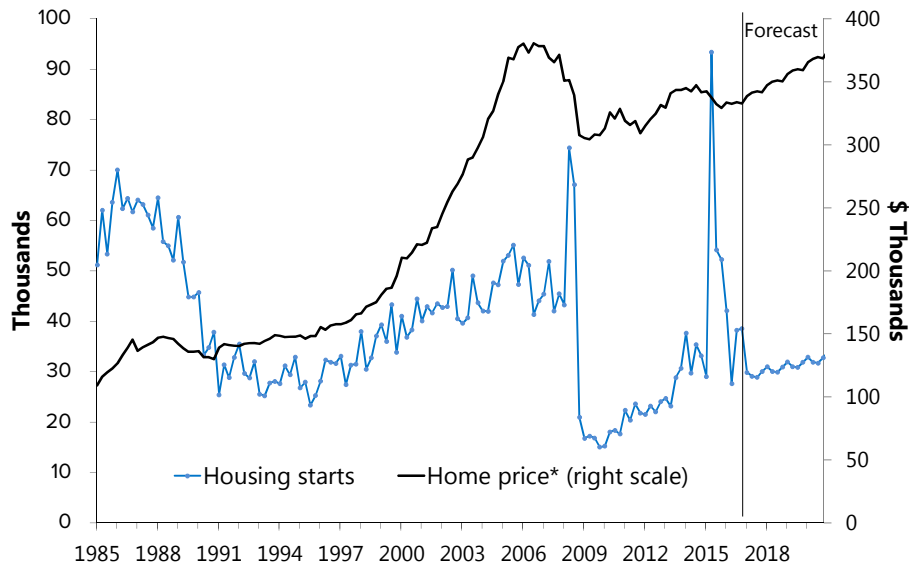
The Housing Market Outlook

New York State's housing market started to trend downward in the first half of 2016, as the volatility of the previous few years began to level out. Housing permits experienced their first decline on an annual basis since 2009, falling 54.4 percent based on the first 11 months of data, while housing starts fell 35.4 percent. The market started to rebound in the second half of 2016 though, as rising interest rates may have induced home sales if prospective buyers believe this is their last chance to borrow at historically low rates.

The greatest impact on home building in 2016 was likely caused by the suspension of the 421-a property tax exemption program for new developments in January 2016.¹⁴ Those fears first materialized in 2015, and resulted in a rush to apply for building permits in the spring and early summer months. Permits grew 367.3 percent during the second quarter of 2015 compared to the same quarter in 2014, as the Governor and State Legislature debated its fate in the face of a June 15, 2015, deadline for renewal. When the program was renewed only until January 15, 2016, the fourth quarter of 2015 saw building permits rise 93.3 percent, year over year. After the suspension, however, the expected permit drop in the first quarter of 2016 did not persist into the second and third quarters, both seeing gains of 32.0 percent and 18.6 percent respectively, compared to the previous quarter. Housing starts, which tend to follow permits with a short lag, grew 38.2 percent in 2016Q3 and a modest 0.9 percent in 2016Q4, compared to their respective previous quarters. The unusually large increase in 2015 housing starts is identifiable in Figure 41, which compares recent trends and the Budget Division forecast for both housing starts and average existing home prices for New York.

¹⁴ This is not the first time that a legal or regulatory change has had an outsized effect on construction spending. A change in New York City building codes took effect on July 1, 2008 requiring developers to add features such as sprinklers, smoke detectors, fire-resistant stairways, and on-site safety managers or coordinators for buildings larger than 10 stories. The change produced a rush to obtain building permits and start work in June of that year, and resulted in growth of 11.2 percent multi-family starts in 2008.

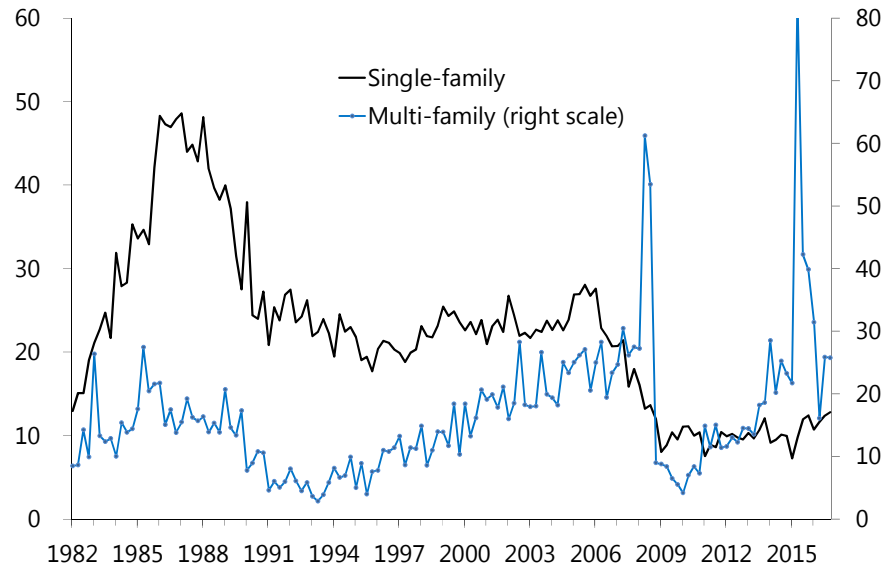
Figure 41
NYS Housing Market Outlook



*Average existing single family home price.
Source: Moody's Analytics.

It is more than likely that the surge in building permits in the fourth quarter of 2015 pulled forward construction activity that would have taken place at some point in the near future. Thus, the fourth quarter increase in permit applications was followed by a 58.6 percent decline in the first quarter of 2016. As a result, State housing starts declined 36.0 percent in 2016, and are projected to fall another 19.6 percent in 2017, following 68.4 percent growth in 2015. The weak 2016 performance stemmed from a strong decline in multifamily units, which saw a decrease of 47.1 percent starts, though multifamily units did see a small bounce in the third quarter of 2016 (see Figure 42), confirming the role which the New York City real estate market played in that increase. The near-term forecast is also consistent with the expected rise in mortgage interest rates, though that increase is projected to be gradual.

Figure 42
Recent Trends in NYS Housing Starts
Thousands of units

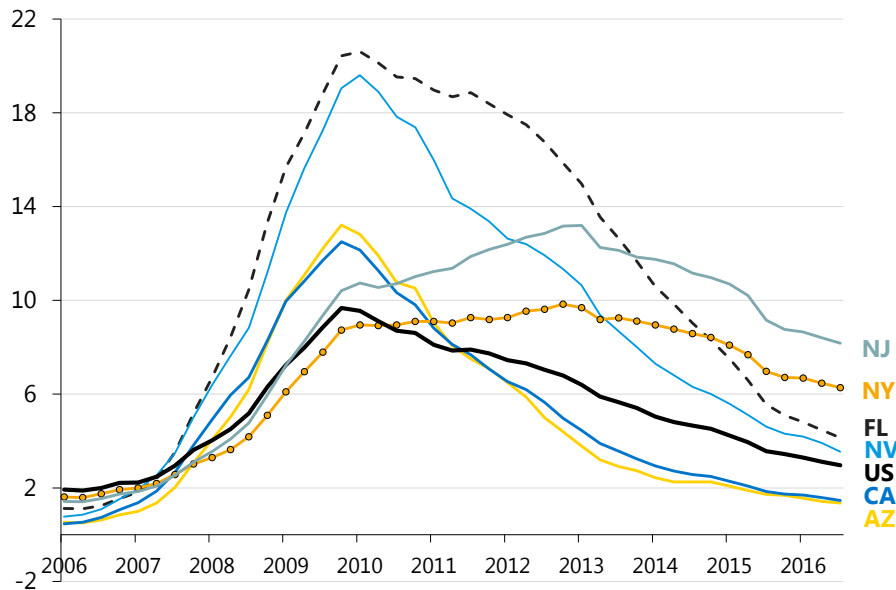


Note: Values for 2016Q4 are based on the average of the first two months.
Source: Moody's Analytics.

Prospects for the State's residential housing market also depend on the outlook for prices. New York State's average single-family home price is expected to rise 2.4 percent in 2017, following a decline of 0.6 percent in 2016. The good news is that because New York's residential housing sector experienced less of a price and construction bubble than many other states, there was less of an overhang to unwind and thus the rate at which New York mortgages were entering foreclosure has been consistently lower than the nation's since the home-price collapse in 2006. However, the State's foreclosure rate began to exceed that of the nation in 2013Q2, due largely to the impact of Superstorm Sandy. By the third quarter of 2016, the most recent period available, the State's percentage of mortgage loans entering foreclosure status is 0.4 percent of all loans serviced, slightly above the national rate of 0.3 percent.

New York's percentage of homes in a state of delinquency is also higher than nation's. Figure 43 displays the percentage of total mortgage debt outstanding that is seriously delinquent, defined as either more than 90 days past due or in foreclosure for selected states. Based on data through 2016Q3, New York continues to look worse than two of the states hit hardest by the housing market collapse, Arizona and California, as well as the nation. The buildup of homeowners in foreclosure or "pre-foreclosure" status in New York is emblematic of the long duration of the foreclosure process here and in other states commonly referred to as "judicial states," where a lender must file a lawsuit in order to initiate a foreclosure. Additional "judicial states" appearing in Figure 43 are Florida and New Jersey. This build up may be delaying the full recovery of New York's housing market. The State's average existing home price is not expected to return to its prior 2006Q3 peak until the first quarter of 2022.

Figure 43
Percent of Seriously Delinquent Mortgage Debt



Source: Moody's Analytics.

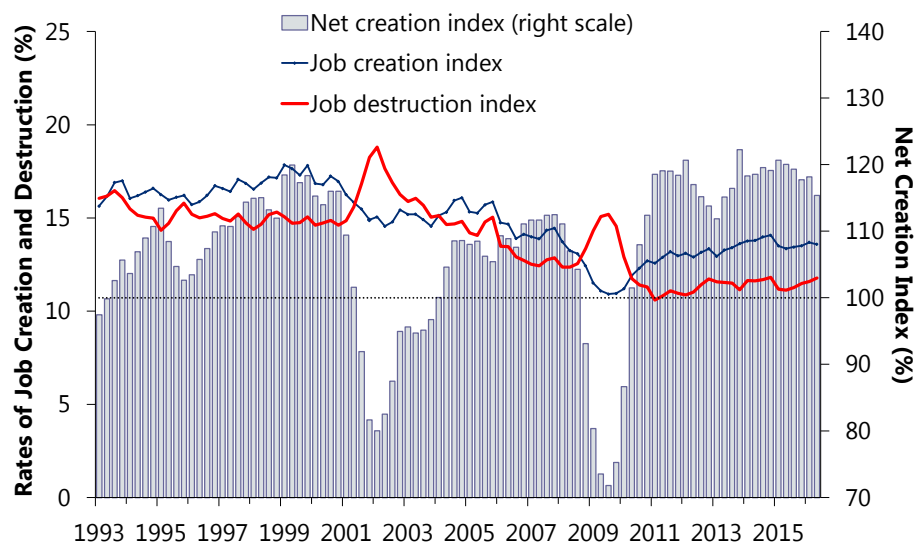
New York City's condo and co-op market is a unique niche with a global reach. The market growth in this segment had been steadily declining from the second half of 2015 through the first half of 2016, although these market gains were likely inflated, in part due to new unit sales which closed in 2016, but were contracted in the years prior. However, after gains of 8.2 percent and 2.3 percent for the first and second quarters of 2016, respectively, this market started to lose traction once again, consistent with the State's overall housing market.¹⁵ Condo and co-op purchases fell 3.7 percent in the fourth quarter of 2016 from a year ago, following an 18.4 percent decrease in the third quarter. On a broader scale, the number of purchases in the fourth quarter was only 3.8 percent above the 10-year quarterly average. The median sales price for the fourth quarter was \$1,050,000, down 8.7 percent from 2015Q4, and \$100,000 below the record of \$1,150,000 reached in the fourth quarter of 2015, as the strength of the New York City condo and co-op market had largely been driven by a falling inventory and rising sales of new units. The cooling off of the market in the final quarters of 2016 is driven by flat resale inventories and a slow market absorption rate. The absorption rate, defined as the number of months to sell all inventory at the current rate of sales, increased by 0.5 months for the overall market from 2015Q4. The co-op segment absorption rate increased by 0.5 months; the condo segment increased by 0.7 months; the new development segment increased by 2.3 months; while the luxury segment *decreased* by 1.2 months, from 2015Q4. Here, the luxury segment represents the top 10 percent of sales, where the fourth quarter of 2015 set a new average sales price record at \$9,376,803.

¹⁵ See <http://www.millersamuel.com/files/2017/01/Manhattan_4Q_2016.pdf>, viewed January 4, 2017.

New York State Labor Market Dynamics

Between 1993 and 2016, New York State's private sector labor market weathered two devastating recessions, the first (2001-03) was amplified by the September 11 terrorist attack, while the second (2008-09) originated in one of the State's critical leading sectors, the financial sector. An analysis of labor market dynamics helps to illuminate the underlying economic conditions that can signal how well the State economy will be able to recover from the next downturn (see Box 5 on page 93). Figure 44 indicates that the 2001-03 recession left a lasting impact on the State's private sector job market, leaving the gross rates of both job creation and job destruction on a downward path, signaling a secular loss of dynamism. Although some of that loss has been regained during the current expansion, the State has still not returned to the more robust conditions of the 1990s.

Figure 44
NYS Private Sector Employment Dynamics



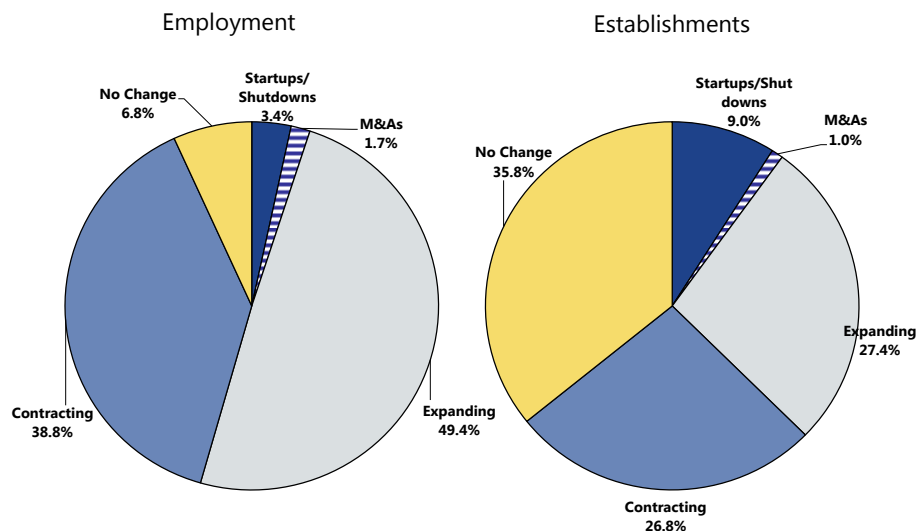
Source: NYS Department of Labor; DOB staff estimates.

During the Great Recession, the gross rate of job destruction jumped while the rate of job creation, which had already been on a downward path, began to fall more steeply. The third quarter of 2009 marked the peak in the rate of job destruction and the trough in the rate of job creation, resulting in the lowest values for the net jobs creation index since 1993. Beginning with the second quarter of 2010, the rate of job creation began to exceed the rate of job destruction, and has done so for 25 consecutive quarters. The underlying net job creation rate of 1.8 percent in the second quarter of 2016 is consistent with the Budget Division's 1.8 percent estimate for private sector job growth for all of 2016. Nevertheless, the net job creation index appears to have posted a peak in early 2015 and will likely be slowing as we enter 2017, supporting the Budget Division outlook for slower growth of 1.5 percent for 2017.

The State's Employment and Establishment Base

Figure 45 shows the composition of the State's employment and establishment base for the second quarter of 2016 by type of establishment. Startups and shutdowns accounted for 9.0 percent of the establishment base in 2016Q2. Because these firms tend to be quite small, averaging only about five employees per firm, they accounted for only 3.4 percent of the State's private sector employment base. Firms that were either acquired or absorbed by other firms accounted for 1.0 percent of the establishment base. The average size of these firms was about 20 employees, and these firms accounted for 1.7 percent of employment.

Figure 45
Composition of State's Employment and Establishment Base
2016Q2



Source: NYS Department of Labor; DOB staff estimates.

Existing firms are classified according to whether their employment levels (a) expanded, (b) contracted, or (c) experienced no change relative to the same quarter of the prior year. Existing firms represent an overwhelming share of both establishments and employment: 90.0 percent of the State's establishment base and 95.0 percent of the job base. As indicated in the right-hand panel of Figure 45, the three types of existing firms accounted for somewhat similar shares of establishments: 27.4 percent were expanding, 26.8 percent were contracting and 35.8 percent had not change. The employment shares, however, were quite different with 49.4 percent of employment in expanding firms, 38.8 percent in contracting firms and 6.8 percent in firms with no change. That the job share of expanding firms is a significantly higher than that of contracting firms is consistent with the healthy rate of net job creation for the quarter. The average size of existing firms also varies by firm type, with those firms experiencing no change in employment averaging less than three employees, expanding firms averaging 22 employees, and contracting firms averaging 18.

Box 5

ANALYZING PRIVATE SECTOR EMPLOYMENT DYNAMICS AT THE ESTABLISHMENT LEVEL

The expansion or contraction of an industry over time is usually measured by the net change or net growth in jobs. However, a look beneath the net numbers into the mechanics of job creation and destruction at the establishment level facilitates a deeper understanding of the underlying dynamics.¹ During times when State employment is growing slowly, or even falling, an examination of the underlying dynamics reveals an extremely active labor market – even in the worst of times, new firms are created and existing firms add jobs. For example, though private sector employment fell 3.3 percent in 2009, about 23 percent of the State’s business establishments created jobs. The data for this study derive from the Quarterly Census of Employment and Wages (QCEW) program.² These data include all establishments subject to Federal unemployment insurance laws and cover approximately 98 percent of all employment. For the second quarter of 2015, the most recent period for which data are available, the QCEW data covered 623,758 private sector establishments in New York State and 7,789,580 private sector employees.

Establishment-level data facilitate the investigation of questions that cannot be addressed at the aggregate level. Such questions include whether the primary source of job creation is new firm startups or existing firms that have chosen to expand, or whether net employment growth is the result of an increase in the rate of job creation or a decrease in the rate of job destruction. Two industries may exhibit the same net change in employment but one may have a high job turnover rate, resulting from high gross rates of gains and losses, while the other may have a low turnover rate. Previous studies have found that an increase in the turnover rate tends to be associated with an increase in net growth.³ Hence, the underlying dynamics may give clues as to the near-term direction of the business cycle, and an industry that suddenly starts to experience an increase in firm startups or gross job creation may turn out to be a leading industry in the economy’s next growth phase. Moreover, one can also determine whether new jobs are being created in relatively high-wage or low-wage industries.

Because QCEW data are not seasonally adjusted, comparisons over time should be restricted to the same quarter of various years. We therefore analyze job growth relative to the same quarter of the previous year. Comparability across time also requires normalizing by a common base. Because the jobs that were eliminated between the two quarters are no longer in the 2016 job count, we follow BLS and define the base as the average of the two quarters.

The gross number of jobs created between the second quarter of 2015 and the second quarter of 2016 is constructed by adding together the number of jobs created by firm startups (firms which existed during the second quarter of 2016 but did not exist four quarters prior), expanding firms that existed in both quarters, and firms created through mergers and acquisitions. Between the second quarter of 2015 and the second quarter of 2016, a total of 1,048,492 jobs were created from these three sources. Performing this calculation for the second quarter of 2016 produces the following:

$$\text{Gross rate of job gain} = \frac{\text{Startup gain} + \text{Existing firm gain} + \text{M\&A gain}}{\text{Base}} = \frac{1,048,492}{7,719,731} = 13.6\%$$

(continued on next page)

¹ For a similar analysis for the U.S., see U.S. Bureau of Labor Statistics (BLS), “Business Employment Dynamics: First Quarter 2014,” <<http://www.bls.gov/news.release/pdf/cewbd.pdf>>.

² For a detailed description of DOB’s use of QCEW data, see Box 2 on page 84.

³ See R. Jason Faberman, “Job Flows and Labor Dynamics in the U.S. Rust Belt.” Monthly Labor Review, September 2002, Vol. 125, No. 9, pages 3-10.

(continued from previous page)

This result indicates that the State's gross rate of job creation for the second quarter of 2016 is 13.6 percent. An analysis of job creation at the establishment level also confirms the conventional wisdom that small firms are the State economy's primary growth engine. For example, of the more than one million gross number of jobs created during the second quarter of 2016, 53.4 percent were created by firms with less than 50 employees. Another 24.0 percent were created by medium sized firms of between 50 and 250 workers, and the remaining 22.7 percent by large firms with workforces exceeding 250.

We similarly construct a gross rate of job destruction by adding together employment at firms that existed in the second quarter of 2015 but not in the second quarter of 2016, jobs lost from contracting firms that existed in both quarters, and jobs lost due to a merger or acquisition. We then divide by the State's job base (as defined above), which for the second quarter of 2016 yields:

$$\text{Gross rate of job loss} = \frac{\text{Startup loss} + \text{Existing firm loss} + \text{M\&A loss}}{\text{Base}} = \frac{908,788}{7,719,731} = 11.8\%$$

This result states that the gross rate at which jobs were lost between the two quarters is 10.9 percent. Thus, for the second quarter of 2015, the gross rate of job creation exceeded the gross rate of job destruction. A net index of job creation is constructed by dividing the gross rate of job gains by the gross rate of job losses. For the second quarter of 2015, this calculation yields:

$$\text{Net index of job creation} = \frac{\text{Gross rate of job gain}}{\text{Gross rate of job loss}} = \frac{13.6\%}{11.8\%} = 115.4\%$$

A net index value of exactly 100 percent implies that the gross number of jobs created is entirely offset by the number of jobs destroyed; a value above 100 percent, as we see above, indicates that employment is growing; a value below 100 percent indicates a net job loss, implying the presence of a "job gap."

As illustrated in the table below, two industries can have similar values for the net index but have very different underlying dynamics. For example, for the second quarter of 2016, the Construction and Real Estate sector and the Education, Health and Social Assistance sector had similar net indices of job creation of 124.7 percent and 133.6 percent, respectively. However, the Education, Health and Social Assistance sector has a much higher turnover rate than the Finance and Insurance sector. Understanding these differences has implications for fine-tuning the Budget Division employment forecast.

Employment Dynamics Comparison: 2016Q2

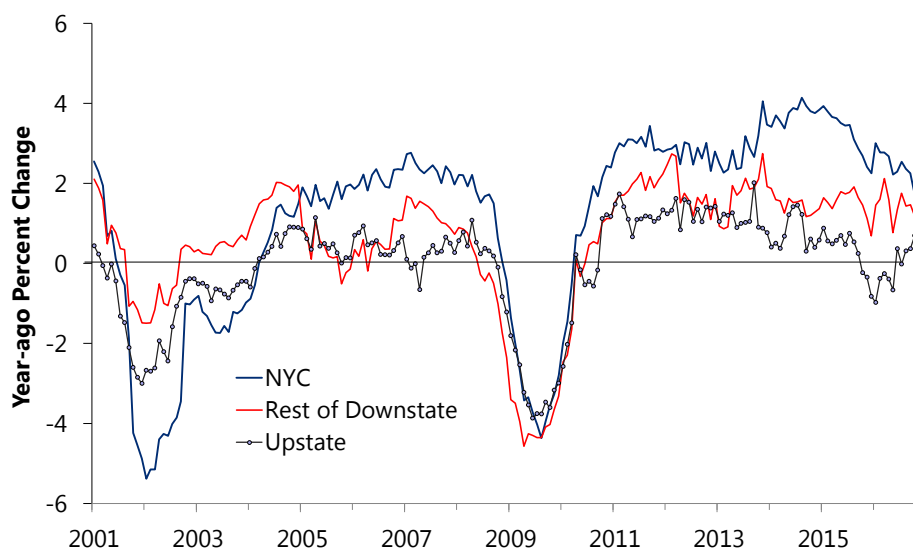
Sector (NAICS code)	Gross rate of job creation	Gross rate of job destruction	Net index of job creation
Construction & Real Estate (23 & 53)	17.8%	14.2%	124.7%
Education, Health & Social Assistance (61 & 62)	11.5%	8.6%	133.6%

Regional Job Growth Disparities

Figure 46 indicates that since the start of the last State recovery in late 2003, employment growth has been quite variable across the State's regions. Between October 2003 and October 2008 the State's private sector added 338,400 jobs, a 4.8 percent increase. Fully 74.7 percent of these jobs were added in New York City, which saw a private sector increase of 252,700, or 8.4 percent. This strong growth is no surprise given the robust performance of the City's services industries, because their market is not just national but global. Employment growth in the downstate region excluding New York City was weaker, at 2.6 percent, a gain of 38,500 jobs. However, growth in the upstate region was still weaker, with the private sector adding only about 47,200 jobs during the period, for growth of 1.9 percent.

By the middle of 2008, the national recession and the housing market contraction began to engulf the New York State economy well beyond the financial sector. As shown in Figure 46, the downstate region outside of New York City was the first to be affected. But the New York City labor market took a big hit when the credit crisis intensified with the fall of Lehman Brothers in September 2008. Most of the job losses in the financial and business services sectors were in the City. In addition, the synchronized global economic recession put significant downward pressure on the City's tourism-related establishments, including airlines, hotels, and restaurants, resulting in severe job losses.

Figure 46
NYS Private Sector Employment by Region



Source: NYS Department of Labor.

Meanwhile, the upstate economy's continued relative dependence on manufacturing, in particular the auto, machinery and equipment industries, meant that the weakening demand for cars and light trucks, and investment goods more generally, resulted in extensive layoffs, especially in the

western and southern parts of the State. But as Figure 46 also shows, job losses turned to growth in 2010, starting in New York City and spreading to the remainder of the State later in the year, consistent with the beginning of recovery in January 2010. Job growth in the rest of downstate began to deteriorate close to the beginning of 2011, presumably negatively affected by the many setbacks that plagued the economy that year, particularly in the finance sector. By the end of the year, the region was experiencing either slow or no growth on a year-ago basis. Those same setbacks caused job growth in New York City to decelerate by the middle of the year. However, jobs in Upstate are less concentrated in the financial sectors and thus kept growing in 2011. That trend reversed itself in 2012 with the intensification of the global slowdown. With Upstate and Rest of Downstate employment growth decelerating, only the New York City's labor market appeared to be strengthening over the course of 2012. However, both New York City and the Rest of Downstate experienced job losses in November in the wake of Superstorm Sandy, losses which turned out to be temporary, as the job market in these areas started to pick up again in 2013. However, the slowdown in net job growth was becoming evident in New York City by early 2015. Growth in the Rest of Downstate has been relatively stable, while Upstate has shown consistent improvement since early 2016.

Figure 47
Regional Employment Growth: 2015H1-2016H1

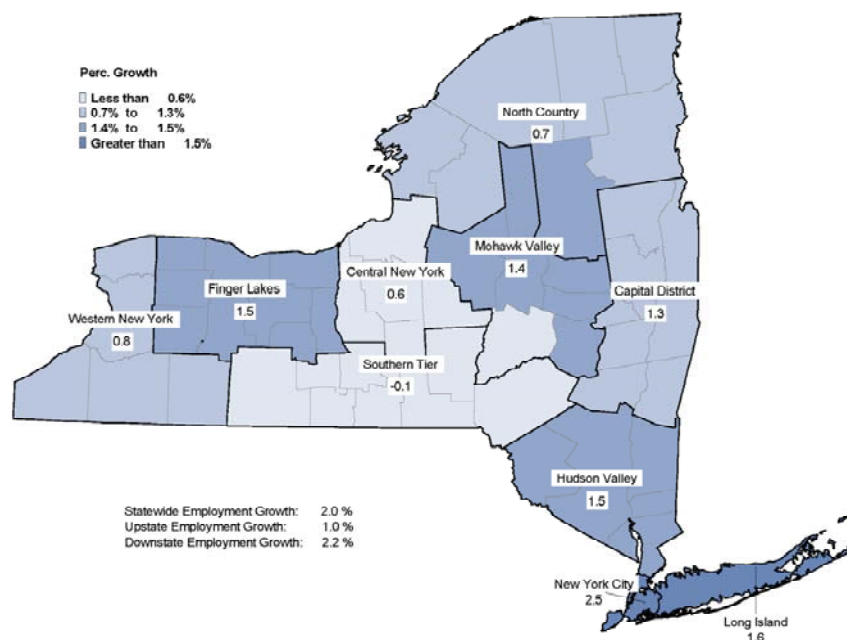


Figure 47 compares the relative performance of New York's 10 regions between the first half of 2015 and the first half of 2016, the most recent period for which the most accurate data – Quarterly Census of Employment and Wages (QCEW) data – are available. These data indicate that job growth over the period was broad-based. Private-sector employment for the State as a whole grew 2.0 percent, with the downstate regions showing faster growth of 2.2 percent. Meanwhile, the upstate region grew 1.0 percent.

New York City

New York City's private sector labor market has outperformed not only the remainder of the State, but also many other states. The New York City labor market is the most dynamic in the State; total private sector employment in the City has grown more than 10 percent since 2008. Education, healthcare and social assistance; professional and business services; leisure, hospitality and other services; retail trade; and finance and insurance are the top five industries in the City, employing more than 70 percent of the private workforce. Although employment in the finance and insurance sector has yet to reach its prerecession peak, employment in the other four sectors exceeds that level, with the leisure, hospitality and other services sector growing more than 30 percent since 2008, the private education, health care and social assistance growing almost 20 percent, and the professional and business services and retail trade sectors each growing 15 percent. In 2015, the most recent year for which detailed QCEW data exist, the City experienced its strongest growth in construction (8.6 percent), transportation and warehousing (5.5 percent), professional and business services (4.9 percent), and leisure and hospitality (4.5 percent).

Long Island

The 2008-09 State recession was long and deep for Long Island, but by the fourth quarter of 2011, regional job growth was approaching a healthy 2 percent. Throughout the expansion, the region's rate of job creation has fairly consistently exceeded the rate of job destruction by one percentage point, sometimes more than two percentage points.

Total private sector employment in Long Island has grown more than 4 percent compared with 2008. The education, healthcare and social assistance, leisure, hospitality and other services, professional and business services, and retail trade sectors are the top four industries in Long Island, employing more than 60 percent of the labor force. Since 2008, the leisure, hospitality and other services sector has grown almost 17%, the education, healthcare and social assistance sector 14 percent, and the professional service sector 4 percent after the recession, more than compensating for the job loss in the information, mining and manufacturing, and finance and insurance sectors. In 2015, Long Island experienced its strongest growth in construction (4.4 percent); private education, health care and social assistance (3.2 percent); and transportation and warehousing (2.1 percent).

Hudson Valley

In the Hudson Valley, the national recession dragged the net jobs creation index to its lowest point since 1993, but the labor market has been improving gradually since the third quarter of 2009. Starting with the third quarter of 2010, the rate of job creation has exceeded the rate of job destruction for 24 consecutive quarters, and has done so by more than a percentage point for most of the period.

The education, healthcare and social assistance; leisure, hospitality and other services; retail trade; and professional and business services sectors are the top four industries in the area, employing more than 70 percent of the private workforce. The leisure, hospitality and other services sector has grown more than 15 percent and the private education, healthcare and social assistance sector

has grown more than 10 percent since 2008. Although employment growth in the information, manufacturing, and finance and insurance sectors still lags, overall regional job gains far outpace the losses in these industries. In 2015, the Hudson Valley experienced its strongest growth in construction (8.0 percent), transportation and warehousing (5.0 percent), and real estate and leasing (4.6 percent).

Capital Region

The Capital Region has experienced steady growth since the end of the recession, with private sector job growth climbing above 1 percent by 2012. Throughout the expansion, the rate of job creation has consistently exceeded the rate of job destruction by at least one percentage point, with private sector employment in the Capital Region more than recovering its pre-recession level. Education, healthcare and social assistance; leisure, hospitality and other services; retail trade; and professional and business services sectors are the top four private sector industries in the area, employing almost 70 percent of the labor force. The leisure, hospitality and other services sector, and private education, healthcare and social assistance sector have grown 10 percent and 9 percent, respectively, since 2008. In 2015, the Capital Region experienced its strongest growth in construction (8.0 percent), transportation and warehousing (5.0 percent), and real estate and leasing (4.6 percent).

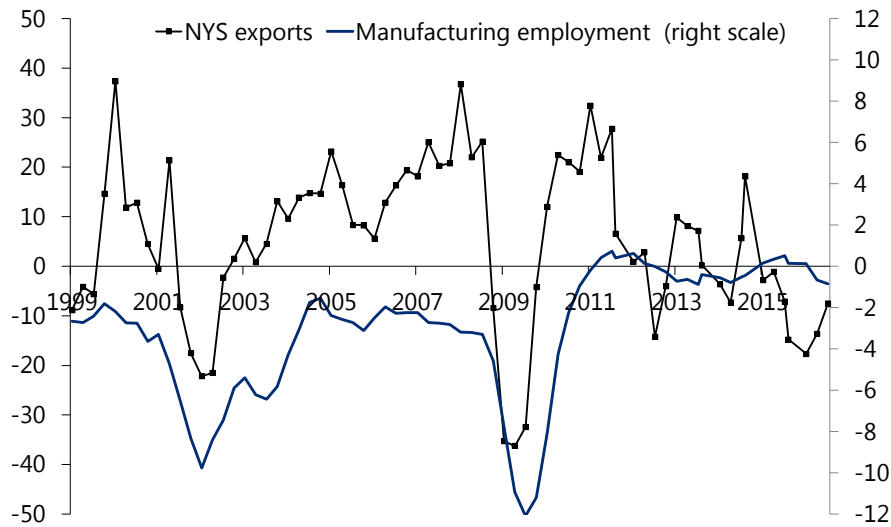
Mohawk Valley

The Mohawk Valley labor market has struggled since the Great Recession, as have many areas nationwide for which manufacturing is a critical component of the region's economic base, but improvement has been steady since 2011. The education, healthcare and social assistance; leisure, hospitality and other services; retail trade, and manufacturing sectors are the top four industries in the region, employing more than 70 percent of the labor force. Education, healthcare and social assistance has grown 7 percent compared with 2008, while leisure, hospitality and other services has grown 5 percent over the same period. In 2015, the Mohawk Valley experienced its strongest growth in private education, health care and social assistance (2.1 percent), professional and business services (1.8 percent), and manufacturing (0.8 percent).

The experience of the Mohawk Valley region is illustrative of how critical the manufacturing sector is to the entire upstate economy. New York State has been losing manufacturing jobs for nearly 30 years, and now employs fewer workers in manufacturing than in either the finance and insurance sector or the professional, scientific, and technical services sector. Nevertheless, the manufacturing sector still accounts for a significant share of upstate private employment.

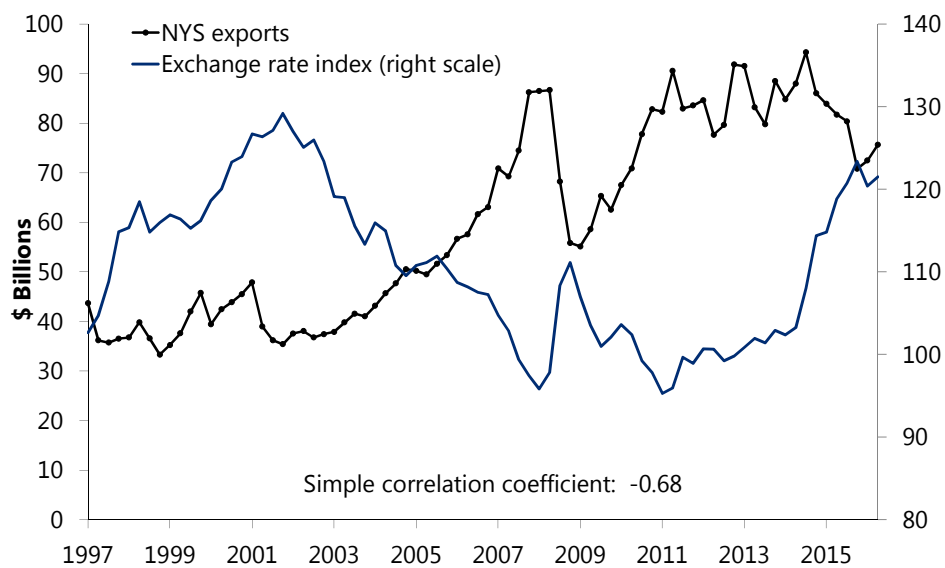
New York's comparative advantage has shifted away from manufacturing jobs toward jobs in services. Competitive pressures arising from increased globalization have resulted in the decline of State manufacturing employment since the mid-1970s, with the rate of job loss accelerating during recessions. However, the declines have slowed in the past few years, and manufacturing has actually experienced a small net employment gains during the first two quarters of 2015. However, these gains dissipated in 2016 as both the national and global economies weakened in late 2015 and early 2016. Figure 48 illustrates how closely correlated the demand for State exports is with manufacturing employment.

Figure 48
NY State Exports and Manufacturing Employment
Year-ago percent change



Note: The two series have a simple correlation coefficient of 0.50.
Source: Moody's Analytics.

Figure 49
U.S. Dollar Exchange Rate and NYS Commodity Exports



Source: Moody's Analytics

Figure 49 indicates that the demand for State exports, and therefore manufacturing workers, is sensitive to the value of the U.S. dollar. The recent strengthening of the dollar clouds the picture for both the national and the State manufacturing sectors.

North Country

The North Country has also struggled since the Great Recession in light of the importance manufacturing to the regional economy, but the region has seen substantial improvement since 2011. Indeed, education, health care and social assistance, and the leisure and hospitality sectors now all exceed their pre-recession peaks. Moreover, a recent uptick in both the gross rates of job creation and destruction may be signaling accelerating growth going forward. Private education, health care and social assistance; retail trade; leisure and hospitality; and manufacturing represent the region's four largest industrial sectors, comprising 74 percent of the regional labor market. The region's strongest growing sectors in 2015 were finance and insurance (3.8 percent), construction (2.9 percent), and private education, health care and social assistance (2.0 percent). The region's high-tech industries registered sizeable employment gains in 2015, largely from high-tech manufacturing sectors.

Central New York

Central New York was hard hit during the national recession and has also been especially impacted by the downward trend in manufacturing. The manufacturing sector's share of the private workforce fell from almost 18 percent in 1993 to 11 percent currently, with the loss of more than 19,000 jobs. But regional job growth has been trending upward since the fourth quarter of 2009. The region's four largest industrial sectors are private education, health care and social assistance; leisure and hospitality; retail trade; and manufacturing, which together comprise 64 percent of the regional economy. The region's strongest growing sectors in 2015 were real estate and leasing (2.7 percent), transportation and warehousing (2.9 percent), and leisure and hospitality (1.3 percent).

Southern Tier

Manufacturing is also a leading industry in the Southern Tier and the entire regional economy has been affected by the heavy job losses within this sector going back to the post-Cold War downsizing of the Federal defense budget starting in the early 1990s. But regional job growth has been trending upward since the fourth quarter of 2009. The region's four largest industrial sectors are private education, health care and social assistance; manufacturing; leisure and hospitality; and retail trade, which together comprise 72 percent of the regional economy. Agriculture is also an important part of the regional economy. The region's strongest growing sectors in 2015 were private education, health care and social assistance (2.5 percent), real estate and leasing (1.7 percent), and leisure and hospitality (0.4 percent).

Western New York

Though Western New York was hard hit during the most recent recession, the labor market has been improving gradually since 2010, with the rate of job creation exceeding the rate of job destruction for 25 consecutive quarters. The region's recovery has been slow but steady, with total private sector employment in Western New York recovering its pre-recession level by 2015. Education, healthcare and social assistance; leisure and hospitality; manufacturing; and retail trade are the top four industries in the area, employing 65 percent of the private sector labor force. Thus far during the expansion, the leisure, hospitality and other services sector has grown more than 11 percent since 2008, while education, healthcare and social assistance has grown 5 percent. Although Western New York has lost more than 9,000 jobs in the manufacturing sector since the start of the recession, the job gains in the remaining industries have more than compensated for the losses in the manufacturing sector. The region's strongest growing sectors in 2015 were finance and insurance (4.4 percent), construction (4.0 percent), and transportation and warehousing (3.0 percent). The region's high-tech sector has generated healthy employment gains for the past two years.

Finger Lakes

The Finger Lakes private regional job market also took a big hit during the Great Recession, but has been improving gradually since then, with the rate of job creation exceeding the rate of job destruction during the 12 consecutive quarters since the second half of 2013. During that period, private sector employment in the Finger Lakes has been able to recover to its pre-recession level. Education, healthcare and social assistance; leisure and hospitality; manufacturing; and retail trade are the top four industries in the area, employing 66 percent of the private sector labor force. The leisure, hospitality and other services sector and the education, healthcare and social assistance sector have each grown about 9 percent during the expansion. The growth in these expanding industries has more than compensated for the job losses in the contracting industries, which includes the manufacturing sector. The region's strongest growing sectors in 2015 were management and administrative services (3.4 percent), construction (1.4 percent), and real estate and leasing (1.4 percent). The region's high-tech sector has generated healthy employment gains for the past two years.

Risks to the New York Forecast

All of the risks to the U.S. forecast – including the uncertainty surrounding the policies of the incoming administration – apply to the State forecast as well, although as the nation’s financial capital, developments that have an impact on credit markets, such as rising (or falling) interest rates and equity market gyrations, pose a particularly large degree of risk for New York. The ongoing realignment of energy prices has created yet another source of equity market volatility, as traders reassess the health of the global economy and the myriad additional factors that influence the demand and supply of energy. All of these sources of volatility can be quite destabilizing to the financial sector and ultimately bonuses and State wages overall. Although recent interest rate increases are expected to bolster finance sector profitability, any development that induces risk-averse investors to pile into U.S. Treasury securities can potentially force long-term interest rates downward, dashing those expectations.

Financial market risks are compounded by the uncertainty surrounding the implementation of financial reform and how the law itself might be altered under the new administration. Dodd-Frank has already altered the composition of bonus packages in favor of stock grants with long-term payouts and claw-back provisions, thus affecting the forecast for taxable wages. As financial regulations evolve, it is becoming increasingly uncertain as to whether finance sector revenue generating activities such as trading, lending, and underwriting will ever return to pre-crisis levels, resulting in additional risk to the forecasts for bonuses and capital gains realizations.

There are, however, some upside risks to DOB’s New York economic outlook as well. A stronger national or global economy than projected could increase the demand for New York goods and services, resulting in stronger job growth than projected. Such an outcome could lead to stronger levels of business activity and income growth than anticipated. If corporate earnings surprise to the upside, stock prices could increase their upward momentum earlier and with more vigor, stimulating additional financial market activity and producing higher wage and bonus growth than currently projected. Of course, a stronger national economy could force the Federal Reserve to raise interest rates more rapidly than projected, which could negatively affect the State economy and the financial sector in particular. The Federal Reserve is in uncharted waters in its exit from an extraordinary period in the history of monetary policy. The risks associated with the execution of that plan are particularly acute for New York.

Table 8
NEW YORK STATE PRIVATE EMPLOYMENT BY INDUSTRY

INDUSTRY	Employment in Thousands					Percent Change				
	2011	2012	2013	2014	2015*	2011	2012	2013	2014	2015*
Mining and Manufacturing	461.5	461.6	458.7	454.8	454.5	0.2	0.0	(0.6)	(0.8)	0.3
Construction and Real Estate	483.6	491.1	507.6	526.2	527.7	0.4	1.6	3.4	3.7	4.6
Trade, Trans., and Warehousing	1,438.9	1,464.0	1,480.8	1,504.2	1,503.1	1.8	1.7	1.1	1.6	1.4
Information	254.5	258.2	259.6	263.5	262.1	1.3	1.5	0.5	1.5	0.0
Finance and Insurance	497.4	496.1	492.8	499.0	502.9	2.1	(0.3)	(0.7)	1.2	1.6
Business and Professional Svs.	1,131.0	1,166.1	1,200.1	1,224.0	1,239.2	3.2	3.1	2.9	2.0	2.9
Education and Health Care	1,604.2	1,628.5	1,656.1	1,692.5	1,729.0	1.5	1.5	1.7	2.2	2.6
Leisure, Hospitality, and Other Svs.	1,092.0	1,134.4	1,177.4	1,215.7	1,220.9	3.7	3.9	3.8	3.3	2.7
Other **	86.2	81.8	84.8	101.5	105.3	2.4	(5.1)	3.7	19.6	10.2
Statewide	7,049.3	7,181.8	7,318.0	7,481.3	7,544.8	2.1	1.9	1.9	2.2	2.4

* Levels for 2015 are based on the first two quarters of the year; 2015 growth rates are relative to the same period in 2014.

** Includes agriculture, utilities, and unclassified firms.

Table 9
NEW YORK STATE PRIVATE EMPLOYMENT BY REGION

REGION	Employment in Thousands					Percent Change				
	2011	2012	2013	2014	2015*	2011	2012	2013	2014	2015*
New York City	3,130.4	3,217.0	3,307.7	3,433.5	3,505.5	2.9	2.8	2.8	3.8	3.5
Long Island	1,011.5	1,026.9	1,047.9	1,062.2	1,061.3	1.6	1.5	2.0	1.4	1.5
Hudson Valley	709.8	716.4	724.4	736.4	739.4	1.7	0.9	1.1	1.7	2.2
Capital District	380.1	387.2	390.9	395.7	396.6	1.4	1.9	1.0	1.2	2.0
Mohawk Valley	126.2	126.3	125.9	125.7	124.1	(0.4)	0.1	(0.3)	(0.2)	0.4
North Country	104.0	104.2	104.5	104.7	102.6	(0.6)	0.2	0.3	0.2	0.3
Central New York	274.9	275.9	276.4	277.9	275.3	0.9	0.4	0.2	0.5	0.3
Southern Tier	228.7	230.1	230.6	228.7	226.4	0.6	0.6	0.2	(0.8)	0.1
Western New York	504.6	508.5	511.3	515.6	512.6	1.2	0.8	0.6	0.8	0.7
Finger Lakes	449.6	453.2	454.1	457.4	454.8	1.5	0.8	0.2	0.7	0.8
Unclassified	129.5	136.0	144.3	143.5	146.1	5.2	5.0	6.0	(0.5)	4.7

* Levels for 2015 are based on the first two quarters of the year; 2015 growth rates are relative to the same period in 2014.

Table 10
REGIONAL EMPLOYMENT SHARES BY INDUSTRY

REGION	Mining/ Manuf.	Constr. & Real Estate	Trade, Trans. & Wareh.	Finance and Insurance	Bus. & Prof. Svs.	Educ. & Health Care	Leisure, Hosp. & Other Svs.	Other
New York City	2.2	7.2	17.0	4.9	9.2	18.7	23.2	16.5
Long Island	6.6	8.1	24.1	1.9	5.0	15.2	21.9	15.9
Mid Hudson	6.1	8.4	23.2	2.1	3.8	13.4	24.2	17.0
Capital Region	8.4	6.9	21.4	2.3	5.4	14.5	23.1	16.8
Mohawk Valley	13.2	4.2	24.5	1.9	5.5	7.7	26.7	15.2
North Country	10.3	6.2	26.0	1.7	2.1	6.9	24.4	19.2
Central New York	11.0	6.1	23.9	1.6	4.4	12.7	21.3	16.7
Southern Tier	15.7	4.8	20.1	1.8	3.5	10.3	26.4	15.9
Western New York	13.1	5.7	21.8	1.6	5.2	14.3	19.7	17.5
Finger Lakes	14.4	5.9	19.1	2.0	3.3	14.5	23.6	15.0
Statewide	6.0	7.1	20.0	3.5	6.6	16.4	22.7	16.3

Note: Shares are based on the period from 2014Q3 through 2015Q2.

Table 11

REGIONAL EMPLOYMENT TRENDS: 2011-2015

Region	Employment (000's)					Percent Change				
	2011	2012	2013	2014	2015*	2011	2012	2013	2014	2015*
Manufacturing and Mining										
New York City	74.8	76.0	75.9	75.7	76.8	(1.9)	1.5	(0.1)	(0.2)	1.9
Long Island	72.7	73.4	73.4	71.3	70.7	(0.1)	1.1	(0.1)	(2.8)	(1.1)
Hudson Valley	48.7	47.9	47.4	45.6	45.3	(2.1)	(1.6)	(1.0)	(3.9)	(0.8)
Capital District	30.2	31.5	32.6	32.8	33.6	4.4	4.3	3.4	0.7	3.6
Mohawk Valley	16.5	16.5	16.3	16.6	16.5	(1.3)	0.3	(1.1)	1.4	0.1
North Country	10.9	10.8	10.9	10.9	10.8	(3.7)	(1.0)	0.8	(0.6)	(0.3)
Central New York	32.3	30.9	30.4	30.4	30.4	(0.2)	(4.2)	(1.8)	0.3	0.8
Southern Tier	38.1	37.6	36.8	36.1	35.7	0.5	(1.3)	(2.3)	(1.9)	(0.8)
Western New York	67.7	67.7	67.1	68.1	67.3	2.8	0.1	(1.0)	1.5	(0.9)
Finger Lakes	68.5	68.0	66.5	66.1	66.2	1.2	(0.7)	(2.2)	(0.6)	0.7
Unclassified	1.1	1.1	1.4	1.2	1.2	21.3	5.6	26.4	(14.7)	2.2
Statewide	461.5	461.6	458.7	454.8	454.5	0.2	0.0	(0.6)	(0.8)	0.3
Construction and Real Estate										
New York City	224.3	228.6	236.8	246.4	252.1	(0.4)	1.9	3.6	4.1	4.8
Long Island	74.4	76.1	81.6	85.5	84.7	(0.6)	2.3	7.2	4.7	3.8
Hudson Valley	54.5	53.9	56.3	59.9	61.3	1.7	(1.0)	4.5	6.4	7.8
Capital District	24.4	24.8	25.3	26.4	26.7	0.9	1.9	1.7	4.6	7.9
Mohawk Valley	5.5	5.5	5.6	5.4	4.8	(2.4)	(0.9)	1.6	(4.0)	(1.2)
North Country	6.9	6.8	6.7	6.5	5.9	(5.0)	(1.6)	(2.0)	(3.6)	0.9
Central New York	16.6	17.2	17.2	16.9	16.0	(1.6)	3.8	0.0	(1.9)	0.7
Southern Tier	11.4	11.5	11.2	11.1	10.3	1.8	0.8	(2.0)	(1.1)	(2.7)
Western New York	28.4	28.1	28.1	29.2	27.8	2.6	(1.0)	(0.1)	4.1	1.8
Finger Lakes	25.4	26.3	26.6	27.1	25.8	0.9	3.7	1.2	1.7	1.2
Unclassified	11.8	12.2	12.1	11.8	12.3	16.5	3.3	(0.3)	(3.1)	16.7
Statewide	483.6	491.1	507.6	526.2	527.7	0.4	1.6	3.4	3.7	4.6
Trade, Transportation, and Warehousing										
New York City	544.1	558.7	572.3	587.0	589.8	2.8	2.7	2.4	2.6	2.1
Long Island	245.8	249.1	252.6	256.9	256.2	0.6	1.4	1.4	1.7	1.1
Hudson Valley	165.9	168.1	169.1	171.9	171.6	2.3	1.3	0.6	1.6	1.2
Capital District	82.8	84.0	84.0	85.2	84.1	0.8	1.5	0.1	1.4	0.5
Mohawk Valley	31.3	31.3	31.2	31.0	30.4	(0.4)	0.1	(0.5)	(0.6)	(0.9)
North Country	27.3	27.1	27.1	27.3	26.7	(1.5)	(0.8)	0.0	0.7	(0.3)
Central New York	64.9	66.0	65.9	66.1	65.8	1.4	1.7	(0.1)	0.3	1.1
Southern Tier	46.3	47.0	46.6	45.9	45.5	1.7	1.5	(0.9)	(1.4)	0.1
Western New York	109.9	111.4	110.6	112.5	112.0	1.2	1.4	(0.7)	1.7	0.8
Finger Lakes	88.9	89.2	87.7	87.7	86.9	0.7	0.3	(1.7)	0.0	0.2
Unclassified	31.8	32.1	33.8	32.8	34.1	4.9	0.8	5.3	(3.0)	6.1
Statewide	1,438.9	1,464.0	1,480.8	1,504.2	1,503.1	1.8	1.7	1.1	1.6	1.4
Information										
New York City	157.3	161.4	163.6	170.9	173.3	5.0	2.7	1.3	4.5	2.3
Long Island	23.4	23.1	22.8	21.1	19.8	(2.6)	(1.2)	(1.2)	(7.5)	(7.7)
Hudson Valley	17.7	17.8	16.9	15.7	15.5	(4.3)	0.7	(4.9)	(7.0)	(2.6)
Capital District	9.8	9.6	9.4	9.4	9.1	(2.0)	(1.9)	(2.0)	0.4	(5.7)
Mohawk Valley	2.6	2.5	2.3	2.3	2.3	(8.5)	(5.8)	(8.0)	3.4	1.6
North Country	1.8	1.8	1.8	1.8	1.7	(1.8)	(2.0)	(0.4)	(0.0)	(2.2)
Central New York	5.1	4.9	4.8	4.7	4.5	(1.8)	(3.8)	(1.8)	(1.9)	(4.1)
Southern Tier	3.9	3.9	4.1	4.4	4.1	(0.6)	(0.1)	5.4	7.6	(10.2)
Western New York	8.4	8.4	8.2	8.3	7.9	(1.1)	0.0	(2.5)	0.7	(4.5)
Finger Lakes	9.2	8.8	8.6	8.9	9.0	(3.0)	(4.2)	(1.5)	2.8	3.2
Unclassified	15.4	16.1	17.0	15.9	15.0	(11.0)	4.2	6.2	(6.9)	(3.3)
Statewide	254.5	258.2	259.6	263.5	262.1	1.3	1.5	0.5	1.5	0.0

(Cont'd on next page)

REGIONAL EMPLOYMENT TRENDS: 2011-2015 (cont'd)

Region	Employment (000's)					Percent Change				
	2011	2012	2013	2014	2015*	2011	2012	2013	2014	2015*
Finance and Insurance										
New York City	315.7	313.4	310.2	318.0	321.3	3.2	(0.7)	(1.0)	2.5	2.2
Long Island	52.2	52.5	52.8	53.0	53.0	0.1	0.6	0.5	0.5	0.4
Hudson Valley	30.0	29.4	29.2	28.9	28.4	1.0	(1.9)	(0.5)	(1.3)	(1.9)
Capital District	21.4	21.5	21.5	21.5	21.6	0.3	0.8	0.0	(0.3)	0.9
Mohawk Valley	7.1	7.0	7.0	7.0	6.9	0.8	(1.8)	0.5	(0.9)	(1.9)
North Country	2.5	2.5	2.3	2.2	2.3	0.0	(1.0)	(8.0)	(2.9)	3.2
Central New York	13.6	13.3	12.8	12.5	12.3	0.6	(1.9)	(4.1)	(2.6)	(1.5)
Southern Tier	8.7	8.5	8.2	8.0	7.9	0.1	(2.6)	(2.5)	(2.9)	(1.8)
Western New York	26.0	26.5	26.3	26.5	27.3	1.7	1.6	(0.5)	0.6	3.8
Finger Lakes	14.9	15.1	15.2	15.0	15.4	2.4	1.6	0.4	(1.5)	2.6
Unclassified	5.3	6.5	7.2	6.5	6.7	(14.9)	21.5	11.0	(9.0)	3.1
Statewide	497.4	496.1	492.8	499.0	502.9	2.1	(0.3)	(0.7)	1.2	1.6
Professional and Business Services										
New York City	573.1	593.9	615.3	637.9	656.3	3.5	3.6	3.6	3.7	4.6
Long Island	151.7	156.6	160.5	161.5	160.5	3.4	3.2	2.5	0.6	1.3
Hudson Valley	94.5	97.0	98.7	99.4	98.6	2.9	2.7	1.7	0.7	1.1
Capital District	55.6	56.9	56.9	57.3	58.1	1.2	2.3	0.1	0.5	2.8
Mohawk Valley	9.9	10.2	9.9	9.6	9.6	0.5	3.0	(2.9)	(2.9)	0.4
North Country	7.0	7.0	7.2	7.4	6.9	(0.9)	0.6	2.6	2.0	(4.9)
Central New York	35.2	35.0	35.1	35.5	34.5	1.3	(0.6)	0.4	1.1	(1.6)
Southern Tier	21.9	22.4	23.4	23.6	23.1	1.1	2.1	4.4	1.1	(0.3)
Western New York	74.3	74.9	76.0	73.9	73.0	0.4	0.8	1.5	(2.8)	0.1
Finger Lakes	63.0	65.4	66.3	66.5	66.6	3.5	3.8	1.3	0.3	0.9
Unclassified	44.6	46.7	50.6	51.4	52.2	10.3	4.7	8.4	1.5	4.5
Statewide	1,131.0	1,166.1	1,200.1	1,224.0	1,239.2	3.2	3.1	2.9	2.0	2.9
Education, Health Care, and Social Assistance										
New York City	727.3	746.2	768.3	797.5	818.6	1.8	2.6	3.0	3.8	3.2
Long Island	226.7	226.8	228.6	231.1	236.7	2.1	0.1	0.8	1.1	3.0
Hudson Valley	173.0	173.7	174.9	177.2	182.5	1.3	0.4	0.7	1.3	3.7
Capital District	88.9	90.3	90.9	91.5	92.6	1.7	1.6	0.7	0.6	1.5
Mohawk Valley	33.6	33.5	33.5	33.4	33.6	0.3	(0.4)	0.1	(0.3)	1.2
North Country	25.2	25.2	25.3	25.3	25.7	0.6	0.1	0.4	0.1	1.9
Central New York	57.3	58.3	58.9	59.2	59.4	1.2	1.7	1.0	0.7	(0.2)
Southern Tier	60.7	61.1	61.2	59.7	60.9	(0.4)	0.7	0.2	(2.5)	2.1
Western New York	100.6	101.2	101.5	101.6	102.2	0.3	0.6	0.3	0.1	0.5
Finger Lakes	105.2	105.3	106.0	108.0	108.6	1.0	0.1	0.7	1.9	0.8
Unclassified	5.7	6.9	6.9	7.9	8.1	19.8	21.7	(0.5)	14.6	2.9
Statewide	1,604.2	1,628.5	1,656.1	1,692.5	1,729.0	1.5	1.5	1.7	2.2	2.6
Leisure, Hospitality, and Other Services										
New York City	484.6	512.4	537.9	565.5	579.7	5.3	5.7	5.0	5.1	4.2
Long Island	153.7	158.8	165.0	169.2	166.4	3.9	3.3	3.9	2.5	1.2
Hudson Valley	114.3	117.8	120.6	125.2	123.7	3.6	3.0	2.4	3.8	2.0
Capital District	62.6	64.1	65.7	66.5	65.7	1.7	2.3	2.5	1.3	2.0
Mohawk Valley	18.4	18.6	18.9	19.1	18.6	0.2	1.2	1.7	0.8	0.5
North Country	19.5	20.0	20.0	20.1	19.3	3.1	2.5	0.2	0.4	0.1
Central New York	44.0	44.4	45.3	46.0	46.1	1.4	0.9	2.0	1.5	1.6
Southern Tier	34.4	34.9	35.7	36.3	35.4	0.5	1.5	2.1	1.8	0.1
Western New York	84.4	85.7	88.7	90.2	89.6	1.2	1.5	3.6	1.7	1.3
Finger Lakes	66.0	66.9	68.3	68.7	67.5	2.7	1.3	2.2	0.6	0.3
Unclassified	9.9	10.8	11.1	8.8	8.9	0.5	8.8	2.9	(20.6)	4.7
Statewide	1,092.0	1,134.4	1,177.4	1,215.7	1,220.9	3.7	3.9	3.8	3.3	2.7

* Levels for 2015 are based on the first two quarters of the year; 2015 growth rates are relative to the same period in 2014.

Source: NYS Department of Labor.

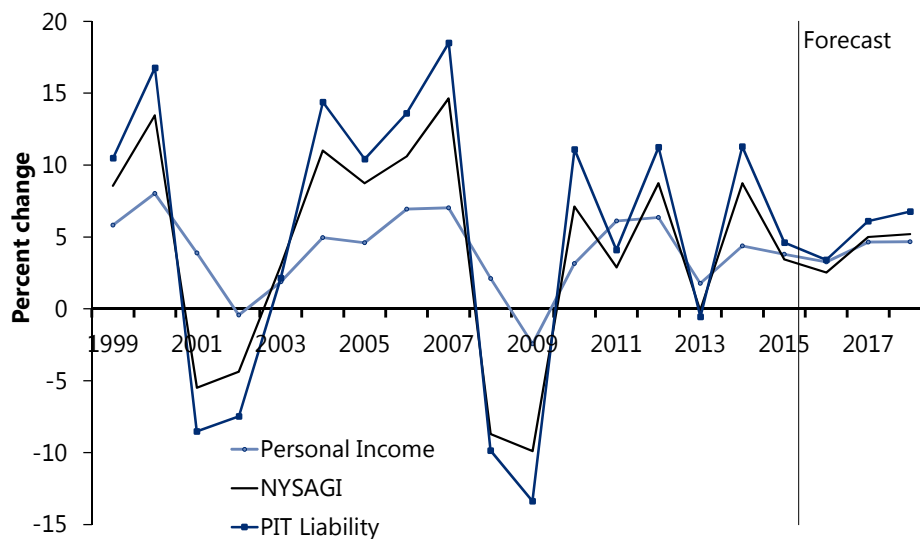
New York State Adjusted Gross Income

Receipts from the personal income tax account for almost 60 percent of the State's total tax revenue stream. New York State adjusted gross income (NYSAGI) forms the basis for taxable income, from which taxpayers' personal income tax liability is computed, in conformity with New York State tax laws.¹⁶ Detailed knowledge of the composition of this personal income tax base and its determinants is critical to accurately projecting New York's largest revenue source.

At the aggregate level the components of NYSAGI, such as dividend income and capital gains income, vary with the State and national economies. The Budget Division's forecast of the components of personal income thus depends on these linkages.

In the years following the Great Recession, NYSAGI growth has been volatile and on average lower than the pre-recession average annual growth (see Figure 50). During a period of sustained but slow economic recovery much of the volatility in NYSAGI has been the result of income shifting in response to anticipated tax law changes. For example, expecting the expiration of a lower tax rate at the end of 2012 taxpayers realized capital gains early and employers distributed dividends and bonuses early, creating a shift in income from 2013 into 2012 that led to 8.7 percent NYSAGI growth in 2012 followed by a small decline of 0.1 percent in 2013 (see Table 12). Estimated NYSAGI growth for 2014 of 8.7 percent was also affected by the shift since that growth rate is based on a lower level in 2013.

Figure 50
The Indicators of New York State's Tax Base



Note: Personal income tax (PIT) liability is computed based on 2002 NY State tax law; 2015 liability and NYSAGI data are preliminary.

Source: NYS Department of Taxation and Finance; Moody's Analytics; DOB staff estimates.

¹⁶ Box 6 on page 124 discusses in detail the relationship between three important indicators of the size of the State's personal income tax base, personal income tax liability, NYSAGI, and state personal income.

The Major Components of NYSAGI

Budget Division forecasts for the components of NYSAGI are based on detailed historical tax return data from samples of State taxpayers through the 2014 tax year, made available by the New York State Department of Taxation and Finance. For 2015, preliminary processing data based on the entire population of tax returns are used to construct estimates for all of the income components.

Although the measure of taxable wages derived from State tax returns does not precisely match the dollar amount derived from Quarterly Census of Employment and Wages (QCEW) data, they tend to follow a similar trend. To be consistent with the Budget Division's New York macroeconomic forecast, projected growth rates for taxable wages from 2015 onward are based on the forecast growth of total State wages derived from the macroeconomic forecast, which is based on QCEW data. For a discussion of the Budget Division forecast for State wages, see

Outlook for State Income beginning on page 81.

Table 12
CHANGES IN NYSAGI AND ITS MAJOR COMPONENTS

	2011	2012	2013	2014	2015*	2016	2017	2018
	----- Actual -----				----- Estimated -----			
NYSAGI								
Level (\$ Billions)	657.3	714.7	714.0	776.5	803.2	823.5	864.7	909.7
Change (\$ Billions)	18.4	57.4	(0.7)	62.4	26.7	20.3	41.2	45.0
% Change	2.9	8.7	(0.1)	8.7	3.4	2.5	5.0	5.2
Wages								
Level (\$ Billions)	499.4	515.6	525.9	558.9	581.1	600.1	624.5	651.3
Change (\$ Billions)	17.0	16.2	10.3	32.9	22.2	19.0	24.5	26.8
% Change	3.5	3.2	2.0	6.3	4.0	3.3	4.1	4.3
Capital Gains								
Level (\$ Billions)	52.8	80.9	71.7	93.5	96.1	93.2	99.7	107.9
Change (\$ Billions)	4.1	28.1	(9.2)	21.8	2.6	(2.9)	6.5	8.2
% Change	8.4	53.2	(11.4)	30.5	2.8	(3.0)	7.0	8.2
Partnership/S Corporation								
Level (\$ Billions)	71.5	79.4	82.8	86.3	92.3	97.0	104.8	113.0
Change (\$ Billions)	0.5	7.9	3.4	3.5	6.0	4.7	7.8	8.2
% Change	0.7	11.0	4.3	4.2	7.0	5.1	8.0	7.9

Source: NYS Department of Taxation and Finance; DOB staff estimates.

* 2015 Estimates are based on processing data except for wages.

Positive Capital Gains Realizations

Positive capital gains realizations play a large role in determining NYSAGI, both because they provide a relatively large share of income and because of their volatile nature. The Budget Division's forecasting model attempts to capture the inherent volatility in capital gains income by incorporating those factors that are most likely to influence realization behavior, such as expected and actual tax law changes, financial markets activity, and real estate market activity.¹⁷ The Division estimates this component fell 3.0 percent in 2016 after growth of just 2.8 percent in 2015. A rebound to 7.0 percent moderate growth in 2017 is foreseen with a stronger 8.2 percent increase in 2018 (see Table 12).

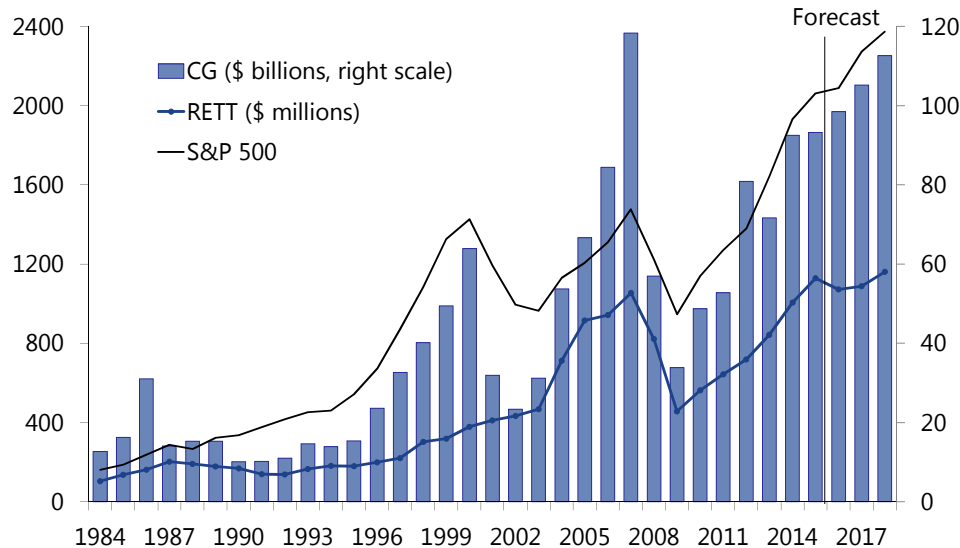
¹⁷ For a discussion of the Budget Division's traditional approach to modeling capital gains realizations, see L. Holland, H. Kayser, R. Megna and Q. Xu "The Volatility of Capital Gains Realizations in New York State: A Monte Carlo Study," *Proceedings, 94th Annual Conference on Taxation*, National Tax Association, Washington, DC, 2002, pages 172-183.

Realization behavior can be greatly affected by federal and State taxes on capital gains income because they constitute a cost associated with the buying and selling of capital assets. Taxpayers may decide to realize capital gains earlier than planned if they expect taxes on capital gains to increase. The federal capital gains tax rate increased to 20 percent from 15 percent at the end of 2012. Additionally, pursuant to a provision of the Affordable Care Act of 2010, a Medicare tax surcharge on investment income took effect in 2013, further raising the federal tax on capital gains realizations by 3.8 percent. While congressional negotiations were still under way as 2012 ended, it was widely expected that tax rates would go up at least for higher-income taxpayers, who also account for most capital gains. Taxpayers responded strategically by shifting long-term gains realizations from 2013 to 2012 to avoid the higher tax burden, resulting in 53.2 percent realizations growth in 2012 but then a drop of 11.4 percent in 2013. As a consequence of this shift, the capital gains realizations base was low in 2013, artificially inflating the 2014 growth rate to an estimated 30.5 percent, beyond what underlying economic drivers would imply.

Figure 51 shows how fluctuations in equity markets (measured by the S&P 500 index) and real estate markets (measured by State real estate transfer tax collections) help explain the magnitude of fluctuations in capital gains realizations. Both markets grew strongly between 2003 and 2007, and both markets experienced sharp declines in 2008 and 2009. While the declines in the S&P 500 in 2008 and 2009 were similar in magnitude to those experienced in the 2001-02 recession, the declines in capital gains realizations in 2001 and 2002 pale in comparison to those experienced in 2008 and 2009. The concurrent collapse of the real estate market clearly contributed to the unprecedented collapse in capital gains realizations. New York taxpayers lost a combined \$84.4 billion in capital gains realizations income between 2007 and 2009 but are expected to have regained only \$62.2 billion (or nearly three-fourths) of these losses by 2015.

Equity market growth, as measured by the S&P 500 index, slowed considerably in 2015 and 2016, mustering growth of only 6.8 percent in the former year and an estimated 1.5 percent in the latter, as opposed to 17.5 percent growth in 2014 and 19.1 percent growth in 2013. Going forward, we anticipate stronger growth of 9.4 percent in 2017 before growth tapers to 4.4 percent in 2018, contributing to healthier capital gains growth in the latter two years after subpar 2015-16 growth.

Figure 51
Capital Gains Realizations, Real Estate Transfer Taxes
and S&P 500 Index



Note: 2015 CG realizations are an estimate, 2016 RETT and S&P500 are actuals.
Source: Moody's Analytics; NYS Dept. of Taxation and Finance; DOB staff estimates.

As suggested above, the health of the real estate market also plays a critical role in determining capital gains realizations. Gains from both residential and commercial real estate transactions are taxable, though gains earned from the sale of a primary home are exempt up to a certain limit, for example, up to \$500,000 for married couples filing jointly.¹⁸ California data show that in 2012, 9.2 percent of positive capital gains realizations in that state were generated by real estate transactions. The share has fluctuated from a low of 6.2 percent in 2010 to a high of 32.4 percent in 1990. A study based on national data indicated that 22 percent of net capital gains realizations in the U.S. were generated by real estate transactions in 1993.¹⁹

State real estate transfer tax (RETT) data provide a timely indicator of the strength of real estate sales and therefore of the possible impact of the real estate market on taxable gains. In just two years, real estate transfer tax collections fell by 57 percent from their 2007 peak, but tax collections have regained all their losses since and exceeded the 2007 peak by an estimated 7 percent by 2015 (see Figure 51). The Budget Division expects the real estate market to continue improving, though the pace may be more uncertain as rising house prices confront expected higher long-term interest rates that will make financing more expensive. The estimated average existing single home price for 2016 in New York was still 10.1 percent below where it was in 2007, before the recession. Thus, the residential housing market's contributions to capital gains realization in the most recent year were most likely not substantial.

¹⁸ Taxpayers can claim this exclusion if they have lived in their home for a total of two years within the 5-year period ending on the date they sold or exchanged their home and if they have not sold or exchanged another home within the 2-year period ending on the date they sold or exchanged their home.

¹⁹ L. E. Burman and P. R. Ricoy, "Capital Gains and the People Who Realize Them," *National Tax Journal* 50(3), September 1997, pages 427-451.

Fluctuating levels of both activity and profitability of private equity and hedge funds also contribute to capital gains realizations. Private equity firms own stakes in companies that are not listed on a public stock exchange and generally receive a return on their investment in one of three ways: through a sale or merger of the company; a recapitalization; or by selling shares back to the public through an initial public offering (IPO). The returns on private equity investments are often not realized for several years, but the rate of return is generally high relative to returns on publicly held stocks, in order to compensate for the higher degree of risk and the value added through the extraction of operating efficiencies. Though related to the performance of equity markets and real estate markets, capital gains from private equity funds exhibit their own dynamics.

Private-equity stakeholders had a solid year in 2015 as financial sponsor-backed deals reached their globally highest level since 2007 both globally and in the U.S. Further, the \$2.283 billion in U.S. mergers and acquisitions was the highest level on record. However, 2016 was a different story, with the Deloitte consulting firm saying the year “started with a thud, and results lagged for the first three quarters of the year.”²⁰ But the report also notes that October 2016 was “the busiest month ever for domestic mergers and acquisitions (M&A).” Despite rising stock prices and higher interest rates toward the end of the year, executives in Deloitte’s survey said that they had increased cash levels and intended to use that cash to make more deals. In addition the research group Preqin reported that by September 2016 private equity firms were holding \$1.5 trillion in unspent commitments, known as “dry powder.” The incoming Trump administration may also look more favorably at M&A activity as well.

The once extremely lucrative hedge fund industry continues to struggle. Part of the problem is continued large costs of compliance with new global regulations that began appearing eight years ago. Recent survey results indicate that hedge funds have spent \$3 billion from 2008 to 2013 meeting the costs of new regulations, roughly a 10 percent increase in annual operating costs.²¹ Meanwhile, as industry returns trail benchmarks such as the S&P 500, investors have been pulling money out: public retirement plans in Kentucky, New York, New Jersey and Rhode Island announced plans to disinvest, as did the University of Maryland and the University of California. Through the third quarter of 2016, hedge fund returns were 4.4 percent, but the S&P 500 total return was 7.8 percent. Hedge fund research firm eVestment indicates that the industry experienced an outflow of \$83.1 billion through November 2016, and speculated that “2016 may shape up to be a negative year for the industry, the first such year since 2009.”²²

There are both downside and upside risks to the forecast for capital gains realizations. Continuing strength in the private equity sector rather than a leveling off in payouts poses the largest upside risk to the out-year capital gains forecast. Downside risk comes from a possible market correction, perhaps in response to more-rapid federal funds rate hikes by the Fed during 2017. There is also

²⁰ Deloitte, *M&A Trends: Year-end report 2016*, at < <https://www2.deloitte.com/us/en/pages/mergers-and-acquisitions/articles/ma-trends-report.html?icid=target-homepage-promo-matrends16> >, accessed January 11, 2017.

²¹ KPMG, *The cost of compliance: 2013 KPMG/AIMA/MFA Global Hedge Fund Survey*, October 11, 2013. Available at < <https://home.kpmg.com/xx/en/home/insights/2013/10/the-cost-of-compliance.html> >, accessed January 11, 2017.

²² Peter Laurelli, “Hedge Fund Outflows Continue, Small Funds Beat Big,” *eVestment Blog*, December 21, 2016. Available at < <https://www.evestment.com/hedge-fund-outflows-continue-nov-small-funds-beat-big/> >, accessed January 11, 2017.

downside risk from the impact of the low crude oil price, geopolitical instability and weak economic growth abroad on U.S. firms' profitability and investor confidence. Recent larger volatility points to a degree of unease among investors.

Rent, Royalty, Partnership, and S Corporation Gains

Partnership and S corporation income vies with capital gains income for the title of second largest income component after wages, but with considerably less volatility than capital gains. In fact, within the forecast horizon this income component is seen as overtaking capital gains by 2016 and maintaining that position.

While over its history it has grown 10.5 percent annually, partnership and S corporation income has grown more slowly in the more recent past, averaging 7.2 percent growth between 2002 and 2012. Consistent with slow economic growth partnership and S corporation income grew only a little more than 4 percent in 2013 and 2014. The Budget Division predicts more average growth of 7.0 percent for 2015, slipping to 5.1 percent for 2016, before a rebound to improved growth of 8.0 percent in 2017 and 7.9 percent in 2018.

The largest contributor to this component is partnership income, much of which originates within the finance and real estate industries. A second large contributor is income from S corporation ownership. Selection of S corporation status allows firms to pass earnings through to a limited number of shareholders and to avoid corporate taxation while still enjoying the limited liability that corporate status affords.

New York State taxable partnership and S corporation income has experienced strong growth over the years. Between 1979 and 2013, this income component grew on average 10.3 percent annually, faster than the average annual rate of 6.3 percent for New York proprietors' income, as defined under NIPA and which includes partnership, S corporation, and sole proprietorship income. At the Federal level, partnerships and S corporations are the first- and second-fastest growing business entity forms, according to Internal Revenue Service Statistics of Income (SOI) data. Between 1998 and 2013, the latest year for which SOI data are available, the number of S corporations grew 64.5 percent while the number of partnerships grew 86.5 percent. For comparison non-farm sole proprietorships increased 38.3 percent and C corporations declined 27.6 percent over this period.

Growth in income from partnership and S corporations is related to both the economy and financial markets. However, average annual growth of 3.0 percent during the recent recovery has been lower than pre-recession relationships would suggest, based both on the strength of the economy and equity markets. Partnership and S corporation income gains and losses tend to rise and fall together, suggesting that the growth rates are linked at least in part to births and deaths of partnerships and S corporations. The severity of the Great Recession forced a large number of entities to exit the market, and it appears that tight credit markets have made it difficult for new entities to enter as economic conditions improved.

The Budget Division's partnership and S corporation income forecast contains both upside and downside risks. The real estate market is not captured independently in the forecast model. Since there is a high concentration of real estate partnerships in New York State, a better-than-predicted

real estate market (due to an improved employment situation and a decline in foreclosures) could lead to higher-than-expected partnership and S corporation gains. Like capital gains income, partnership and S corporation income is also sensitive to the performance of the private equity sector.

Dividend Income

Taxable dividend income in New York is a very volatile component, as witnessed by the fact that growth rates in State taxpayers' dividend income have ranged from a decline of 28.7 percent in 2009 to an increase of 26.6 percent in 2004. The volatility has continued during the last few years, partly due to income shifting. Taxable dividend income grew 19. percent in 2014 after falling 4.8 percent in 2013. Both these numbers were affected by early dividend payouts made in 2012 to avoid the higher tax rate in 2013, which in turn lowered the 2013 level of dividends and consequently resulted in a higher growth rate for 2014. State dividend income then fell 4.7 percent in 2015, with the Budget Division forecasting a slight recovery to 2.5 percent growth in 2016 and stronger growth of 8.0 percent in 2017 before easing to growth of 5.9 percent in 2018.

Taxable dividend income is expected to rise and fall with U.S. dividend income, a component of the NIPA definition of U.S. personal income; long-term interest rates, as represented by the 10-year Treasury yield; and the performance of equity markets. State taxable dividends have proven to be more variable than U.S. dividend income, growing at an average annual rate of 6.7 percent between 1976 and 2014 with a standard deviation of 12.8 percentage points, while U.S. dividend income grew an average 9.5 percent annually, with a lower standard deviation of 10.6 percentage points over the same period.

Average annual growth in taxable dividend income has been strong since the end of the recession, growing on average 12.2 percent annually from 2010 to 2014, presumably as a result of sizeable dividend payouts from publicly traded private equity firms and other businesses whose valuation improved greatly with the surge in the equity markets through 2014. While equity markets treaded water in 2015 and 2016, conditions are expected to improve in the near term, helping growth rates going forward to strengthen somewhat.

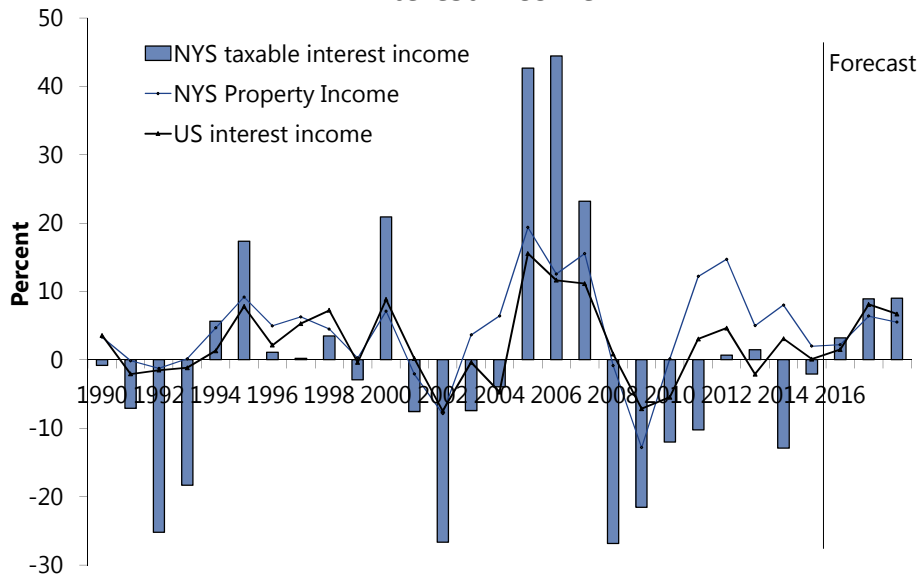
Risks to the dividend income forecast are closely linked to the risks embedded in the U.S. equity markets, corporate profitability and the performance of publicly traded private equity firms.

Interest Income

With an estimated 2.1 percent decline in 2015, taxable interest income extended its streak of either declines or very low growth to an eighth year, following a drop of 12.9 percent in the prior year. However, in response to continued improvements in the U.S. and State economies and the Fed's finterest rate hikes in December 2015 and December 2016, we expect interest income to increase by 3.2 percent in 2016, followed by a stronger 8.9 percent and 9.0 percent growth in 2017 and 2018, respectively, as additional rate hikes follow.

Figure 52

Interest Income



Note: 2014 NYS taxable interest income is an estimate.

Source: Moody's Analytics; NYS Department of Taxation and Finance; DOB staff estimates.

FAAn increase in interest rates will increase interest income for a given amount of assets. In addition, New York property income, a component of the NIPA definition of state personal income that includes interest income, is found to be a good indicator of the trend in taxable interest income for the State, although it is much less volatile (see Figure 52). For the period from 1977 to 2014, the average growth rate for New York property income was 6.7 percent, with a standard deviation of 7.2 percentage points, and the average growth rate for U.S. interest income, a component of the NIPA definition of U.S. personal income, was 5.8 percent, with a standard deviation of 7.7 percentage points. In contrast, State taxable interest income averaged 3.5 percent annual growth over the same period, with a standard deviation of 17.7 percentage points. The additional volatility in this component of NYSAGI could be related to the behavioral response of State taxpayers to past changes in the tax law.

In response to the conditions wrought by the Great Recession, the Federal Reserve ushered in a round of interest rate cuts starting in the second half of 2007. As the federal funds rate fell to close to zero and stayed there from December 2008 to late 2015, taxable interest income experienced large declines or very slow growth through 2015. The response to additional increases in the federal funds rate over the next few years should be stronger growth in interest income going forward.

The risks of the interest income forecast are clearly linked to the pace of interest rate hikes by the Federal Reserve. If the economy should experience a downturn, or if inflation does not pick up, the Fed may slow the pace of interest rate hikes, which would lower our forecast for interest income. On the other hand if inflation shows signs of overshooting the Fed's 2 percent target it may need to hike more and faster, thus helping interest income growth to outpace DOB's forecast.

Small Business and Farm Income

Small business and farm income combines income reported as a result of operating a business, practicing a profession as a sole proprietor, or operating a farm. Such income is expected to vary with the overall strength of the national and State economies with some added volatility due to income shifting. Business and farm income is estimated to have grown 4.9 percent in 2014, after 1.1 percent growth in 2013, with 2013 income most likely lower because of some movement of income from 2013 into 2012 to avoid higher tax rates. Growth in 2014 is higher than it would be otherwise due to the lower base. Business income growth appears to have deteriorated to just 0.9 percent in 2015, though the Budget Division expects business and farm income to pick up speed with 5.0 percent growth in 2016 followed by 6.0 percent in both 2017 and 2018.

Small business and farm income growth and volatility has shrunk over the years. This component of taxable income grew at an annual average rate of 11.5 percent from 1980 to 1990 with a standard deviation of 10.8 percent but between 1991 and 2013 small business income grew only at an annual average rate of 4.1 percent, with a standard deviation of 4.7 percent. Proprietors' income, as defined under NIPA, experienced similar changes in growth, falling from 10.5 percent growth and a standard deviation of 8.4 percent to annual average growth of 4.2 percent and a standard deviation of 7.9 percent thereafter.

Average growth over 2009-2014 has been low, only 2.8 percent, at least partly due to tight credit markets. The contraction of credit as a result of the financial crisis was especially difficult for small businesses since credit availability is particularly critical to them. Since small businesses historically have a higher failure rate, small-business lending is the highest-risk lending for banks and thus the first to be cut back as economic conditions worsen. In an environment of tight credit, obtaining loans to maintain or grow activity became difficult for many small businesses. As credit became and continues to become more available in a slow but sustained economic recovery, business and farm income growth is seen as picking up speed.

Risks to the forecast of business income are closely linked to the risks to the overall economic forecast as sole proprietors' income is particularly responsive to the progress of the business cycle.

Pension Income

Growth in pension income in the near term is expected to be nearly flat. After growth of 3.4 percent in 2015 on the heels of a 5.1 percent increase in 2014, it is forecast to rise 3.8 percent in 2016, slipping to 3.5 percent growth in 2017 with improved growth of 4.5 percent in 2018.

Pension income includes payments from retirement plans, life insurance annuity contracts, profit-sharing plans, military retirement pay, and employee savings plans. It is linked to prior year long-term interest rates, suggesting that firms base the level of pension and life-insurance benefits they offer to employees on their expectations of future profitability, which is in turn tied to the future strength of the economy. Pension income has grown steadily over the years, although the growth rate has declined considerably over time. The average annual growth rate between 1980 and 1990 was 12.6 percent, but it fell to 6.3 percent between 1991 and 2013. This coincides with a decline in

the average 10-year Treasury yield from 10.4 percent in the former period to 4.9 percent in the latter. Both declines are likely the result of lower inflation rates in the later period.

Long-term Treasury yields have been at exceptionally low levels and fell continuously from a local high of 6.0 percent in 2000 to 1.8 percent in 2012 as a result of a combination of factors, including the exceptionally low federal funds rate; the Federal Reserve's now-ended long-term asset purchasing programs ("Quantitative Easing"); and the flight to safety engendered by the financial crisis and subsequent sovereign debt crises. Long-term Treasury yields increased slightly to 2.5 percent in 2014 from 2.4 percent the year before, but then fell back to 2.1 percent in 2015. Despite a further slide to an estimated 1.8 percent in 2016 they are expected to rise gradually over the course of the next few years, to 2.8 percent in 2017 to 3.4 percent in 2017 and 3.3 percent in 2018, following expected gradual rate hikes by the Fed over the next few years. This should bode well for pension incomes that are expected to follow suit.

The risks to the forecast for pension income are related mainly to the risks to long-term interest rates. If the economy sputters more than expected at this time, the Fed may slow down increases in the federal funds rate, affecting long-term interest rates and thus pension income.

Changes in the State Distribution of Income and Revenue Risk

As indicated in Figure 50 on page 106, NYSAGI exhibits more volatility than other indicators of the State's tax base, such as State personal income, while tax liability is still more volatile. Box 6 compares these three important indicators of the State's personal income tax base and discusses their respective volatilities.

The most volatile components of taxable income, such as bonuses and capital gains realizations, are highly concentrated among the State's highest-income taxpayers. While the top one percent of taxpayers, as determined by their NYSAGI, accounted for 44.4 percent of adjusted gross income in 2014, they also accounted for 76.3 percent of capital gains realizations (see Figure 53). Note that at their recent peak these filers represented 45.9 percent of NYSAGI and 82.2 percent of realized capital gains. Since the income of wealthy taxpayers is taxed at the highest rate, an accurate projection of these income components is critical to an accurate projection of personal income tax liability.

Box 6 INCOME TAX LIABILITY AND ALTERNATIVE MEASURES OF INCOME

A major focus of the Budget Division's forecasting effort is an accurate projection of personal income tax receipts. This requires estimates of income tax liability, which depends on taxpayer income. New York State tax law determines the components of income to be taxed and the corresponding tax rates.

Personal income tax liability is the amount which State taxpayers actually owe for a given tax year and thus measures the State's tax base.¹ Personal income tax liability is derived from taxpayers' New York State adjusted gross income (NYSAGI), in conformity with State tax law. A measure that is closely related to NYSAGI is State personal income, a U.S. Bureau of Economic Analysis national income and product accounts (NIPA) concept that measures income derived from value added to current production.² This widely available data source is often used as a proxy for NYSAGI. The relative volatility of personal income tax liability, NYSAGI, and State personal income, is presented in Figure 50 on page 106. For example in 2014, personal income grew 4.0 percent, while NYSAGI grew a stronger estimated 8.6 percent and personal income tax liability at constant law grew an even stronger estimated 11.6 percent.

Economists use the concept of elasticity to measure the sensitivity of one economic indicator to another. Elasticity is defined as the percentage change in one economic indicator when another changes by one percent. Since tax revenues tend to vary with the business cycle, we are often interested in the elasticity of the tax base with respect to a broad measure of economic conditions, such as GDP. The more sensitive a particular tax base measure is to a change in GDP, the higher the elasticity.

Typically, the elasticity of NYSAGI tends to be higher than that of personal income because NYSAGI measures the taxable components of income, which include realized capital gains and losses. Gains and losses earned on changes in asset prices are not included in the NIPA concept of personal income since they do not represent changes to the value of current production.³ Unlike the primary drivers of personal income – employment and wages, which have relatively stable bases – income from capital gains realizations can rise and fall dramatically. In an asset market downturn such as in 2008, for example, taxpayers can refrain from selling, causing a 51.8 percent decline in capital gains realizations. In addition to behavioral responses to changes in market conditions, NYSAGI fluctuations can result from statutory changes and taxpayers' strategic responses to such changes. Taxpayers realized capital gains and received compensation early to avoid higher tax rates in 2013, shifting taxable income from 2013 to 2012.

Personal income tax liability is even more elastic than NYSAGI, primarily because of the progressivity of the State tax system. The volatile components of taxable income, such as bonuses and capital gains realizations, tend to be concentrated among the State's high-income taxpayers, who are also taxed at the highest marginal tax rate. As the more volatile income components respond strongly to changing economic conditions, the effective or average tax rate changes. Furthermore, as incomes rise, some taxpayers move into higher income tax brackets, increasing the effective tax rate and the amount of liability generated from a given amount of adjusted gross income. The opposite occurs as incomes fall. For example, the average effective tax rate fell from a high of 4.81 percent in 2000 to a low of 4.51 percent in 2002 without any significant changes in tax law. This impact is exacerbated in New York by provisions in State laws that recapture the benefits of portions of income being taxed at lower rates for high income taxpayers.

The fact that the most volatile components of income can and have accounted for a large portion of the change in NYSAGI poses significant risks to the Division of the Budget's personal income tax forecast.⁴ Therefore, the Budget Division has consistently maintains that cautious projections are warranted.

¹ For a detailed discussion of personal income tax liability, see Tax Receipt Section "Personal Income Tax."

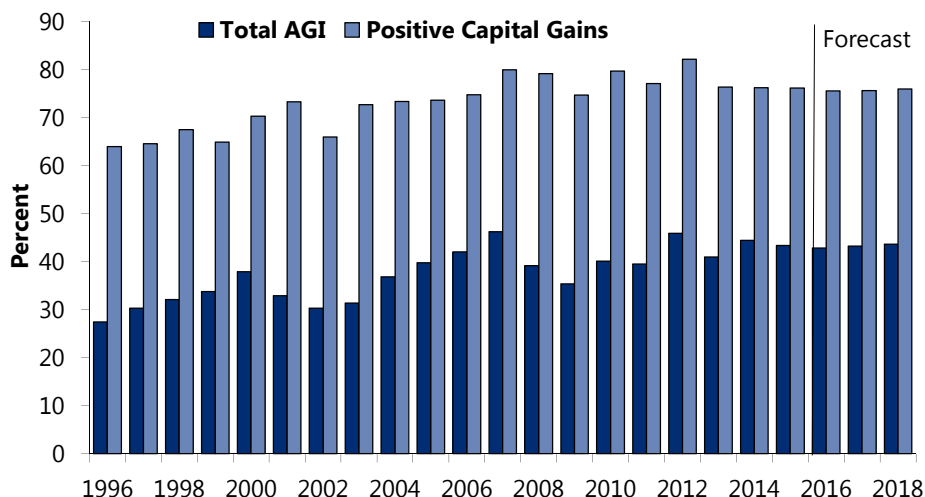
² For a detailed explanation of how the Budget Division constructs State personal income, see **Box 4** on page 84.

³ However, any transaction cost generated by such a sale would add value to current production and would therefore be included in personal income.

⁴ The *New York State Economic, Revenue and Spending Methodologies*, November 2015, provides a detailed explanation of the Budget Division's use of fan charts to compute prediction intervals around forecasts

(<<http://www.budget.ny.gov/pubs/supporting/MethodologyBook.pdf>>).

Figure 53
Income Shares of the Top One Percent Taxpayers
AGI and Capital Gains Realizations



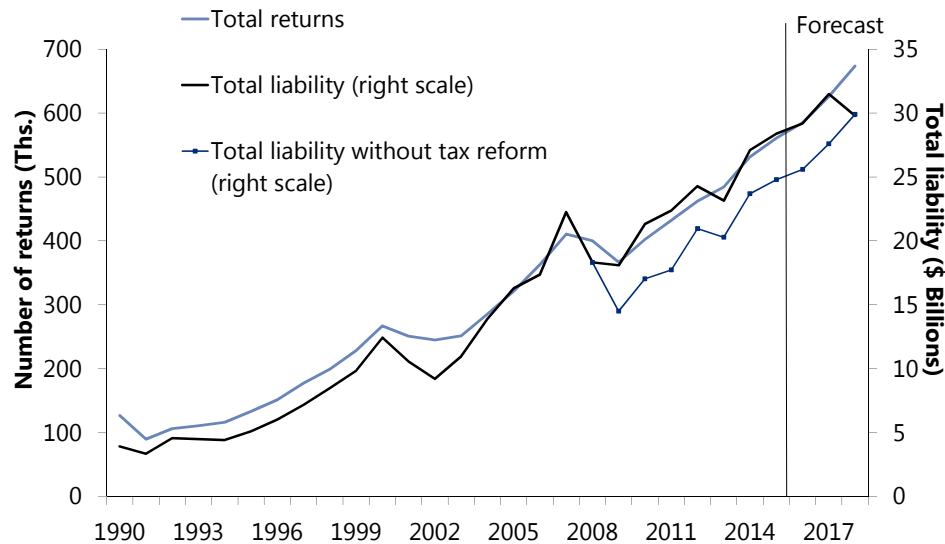
Note: For nonresident taxpayers, shares are based on total income.
Source: NYS Department of Taxation and Finance; DOB staff estimates.

Between 1985 and 2007 (or prior to the Great Recession), the number of returns generated by high-income taxpayers – those reporting NYSAGI of \$200,000 or more – grew substantially, at an average annual rate of 12.8 percent. During the same period, the liability generated by these taxpayers grew more rapidly, at an annual average rate of 14.2 percent (see Figure 54). Liability was also affected by a temporary tax measure that added two more tax brackets for wealthier taxpayers, raising the State’s top income tax rate to 8.97 percent from 6.85 percent for tax years 2009 to 2011.²³ As the economy recovered between 2009 and 2015, returns and tax liability for wealthier taxpayers also rebounded with an estimated increase of 53.2 percent in returns and 57.0 percent in liability over the period.

The large decline in capital gains realizations and thus NYSAGI brought about by the recession temporarily unwound some of the concentration of income, but by 2012 the estimated liability share of high-income taxpayers exceeded the 2007 peak and by 2015 it is estimated that it has exceeded that peak by just over two percentage points, in part helped by a new high top marginal tax rate of 8.82 percent that started with the implementation of the December 2011 tax reform in 2012 (see Figure 55). Note that in the absence of the rate increase under the tax reform, high income taxpayers’ share of liability is not expected to exceed that peak within the forecast horizon, though the peak will continue to be exceeded in the 2016 tax reform’s first year, that is 2018.

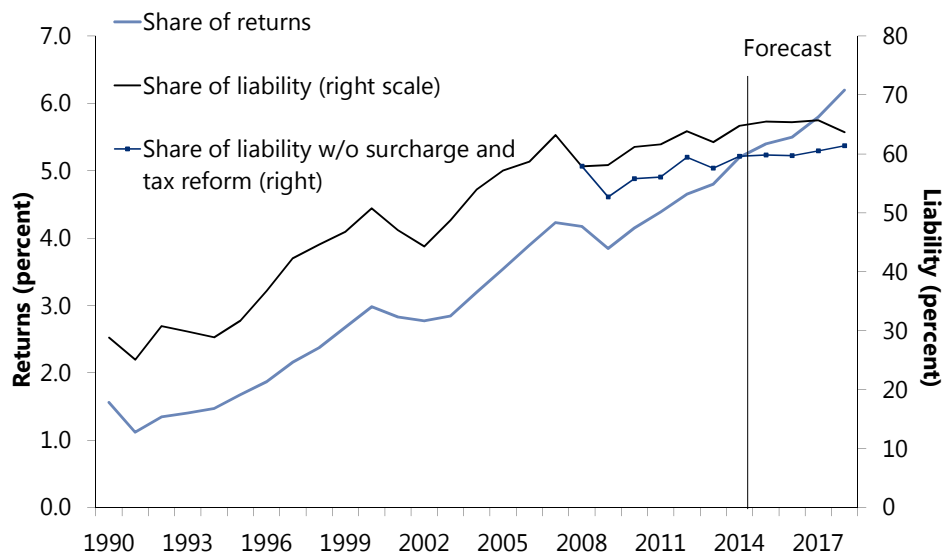
²³ See the “Personal Income Tax” section for more detail on the temporary income brackets and tax rates and the tax reform of 2011.

Figure 54
New York State High-Income Tax Returns



Note: High-income taxpayers are those reporting NYSAGI of \$200,000 or more.
Source: NYS Department of Taxation and Finance; DOB staff estimates.

Figure 55
High-Income Taxpayers as Percent of Total Returns and Liability



Note: High-income taxpayers are those reporting NYSAGI of \$200,000 or more.
Source: NYS Department of Taxation and Finance; DOB staff estimates.

Table 13

**THE CONCENTRATION OF STATE INCOME AND LIABILITY
2007, 2009 and 2015**

	Number of Returns	Gross Income	Wage Income	Nonwage Income	Liability
2007					
Total (\$ millions)	9,700,043	\$778,402	\$485,565	\$292,837	\$35,217
Share: Top 1%	—	34.4	19.5	59.2	46.4
Share: Top 5%	—	49.7	35.4	73.3	65.1
Share: Top 10%	—	59.2	46.7	79.8	75.2
Share: Top 25%	—	76.7	68.5	90.4	90.2
2009					
Total (\$ in millions)	9,524,621	\$646,935	\$463,939	\$182,995	\$31,168
Share: Top 1%	—	25.8	15.9	50.7	42.6
Share: Top 5%	—	41.6	32.3	65.2	61.5
Share: Top 10%	—	52.6	44.7	72.6	72.6
Share: Top 25%	—	73.5	67.8	87.8	89.5
2015					
Total (\$ in millions)	10,432,979	\$871,251	\$581,089	\$290,162	\$43,402
Share: Top 1%	—	30.3	17.6	55.6	44.7
Share: Top 5%	—	46.7	34.5	71.2	62.7
Share: Top 10%	—	57.4	46.6	79.2	72.8
Share: Top 25%	—	76.9	69.2	92.3	88.1

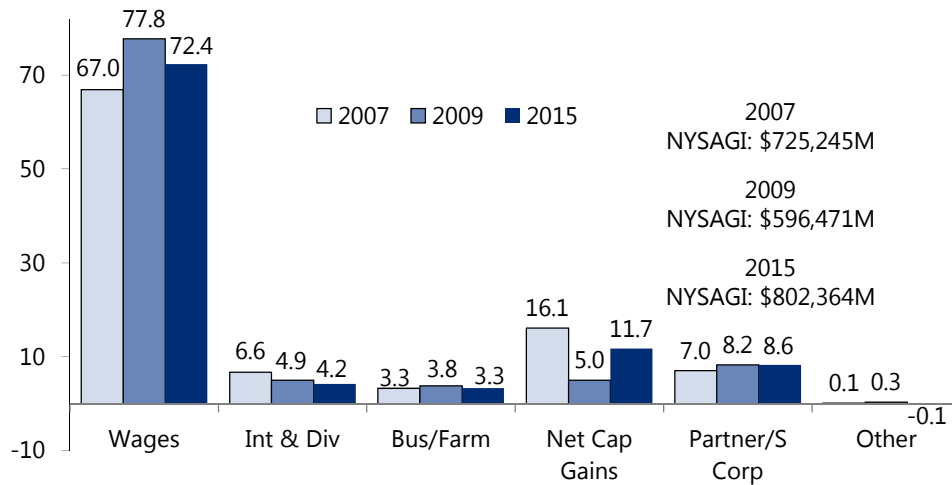
Note: Returns are ranked on the basis of gross income and based on a weighted statistical sample of all tax returns in the State. 2015 numbers are based on a trended sample.

Source: NYS Department of Taxation and Finance; DOB staff estimates.

Table 13 shows the changes in the concentration of income and liability from the pre-recession peak in 2007 to the trough in 2009 and to 2015, the last year for which some taxpayer data are available. As a result of the recession, the share of nonwage income accruing to the top 10 percent of taxpayers fell by 7.2 percentage points between 2007 and 2009; but by 2015, the group had regained 6.6 percentage points of that loss. That parallels the movements of capital gains income, which tends to accrue primarily to high-income filers. New York taxpayers lost \$84.4 billion in capital gains income between 2007 and 2009, of which they regained \$62.2 billion by 2015. For wage income, which is more evenly distributed across taxpayers, the share of the top 10 percent

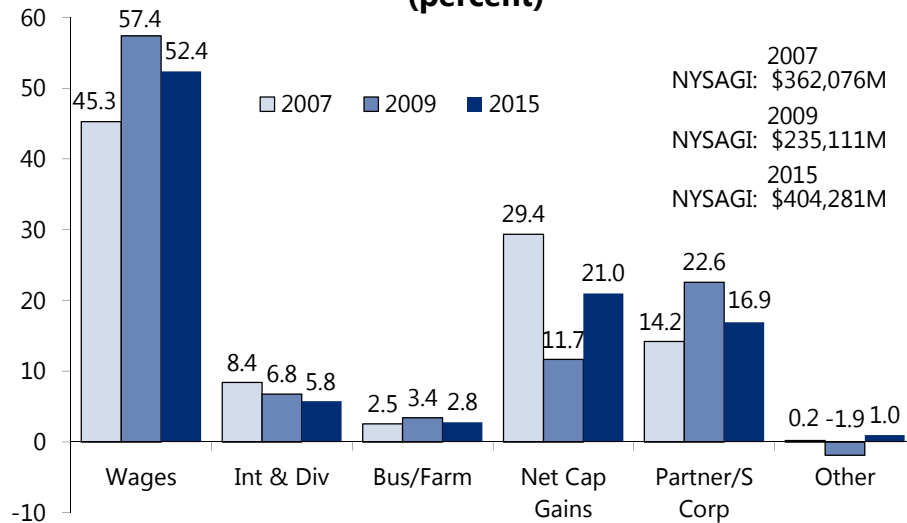
of taxpayers fell 2.0 percentage points between 2007 and 2009, and increased 1.9 percentage points between 2009 and 2015.

Figure 56
Composition of NYSAGI for All Taxpayers
(percent)



Note: Both capital gains and partnership/S corporation gains income are net of losses.
2015 numbers are projections based on processing information.
Source: NYS Department of Taxation and Finance; DOB staff estimates.

Figure 57
Composition of NYSAGI for High-Income Taxpayers
(percent)



Note: Both capital gains and partnership/S corporation gains income are net of losses. High-income taxpayers are those reporting NYSAGI of \$200,000 or more. All 2015 numbers are projections.

Source: NYS Department of Taxation and Finance; DOB staff estimates.

Figure 56 and Figure 57 display the decomposition of NYSAGI into its main components for the 2007 peak year, the 2009 trough year and the projected components for 2015, for all taxpayers and for high-income taxpayers, defined here as those reporting NYSAGI of \$200,000 or more.

The figures show a substantial increase between 2009 and 2015 in the share of capital gains income and a decrease in the share of the other income components in response to equity market growth that far exceeded economic growth. Given the larger share of capital gains income among wealthier taxpayers, the impact of the strong equity market growth is more pronounced for wealthier taxpayers. Overall, though, some of the large changes in income shares brought about by the Great Recession do not appear to have been unwound by 2015.

Risks to the Forecast

The Budget Division's forecast for the personal income tax provides a balanced picture of upside and downside risks, particularly with respect to its most volatile components. As forecasts of the components of New York State's adjusted gross income are consistent with economic indicator variables from the Budget Division's macroeconomic forecasting models, much of the risk to the personal income tax are the same as the risks to the New York and national economies. However, because of the prominence of bonus income and capital gains realizations in taxable income, the risks and uncertainties are heightened and, as a consequence of the progressive tax system, even more so for personal income tax revenues.

There is particular risk to the forecast for taxable income during a year when the Congress is considering changes to the tax code. Going back to the early 1990s, it is easy to observe a significant shifting of various forms of income from one tax year to another as taxpayers and their employers anticipate possible tax law changes in order to position themselves to take advantage of a lower tax rate. The period since the most recent election has been such a period. Anticipating changes in taxpayer behavior adds an additional layer of risk and uncertainty to the New York State adjusted gross income forecast.

SELECTED ECONOMIC INDICATORS (Calendar Year)

	2015 (actual) ¹	2016 (estimate)	2017 (forecast)	2018 (forecast)	2019 (forecast)	2020 (forecast)	1977-2015 Average ²
U.S. Indicators³							
Gross Domestic Product (current dollars)	3.7	2.9	4.1	4.4	4.5	4.6	6.0
Gross Domestic Product	2.6	1.6	2.4	2.4	2.2	2.2	2.8
Consumption	3.2	2.7	2.5	2.3	2.2	2.2	3.0
Residential Fixed Investment	11.7	4.8	4.9	6.1	5.3	4.2	2.1
Nonresidential Fixed Investment	2.1	(0.4)	3.5	4.4	4.2	4.0	4.5
Change in Inventories (dollars)	84.0	10.7	30.3	47.0	45.8	45.9	33.0
Exports	0.1	0.4	2.2	3.7	4.3	4.5	5.5
Imports	4.6	0.7	3.2	4.8	4.9	4.9	5.8
Government Spending	1.8	0.9	0.7	1.1	1.1	1.1	1.7
Corporate Profits ⁴	(3.0)	(0.0)	7.1	5.2	5.2	4.9	7.1
Personal Income	4.4	3.5	4.4	4.6	4.6	4.6	6.2
Wages	5.1	4.2	4.4	4.4	4.4	4.4	5.8
Nonagricultural Employment	2.1	1.7	1.4	1.3	1.3	1.2	1.5
Unemployment Rate (percent)	5.3	4.9	4.6	4.4	4.4	4.4	6.4
S&P 500 Stock Price Index	6.8	1.5	9.4	4.4	5.6	6.4	8.9
Federal Funds Rate	0.1	0.4	0.8	1.6	2.3	2.9	5.3
10-year Treasury Yield	2.1	1.8	2.8	3.2	3.5	3.9	6.6
Consumer Price Index	0.1	1.3	2.6	2.5	2.4	2.4	3.8
New York State Indicators							
Personal Income ⁵	3.8	3.2	4.8	4.5	4.6	4.6	5.7
Wages and Salaries ⁵							
Total	4.4	3.4	4.3	4.2	4.3	4.2	5.4
Without Bonus ⁶	4.9	4.4	4.3	4.3	4.3	4.2	5.1
Bonus ⁶	1.7	(2.8)	4.0	3.4	4.6	4.6	9.2
Finance and Insurance Bonuses ⁶	(6.3)	(6.4)	4.0	2.0	4.3	4.3	13.8
Wage Per Employee	2.4	1.7	2.9	2.9	3.1	3.1	4.6
Property Income	2.0	2.1	6.1	5.2	5.1	4.9	6.6
Proprietors' Income	2.3	4.6	5.2	5.3	5.3	5.3	6.9
Transfer Income	5.5	3.1	5.1	4.9	5.1	5.2	6.0
Nonfarm Employment ⁵							
Total	1.9	1.7	1.3	1.3	1.2	1.1	0.8
Private	2.2	1.8	1.5	1.4	1.3	1.2	0.9
Unemployment Rate (percent)	5.3	4.9	4.7	4.7	4.6	4.6	6.6
Composite CPI of New York ⁶	0.2	1.2	2.7	2.6	2.5	2.5	3.8
New York State Adjusted Gross Income (NYSAGI)							
Capital Gains	2.8	(3.0)	7.0	8.2	8.4	8.5	15.8
Partnership/ S Corporation Gains	7.0	5.1	8.0	7.9	7.7	7.9	10.1
Business and Farm Income	0.9	5.0	6.0	6.0	5.9	6.0	6.1
Interest Income	(2.1)	3.2	8.9	9.0	7.0	6.8	3.4
Dividends	(4.7)	2.5	8.0	5.9	6.4	7.3	6.3
Total NYSAGI	3.4	2.5	5.0	5.2	5.2	5.3	5.4

¹ For NYSAGI variables, 2015 is an estimate.

² Partnership and S corporation gains data start in 1978, NYSAGI and Business and Farm data in 1980.

³ All indicators are percent changes except change in inventories, the unemployment rate, and interest rates; all GDP components refer to chained 2009 dollars, unless otherwise noted.

⁴ Includes inventory valuation and capital consumption adjustments.

⁵ Nonagricultural employment, wage, and personal income numbers are based on CEW data.

⁶ Series created by the Division of the Budget.

Source: Moody's Analytics; NYS Department of Labor; NYS Department of Taxation and Finance; DOB staff estimates.

Economic Backdrop



SELECTED ECONOMIC INDICATORS (State Fiscal Year)

	2015-16 (actual)	2016-17 (estimate)	2017-18 (forecast)	2018-19 (forecast)	2019-20 (forecast)	2020-21 (forecast)	1977-78 - 2015-16 Average
U.S. Indicators¹							
Gross Domestic Product (current dollars)	3.3	3.2	4.2	4.4	4.5	4.6	6.0
Gross Domestic Product	2.2	1.8	2.5	2.3	2.2	2.2	2.8
Consumption	2.9	2.8	2.4	2.3	2.2	2.2	3.0
Residential Fixed Investment	12.1	2.3	6.2	6.0	5.0	3.9	2.0
Nonresidential Fixed Investment	1.1	0.2	4.0	4.3	4.2	4.0	4.5
Change in Inventories (dollars)	65.6	4.8	37.7	46.9	45.7	46.3	33.1
Exports	(0.7)	1.2	2.4	3.9	4.4	4.5	5.5
Imports	3.3	1.0	3.9	4.9	4.9	4.9	5.6
Government Spending	2.0	0.4	0.9	1.1	1.1	1.1	1.7
Corporate Profits ²	(6.3)	3.6	6.5	5.2	5.1	4.9	7.0
Personal Income	4.1	3.7	4.5	4.6	4.6	4.6	6.2
Wages	4.9	4.4	4.3	4.4	4.4	4.3	5.7
Nonagricultural Employment	2.0	1.6	1.4	1.3	1.3	1.2	1.5
Unemployment Rate (percent)	5.1	4.8	4.5	4.4	4.4	4.4	6.4
S&P 500 Stock Price Index	2.2	6.7	6.6	4.6	5.9	6.4	8.8
Federal Funds Rate	0.2	0.5	1.0	1.8	2.4	3.0	5.3
10-year Treasury Yield	2.1	2.0	2.9	3.3	3.6	4.0	6.6
Consumer Price Index	0.4	1.6	2.6	2.5	2.4	2.4	3.7
New York State Indicators							
Personal Income ³	3.8	3.7	4.7	4.6	4.6	4.6	5.8
Wages and Salaries ³							
Total	4.3	4.1	4.2	4.3	4.3	4.2	5.4
Without Bonus ⁴	4.8	4.6	4.3	4.3	4.2	4.1	5.1
Bonus ⁴	0.9	0.8	3.9	4.5	4.6	4.6	9.0
Finance and Insurance Bonuses ⁴	(7.4)	(0.7)	3.0	4.2	4.3	4.4	14.3
Wage Per Employee	2.3	2.5	2.9	3.1	3.1	3.1	4.6
Property Income	2.2	3.0	5.7	5.3	5.0	4.9	6.7
Proprietors' Income	3.2	4.2	5.4	5.3	5.3	5.2	7.2
Transfer Income	5.1	3.2	5.2	4.9	5.2	5.2	6.0
Nonfarm Employment ³							
Total	1.9	1.5	1.3	1.2	1.1	1.1	0.7
Private	2.2	1.7	1.4	1.4	1.3	1.2	0.8
Unemployment Rate (percent)	5.1	4.9	4.7	4.7	4.5	4.5	6.7
Composite CPI of New York ⁴	0.4	1.6	2.7	2.6	2.5	2.5	3.9

¹ All indicators are percent changes except change in inventories, the unemployment rate, and interest rates; all GDP components refer to chained 2009 dollars, unless otherwise noted.

² Includes inventory valuation and capital consumption adjustments.

³ Nonagricultural employment, wage, and personal income numbers are based on CEW data.

⁴ Series created by the Division of the Budget.

Source: Moody's Analytics; NYS Department of Labor; DOB staff estimates.



Comparison of New York State Tax Structure with Other States

An important consideration in tax policy decisions in New York State, and by extension in setting Budget priorities, is the position of the State in terms of state and local tax rates and bases relative to other states.

An emphasis on tax reduction in New York over much of the past four decades has modestly reduced the disparity between New York State tax rates and burdens and those of the rest of the nation. However, local taxes in New York State remain very high relative to other states.

The data presented here suggest there is pressure on states to remain competitive with respect to tax policy. This is evidenced by the gradual clustering over time of states around the national average tax-to-income ratio. However, there is also a strong tendency for a state tax position to be highly persistent over time; this means movements towards the average have been slow. The persistence most likely reflects a combination of localized spending pressures and priorities and different state and regional attitudes towards tax policy.

Several important points on comparative tax structures can be seen by examining the accompanying tables.

Total State and Local Taxes

- Overall, state and local tax structures are broadly similar in both the taxes imposed and the rates applied. Average rates measured by the tax-to-income ratios are also roughly equivalent across states, especially when aggregating both state and local taxes together.
- The variability across states within each category of tax (e.g., income, sales, or property taxes examined in isolation) is greater than the dispersion for taxes when examined in the aggregate (all state and local taxes added together). For example, a fairly large number of states have excluded the personal income tax from their fiscal policy mix; a smaller subset has excluded corporate taxes, and a few impose no sales tax.
- In general, it appears that the spread of state and local tax burdens across states has been narrowing over time. This may reflect both competitive pressures to keep taxes in line with other states, and the more widespread use of income taxes nationwide.
- The national average state and local tax-to-income ratio has remained relatively stable over time and significantly below that of New York.
- The state and local tax-to-income ratio for New York exceeded the national average by \$4.53 per \$100 of personal income, or 43.6 percent in 1977, ranking New York second nationally. In 2014, the gap was \$4.11 (40.5 percent) above the national average, ranking New York second nationally.

Comparison of New York State Tax Structure with Other States



State Taxes

- In iterations of this Comparison through the FY 2015 Executive Budget, New York's tax-to-personal income ratio had been inherently overstated. The numerator included all personal income tax receipts, whether from residents or non-residents. The denominator, as calculated by the U.S. Bureau of Economic Analysis, excluded the personal income of non-N.Y. residents. Beginning with the FY 2016 Executive Budget Comparison, an adjustment has been made to add the personal income of non-N.Y. residents that pay N.Y. personal income tax to the denominator.
- New York is a slightly above average tax state when looking only at state taxes.
- New York's tax burden, as measured by taxes per \$100 of personal income, was \$0.27 (4.3 percent) above the national average of \$6.34 in 2014.
- New York taxes per \$100 of personal income declined from \$7.12 in 1977 to \$6.61 in 2014.
- New York's state tax rank was eleventh highest in 1977, and dropped to sixteenth highest in 2014.
- Legislation enacted in 2014 that reduced corporate and estate taxes should serve to lower New York's ranking in future years.

Local Taxes

- At least a portion of New York's significant local tax burden is due to the large portion of sales tax retained by New York localities. This contrasts sharply with other states and reflects, at least in part, the need at the local level in New York for receipts to pay for the local share of Medicaid.
- New York City uniquely imposes taxes which comprise a large portion of New York's total local burden. In 2014, nearly \$1.80 of New York's local burden of \$7.65 per \$100 of state personal income was due to New York City (NYC) personal and corporate income taxes. This accounted for approximately 23.5 percent of the total local burden.

Property Taxes in New York State

- Higher than average property taxes as a share of income (51 percent above the 2014 national average) in New York are tied, for the most part, to the rapid escalation in local Medicaid costs and uncapped growth in school property taxes through 2011. The property tax cap went into effect for local fiscal years beginning in 2012 for local governments and school districts.
- Significant disparities exist within New York with respect to the property tax burden.



Comparison of New York State Tax Structure with Other States

- Property tax burdens as a percent of median home value are felt most heavily in Upstate counties due to relative weakness in home value appreciation and other demographic factors. In fact, six of the top ten highest property tax counties in the nation (and 9 of the top 20) in 2014 were in Upstate New York as measured by property taxes paid as a percent of a median-valued home in that county.¹ This is an improvement from 2011 (before the property tax cap went into effect) when, according to this measure, seven of the top ten (and 12 of the top 20) counties were in Upstate New York.
- Long Island and suburban counties near NYC (Westchester, Rockland, Putnam, Suffolk, and Nassau) demonstrated high property taxes as a percent of each county's respective median household income in 2014. Using this metric, five of the ten highest property tax counties in the nation in 2014 were clustered Downstate. At least in part, this is a housing supply issue that characterizes Downstate and that disproportionately affects the elderly and middle class.
- Noticeably, the five counties of New York City did not have relatively high residential property tax burdens in 2014 when compared to other New York counties. This is the result of the more diverse tax structure in the City and a large and valuable commercial property tax base.
- Chapter 97 of the Laws of 2011 generally imposed a growth cap of 2 percent on the annual property tax levy of local taxing jurisdictions. With data through 2014 available, the impact of the property tax cap can be seen as the rankings of many New York State counties based on taxes as a percentage of median home value improved compared to 2011. Also, New York's property taxes as a share of income in 2014 dropped approximately 0.2 percentage points compared to the national average in 2011.

Table Construction

This section compares the state and local tax structure in New York State with other states. Table 1 reports tax rates for the major tax sources utilized by state and local governments. The first and second data columns of the table show the top personal income tax rate by state, and the income level at which the top rate takes effect; the third column lists top corporate tax rates (most state corporate tax structures have relatively flat rate structures, so the rate reported often applies to all corporate income subject to tax); the fourth column reports state sales tax rates; and the final column reports the average combined state and local sales tax rates imposed by the various jurisdictions within such state. The rates are those in effect as of 2016. The income and corporate tax rates reported exclude local rates. This exclusion is important since New York is one of only a handful of states where significant local personal income and corporate taxes are imposed, as in New York City.

¹ Source: Moodyanalytics.com; DOB Staff Estimates

Comparison of New York State Tax Structure with Other States



Tables 2 and 3 report state taxes collected by source divided by state personal income for 1977 and for 2014, respectively, with 2014 being the latest year for which complete state and local tax information are available. The New York rank in terms of state taxes fell from eleventh highest to sixteenth highest over this period.

Tables 4 and 5 report local taxes as a share of state personal income by state in 1977 and in 2014. In 2014, New York had the highest local tax burden using this measure. New York fell from \$3.86 above the mean local tax burden in 1977 to \$3.84 in 2014, but some of this decrease is captured in the general decrease in variation amongst local taxes across states. The above-average local tax burden is caused by relatively high property taxes, the large sales tax burden imposed at the local level, and the high ratio in the other category that picks up the income and corporate taxes imposed by New York City.

Tables 6a, 6b and 7 report state and locally imposed taxes as a percentage of state personal income. The data used in the calculations are for fiscal years ending in 1977 and 2014. The tax-to-income ratios included on table 7 are: state and local income taxes, state and local corporate taxes, state and local sales taxes, local property taxes, all other state and local taxes, and finally combined state and local taxes.

Table 8a reports changes in only the state tax to income ratio over the 1977-2014 period. During this time, New York's state tax burden fell relative to the mean, and has been below the mean for all but six of the last twenty-six recorded years. These results reflect the State's temporary high-income PIT bracket first imposed in 2009. Table 8b reports changes in the state and local tax-to-income ratio over the 1977-2014 period. In 1977, New York state and local taxes as a percent of personal income were 4.53 percentage points above the national average. In 2014, New York was 4.11 percentage points above the national average. The average state and local tax-to-income ratio has remained relatively constant nationwide over the thirty-eight year period, while the New York ratio has declined overall. In every year since 1977, New York has been at least 2.23 percentage points above the mean.

The bottom of tables 1-7 report the mean for each tax category, as well as the standard deviation and the Coefficient of Variation (CV). Additionally, the difference between the national average and New York values is reported. While the standard deviation provides a sense of how the data are dispersed around the average value for all states, the CV allows comparisons of spread for data with different averages and is defined simply as the standard deviation divided by the average and is reported as a percentage. It essentially provides a normalized, unit-free measure of dispersion.

Table 9 reports U.S. Census Bureau data on county-level property tax collections on owner-occupied housing for the 39 New York State counties, out of a total of 806 U.S. counties that had populations of at least 65,000 as of July 1, 2014. The data has been compiled and calculated by DOB based on the methodology used by the Tax Foundation in prior years' reports. Table 9 is sorted by county, in descending order of median property taxes paid on homes in that county as a percentage of the same county's median home value. Median values report the data point for which half of the data set values are higher and half lower. They differ from mean values (the sum of all observations divided by the number of observations) in that outlying values, such as



Comparison of New York State Tax Structure with Other States

particularly expensive homes, do not skew the computation. The rankings reported indicate the relative ordering of the counties with respect to the 806 U.S. counties covered, and are not relative solely to the counties of New York State.

The Tax-to-Income Percentage

The tax-to-personal-income percentage offers one simple and commonly used way of comparing states with respect to relative tax burdens. It must be noted that the real effort of tax burden analysis should be to determine who actually faces the economic consequences of a tax, not who is legally required to pay the tax. All simple measures of tax burden across states are inadequate from this perspective. In general, any single indicator of burden will necessarily be limited in value. The following three additional issues should be taken into consideration when relying on this measure:

Tax Exportation

In using taxes per dollar of personal income as a measure of tax burden it must be noted that for many states a significant portion of the tax base is “exported” or paid by out-of-state taxpayers.

For example, in New York, a large number of workers from New Jersey and Connecticut pay tax on New York source income and on taxable sales while in New York. This means that, unless a portion of Connecticut’s and New Jersey’s personal income is also shifted to New York State; the actual burden on New Jersey residents will appear to be a burden on New York residents. Beginning with the FY 2016 Executive Budget Comparison, a residence adjustment has been made to the personal income calculation for each state. The denominator now includes New York source income earned by non-New York residents. The same adjustment has been made for all 50 states.

One example of tax exportation can be seen in states with a large tourism economy. These states will realize increases in their sales tax collections and other excise taxes that may overstate the tax burden actually paid by their citizens.

Another example is that methods used to apportion corporate taxable income are neither consistent across states, nor are they necessarily representative of actual activity. For example, some states use a three-factor allocation formula that takes into account the percentage of a taxpayer’s property, payroll and receipts amounts in the state compared to those amounts everywhere. Other states use different formulas. These differences in allocation formulas could result in either tax importation or exportation, again distorting this measure as a method of comparison of true tax burden imposed on each state’s residents.

Overall, it would seem likely that New York State is a net exporter of tax burdens relative to other states. This serves to bias the tax-to-income percentage for New York upward – making burdens in New York appear too high using this measure. The inclusion of the residence adjustment has helped rectify one of the tax exportation issues facing New York.

Comparison of New York State Tax Structure with Other States



Income Adjustments

Given two states with identical marginal tax rate structures, differences in the incomes of individuals could yield different tax-to-income percentage results. For example, if New York State and Alabama had identical progressive income brackets built into their respective tax codes, the higher average personal incomes of New York State residents would tend to lead to higher taxes per dollar of personal income due to the nature of the income tax.

Particularly important is the distinction between the National Income and Product Account (NIPA) measure of personal income as defined by the Bureau of Economic Analysis (BEA), and taxable personal income as defined by each state's respective tax code. For example, the NIPA personal income measure does not include capital gains (by the definition of personal income). However, capital gains are a component of New York Adjusted Gross Income (NYAGI) that contributes significantly to personal income tax receipts in New York State. States with high income individuals, like New York, would be more likely to have the tax-to-income percentage distorted upward. In the gains example, the percentage of personal income used in Table 2 will be influenced because the numerator will include taxes on capital gains income that is not included in the denominator, effectively overstating the tax burden relative to other states since New York has a disproportionate share of taxpayers with large capital gains incomes.

Federal Offsets

The Federal tax structure allows for the deductibility of certain state and local taxes. As a result, residents of states with relatively higher state income, property and corporate tax burdens, such as New York State, receive a larger deduction, thereby offsetting a portion of the individual's total tax burden. Again, this is not reflected in the tax-to-income percentage reported here. So again, it would appear this biases the measure in a way that makes New York look like a relatively higher tax state than is actually the case.

With all three issues, the tax-to-income percentage calculation likely biases the tax burden in New York upward.



Comparison of New York State Tax Structure with Other States

Table 1 Comparison of 2016 State Top Rates

State	Top PIT Rate	Highest Tax Bracket (Married Filing Joint)	Top Corp. Rate	State Sales Rate	Combined Sales Tax Rate ¹
Alabama	5	\$6,000	6.5	4	8.97
Alaska	-	NA	9.4	-	1.78
Arizona	4.54	\$300,000	5.5	5.6	8.25
Arkansas	6.9	\$35,099	6.5	6.5	9.3
California	13.3	\$1,052,886	8.84	7.5	8.48
Colorado	4.63	Flat Rate	4.63	2.9	7.52
Connecticut	6.99	\$1,000,000	9	6.35	6.35
Delaware	6.6	\$60,000	8.7	-	-
Florida	-	NA	5.5	6	6.66
Georgia	6	\$10,000	6	4	7.01
Hawaii	8.25	\$96,000	6.4	4	4.35
Idaho	7.4	\$21,780	7.4	6	6.03
Illinois	3.75	Flat Rate	7.75	6.25	8.64
Indiana	3.3	Flat Rate	6.5	7	7
Iowa	8.98	\$69,930	12	6	6.79
Kansas	4.6	\$30,000	7	6.5	8.60
Kentucky	6	\$75,000	6	6	6
Louisiana	6	\$100,000	8	4	9
Maine	7.15	\$74,999	8.93	5.5	5.5
Maryland	5.75	\$300,000	8.25	6	6
Massachusetts	5.1	Flat Rate	8	6.25	6.25
Michigan	4.25	Flat Rate	6	6	6
Minnesota	9.85	\$259,420	9.8	6.875	7.27
Mississippi	5	\$10,000	5	7	7.07
Missouri	6	\$9,000	6.25	4.225	7.86
Montana	6.9	\$17,400	6.75	-	-
Nebraska	6.84	\$59,180	7.81	5.5	6.87
Nevada	-	NA	-	6.85	7.98
New Hampshire	-	-	8.5	-	-
New Jersey	8.97	\$500,000	9	7	6.97
New Mexico	4.9	\$24,000	6.6	5.125	7.51
New York	8.82	\$2,140,900	6.5	4	8.49
North Carolina	5.75	Flat Rate	4	4.75	6.9
North Dakota	2.9	\$411,500	4.31	5	6.82
Ohio	4.997	\$208,500	-	5.75	7.14
Oklahoma	5	\$12,200	6	4.5	8.82
Oregon	9.9	\$250,000	7.6	-	-
Pennsylvania	3.07	Flat Rate	9.99	6	6.34
Rhode Island	5.99	\$138,300	7	7	7
South Carolina	7	\$14,600	5	6	7.22
South Dakota	-	NA	-	4	5.84
Tennessee	-	-	6.5	7	9.46
Texas	-	NA	-	6.25	8.17
Utah	5	Flat Rate	5	5.95	6.69
Vermont	8.95	\$421,900	8.5	6	6.17
Virginia	5.75	\$17,000	6	5.3	5.63
Washington	-	NA	-	6.5	8.89
West Virginia	6.5	\$60,000	6.5	6	6.2
Wisconsin	7.65	\$326,330	7.9	5	5.41
Wyoming	-	NA	-	4	5.42
Mean Values	5.20		6.27	5.08	6.45
Standard Deviation	3.08		2.79	1.98	2.34
Coefficient of Variation	59.09		44.53	38.98	36.27

"-" indicates either no tax or a tax that is not strictly comparable is imposed.

¹Source: Tax Foundation. Reflects combined state and average local rate for each state.

Comparison of New York State Tax Structure with Other States



Table 2 - 1977 Components and Percentage of Total State Tax Burden per \$100 Personal Income

State	Total State Taxes		Percent of Total			Sales and Use			Corporate			Other		
	Taxes	Rank	PIT	Rank	of Total	and Use	Rank	Percent of Total	Rank	Percent of Total	Rank	Percent of Total	Rank	Percent of Total
Alabama	6.37	26	1.19	33	18.7	4.12	10	64.7	0.34	38	5.4	0.71	27	11.2
Alaska	14.12	1	3.84	1	27.2	1.20	49	8.5	0.65	10	4.6	8.42	1	59.7
Arizona	7.02	12	1.15	34	16.4	4.30	7	61.2	0.31	40	4.5	1.25	10	17.9
Arkansas	6.34	27	1.29	28	20.4	3.87	15	61.1	0.53	21	8.4	0.64	32	10.1
California	6.50	24	1.87	18	28.8	3.10	33	47.7	0.85	5	13.0	0.68	31	10.5
Colorado	5.16	44	1.62	20	31.5	2.64	41	51.1	0.39	31	7.5	0.52	42	10.0
Connecticut	5.63	36	0.23	42	4.1	4.07	12	72.3	0.78	6	13.8	0.55	38	9.8
Delaware	8.04	5	3.45	2	43.0	1.42	48	17.6	0.60	14	7.4	2.57	3	31.9
Florida	5.10	45	0.00	45	0.0	3.76	19	73.8	0.30	41	5.9	1.04	15	20.3
Georgia	5.73	34	1.49	24	26.0	3.41	24	59.5	0.51	22	9.0	0.32	49	5.5
Hawaii	8.49	2	2.51	9	29.6	5.51	2	64.9	0.34	39	4.0	0.13	50	1.5
Idaho	6.32	28	1.93	15	30.6	3.03	35	47.8	0.53	20	8.4	0.83	22	13.2
Illinois	5.56	38	1.48	25	26.6	3.15	29	56.7	0.40	29	7.2	0.53	40	9.5
Indiana	5.66	35	1.25	31	22.2	3.75	20	66.2	0.23	44	4.0	0.43	47	7.6
Iowa	6.08	30	2.11	13	34.6	2.69	38	44.3	0.43	27	7.1	0.85	20	14.0
Kansas	5.83	33	1.26	29	21.6	3.13	31	53.7	0.74	9	12.7	0.70	29	12.0
Kentucky	7.14	10	1.55	22	21.7	3.83	16	53.7	0.60	13	8.4	1.16	13	16.2
Louisiana	6.90	15	0.54	40	7.8	3.42	23	49.5	0.38	32	5.5	2.56	4	37.1
Maine	6.73	21	1.08	37	16.0	4.25	8	63.2	0.51	23	7.5	0.89	18	13.3
Maryland	6.87	17	2.60	8	37.9	3.19	28	46.5	0.37	35	5.4	0.70	30	10.2
Massachusetts	6.57	22	2.67	7	40.6	2.63	42	40.1	0.89	2	13.5	0.38	48	5.8
Michigan	6.75	20	2.04	14	30.3	3.02	36	44.7	1.10	1	16.3	0.59	35	8.8
Minnesota	8.25	3	3.18	4	38.5	3.26	26	39.6	0.86	4	10.4	0.95	17	11.6
Mississippi	7.49	8	1.02	38	13.6	5.42	3	72.3	0.35	37	4.7	0.70	28	9.4
Missouri	4.54	47	1.11	36	24.4	2.64	40	58.2	0.30	42	6.6	0.49	44	10.8
Montana	6.00	31	2.15	12	35.8	1.59	47	26.6	0.48	26	8.0	1.78	7	29.6
Nebraska	5.45	40	1.52	23	27.8	3.05	34	56.0	0.37	34	6.8	0.51	43	9.3
Nevada	5.50	39	0.00	45	0.0	4.30	6	78.2	0.00	47	0.0	1.20	12	21.8
New Hampshire	3.53	50	0.12	43	3.5	2.01	46	56.9	0.57	16	16.3	0.82	24	23.3
New Jersey	5.32	42	1.22	32	22.9	2.70	37	50.8	0.57	17	10.7	0.83	23	15.6
New Mexico	7.72	7	0.34	41	4.5	4.86	5	62.9	0.38	33	4.9	2.14	5	27.7
New York	7.12	11	3.00	5	42.1	2.63	43	36.9	0.86	3	12.1	0.64	33	8.9
North Carolina	6.82	18	2.24	11	32.8	3.23	27	47.3	0.58	15	8.6	0.77	26	11.3
North Dakota	6.77	19	1.26	30	18.6	3.77	18	55.7	0.50	24	7.4	1.25	11	18.4
Ohio	4.44	49	0.76	39	17.2	2.65	39	59.7	0.39	30	8.8	0.63	34	14.2
Oklahoma	5.98	32	1.14	35	19.0	2.59	45	43.3	0.37	36	6.2	1.88	6	31.4
Oregon	5.19	43	3.00	6	57.7	0.85	50	16.4	0.49	25	9.4	0.86	19	16.5
Pennsylvania	6.26	29	1.32	27	21.1	3.14	30	50.2	0.75	8	11.9	1.05	14	16.8
Rhode Island	6.54	23	1.55	21	23.6	3.80	17	58.1	0.61	12	9.3	0.59	36	9.0
South Carolina	6.88	16	1.68	19	24.5	4.12	11	59.8	0.62	11	9.0	0.46	46	6.7
South Dakota	4.47	48	0.00	45	0.0	3.89	14	86.9	0.06	46	1.3	0.53	41	11.8
Tennessee	5.59	37	0.08	44	1.5	4.13	9	73.9	0.57	18	10.2	0.81	25	14.5
Texas	5.07	46	0.00	45	0.0	3.40	25	67.0	0.00	47	0.0	1.68	9	33.0
Utah	6.37	25	1.90	16	29.8	3.69	21	57.9	0.30	43	4.7	0.49	45	7.7
Vermont	7.46	9	2.28	10	30.6	3.66	22	49.1	0.55	19	7.4	0.96	16	12.9
Virginia	5.44	41	1.89	17	34.8	2.59	44	47.7	0.42	28	7.7	0.54	39	9.8
Washington	7.00	13	0.00	45	0.0	5.30	4	75.7	0.00	47	0.0	1.70	8	24.3
West Virginia	7.80	6	1.42	26	18.2	5.60	1	71.7	0.20	45	2.6	0.58	37	7.4
Wisconsin	8.13	4	3.40	3	41.9	3.13	32	38.5	0.75	7	9.2	0.85	21	10.4
Wyoming	6.91	14	0.00	45	0.0	3.93	13	56.8	0.00	47	0.0	2.99	2	43.2
Mean	6.46		1.49		22.4	3.39		54.1	0.47		7.5	1.10		16.1
Standard Deviation	1.52		1.00			1.02			0.24			1.21		
Coefficient of Variation	23.52		66.79			29.97			50.97			109.53		
NYS Diff. from Mean	0.66		1.51		19.7	(0.76)		(17.2)	0.38		4.6	(0.47)		(7.2)
Source: Moody's Economy.com, U.S. Census Bureau														



Comparison of New York State Tax Structure with Other States

Table 3 - 2014 Components and Percentage of Total State Tax Burden per \$100 Personal Income

State	Total State		Percent			Sales and Use			Corporate			Other		
	Taxes	Rank	PIT	Rank	of Total	and Use	Rank	Percent of Total	Rank	Percent of Total	Rank	Percent of Total	Rank	Percent of Total
Alabama	5.18	38	1.79	34	34.5	2.68	30	51.8	0.23	39	4.4	0.48	35	9.3
Alaska	8.48	5	0.00	44	0.0	0.64	50	7.6	1.02	1	12.1	6.81	2	80.4
Arizona	5.16	39	1.36	40	26.5	3.06	23	59.3	0.23	38	4.4	0.51	32	9.8
Arkansas	7.96	7	2.32	20	29.1	3.85	8	48.4	0.35	18	4.5	1.43	8	18.0
California	7.11	12	3.50	5	49.2	2.58	34	36.2	0.46	10	6.4	0.58	28	8.1
Colorado	4.50	44	2.17	27	48.1	1.71	44	38.1	0.27	30	6.1	0.35	44	7.7
Connecticut	7.27	10	3.55	3	48.8	3.10	20	42.6	0.29	27	3.9	0.34	45	4.7
Delaware	6.95	14	2.28	22	32.8	1.05	48	15.1	0.61	4	8.8	3.01	5	43.3
Florida	4.18	48	0.00	44	0.0	3.43	14	82.1	0.24	35	5.8	0.51	33	12.1
Georgia	4.71	43	2.27	23	48.1	1.85	43	39.2	0.24	36	5.1	0.36	43	7.6
Hawaii	9.23	3	2.67	10	28.9	5.89	1	63.8	0.19	41	2.1	0.48	37	5.2
Idaho	6.21	24	2.26	24	36.4	3.08	21	49.6	0.32	24	5.2	0.55	30	8.8
Illinois	6.36	20	2.61	14	41.0	2.56	35	40.2	0.70	3	10.9	0.50	34	7.9
Indiana	6.58	17	1.91	32	29.1	4.06	6	61.7	0.34	22	5.1	0.27	48	4.1
Iowa	5.97	29	2.31	21	38.7	2.72	29	45.6	0.28	28	4.7	0.66	22	11.0
Kansas	5.69	33	1.95	31	34.2	3.02	24	53.0	0.26	32	4.5	0.47	38	8.2
Kentucky	6.65	15	2.24	25	33.8	3.20	17	48.2	0.40	13	6.1	0.79	16	11.9
Louisiana	4.95	41	1.41	39	28.4	2.61	33	52.8	0.25	33	5.0	0.69	20	13.9
Maine	7.21	11	2.65	12	36.8	3.58	12	49.7	0.34	20	4.8	0.63	24	8.8
Maryland	6.29	22	2.58	16	41.1	2.67	31	42.4	0.33	23	5.2	0.71	19	11.4
Massachusetts	6.26	23	3.29	6	52.5	1.97	41	31.4	0.54	6	8.7	0.46	39	7.4
Michigan	6.18	25	1.96	30	31.7	3.06	22	49.6	0.22	40	3.6	0.93	15	15.1
Minnesota	8.61	4	3.55	4	41.2	3.63	10	42.2	0.49	9	5.7	0.94	14	10.9
Mississippi	7.55	8	1.66	38	22.0	4.69	3	62.1	0.52	7	6.9	0.67	21	8.9
Missouri	4.36	47	2.08	28	47.7	1.91	42	43.7	0.14	44	3.2	0.24	49	5.4
Montana	6.53	19	2.62	13	40.0	1.35	47	20.7	0.37	16	5.7	2.19	6	33.6
Nebraska	5.39	37	2.35	18	43.6	2.55	37	47.2	0.34	21	6.3	0.16	50	2.9
Nevada	6.17	26	0.00	44	0.0	4.94	2	80.0	0.00	46	0.0	1.24	10	20.0
New Hampshire	3.54	50	0.14	42	4.1	1.36	46	38.4	0.84	2	23.8	1.19	12	33.7
New Jersey	6.35	21	2.56	17	40.3	2.73	28	43.0	0.51	8	8.0	0.55	29	8.7
New Mexico	7.45	9	1.68	37	22.5	3.62	11	48.6	0.27	31	3.6	1.88	7	25.3
New York	6.61	16	3.69	2	55.8	2.02	40	30.6	0.42	12	6.3	0.48	36	7.3
North Carolina	5.98	28	2.66	11	44.4	2.55	36	42.6	0.35	19	5.8	0.43	40	7.1
North Dakota	14.40	1	1.17	41	8.1	4.35	5	30.2	0.59	5	4.1	8.29	1	57.6
Ohio	5.49	35	1.71	36	31.2	3.17	18	57.8	0.00	46	0.0	0.61	27	11.0
Oklahoma	5.40	36	1.76	35	32.5	2.37	39	43.8	0.24	37	4.4	1.04	13	19.3
Oregon	5.79	30	3.98	1	68.7	0.86	49	14.9	0.30	26	5.1	0.65	23	11.3
Pennsylvania	5.69	31	1.80	33	31.6	2.90	26	50.9	0.38	15	6.7	0.61	26	10.7
Rhode Island	5.99	27	2.20	26	36.7	3.16	19	52.8	0.24	34	4.0	0.39	42	6.4
South Carolina	5.14	40	1.97	29	38.3	2.66	32	51.8	0.19	42	3.7	0.32	46	6.2
South Dakota	4.16	49	0.00	44	0.0	3.35	15	80.6	0.06	45	1.5	0.74	18	17.8
Tennessee	4.43	46	0.09	43	2.0	3.29	16	74.2	0.44	11	10.0	0.61	25	13.8
Texas	4.48	45	0.00	44	0.0	3.71	9	82.8	0.00	46	0.0	0.77	17	17.2
Utah	5.69	32	2.61	15	45.8	2.42	38	42.5	0.28	29	4.9	0.39	41	6.9
Vermont	10.31	2	2.35	19	22.8	3.53	13	34.3	0.37	17	3.6	4.06	4	39.4
Virginia	4.74	42	2.72	8	57.4	1.52	45	32.0	0.19	43	3.9	0.32	47	6.7
Washington	5.61	34	0.00	44	0.0	4.38	4	78.2	0.00	46	0.0	1.22	11	21.8
West Virginia	8.27	6	2.72	7	32.9	3.94	7	47.6	0.31	25	3.8	1.30	9	15.7
Wisconsin	6.55	18	2.71	9	41.4	2.94	25	44.8	0.39	14	6.0	0.51	31	7.7
Wyoming	7.05	13	0.00	44	0.0	2.89	27	40.9	0.00	46	0.0	4.17	3	59.1
Mean	6.34		1.96		31.2	2.90		47.4	0.33		5.3	1.15		16.1
Standard Deviation	1.79		1.07			1.03			0.20			1.56		
Coefficient of Variation	28.17		54.92			35.55			61.54			135.42		
NYS Diff. from Mean	0.27		1.73		24.6	(0.88)		(16.8)	0.09		1.0	(0.67)		(8.9)

Source: Moody's Economy.com, U.S. Census Bureau

Comparison of New York State Tax Structure with Other States



Table 4 - 1977 Components and Percentage of Total Local Taxes Per \$100 of Personal Income

State	Total	Rank	Property	Rank	Percent of Total	Sales	Rank	Percent of Total	Other	Rank	Percent of Total
Alabama	2.14	47	0.87	50	40.6	0.89	4	41.6	0.38	8	17.9
Alaska	2.94	39	2.31	36	78.6	0.59	14	20.0	0.04	48	1.4
Arizona	4.62	15	3.78	19	81.8	0.74	10	16.0	0.11	31	2.3
Arkansas	2.00	48	1.82	44	90.9	0.12	29	6.1	0.06	41	3.0
California	5.83	4	4.97	8	85.2	0.64	13	11.0	0.22	16	3.8
Colorado	5.16	10	3.91	17	75.9	1.09	3	21.0	0.16	21	3.1
Connecticut	4.99	12	4.95	9	99.1	0.00	44	0.0	0.04	45	0.9
Delaware	1.89	49	1.61	46	85.0	0.00	42	0.2	0.28	12	14.7
Florida	3.19	35	2.69	31	84.4	0.39	20	12.1	0.11	28	3.5
Georgia	3.55	31	2.89	30	81.3	0.54	17	15.2	0.12	26	3.5
Hawaii	2.31	43	1.85	43	80.1	0.22	25	9.4	0.24	15	10.5
Idaho	3.07	37	2.99	28	97.3	0.02	37	0.8	0.06	40	2.0
Illinois	4.52	16	3.70	20	81.9	0.65	12	14.5	0.16	20	3.6
Indiana	3.38	33	3.26	24	96.6	0.01	41	0.1	0.11	30	3.3
Iowa	4.11	20	3.98	16	96.9	0.01	39	0.2	0.12	27	2.9
Kansas	4.33	19	4.08	14	94.1	0.16	27	3.8	0.09	33	2.1
Kentucky	2.37	42	1.59	47	66.9	0.11	31	4.6	0.68	5	28.5
Louisiana	3.12	36	1.52	49	48.5	1.47	1	47.1	0.14	24	4.4
Maine	3.57	29	3.54	22	99.3	0.00	45	0.0	0.03	50	0.7
Maryland	4.98	13	3.24	25	65.1	0.22	24	4.4	1.51	1	30.4
Massachusetts	6.40	3	6.36	1	99.4	0.00	45	0.0	0.04	49	0.6
Michigan	4.37	18	4.01	15	91.6	0.04	35	1.0	0.32	11	7.4
Minnesota	3.72	27	3.57	21	96.0	0.07	33	2.0	0.08	36	2.1
Mississippi	2.28	44	2.16	38	94.5	0.08	32	3.7	0.04	47	1.8
Missouri	3.79	25	2.64	33	69.8	0.77	7	20.2	0.38	9	9.9
Montana	5.18	8	4.98	7	96.1	0.00	45	0.0	0.20	17	3.9
Nebraska	5.41	6	5.04	6	93.3	0.24	22	4.4	0.13	25	2.3
Nevada	3.96	22	2.67	32	67.5	0.74	9	18.7	0.55	6	13.9
New Hampshire	5.75	5	5.64	3	98.1	0.00	45	0.0	0.11	29	1.9
New Jersey	6.48	2	5.85	2	90.1	0.55	16	8.5	0.09	35	1.3
New Mexico	1.87	50	1.53	48	81.7	0.21	26	11.0	0.14	23	7.4
New York	7.79	1	5.33	4	68.4	1.45	2	18.7	1.00	3	12.9
North Carolina	2.55	41	2.10	41	82.4	0.40	19	15.5	0.05	42	2.0
North Dakota	3.40	32	3.28	23	96.5	0.02	38	0.6	0.10	32	3.0
Ohio	3.99	21	3.04	27	76.3	0.14	28	3.5	0.81	4	20.3
Oklahoma	2.88	40	2.02	42	70.0	0.81	6	28.3	0.05	43	1.7
Oregon	4.95	14	4.56	12	92.3	0.11	30	2.2	0.27	13	5.5
Pennsylvania	3.90	24	2.58	35	66.2	0.03	36	0.9	1.28	2	32.9
Rhode Island	4.44	17	4.40	13	99.1	0.00	45	0.0	0.04	46	0.9
South Carolina	2.26	45	2.11	40	93.2	0.00	43	0.1	0.15	22	6.7
South Dakota	5.20	7	4.71	10	90.6	0.24	23	4.6	0.25	14	4.9
Tennessee	3.27	34	2.22	37	67.9	0.86	5	26.3	0.19	18	5.8
Texas	3.66	28	3.14	26	85.8	0.45	18	12.2	0.07	37	2.0
Utah	3.56	30	2.91	29	81.8	0.56	15	15.7	0.09	34	2.6
Vermont	5.17	9	5.10	5	98.7	0.00	45	0.0	0.07	39	1.3
Virginia	3.75	26	2.59	34	69.0	0.75	8	19.9	0.42	7	11.1
Washington	3.02	38	2.12	39	69.9	0.73	11	24.2	0.18	19	5.9
West Virginia	2.18	46	1.78	45	81.8	0.06	34	2.8	0.33	10	15.3
Wisconsin	3.94	23	3.89	18	98.7	0.01	40	0.1	0.05	44	1.2
Wyoming	5.07	11	4.66	11	92.0	0.33	21	6.6	0.07	38	1.4
Mean	3.93		3.33		83.8	0.35		9.6	0.24		6.6
Standard Deviation	1.31		1.31			0.38			0.31		
CV	33.43		39.41			109.40			126.26		
NYS Diff. from Mean	3.86		2.00		(15.3)	1.10		9.1	0.76		6.3

Source: Moody's Economy.com, U.S. Census Bureau

Note: "Other" includes NYC imposed taxes and other categories.



Comparison of New York State Tax Structure with Other States

Table 5 - 2014 Components and Percentage of Total Local Taxes Per \$100 of Personal Income

State	Total	Rank	Property	Rank	Percent of Total	Sales	Rank	Percent of Total	Other	Rank	Percent of Total
Alabama	2.93	41	1.23	49	41.9	1.23	6	42.1	0.47	9	16.0
Alaska	5.44	3	4.54	6	83.5	0.79	18	14.5	0.10	30	1.9
Arizona	3.58	31	2.29	36	64.0	1.13	10	31.5	0.16	23	4.5
Arkansas	1.96	49	0.82	50	41.9	1.11	11	56.6	0.03	50	1.5
California	3.77	26	2.65	28	70.3	0.84	17	22.4	0.27	17	7.3
Colorado	4.45	11	2.80	24	62.9	1.46	3	32.8	0.19	20	4.3
Connecticut	4.62	10	4.55	5	98.5	0.00	49	0.0	0.07	45	1.5
Delaware	2.07	48	1.70	45	81.7	0.03	46	1.5	0.35	12	16.8
Florida	3.63	29	2.78	25	76.7	0.63	25	17.4	0.22	19	5.9
Georgia	3.91	22	2.58	29	65.9	1.23	7	31.5	0.10	31	2.6
Hawaii	3.17	36	2.13	39	67.2	0.69	22	21.9	0.34	14	10.9
Idaho	2.74	46	2.57	31	93.7	0.06	43	2.1	0.12	28	4.3
Illinois	5.02	6	4.19	8	83.5	0.69	23	13.8	0.14	26	2.7
Indiana	3.08	38	2.50	33	81.1	0.08	40	2.5	0.50	7	16.4
Iowa	3.96	20	3.42	13	86.5	0.39	29	10.0	0.14	25	3.6
Kansas	4.17	16	3.17	15	76.0	0.91	16	21.8	0.09	36	2.2
Kentucky	2.88	43	1.61	47	55.9	0.39	30	13.5	0.88	5	30.6
Louisiana	4.28	15	1.96	42	45.8	2.21	1	51.7	0.11	29	2.5
Maine	4.77	8	4.72	4	98.8	0.02	48	0.4	0.04	48	0.9
Maryland	4.83	7	2.72	26	56.3	0.28	32	5.7	1.84	1	38.0
Massachusetts	3.82	23	3.65	11	95.7	0.09	39	2.3	0.08	42	2.0
Michigan	3.07	39	2.82	23	91.9	0.07	42	2.2	0.18	21	6.0
Minnesota	2.81	45	2.55	32	91.1	0.16	37	5.6	0.09	34	3.3
Mississippi	2.90	42	2.71	27	93.5	0.11	38	3.6	0.08	39	2.9
Missouri	3.81	24	2.25	37	59.0	1.14	9	29.9	0.42	11	11.1
Montana	3.13	37	3.03	16	96.6	0.02	47	0.6	0.09	37	2.8
Nebraska	4.75	9	3.66	10	77.0	0.57	26	12.0	0.53	6	11.0
Nevada	3.33	32	2.11	40	63.4	0.92	14	27.6	0.30	16	9.0
New Hampshire	5.37	4	5.30	2	98.7	0.00	49	0.0	0.07	44	1.3
New Jersey	5.98	2	5.86	1	98.0	0.04	45	0.6	0.08	38	1.4
New Mexico	3.26	33	1.84	44	56.4	1.35	4	41.4	0.07	43	2.2
New York	7.65	1	4.38	7	57.2	1.47	2	19.2	1.80	2	23.6
North Carolina	3.20	34	2.42	34	75.4	0.70	21	21.7	0.09	35	2.9
North Dakota	2.57	47	1.95	43	75.7	0.52	27	20.4	0.10	32	3.9
Ohio	4.42	12	2.84	22	64.1	0.44	28	10.0	1.14	3	25.9
Oklahoma	2.81	44	1.44	48	51.1	1.31	5	46.5	0.07	47	2.3
Oregon	3.94	21	3.19	14	80.9	0.27	33	6.8	0.49	8	12.3
Pennsylvania	4.33	14	2.98	19	68.9	0.21	34	4.9	1.13	4	26.2
Rhode Island	5.03	5	4.91	3	97.7	0.05	44	1.0	0.07	46	1.3
South Carolina	3.81	25	2.99	18	78.5	0.38	31	9.8	0.44	10	11.7
South Dakota	3.97	19	2.87	21	72.4	1.00	12	25.2	0.10	33	2.4
Tennessee	3.17	35	2.04	41	64.4	0.96	13	30.4	0.16	22	5.2
Texas	4.38	13	3.58	12	81.7	0.72	19	16.5	0.08	41	1.8
Utah	3.61	30	2.57	30	71.3	0.91	15	25.2	0.13	27	3.6
Vermont	1.78	50	1.67	46	94.1	0.07	41	3.9	0.04	49	2.0
Virginia	4.01	17	3.02	17	75.3	0.66	24	16.4	0.33	15	8.3
Washington	3.67	28	2.21	38	60.1	1.22	8	33.3	0.24	18	6.6
West Virginia	2.96	40	2.41	35	81.4	0.20	35	6.9	0.35	13	11.7
Wisconsin	4.01	18	3.75	9	93.5	0.18	36	4.5	0.08	40	2.0
Wyoming	3.77	27	2.91	20	77.1	0.70	20	18.6	0.16	24	4.3
Mean	3.81		2.90		75.5	0.61		16.8	0.30		7.7
Standard Deviation	1.05		1.05			0.51			0.40		
CV	27.45		36.26			83.13			130.75		
NYS Diff. from Mean	3.84		1.48		(18.3)	0.86		2.4	1.50		15.9

Source: Moody's Economy.com, U.S. Census Bureau

Note: "Other" includes NYC imposed taxes and all other categories.

Comparison of New York State Tax Structure with Other States



Table 6a - State/Local Split of 1977 Tax-to-Income Ratio

State	State Taxes	Local Taxes	State/Local Total	Total Rank
Alabama	6.37	2.14	8.51	46
Alaska	14.12	2.94	17.05	1
Arizona	7.02	4.62	11.64	11
Arkansas	6.34	2.00	8.34	48
California	6.50	5.83	12.33	5
Colorado	5.16	5.16	10.32	18
Connecticut	5.63	4.99	10.62	17
Delaware	8.04	1.89	9.93	30
Florida	5.10	3.19	8.29	50
Georgia	5.73	3.55	9.29	38
Hawaii	8.49	2.31	10.80	16
Idaho	6.32	3.07	9.40	36
Illinois	5.56	4.52	10.08	25
Indiana	5.66	3.38	9.03	42
Iowa	6.08	4.11	10.19	20
Kansas	5.83	4.33	10.16	22
Kentucky	7.14	2.37	9.51	34
Louisiana	6.90	3.12	10.02	27
Maine	6.73	3.57	10.30	19
Maryland	6.87	4.98	11.84	9
Massachusetts	6.57	6.40	12.97	3
Michigan	6.75	4.37	11.12	13
Minnesota	8.25	3.72	11.97	8
Mississippi	7.49	2.28	9.77	31
Missouri	4.54	3.79	8.33	49
Montana	6.00	5.18	11.19	12
Nebraska	5.45	5.41	10.85	15
Nevada	5.50	3.96	9.45	35
New Hampshire	3.53	5.75	9.28	39
New Jersey	5.32	6.48	11.81	10
New Mexico	7.72	1.87	9.60	33
New York	7.12	7.79	14.91	2
North Carolina	6.82	2.55	9.36	37
North Dakota	6.77	3.40	10.17	21
Ohio	4.44	3.99	8.43	47
Oklahoma	5.98	2.88	8.86	44
Oregon	5.19	4.95	10.14	24
Pennsylvania	6.26	3.90	10.16	23
Rhode Island	6.54	4.44	10.98	14
South Carolina	6.88	2.26	9.14	41
South Dakota	4.47	5.20	9.68	32
Tennessee	5.59	3.27	8.87	43
Texas	5.07	3.66	8.74	45
Utah	6.37	3.56	9.93	29
Vermont	7.46	5.17	12.62	4
Virginia	5.44	3.75	9.19	40
Washington	7.00	3.02	10.03	26
West Virginia	7.80	2.18	9.98	28
Wisconsin	8.13	3.94	12.07	6
Wyoming	6.91	5.07	11.98	7
Mean Values	6.46	3.93	10.38	
Standard Deviation	1.52	1.31	1.66	
Coefficient of Variation	23.52	33.43	15.94	
NYS Diff. from Avg.	0.66	3.86	4.53	
Source: Moody's Economy.com, U.S. Census Bureau				



Comparison of New York State Tax Structure with Other States

Table 6b - State/Local Split of 2014 Tax-to-Income Ratio				
State	State Taxes	Local Taxes	State/Local Total	Total Rank
Alabama	5.18	2.93	8.10	48
Alaska	8.48	5.44	13.91	3
Arizona	5.16	3.58	8.74	43
Arkansas	7.96	1.96	9.92	23
California	7.11	3.77	10.88	14
Colorado	4.50	4.45	8.95	37
Connecticut	7.27	4.62	11.89	8
Delaware	6.95	2.07	9.02	36
Florida	4.18	3.63	7.81	49
Georgia	4.71	3.91	8.63	44
Hawaii	9.23	3.17	12.40	4
Idaho	6.21	2.74	8.95	38
Illinois	6.36	5.02	11.38	10
Indiana	6.58	3.08	9.66	28
Iowa	5.97	3.96	9.92	22
Kansas	5.69	4.17	9.86	25
Kentucky	6.65	2.88	9.53	29
Louisiana	4.95	4.28	9.23	34
Maine	7.21	4.77	11.99	7
Maryland	6.29	4.83	11.13	12
Massachusetts	6.26	3.82	10.08	20
Michigan	6.18	3.07	9.24	33
Minnesota	8.61	2.81	11.42	9
Mississippi	7.55	2.90	10.45	18
Missouri	4.36	3.81	8.18	46
Montana	6.53	3.13	9.66	27
Nebraska	5.39	4.75	10.15	19
Nevada	6.17	3.33	9.51	30
New Hampshire	3.54	5.37	8.91	40
New Jersey	6.35	5.98	12.33	5
New Mexico	7.45	3.26	10.70	16
New York	6.61	7.65	14.26	2
North Carolina	5.98	3.20	9.18	35
North Dakota	14.40	2.57	16.97	1
Ohio	5.49	4.42	9.92	24
Oklahoma	5.40	2.81	8.21	45
Oregon	5.79	3.94	9.73	26
Pennsylvania	5.69	4.33	10.03	21
Rhode Island	5.99	5.03	11.02	13
South Carolina	5.14	3.81	8.95	39
South Dakota	4.16	3.97	8.12	47
Tennessee	4.43	3.17	7.60	50
Texas	4.48	4.38	8.86	41
Utah	5.69	3.61	9.30	31
Vermont	10.31	1.78	12.08	6
Virginia	4.74	4.01	8.75	42
Washington	5.61	3.67	9.28	32
West Virginia	8.27	2.96	11.23	11
Wisconsin	6.55	4.01	10.56	17
Wyoming	7.05	3.77	10.82	15
Mean Values	6.34	3.81	10.15	
Standard Deviation	1.79	1.05	1.75	
Coefficient of Variation	28.17	27.45	17.29	
NYS Diff. from Avg.	0.27	3.84	4.11	
Source: Moody's Economy.com, U.S. Census Bureau				

Comparison of New York State Tax Structure with Other States



Table 7 - 2014 Ratios of Tax Collections to Personal Income by Category

State	State PIT	Local PIT	State Corporate	Local Corporate	State Sales	Local Sales	Local Property	All Other	Total State/Local
Alabama	1.79	0.06	0.23	0.00	2.68	1.23	1.23	0.90	8.10
Alaska	0.00	0.00	1.02	0.00	0.64	0.79	4.54	6.92	13.91
Arizona	1.36	0.00	0.23	0.00	3.06	1.13	2.29	0.67	8.74
Arkansas	2.32	0.00	0.35	0.00	3.85	1.11	0.82	1.47	9.92
California	3.50	0.00	0.46	0.00	2.58	0.84	2.65	0.85	10.88
Colorado	2.17	0.00	0.27	0.00	1.71	1.46	2.80	0.54	8.95
Connecticut	3.55	0.00	0.29	0.00	3.10	0.00	4.55	0.41	11.89
Delaware	2.28	0.12	0.61	0.01	1.05	0.03	1.70	3.22	9.02
Florida	0.00	0.00	0.24	0.00	3.43	0.63	2.78	0.72	7.81
Georgia	2.27	0.00	0.24	0.00	1.85	1.23	2.58	0.46	8.63
Hawaii	2.67	0.00	0.19	0.00	5.89	0.69	2.13	0.83	12.40
Idaho	2.26	0.00	0.32	0.00	3.08	0.06	2.57	0.66	8.95
Illinois	2.61	0.00	0.70	0.00	2.56	0.69	4.19	0.64	11.38
Indiana	1.91	0.45	0.34	0.00	4.06	0.08	2.50	0.33	9.66
Iowa	2.31	0.08	0.28	0.00	2.72	0.39	3.42	0.72	9.92
Kansas	1.95	0.00	0.26	0.00	3.02	0.91	3.17	0.56	9.86
Kentucky	2.24	0.74	0.40	0.09	3.20	0.39	1.61	0.85	9.53
Louisiana	1.41	0.00	0.25	0.00	2.61	2.21	1.96	0.79	9.23
Maine	2.65	0.00	0.34	0.00	3.58	0.02	4.72	0.68	11.99
Maryland	2.58	1.58	0.33	0.00	2.67	0.28	2.72	0.97	11.13
Massachusetts	3.29	0.00	0.54	0.00	1.97	0.09	3.65	0.54	10.08
Michigan	1.96	0.11	0.22	0.00	3.06	0.07	2.82	1.00	9.24
Minnesota	3.55	0.00	0.49	0.00	3.63	0.16	2.55	1.03	11.42
Mississippi	1.66	0.00	0.52	0.00	4.69	0.11	2.71	0.76	10.45
Missouri	2.08	0.13	0.14	0.03	1.91	1.14	2.25	0.50	8.18
Montana	2.62	0.00	0.37	0.00	1.35	0.02	3.03	2.28	9.66
Nebraska	2.35	0.00	0.34	0.00	2.55	0.57	3.66	0.68	10.15
Nevada	0.00	0.00	0.00	0.00	4.94	0.92	2.11	1.53	9.51
New Hampshire	0.14	0.00	0.84	0.00	1.36	0.00	5.30	1.26	8.91
New Jersey	2.56	0.00	0.51	0.00	2.73	0.04	5.86	0.64	12.33
New Mexico	1.68	0.00	0.27	0.00	3.62	1.35	1.84	1.95	10.70
New York	3.69	0.89	0.42	0.57	2.02	1.47	4.38	0.82	14.26
North Carolina	2.66	0.00	0.35	0.00	2.55	0.70	2.42	0.52	9.18
North Dakota	1.17	0.00	0.59	0.00	4.35	0.52	1.95	8.39	16.97
Ohio	1.71	0.93	0.00	0.06	3.17	0.44	2.84	0.76	9.92
Oklahoma	1.76	0.00	0.24	0.00	2.37	1.31	1.44	1.11	8.21
Oregon	3.98	0.00	0.30	0.04	0.86	0.27	3.19	1.10	9.73
Pennsylvania	1.80	0.80	0.38	0.08	2.90	0.21	2.98	0.87	10.03
Rhode Island	2.20	0.00	0.24	0.00	3.16	0.05	4.91	0.45	11.02
South Carolina	1.97	0.00	0.19	0.00	2.66	0.38	2.99	0.76	8.95
South Dakota	0.00	0.00	0.06	0.00	3.35	1.00	2.87	0.84	8.12
Tennessee	0.09	0.00	0.44	0.00	3.29	0.96	2.04	0.78	7.60
Texas	0.00	0.00	0.00	0.00	3.71	0.72	3.58	0.85	8.86
Utah	2.61	0.00	0.28	0.00	2.42	0.91	2.57	0.52	9.30
Vermont	2.35	0.00	0.37	0.00	3.53	0.07	1.67	4.09	12.08
Virginia	2.72	0.00	0.19	0.00	1.52	0.66	3.02	0.65	8.75
Washington	0.00	0.00	0.00	0.00	4.38	1.22	2.21	1.46	9.28
West Virginia	2.72	0.00	0.31	0.00	3.94	0.20	2.41	1.65	11.23
Wisconsin	2.71	0.00	0.39	0.00	2.94	0.18	3.75	0.59	10.56
Wyoming	0.00	0.00	0.00	0.00	2.89	0.70	2.91	4.33	10.82
Mean Values	1.96	0.12	0.33	0.02	2.90	0.61	2.90	1.32	10.15
Standard Deviation	1.07	0.31	0.20	0.08	1.03	0.51	1.05	1.54	1.75
Coefficient of Variati	54.92	265.67	61.54	467.42	35.55	83.13	36.26	116.74	17.29
NYS Diff. from Avg.	1.73	0.77	0.09	0.56	(0.88)	0.86	1.48	(0.49)	4.11

Source: Moody's Economy.com, U.S. Census Bureau



Comparison of New York State Tax Structure with Other States

Table 8a - State Tax Burdens as a Pct. Of Personal Inc., 1977 - 2014

Year	Mean	NYS	Standard Deviation	Coefficient of Variation	NY difference from mean
1977	6.46	7.12	1.53	23.76	0.66
1978	6.34	6.64	1.25	19.65	0.30
1979	6.41	6.45	1.58	24.62	0.04
1980	6.40	6.33	2.49	38.95	(0.08)
1981	6.42	6.22	3.71	57.86	(0.20)
1982	6.57	6.36	3.35	50.93	(0.21)
1983	6.38	6.18	2.43	38.06	(0.20)
1984	6.59	6.50	2.23	33.84	(0.09)
1985	6.66	6.67	1.96	29.51	0.01
1986	6.60	6.87	1.91	28.96	0.27
77-86 avg.	6.48	6.53	2.24	34.61	0.05
1987	6.53	6.98	1.29	19.74	0.45
1988	6.61	6.75	1.35	20.45	0.14
1989	6.53	6.36	1.33	20.42	(0.17)
1990	6.51	6.42	1.36	20.92	(0.09)
1991	6.55	6.34	1.51	23.10	(0.21)
1992	6.49	6.35	1.24	19.15	(0.14)
1993	6.75	6.44	1.56	23.16	(0.32)
1994	6.65	6.55	1.22	18.30	(0.10)
1995	6.74	6.47	1.35	20.09	(0.27)
1996	6.59	6.10	1.28	19.43	(0.49)
87-96 avg.	6.60	6.48	1.35	20.48	(0.12)
1997	6.62	5.89	1.27	19.23	(0.73)
1998	6.58	5.79	1.25	19.06	(0.79)
1999	6.58	5.89	1.29	19.66	(0.69)
2000	6.60	5.93	1.18	17.86	(0.67)
2001	6.52	6.18	1.14	17.43	(0.34)
2002	6.16	5.99	1.07	17.38	(0.17)
2003	6.11	5.71	1.07	17.45	(0.40)
2004	6.22	5.82	1.09	17.59	(0.41)
2005	6.55	6.17	1.32	20.13	(0.38)
2006	6.73	6.39	1.39	20.67	(0.34)
97-06 avg.	6.47	5.98	1.21	18.65	(0.49)
2007	6.80	6.50	1.54	22.69	(0.31)
2008	6.96	6.54	3.14	45.20	(0.42)
2009	6.54	6.70	1.95	29.80	0.17
2010	6.16	6.33	1.69	27.42	0.16
2011	6.31	6.39	1.98	31.34	0.08
2012	6.39	6.45	2.24	35.07	0.07
2013	6.55	6.61	1.93	29.45	0.06
2014	6.34	6.61	1.80	28.46	0.27

Comparison of New York State Tax Structure with Other States



Table 8b - State/Local Tax Burdens as a Pct. Of Personal Inc., 1977 - 2014

Year	Mean	NYS	Standard Deviation	Coefficient of Variation	NY Difference From Mean
1977	10.38	14.91	1.67	16.11	4.53
1978	10.10	14.11	1.42	14.07	4.01
1979	10.04	13.41	1.66	16.58	3.37
1980	9.89	13.05	2.55	25.78	3.17
1981	9.81	12.79	3.72	37.90	2.97
1982	10.03	12.95	3.41	33.96	2.92
1983	9.92	12.75	2.64	26.60	2.83
1984	10.08	13.04	2.46	24.43	2.96
1985	10.23	13.38	2.27	22.17	3.15
1986	10.23	13.64	2.27	22.15	3.41
77-86 avg.	10.07	13.40	2.41	23.97	3.33
1987	10.29	13.99	1.59	15.46	3.70
1988	10.34	13.55	1.53	14.82	3.21
1989	10.22	13.10	1.37	13.42	2.88
1990	10.27	13.18	1.40	13.64	2.90
1991	10.40	13.51	1.57	15.08	3.11
1992	10.26	13.50	1.31	12.72	3.24
1993	10.62	13.81	1.63	15.35	3.19
1994	10.53	13.88	1.16	11.00	3.35
1995	10.61	13.45	1.30	12.24	2.84
1996	10.36	12.95	1.12	10.84	2.59
87-96 avg.	10.39	13.49	1.40	13.46	3.10
1997	10.37	12.74	1.11	10.71	2.37
1998	10.29	12.58	1.12	10.90	2.29
1999	10.21	12.51	1.03	10.13	2.30
2000	10.12	12.35	1.02	10.05	2.23
2001	10.08	12.43	1.01	10.03	2.35
2002	9.84	12.31	0.95	9.68	2.47
2003	9.86	12.54	0.99	10.08	2.68
2004	9.98	12.87	1.05	10.57	2.89
2005	10.34	13.45	1.22	11.77	3.11
2006	10.53	13.70	1.26	11.95	3.17
97-06 avg.	10.16	12.75	1.08	10.59	2.59
2007	10.63	13.78	1.47	13.80	3.15
2008	10.80	13.85	3.14	29.05	3.05
2009	10.72	14.14	1.99	18.58	3.42
2010	10.28	13.62	1.70	16.52	3.34
2011	10.24	13.65	1.97	19.20	3.41
2012	10.18	13.68	2.24	21.98	3.51
2013	10.37	14.22	1.90	18.33	3.85
2014	10.15	14.26	1.77	17.46	4.11



Comparison of New York State Tax Structure with Other States

Table 9 - 2014 Property Taxes on Owner-Occupied Housing, by County

County	Median Property Taxes		Median Home Value	Taxes as % of Home Value		Median Income for Home Owners	Taxes as % of Income	
	Paid on Homes	Rank		Home Value	Rank		Income	Rank
Cattaraugus County	\$2,652	228	\$85,400	3.1%	2	\$56,450	4.7%	95
Monroe County	\$4,265	77	\$137,600	3.1%	3	\$69,459	6.1%	44
Niagara County	\$3,128	162	\$105,500	3.0%	7	\$60,618	5.2%	72
Schenectady County	\$4,784	55	\$161,700	3.0%	8	\$72,674	6.6%	33
Livingston County	\$3,413	133	\$117,000	2.9%	9	\$60,484	5.6%	54
Wayne County	\$3,412	134	\$117,100	2.9%	10	\$60,268	5.7%	53
Oswego County	\$2,701	219	\$96,000	2.8%	11	\$61,684	4.4%	133
Chautauqua County	\$2,323	297	\$83,500	2.8%	15	\$51,987	4.5%	123
Onondaga County	\$3,777	103	\$135,800	2.8%	16	\$71,174	5.3%	64
Broome County	\$3,042	171	\$114,200	2.7%	24	\$60,265	5.0%	77
Oneida County	\$3,071	168	\$116,000	2.6%	25	\$62,276	4.9%	82
Erie County	\$3,483	123	\$131,800	2.6%	26	\$66,442	5.2%	68
Madison County	\$3,162	160	\$119,700	2.6%	27	\$59,137	5.3%	63
Cayuga County	\$2,860	190	\$111,700	2.6%	34	\$62,864	4.5%	113
Steuben County	\$2,484	261	\$98,100	2.5%	36	\$56,312	4.4%	129
Putnam County	\$8,811	9	\$353,600	2.5%	38	\$109,089	8.1%	10
Chemung County	\$2,780	210	\$111,800	2.5%	39	\$64,743	4.3%	141
Tompkins County	\$4,524	70	\$182,100	2.5%	40	\$75,376	6.0%	49
Orange County	\$6,266	27	\$254,700	2.5%	41	\$86,903	7.2%	18
Sullivan County	\$3,959	91	\$161,700	2.4%	42	\$61,108	6.5%	36
Rensselaer County	\$4,419	73	\$180,800	2.4%	43	\$75,603	5.8%	50
Rockland County	\$10,001	1	\$414,500	2.4%	45	\$110,189	9.1%	4
Ulster County	\$5,137	46	\$217,100	2.4%	49	\$74,107	6.9%	26
Suffolk County	\$8,559	12	\$368,800	2.3%	53	\$100,724	8.5%	8
Ontario County	\$3,440	127	\$149,800	2.3%	55	\$68,982	5.0%	79
Nassau County	\$10,001	1	\$443,200	2.3%	60	\$112,094	8.9%	6
St. Lawrence County	\$1,977	360	\$89,200	2.2%	69	\$55,349	3.6%	246
Dutchess County	\$5,911	32	\$270,900	2.2%	73	\$88,299	6.7%	31
Albany County	\$4,475	71	\$208,200	2.1%	76	\$86,753	5.2%	73
Clinton County	\$2,634	230	\$130,200	2.0%	102	\$63,752	4.1%	160
Westchester County	\$10,001	1	\$501,100	2.0%	110	\$119,894	8.3%	9
Saratoga County	\$4,066	85	\$238,000	1.7%	176	\$86,155	4.7%	90
Jefferson County	\$2,434	272	\$147,900	1.6%	188	\$65,701	3.7%	224
Warren County	\$3,173	159	\$197,100	1.6%	201	\$72,619	4.4%	134
Bronx County	\$3,565	116	\$359,100	1.0%	434	\$76,345	4.7%	99
New York County	\$7,984	14	\$888,500	0.9%	512	\$143,843	5.6%	56
Richmond County	\$3,828	98	\$441,000	0.9%	533	\$86,885	4.4%	130
Queens County	\$3,866	96	\$447,300	0.9%	539	\$78,122	4.9%	80
Kings County	\$3,829	97	\$574,800	0.7%	701	\$80,723	4.7%	89
United States	\$2,139	N/A	\$181,200	1.2%	N/A	\$68,795	3.1%	N/A

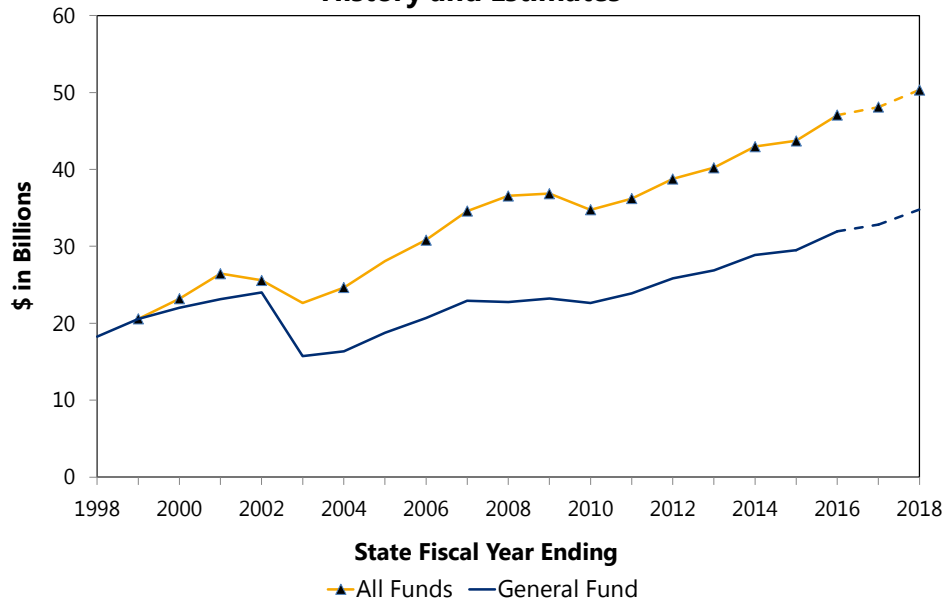
Source: U.S. Census Bureau, DOB Staff Estimates

Tax Receipts

PERSONAL INCOME TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	31,956.8	32,521.4	564.6	1.8	35,405.5	2,884.1	8.9
Other Funds	15,098.5	15,117.5	19.0	0.1	15,276.5	159.0	1.1
All Funds	47,055.3	47,639.0	583.7	1.2	50,682.0	3,043.0	6.4

Note: Totals may differ due to rounding.

Personal Income Tax Receipts History and Estimates



PERSONAL INCOME TAX BY FUND (millions of dollars)						
	Gross General Fund	Refunds	General Fund Receipts	Special Revenue Funds ¹	Debt Service Funds ²	All Funds Receipts
FY 2008	29,365	6,606	22,759	4,664	9,141	36,564
FY 2009	30,367	7,171	23,196	4,434	9,210	36,840
FY 2010	29,296	6,642	22,654	3,409	8,688	34,751
FY 2011	31,687	7,792	23,894	3,263	9,053	36,210
FY 2012	33,106	7,263	25,843	3,233	9,692	38,768
FY 2013	34,100	7,216	26,884	3,286	10,057	40,227
FY 2014	37,478	8,614	28,864	3,357	10,740	42,961
FY 2015	38,024	8,539	29,485	3,297	10,927	43,710
FY 2016	41,502	9,545	31,957	3,335	11,764	47,055
Estimated						
FY 2017	41,736	9,215	32,521	3,208	11,910	47,639
FY 2018						
Current Law	44,467	9,956	34,511	2,957	12,489	49,957
Proposed Law	45,361	9,956	35,405	2,606	12,671	50,682

¹ School Tax Relief Fund.
² Revenue Bond Tax Fund.

Proposed Legislation

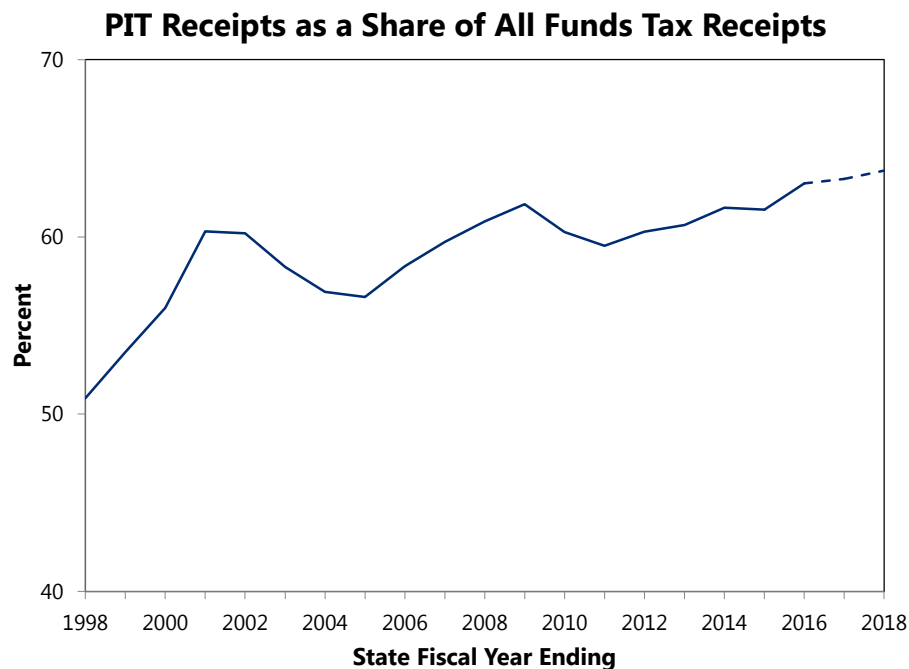
Legislation proposed with this Budget would:

- Extend the Personal Income Tax top bracket for three years;
- Require State S-corporation conformity with Federal return;
- Close co-op sale loophole;
- Close non-resident asset sale loophole;
- Reform the Investment Tax Credit;
- Permanently extend the high income charitable contribution deduction limitation;
- Create the New York Youth Jobs Program Tax Credit;
- Extend the Alternative Fuels Property and Electric Vehicle Recharging Property Credit for five years;
- Permanently extend warrantless wage garnishment;
- Establish life sciences tax credits;
- Require new State employees to be compliant with State tax obligations;
- Require practitioners to be compliant with State tax obligations before receiving excess medical malpractice coverage;
- Allow warrantless bank account data matching;
- Treat disregarded entities as a single taxpayer for tax credit purposes;
- Enhance the Child and Dependent Care Credit;
- Establish a workforce training credit;
- Extend the Empire State Film and Post-Production Tax Credits for three years;
- Create Excelsior Business Program;
- Convert the NYC PIT rate reduction benefit into a credit;

- Allow taxpayers to make partial real property tax payments;
- Maintain Basic and Enhanced STAR exemption benefits at existing levels;
- Make participation in Income Verification Program (IVP) mandatory;
- Allow for confidential intergovernmental sharing of STAR information; and
- Make technical amendments to the co-op STAR credit.

Description

The personal income tax (PIT) is by far New York State's largest source of tax receipts. The PIT accounted for approximately 63 percent of All Funds tax receipts in FY 2016.



Tax Base

The State's PIT structure adheres closely to the definitions of adjusted gross income and itemized deductions used for Federal PIT purposes, with certain modifications, such as: 1) the inclusion of investment income from debt instruments issued by other states and municipalities and the exclusion of income on certain Federal obligations; 2) the exclusion of pension income received by Federal, New York State and local government employees, private pension and annuity income up to \$20,000 (\$40,000 for married couples filing jointly), and any Social Security income and

refunds otherwise included in Federal adjusted gross income; and 3) the subtraction of State and local income taxes from Federal itemized deductions.

New York allows either a standard deduction or itemized deductions, whichever is greater. Although New York generally conforms to Federal rules pertaining to itemized deductions, the State imposes some additional limitations. New York limits itemized deductions for taxpayers with New York State Adjusted Gross Incomes (NYSAGI) between \$525,000 and \$1 million to only 50 percent of federally allowed deductions, and for taxpayers with incomes above \$1 million to only 50 percent of charitable contributions. For tax years 2010 to 2017, itemized deductions are limited to only 25 percent of charitable contributions for taxpayers with NYSAGI above \$10 million.

Tax Rates and Structure

As partially shown in Table 1, in tax years 2003, 2004, and 2005, a temporary PIT surcharge added two new brackets applicable to taxpayers with taxable income over \$150,000 and taxable income over \$500,000, and increased the top rate to 7.7 percent. In 2006, the top rate returned to 6.85 percent, reflecting the sunset of the temporary surcharge, and the standard deduction for married taxpayers filing jointly increased from \$14,600 to \$15,000. For tax years 2009 through 2011, two new tax brackets and rates were added, applicable to taxpayers with taxable incomes over \$300,000 for married filing jointly (with lower levels for other filing categories) and taxable incomes over \$500,000 for all filers, and the top bracket tax rates were increased to 8.97 percent.

For tax years 2012 to 2014, four new tax brackets and rates replaced the former bracket and rate applicable to taxpayers with taxable income above \$40,000 for married filing jointly returns (with lower levels for other filing categories). The tax rate for taxpayers (married filing jointly returns) with taxable income in the \$40,000 to \$150,000 and \$150,000 to \$300,000 brackets was lowered to 6.45 percent and 6.65 percent respectively, while the rate on the \$300,000 to \$2 million tax bracket remained unchanged from 2008 law at 6.85 percent. The top rate for those earning \$2 million and above (married filing jointly returns) was increased (compared to 2008 law) to 8.82 percent. The tax brackets and standard deduction amounts were also indexed to the Consumer Price Index (CPIU) starting in tax year 2013. These brackets and rates, as well as indexing, were extended through tax year 2017 as part of the FY 2014 Enacted Budget.

Legislation included as part of the FY 2017 Enacted Budget established permanent tax rate reductions for taxpayers with taxable income between \$26,000 and \$300,000.¹ The tax years 2013 through 2017 tax brackets with marginal tax rates of 5.9 percent, 6.45 percent, and 6.65 percent are scheduled to be replaced by two tax brackets with marginal tax rates of 5.5 percent and 6 percent. Barring further legislation, these rate reductions will be phased in over the course of eight years, with full implementation occurring in tax year 2025.

¹ The cited taxable income amounts apply to taxpayers filing joint returns and are shown absent the influence of Consumer Price Index adjustments. Tax reductions apply at lower taxable income levels for single and head of household returns.

TABLE 1 PERSONAL INCOME TOP TAX RATES, STANDARD DEDUCTIONS, AND DEPENDENT EXEMPTIONS									
	2002	2003-2005	2006-2008	2009-2011	2012	2013*	2014*	2015*	2016*
Top Rate (Percent)	6.85	7.70	6.85	8.97	8.82	8.82	8.82	8.82	8.82
Thresholds									
Married Filing Jointly	40,000	500,000	40,000	500,000	2,000,000	2,058,550*	2,092,800*	2,125,450*	2,140,900*
Single	20,000	500,000	20,000	500,000	1,000,000	1,029,250*	1,046,350*	1,062,650*	1,070,350*
Head of Household	30,000	500,000	30,000	500,000	1,500,000	1,543,900*	1,569,550*	1,594,050*	1,605,650*
Standard Deduction									
Married Filing Jointly	14,200	14,600	15,000	15,000	15,000	15,400	15,650	15,850	15,950
Single	7,500	7,500	7,500	7,500	7,500	7,700	7,800	7,900	7,950
Head of Household	10,500	10,500	10,500	10,500	10,500	10,800	10,950	11,100	11,150
Dependent Exemption	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

* Tax Brackets and standard deductions are subject to indexing based on the CPIU

TABLE 2 TAX SCHEDULES FOR 2016 LIABILITY YEAR* (dollars)								
Married - Filing Jointly			Single			Head of Household		
Taxable Income	\$/Tax Rate	Of Amt. Over	Taxable Income	Tax Rate Percent	Of Amt. Over	Taxable Income	Tax Rate Percent	Of Amt. Over
0 to 17,050	\$0		0 to 8,450	\$0		0 to 12,750	\$0	
	+4.00%	0		+4.00%	0		+4.00%	0
17,050 to 23,450	\$682		8,450 to 11,650	\$338		12,750 to 17,550	\$510	
	+4.50%	17,050		+4.50%	8,450		+4.50%	12,750
23,450 to 27,750	\$970		11,650 to 13,850	\$482		17,550 to 20,800	\$726	
	+5.25%	23,450		+5.25%	11,650		+5.25%	17,550
27,750 to 42,750	\$1,196		13,850 to 21,300	\$598		20,800 to 32,000	\$897	
	+5.90%	27,750		+5.90%	13,850		+5.90%	20,800
42,750 to 160,500	\$2,081		21,300 to 80,150	\$1,037		32,000 to 106,950	\$1,557	
	+6.45%	42,750		+6.45%	21,300		+6.45%	32,000
160,500 to 321,050	\$9,676		80,150 to 214,000	\$4,833		106,950 to 267,500	\$6,392	
	+6.65%	160,500		+6.65%	80,150		+6.65%	106,950
321,050 to 2,140,900	\$20,352		214,000 to 1,070,350	\$13,734		267,500 to 1,605,650	\$17,068	
	+6.85%	321,050		+6.85%	214,000		+6.85%	267,500
2,140,900 and over	\$145,012		1,070,350 and over	\$72,394		1,605,650 and over	\$108,732	
	+8.82%	2,140,900		+8.82%	1,070,350		+8.82%	1,605,650

* Benefits of graduated tax rates recaptured for taxpayers with adjusted gross incomes above \$106,950.

Tax Expenditures

Tax expenditures are defined as features of the Tax Law that by exclusion, exemption, deduction, allowance, credit, deferral, preferential tax rate, or other statutory provision reduce the amount of a taxpayer's liability to the State by providing either economic incentives or tax relief to particular entities to achieve a public purpose. The PIT structure includes various exclusions, exemptions, tax credits, and other statutory devices designed to adjust State tax liability. For a more detailed discussion of tax expenditures, see the Annual Report on New York State Tax Expenditures, prepared by the Department of Taxation and Finance and the Division of the Budget.

Credits

Current law authorizes a wide variety of credits against PIT liability. The major individual credits are:

Personal Income Tax



Credit	Description
Earned Income Tax Credit (EITC)	Allowed at a rate of 7.5 percent of the Federal credit in 1994, 10 percent in 1995, and 20 percent in 1996 and thereafter. Starting in 1996, the EITC was offset by the amount of the household credit. The EITC was raised to 22.5 percent of the Federal credit in 2000, 25 percent in 2001, 27.5 percent in 2002, and 30 percent in 2003 and thereafter. The credit is fully refundable for New York residents whose credit amount exceeds tax liability. The Federal Economic Growth and Tax Relief Reconciliation Act of 2001 provided marriage penalty relief for married taxpayers filing jointly by increasing the phase-out range for the credit beginning in 2002.
Household Credit	Permitted for single taxpayers in amounts declining from \$75 to \$20, as their household income rises to \$28,000, and for married couples and heads of households, in amounts declining from \$90 to \$20, as their household income rises to \$32,000. This latter category is also eligible for additional amounts based on the number of eligible exemptions and income level.
Child and Dependent Care Credit	<p>Allowed at a rate of 20 percent or more of the comparable Federal credit. In 1997, the credit became refundable and equal to 60 percent of the Federal credit for those with incomes under \$10,000, with a phase-down until it was 20 percent for incomes of \$14,000 and above. In 1998, the percentage of the Federal credit increased to 100 percent for those with incomes less than \$17,000, with this percentage gradually phasing down to 20 percent for those with incomes of \$30,000 or more. For 1999, the phase-down from 100 percent to 20 percent began at incomes of \$35,000 and ended at incomes of \$50,000. For 2000 and later years, the credit as a share of the Federal credit equaled 110 percent for incomes up to \$25,000, phased down from 110 percent to 100 percent for incomes between \$25,000 and \$40,000, equaled 100 percent for incomes between \$40,000 and \$50,000, phased down from 100 percent to 20 percent for incomes between \$50,000 and \$65,000, and equaled 20 percent for incomes over \$65,000. The credit is fully refundable for New York residents whose credit amount exceeds tax liability.</p> <p>Federal legislation enacted in 2001 and effective in 2003 increased maximum allowable expenses from \$2,400 to \$3,000 for one dependent (\$4,800 to \$6,000 for two or more dependents); the maximum credit rate from 30 percent to 35 percent; and the income at which the credit begins to phase down from \$10,000 to \$15,000.</p>
College Tuition Tax Credit	Available as an alternative to the college tuition deduction, this refundable credit equals the applicable percentage of allowed tuition expenses multiplied by 4 percent. It was phased in over a four-year period with applicable percentages of allowed tuition expenses beginning at 25 percent in tax year 2001, 50 percent in 2002, 75 percent in tax year 2003, and 100 percent in 2004 and thereafter. For 2004 and thereafter the minimum credit is the lesser of tuition paid or \$200 and the maximum credit is \$400 (4 percent of expenses up to \$10,000).
Empire State Child Credit	Effective in 2006, this refundable credit for children ages 4-16 equals the greater of \$100 times the number of children qualifying for the Federal credit, or 33 percent of the Federal credit.
Long-Term Care Insurance Credit	A non-refundable credit equal to 10 percent of a taxpayer's long-term care insurance premium became effective in 2002. The credit amount was increased to 20 percent in 2004. Unused amounts may be carried forward to future tax years.
Middle-Class Family Tax Credit	Permitted for each taxpayer who, on his or her personal income tax return filed for the taxable year two years prior to the taxable year that the credit is claimed, a) was a resident of New York State; b) claimed one or more dependent children who were under age 17 at the end of the taxable year, c) had NYSAGI of between \$40,000 and \$300,000; and d) had tax liability that was greater than or equal to \$0. Worth \$350, the credit is fully refundable and is effective for tax years 2014 through 2016. For tax years 2015 and 2016, the credit qualifications were modified to reference information from the tax year that the credit is claimed, eliminating the two-year lag. The credit is scheduled to expire after tax year 2016.
Real Property Tax Freeze Credit	A refundable credit that offsets up to two years of school and local municipal property taxes for taxpayers in eligible districts. To be eligible, the school district or taxing jurisdiction must be in compliance with the NYS Property Tax Cap. Taxpayers must be STAR exemption-eligible and may not reside in New York City in order to receive the credit. Eligible taxpayers receive a benefit equal to the greater of the actual increase in the property tax bill, or the previous year's tax bill multiplied by an inflation factor. In tax year 2014, the credit is calculated based on one year of school district property tax increases. In tax year 2015, the credit is calculated based on up to two years of school district property tax increases and one year of municipal property tax increases. In tax year 2016, the credit is calculated based on up to two years of municipal district property tax increases.

Credit	Description
Enhanced Real Property Tax Credit	Available to residents of New York City, a refundable credit based on household gross income (HGI) and qualified property taxes paid (homeowners), or the property tax equivalent (renters). For taxpayers that rent, the property tax equivalent is equal to 15.75 percent of the rental amount paid, excluding charges for heat, gas, electricity, furnishings, and board. For taxpayers with HGI under \$100,000, the credit is equal to 4.5 percent of real property taxes, or the real property tax equivalent paid in excess of 4 percent of HGI. For taxpayers with HGI between \$100,000 and \$150,000, the credit is equal to 3 percent of real property taxes, or the real property tax equivalent paid in excess of 5 percent of HGI. For taxpayers with HGI between \$150,000 and \$200,000, the credit is equal to 1.5 percent of real property taxes or the real property tax equivalent paid in excess of 6 percent of HGI.
Property Tax Relief Credit	A four year refundable credit that takes effect in 2016 to offset real property taxes for properties located within school districts compliant with the 2 percent annual property tax cap. Eligible taxpayers must be full time residents who own and primarily reside on real property located within an eligible school district outside of NYC, and have an annual federal adjusted gross income (AGI) of less than \$275,000. In tax year 2016, the credit is valued at \$130 for all eligible properties located within the Metropolitan Commuter Transportation District (MCTD). For all other eligible properties, the credit is valued at \$185. In 2017, for taxpayers with properties receiving the basic STAR Exemption and federal AGI less than \$75,000, the credit is equal to 28 percent of the STAR property tax savings associated with the exemption. For other basic STAR recipients, the credit is equal to 20.5 percent of the associated STAR exemption savings for incomes between \$75,000 and \$150,000, 13 percent for incomes between \$150,000 and \$200,000, and 5.5 percent for incomes between \$200,000 and \$275,000. In 2018, these percentages increase to 60 percent, 42.5 percent, 25 percent, and 7.5 percent, respectively. These percentages further increase, in 2019, to 85 percent, 60 percent, 35 percent, and 10 percent, respectively. In addition, for taxpayers with properties receiving the enhanced STAR exemption and federal AGI less than \$275,000, the credit is valued at 12 percent of the STAR tax savings associated with the exemption in 2017, 26 percent in 2018, and 34 percent in 2019.
STAR Transformation Credit	Effective in 2016, a refundable tax credit that gradually transforms the STAR property tax exemption into a personal income tax liability offset. Existing STAR property tax exemption recipients may opt to receive the credit instead of the property tax exemption, but otherwise retain the exemption until acquiring a new primary residence. All new homeowners and homeowners that relocate receive, in the form of a PIT credit, the benefit that they otherwise would have received through the STAR exemption.

Additionally, credits are allowed for investment in production facilities, film production, Brownfields, for PIT paid to other states, and for job-producing investments. Other minor credits also apply.

Significant Legislation

Significant statutory changes made to the State PIT since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Offset Lottery Winnings with Outstanding Tax	Permitted the crediting of lottery prizes exceeding \$600 against prize winner's liabilities for taxes owed to the State.	August 1, 2011
STAR	Limited exemption growth to 2 percent annually.	2011-12 school year and after
Excelsior Jobs Program Amendments	Modified the credit to make it more widely available and attractive, and created a new energy incentive. It also lengthened the benefit period from five to ten years.	2011 and after
Economic Transformation and Facility Redevelopment Program	Provided tax incentives to businesses to stimulate redevelopment in targeted communities where certain correctional or juvenile facilities are closed (economic transformation areas).	2011 to 2021

Personal Income Tax



Subject	Description	Effective Date
PIT Reform	Reformed the PIT by lowering rates for middle income taxpayers and adding three new brackets on taxable income above \$150,000 for tax years 2012 through 2014. Also indexed to the CPIU the tax brackets and standard deduction starting in tax year 2013.	January 1, 2012
New York Youth Works Tax Credit Program	Provided a tax credit to businesses that employ at risk youth in part-time or full-time positions in 2012 and 2013.	January 1, 2012
Empire State Jobs Retention Program	Provided a jobs tax credit to businesses that are at risk of leaving the State due to the negative impact on their business from a natural disaster. The tax credit is 6.85 percent of gross wages of jobs that are retained in New York.	January 1, 2012
Legislation Enacted in 2012		
Residential Solar Equipment Credit	The Residential Solar Equipment Credit was extended to leases and purchase power agreements.	2012 and after
Legislation Enacted in 2013		
Empire State Film Production Credit	Extended the Empire State film production tax credit of \$420 million per year for an additional five years (2015 - 2019). For the period 2015 through 2019 certain upstate counties will receive an additional 10 percent credit for wages and salaries paid.	January 1, 2015
	Restrictions on the post production portion of the credit were reduced and additional reporting will be required to document the effectiveness of the credit in creating jobs.	March 28, 2013
New York State Business Incubator and Innovation Hot Spot Program	Created a new high tech incubator program in which start-up businesses will be free of property, sales and business income taxes for the first five years. Hot spots must demonstrate an affiliation with, and the support of, at least one college, university or independent research institution and offer programs consistent with regional economic development strategies.	March 28, 2013
Limitation on Itemized Deductions	Extended, for three additional years, the limitation on itemized deductions for taxpayers with NYSAGI over \$10 million.	2013-2015
Royalty Income Loophole	Closed a loophole that allowed New York companies that earn royalty income to avoid paying taxes on that income. New York taxpayers must show on their tax return that the taxpayer's non-New York parent company included the royalty income in its tax liability. The demonstration absolves taxpayers of the obligation to pay tax on their royalty income.	January 1, 2013
Historic Preservation Tax Credit	Extended for five years the Historic Preservation Tax Credit \$5 million cap, which had previously been scheduled to revert to \$100,000 following the conclusion of tax year 2014, and permanently made the credit refundable for tax years beginning on or after January 1, 2015.	January 1, 2015
Charge NY Electric Vehicle Recharging Equipment Credit	Created a credit equal to 50 percent or \$5,000 per station, whichever is less, of the cost of electric vehicle recharging or alternative fuel vehicle refueling equipment. The credit sunsets December 31, 2017.	January 1, 2013
Suspension of Drivers' Licenses of Delinquent Persons	Provided for the suspension of New York State driver's licenses of taxpayers who owe taxes in excess of \$10,000.	March 28, 2013
Warrantless Wage Garnishment	Allowed the Department of Taxation and Finance to garnish wages of delinquent taxpayers without filing a warrant and replaced the warrant requirement with a faster public notification requirement.	March 28, 2013 - March 31, 2015
Credit for Rehabilitation of Historic Homes	Extended for five years the maximum credit amount of \$50,000 (scheduled to revert to \$25,000), and the refundability of the credit for filers with income less than \$60,000.	January 1, 2015



Personal Income Tax

Subject	Description	Effective Date
Small Business and Small Farm Income Subtraction	Provided a FAGI modification equal to a percentage of business or farm income for taxpayers with business or farm income not exceeding \$250,000. The modification reduces FAGI by 3 percent in tax year 2014, 3.75 percent in tax year 2015, and 5 percent for tax years 2016 and beyond.	January 1, 2014
Hire-a-Vet Tax Credit	Provided a refundable tax credit for tax years 2015 and 2016 equaling 10 percent of the wages paid to a qualified veteran (capped at \$5,000) and 15 percent of wages paid to a qualified veteran (capped at \$15,000).	January 1, 2015
Middle-Class Family Tax Credit	Provided a refundable \$350 credit in each of tax years 2014 through 2016 to taxpayers with dependents under the age of 17, zero or positive tax liability, and income between \$40,000 and \$300,000.	January 1, 2014
Youth Works Tax Credit	Provided a four year refundable tax credit capped at \$6 million per year for tax years 2014 through 2017 for hiring unemployed, low-income or at risk youth ages 16-24 in cities with populations greater than 55,000 or towns with populations greater than 480,000.	January 1, 2014
Minimum Wage Reimbursement Credit	Provided a refundable tax credit for tax years 2014 through 2018 equal to the product of the number of hours worked by qualifying minimum wage-earning employees and 1) \$0.75 in tax year 2014; 2) \$1.31 in tax year 2015; or 3) \$1.35 in tax years 2016 through 2018. Qualifying employees must be students aged 16 to 19, and the credit is reduced if the federal minimum wage is increased to a level in excess of 85 percent of the New York minimum wage.	January 1, 2014
PIT Reform Extension	Extended the December 2011 PIT reform program for three additional tax years, 2015 through 2017.	January 1, 2015
START-UP NY	Established tax-free zones on or near qualifying university and college campuses. Qualifying businesses operating within such zones are exempt from taxation for a ten-year period under the personal income tax. During the first five years of the exemption period, qualifying new employees are fully exempt from New York State and New York City personal income tax on wages earned while working in a tax-free zone. During the last five years of the exemption period, qualifying employees are exempt from taxation on wages up to \$200,000 for single filers, \$250,000 for head-of-household filers, and \$300,000 for joint filers.	January 1, 2014
Excelsior Jobs Program	Changed the job requirement parameters for the Excelsior Jobs Program and allowed a portion of the unallocated tax credits from any taxable year to be used to award tax credits in another taxable year.	May 27, 2013
Trust Taxation Loophole Closer	Closed a loophole that allowed resident taxpayers to completely avoid New York income tax through the creation of an incomplete gift, non-grantor trust. Also taxes the accumulated distribution income of New York resident beneficiaries when the income is distributed by an exempt resident trust.	January 1, 2014
Legislation Enacted in 2014		
Middle-Class Family Tax Credit	Modified the delivery of the Middle-Class Family Tax Credit to eliminate the prepayment element for tax years 2015 and 2016.	January 1, 2015
Real Property Tax Freeze Credit	Established, through the use of a refundable credit, a two-year tax relief program to offset school and municipal property tax increases for New York State homeowners. The credit is limited to properties that have STAR property tax exemption eligibility and are located within a New York State Property Tax Cap-compliant school/municipal district.	January 1, 2014

Personal Income Tax



Subject	Description	Effective Date
Enhanced Real Property Tax Credit	Established a refundable credit for residents of New York City based on qualifying real property taxes paid or the real property tax equivalent. For taxpayers with household gross income (HGI) under \$100,000, the credit is equal to 4.5 percent of real property taxes, or the real property tax equivalent paid in excess of 4 percent of HGI. For taxpayers with HGI between \$100,000 and \$150,000, the credit is equal to 3 percent of real property taxes, or the real property tax equivalent paid in excess of 5 percent of HGI. For taxpayers with HGI between \$150,000 and \$200,000, the credit is equal to 1.5 percent of real property taxes, or the real property tax equivalent paid in excess of 6 percent of HGI.	January 1, 2014
Enhanced Earned Income Tax Credit	Extended the non-custodial parent earned income tax credit for two years, through and including tax year 2016.	January 1, 2015
Minimum PIT Repeal	Repealed the additional minimum personal income tax.	January 1, 2014
Length of Service Awards	Provided for an AGI subtraction modification equal to the amount of awards paid to volunteer firefighter or volunteer ambulance workers from a length of service defined contribution plan or defined benefit plan.	January 1, 2014
Property Tax Credit for Manufacturers	Made qualified New York manufacturers eligible for a new tax credit equal to 20 percent of the real property taxes paid.	January 1, 2014
Enhance the Youth Works Tax Credit	Enhanced the credit by providing additional credit for youth retained in either a full-time or part-time status for one additional year, lowered the part-time hourly threshold from 20 hours to 10 hours for full-time high school students and increased the allocation from \$6 million to \$10 million for programs two through five (2014-2018).	January 1, 2014
Expand the Upstate Counties Eligible for the Enhanced Film Production Tax Credit	Added the counties of Albany and Schenectady to the list of upstate counties eligible for the additional 10 percent credit on wages and salaries.	January 1, 2015
Workers with Disabilities Tax Credit	Provided a non-refundable tax credit for tax years 2015 through 2019 equaling 15 percent of wages paid to a developmentally disabled individual employed full time (capped at \$5,000) and 10 percent of wages paid if the individual is employed part time (capped at \$2,500). This credit has an annual allocation of \$6 million.	January 1, 2015
Musical and Theatrical Production Credit	Provided a refundable tax credit for tax years 2015 through 2018 equaling 25 percent of qualified expenses for qualified musical and theatrical productions in certain upstate theaters. This credit has an annual allocation of \$4 million annually.	January 1, 2015
START-UP NY Amendments	Provided a refundable tax credit equal to the excise tax paid on telecommunications services paid by businesses in START-UP NY areas. Added four correctional facilities owned by the State of New York to be included as START-UP NY areas.	January 1, 2014 July 26, 2014
Empire State Commercial Production Tax Credit	Extended the annual allocation of \$7 million for two years through tax year 2016. Also, lowered the minimum required production costs for upstate productions from \$200,000 to \$100,000.	March 31, 2014
Legislation Enacted in 2015		
Limitation on Itemized Deductions	Extended, the limitation on itemized deductions for taxpayers with NYSAGI over \$10 million for two additional years. The limitation sunsets December 31, 2017.	January 1, 2016
Property Tax Relief Credit	Established a refundable tax credit, administered as an advanced credit payment, to offset property tax increases for all eligible taxpayers who own and primarily reside in real property located within eligible school districts that are compliant with the 2 percent annual property tax cap. The credit sunsets December 31, 2019.	January 1, 2016



Personal Income Tax

Subject	Description	Effective Date
Warrantless Wage Garnishment	Extended, for two additional years, authority for the Department of Taxation and Finance to garnish wages of delinquent taxpayers without filing a warrant. The authority to act without warrant sunsets March 31, 2017.	April 1, 2015
Enhanced Real Property Tax Circuit Breaker Extender	Extended the Enhanced Real Property Tax Circuit Breaker credit for four years. The credit sunsets December 31, 2019.	January 1, 2016
Expand the Excelsior Jobs Program	Expanded eligibility for the program to include entertainment companies that meet certain criteria, music production companies and video game software developers.	April 13, 2015
Employee Training and Incentive Program (ETIP) Tax Credit	Provided a refundable tax credit for tax years 2015 and after equaling 50 percent of employee training costs (\$10,000 cap per employee) or internship costs (\$3,000 cap per intern). The amount of tax credits allocated per year is capped at \$5 million and will be allotted from funds available under the Excelsior Jobs Program.	January 1, 2015
Urban Youth Jobs Program	Enhanced the credit (formerly the New York Youth Works Tax Credit) by increasing the allocation from \$10 million to \$20 million for programs three through five (2015-2017).	April 13, 2015
Alternative Fuel Vehicle Refueling Property Tax Credit	Allowed the credit for spending not covered by a grant. The amount of the credit is amended to equal the lesser of \$5,000 or the product of 50 percent and the cost of any property less any costs paid from the proceeds of a grant.	January 1, 2015
Brownfields Clean-Up Program	Reformed the program and extended the tax credits through March 31, 2026. Reforms included the prioritization of 1) site redevelopment in economically distressed areas, 2) low income housing, or 3) properties that are upside down or underutilized; also provided for the creation of an expedited remediation program (BCP-EZ), a more detailed description of eligible costs for redevelopment tax credits, and allowed the real property tax and environmental remediation insurance credits to sunset.	July 1, 2015
START-UP NY Amendments	Added two airport facilities owned by the State of New York to be included as START-UP NY areas.	April 13, 2015
Legislation Enacted in 2016		
Hire a Veteran Credit	Extended the credit for two additional years to January 1, 2019.	January 1, 2017
Commercial Production Credit	Extended the credit for two additional years to January 1, 2019.	January 1, 2017
Credit for Companies That Provide Transportation to People with Disabilities	Extended the expiration date of this credit for six years until December 31, 2022.	December 31, 2016
Low-Income Housing Credit	Extended the statewide limitation for the aggregate dollar amount of credit the Commissioner of Division of Housing and Community Renewal (DHCR) may allocate to eligible low-income buildings. The credit allocation pool was increased \$8 million for each of the next five fiscal years.	April 1, 2017
Clean Heating Fuel Credit	Modified and extended the clean heating fuel credit. The minimum biodiesel fuel thresholds were increased. The credit was extended for three years to January 1, 2020.	January 1, 2017
Excelsior Jobs Program Tax Credit	Extended claims period through 2026, allowing Empire State Development the ability of offering a 10 year benefit period for companies entering the program in 2016 and 2017. Unused credits from previous years will be used to fund the extension. Reduced annual credit allocations a total of \$150 million over the period 2016 through 2024.	April 13, 2016

Subject	Description	Effective Date
Urban Youth Jobs Tax Credit	Increased the allocation for the final two program years from \$20 million to \$50 million.	April 13, 2016
Economic Transformation and Facility Redevelopment Program	Modified to include any psychiatric facility previously owned by New York State and located within the MCTD (excluding NYC) to qualify as a closed facility under this program. Prospective participants must submit an application by September 1, 2016.	April 13, 2016
The Farm Workforce Retention Credit	Created a refundable credit that is available to farm employers equal to a fixed amount per eligible farm employee. The credit varies between \$250 per eligible farm employee in tax year 2017 up to \$600 for tax year 2021. This credit expires after tax year 2021.	January 1, 2017
STAR Transformation Credit	Replaced, for new and relocated homeowners, the STAR property tax exemption with a STAR tax credit.	April 13, 2016
Enhanced Earned Income Tax Credit	Permanently extended the Enhanced Earned Income Tax Credit for non-custodial parents.	January 1, 2017
Tax Shelter Reporting Requirements	Extended tax shelter reporting requirements through July 1, 2019.	April 13, 2016
NYC Resident STAR Credit	Converted the STAR Personal Income Tax credit for eligible NYC resident taxpayers from a credit against NYC tax liability to a credit against NYS tax liability.	January 1, 2016
Middle Income Tax Cut	Provided reduced middle-income personal income tax rates over the course of eight years. The rate cuts begin in tax year 2018 and, when fully phased in, the range of marginal tax rates on middle incomes will be reduced from between 5.9 percent and 6.65 percent to between 5.5 percent and 6 percent.	January 1, 2018

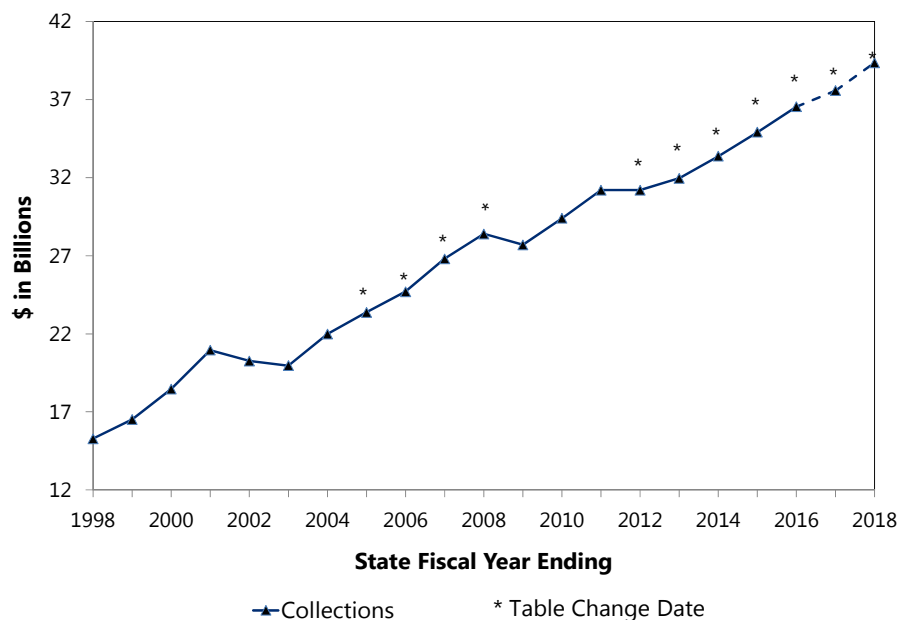
Withholding Changes

Various changes in tax rates, deductions and exemptions have been reflected in withholding tables as follows:

Effective Date	Feature	Changes
July 1, 1995	Deduction Allowance	Increased to \$5,650 for single individuals, \$6,150 for married couples.
	Rate Schedule	Lowered the maximum rate to 7.59 percent and reduced the number of tax brackets.
April 1, 1996	Deduction Allowance	Increased to \$6,300 for single individuals, \$6,800 for married couples.
	Rate Schedule	Lowered the maximum rate to 7 percent and broadened the wage brackets to which the rates apply.
January 1, 1997	Deduction Allowance	Increased to \$6,975 for single individuals, \$7,475 for married couples.
	Rate Schedule	Lowered the maximum rate to 6.85 percent and broadened the wage brackets to which the rates apply.
July 1, 2003	Rate Schedule	Raised maximum rate to 8.55 percent and added two new wage brackets.
January 1, 2004	Rate Schedule	Decreased maximum rate to 7.7 percent and lowered rate for second highest bracket from 7.5 percent to 7.375 percent.
January 1, 2005	Rate Schedule	Lowered rate for second highest bracket from 7.375 to 7.25 percent.
January 1, 2006	Rate Schedule	Eliminated top two rates to reflect expiration of the temporary tax surcharge.

Effective Date	Feature	Changes
May 1, 2009	Rate Schedule	Raised maximum rate to 8.97 percent and added two new wage brackets; added new higher rate to reflect phase out of itemized deductions.
January 1, 2012	Rate Schedule	Lowered rates for middle income taxpayers and created a new 8.82 percent tax rate and bracket for tax years through 2014.
January 1, 2013	Deduction Allowance	Annual deduction increases to reflect inflation (CPIU) indexing. Has applied to tax years 2013 through 2017.
	Rate Schedule	Annual tax bracket adjustment to reflect indexing. Has applied to tax years 2013 through 2017. ¹

Personal Income Tax Withholding



The above graph shows the history of withholding collections beginning in FY 1998. Asterisks denote the dates of withholding table changes.

Limited Liability Companies

A limited liability company (LLC) can be formed in New York by one or more persons by filing its articles of organization with the Secretary of State and paying an annual filing fee. The fee is reflected in the “returns” component of the PIT. The fees/minimum taxes applicable to all LLC and non-LLC partnerships, C corporations, and S corporations are based on New York source income. The annual filing fee has been imposed since 1994 and applies to any LLC that has any income, gain, loss or deduction attributable to New York sources in the taxable year. Filing fees for the tax year are due no later than January 30 of the following year. Table 3 shows historical and estimated

¹ Deduction and tax bracket inflation adjustment is scheduled to expire after tax year 2017.

(for FY 2017) LLC fees. Fee amounts were temporarily increased for tax years 2003 through 2006, which explains the year-over-year decline between FY 2007 and FY 2008.

TABLE 3 LIMITED LIABILITY COMPANY AND PARTNERSHIP FEES (thousands of dollars)	
SFY	Amount
2007	78,036
2008	50,973
2009	56,219
2010	67,469
2011	68,667
2012	71,589
2013	71,690
2014	84,129
2015	86,902
2016	91,695
2017 Estimated	96,280

Administration

Timing of the Payment of Refunds

The payment of refunds during the final quarter of the State's fiscal year (i.e., the January-March period) has been administratively managed in accordance with cash flow expectations and to minimize potential year-end imbalances in the State's General Fund. The amount of refunds paid during this three-month period totaled \$1,500 million in both FY 2007 and FY 2008. The refund "cap" increased to \$1,750 million for FY 2009 to more closely match the estimate of refunds payable during this three-month period. The refund "cap" was reduced to \$1,250 million for FY 2010 for cash management purposes, but reverted to \$1,750 million for FYs 2011 through 2013. One-time increases in the three-month allocation to \$2,078 million took place in FY 2014, \$1,950 million in FY 2015, and \$2,550 million in FY 2016. Strong revenue growth during the final quarter of the fiscal year allowed for these increases. The FY 2017 "cap" on refunds is currently set at \$1,750 million.

School Tax Relief Fund

Legislation enacted in 1998 created the School Tax Relief (STAR) program and the STAR Fund. The program provides residential homeowners with State-funded tax exemptions, and tax relief under the New York City (NYC) income tax for NYC residents. In addition to school property tax exemptions, NYC residents who have relatively low homeownership rates are provided rate reductions against the New York City PIT. To reimburse school districts and New York City for the costs of the program, a portion of State PIT receipts are deposited to the STAR Fund. Pursuant to

State Finance Law, payments are currently made to school districts in October through March and to New York City in September and June.

FY 2017 Enacted Budget legislation replaced, for new and relocated homeowners, the STAR property tax exemption with a STAR credit against the New York State PIT. This legislation also converted the New York City school tax credit, which previously had been funded through the STAR Fund and applied against New York City PIT, into a credit against New York State PIT.

Revenue Bond Tax Fund

Legislation enacted in 2001 authorized the issuance of State PIT Revenue Bonds and provided a source of payment for the debt service on those Bonds by earmarking a portion of PIT receipts to the newly created Revenue Bond Tax Fund (RBTF). Effective May 2002, such legislation directs the State Comptroller to deposit an amount equal to 25 percent of estimated monthly State PIT receipts (after payment of refunds and STAR deposits). Effective April 1, 2007, deposits to the RBTF are calculated before the deposit of income tax receipts to the STAR Fund. Although this decreases General Fund PIT receipts, RBTF deposits in excess of debt service requirements are transferred back to the General Fund.

Taxpayer Characteristics

Personal income tax liability and NYSAGI, the income base that determines personal income tax liability, differ noticeably across taxpayer groups. Table 4 examines the changes in NYSAGI and in liability over a span from 2007 to 2014, with a breakdown by taxpayer characteristics. Note that while NYSAGI grew 8.2 percent over this period, the growth in liability was over twice that – 19 percent. The outsized growth in liability can be accounted for in part by changes in the State personal income tax law enacted in December 2011. The tax reform law replaced the temporary brackets and rates for high-income filers of the 2009-2011 law with new brackets and generally lower tax rates but retained a restriction on the itemized deductions of millionaires to a fraction of their charitable contributions. While the highest rate of the December 2011 reform applies only to millionaires, it was higher than the highest rate under the 2006 brackets and rates.

Both 2007 and 2014 were years of economic expansion for the State. While in 2007 New York State was in its fourth full year of expansion following the State recession that came after the national recession of 2001, 2014 was the fifth year of the State's recovery from its August 2008-December 2009 recession (which was eight months shorter than the national recession). The years differ in their tax structures, as in 2007 the tax structure was back to its prior configuration after the temporary brackets and rates of 2003-05, while a reformed tax structure was in force for a third year in 2014.

While the share of nonresident returns moved up to 11.6 percent from 10.2 percent over the period, the share of liability accounted for by the two groups of taxpayers was fairly stable – the resident share slipped to 83.5 percent from 84.2 percent while the nonresident share grew to 16.5 percent from 15.8 percent in 2007. Helping to account for this is the contrasting growth in wage and non-wage income for the two groups: resident wages grew just about a percentage point faster, 15.2

percent versus 14.3 percent for nonresidents, but while nonresident nonwage income rose 12.1 percent, this income concept (which includes items of income such as dividends, interest received, and capital gains) fell 5.7 percent for resident filers.

With respect to filing status, a comparison of the two years shows that the slow decline in the share of taxpayers filing as “married filing jointly” continued. Despite a 5.2 percent rise in the number of returns filed under this status from 2007 to 2014, the share edged down to 33.9 percent from the 34.1 percent share in 2007. Returns filed as “head of household” increased just 0.7 percent with the share dropping about a percentage point to 15.3 percent. “Single” returns, though, posted growth of 8 percent over the eight years, driving the share up a percentage point to 50 percent in 2014. Despite the rising share of single filers, the money is still with the married filers: in 2007 they accounted for nearly 70 percent of all liability, slipping to just under 70 percent in 2014, while the liability share of single filers declined to 26.9 percent from 27.7 percent in 2007. Interestingly head of household filers saw their liability share rise to 3.5 percent from 2.4 percent in 2007.

Taxpayers who itemized their deductions made up 25.8 percent of all filers in 2007, sliding to 22.1 percent in 2014. In 2007, standard deduction returns accounted for 74.1 percent of all returns and 30.2 percent of all liability, while the remaining returns that were itemized made up 69.8 percent of all liability. By 2014 the itemizer share of liability had fallen to 54.6 percent while standard-deduction takers accounted for 46.4 percent of liability. Note that with the continuing limitation on itemized deductions for millionaires many of the high-liability taxpayers likely found themselves better off taking the standard deduction rather than itemizing.

With liability falling from its traditional two-thirds/one-third split between itemizers and standard deduction takers, it is perhaps not surprising that NYSAGI also moved toward equality between 2007 and 2014. In 2007 itemizers had 62.2 percent of NYSAGI while standard deduction takers had 37.8 percent; by 2014 the proportions were nearly equal: 48.4 percent for the itemizers and 51.5 percent for the standard deduction filers. While nonwage income still overwhelmingly accrued to the itemizers (77.4 percent in 2007 and 62.7 percent in 2014), the wage shares tended toward equality, with standard deduction filers getting 51.5 percent of wages in 2014 (up from 46.2 percent in 2007) while the itemizer wage share fell to 48.4 percent in 2014 from 53.8 percent in 2007. Note that with itemizers falling 9.3 percent in terms of returns during this period, liability from these taxpayers also fell 7 percent.

TABLE 4
PERCENT SHARES OF STATE AGI, WAGES, NONWAGE INCOME AND LIABILITY
BY VARIOUS TAXPAYER CHARACTERISTICS, 2006 AND 2013
(Values for AGI, wages, nonwage income and liability in millions of dollars)

	2007					2014				
	Returns	NYSAGI	Wages	Nonwage Income	Liability	Returns	NYSAGI	Wages	Nonwage Income	Liability
Total	9,700,043	735,360	485,565	258,362	35,212	10,272,011	795,802	558,857	247,809	41,910
percent change						5.9	8.2	15.1	-4.1	19
Residents	8,706,284	639,262	412,138	234,580	29,635	9,080,776	686,418	474,906	221,139	35,010
percent share	89.8	86.9	84.9	90.8	84.2	88.4	86.3	85	89.2	83.5
percent change						4.3	7.4	15.2	-5.7	18.1
Nonresidents	993,759	96,099	73,427	23,782	5,578	1,191,235	109,384	83,951	26,670	6,899
percent share	10.2	13.1	15.1	9.2	15.8	11.6	13.7	15	10.8	16.5
percent change						19.9	13.8	14.3	12.1	23.7
Married Filing Jointly	3,306,853	474,058	297,388	181,611	24,622	3,479,028	506,802	337,034	176,058	29,158
percent share	34.1	64.5	61.2	70.3	69.9	33.9	63.7	60.3	71	69.6
percent change						5.2	6.9	13.3	-3.1	18.4
Head of Household	1,559,005	56,204	48,699	8,486	838	1,570,168	64,849	56,291	9,565	1,476
percent share	16.1	7.6	10	3.3	2.4	15.3	8.1	10.1	3.9	3.5
percent change						0.7	15.4	15.6	12.7	76
Single Filers	4,834,185	205,098	139,479	68,265	9,751	4,968,402	207,219	152,672	57,658	10,397
percent share	49.8	27.9	28.7	26.4	27.7	48.4	26	27.3	23.3	24.8
percent change						2.8	1	9.5	-15.5	6.6
Itemized Deduction	2,506,901	457,123	261,239	199,913	24,586	2,273,396	385,277	233,742	155,493	22,866
percent share	25.8	62.2	53.8	77.4	69.8	22.1	48.4	41.8	62.7	54.6
percent change						-9.3	-15.7	-10.5	-22.2	-7
Standard Deduction	7,190,958	278,116	224,219	58,428	10,619	7,991,664	410,056	324,769	92,163	19,012
percent share	74.1	37.8	46.2	22.6	30.2	77.8	51.5	58.1	37.2	45.4
percent change						11.1	47.4	44.8	57.7	79

Source: NYS Department of Taxation and Finance; DOB staff estimates

Recent Liability History

New York State Adjusted Gross Income, NYSAGI, is the income base that underlies PIT liability. Table 5 lists the major components, their growth rates and shares of NYSAGI (see also Economic Backdrop – New York State Adjusted Gross Income section). NYSAGI growth has been somewhat volatile in the years following the Great Recession with strong 8.7 percent growth in 2012 and 2014, and a tiny 0.1 percent decline in 2013. Recent growth rates belie the impact of underlying economic drivers and are affected by a considerable amount of income shifting. Lower tax rates established under the Economic Growth and Tax Relief Reconciliation Act of 2001 were originally expected to sunset at the end of 2010. Though the sunset was moved to the end of 2012, evidence suggests that taxpayers shifted income from 2011 to 2010 in anticipation of a possible increase. With actual tax rates increasing at the close of 2012, taxpayers engaged in a more substantial income shift out of 2013 into 2012.

TABLE 5
DISTRIBUTION OF THE MAJOR COMPONENTS OF NEW YORK ADJUSTED GROSS INCOME (NYSAGI)
(millions of dollars)

Component of Income	2010	2011	2012	2013	2014	2015*	2016	2017	2018
	Actual			Estimate					
NYSAGI									
Amount	638,855	657,298	714,698	714,046	776,477	803,186	823,481	864,705	909,711
Percent Change	7.1	2.9	8.7	(0.1)	8.7	3.4	2.5	5.0	5.2
Wages									
Amount	482,433	499,425	515,645	525,924	558,857	581,089	600,067	624,547	651,331
Percent Change	4.0	3.5	3.2	2.0	6.3	4.0	3.3	4.1	4.3
Share of NYSAGI	75.5	76.0	72.1	73.7	72.0	72.3	72.9	72.2	71.6
Net Capital Gains									
Amount	44,669	48,800	77,248	68,492	90,918	93,620	90,641	97,115	105,273
Percent Change	50.5	9.2	58.3	(11.3)	32.7	3.0	(3.2)	7.1	8.4
Share of NYSAGI	7.0	7.4	10.8	9.6	11.7	11.7	11.0	11.2	11.6
Interest and Dividends									
Amount	30,200	29,240	33,433	32,604	34,970	33,600	34,522	37,395	39,956
Percent Change	2.9	(3.2)	14.3	(2.5)	7.3	(3.9)	2.7	8.3	6.8
Share of NYSAGI	4.7	4.4	4.7	4.6	4.5	4.2	4.2	4.3	4.4
Taxable Pension									
Amount	35,583	37,052	39,040	40,394	42,461	43,903	45,580	47,191	49,328
Percent Change	10.6	4.1	5.4	3.5	5.1	3.4	3.8	3.5	4.5
Share of NYSAGI	5.6	5.6	5.5	5.7	5.5	5.5	5.5	5.5	5.4
Net Business and Partnership Income									
Amount	74,368	74,148	84,363	83,995	89,448	95,179	99,697	107,009	114,930
Percent Change	4.1	(0.3)	13.8	(0.4)	6.5	6.4	4.7	7.3	7.4
Share of NYSAGI	11.6	11.3	11.8	11.8	11.5	11.9	12.1	12.4	12.6
All Other Incomes and Adjustments¹									
Amount	(28,398)	(31,367)	(35,031)	(37,363)	(40,178)	(44,206)	(47,025)	(48,553)	(51,107)
Percent Change	(5.7)	10.5	11.7	6.7	7.5	10.0	6.4	3.2	5.3
Share of NYSAGI	(4.4)	(4.8)	(4.9)	(5.2)	(5.2)	(5.5)	(5.7)	(5.6)	(5.6)

* Estimates for 2015 are based on processing data.

¹ Includes alimony received, unemployment income, IRA income, and other incomes. This number is negative due to Federal and New York adjustments to income, which together reduce final NYSAGI.

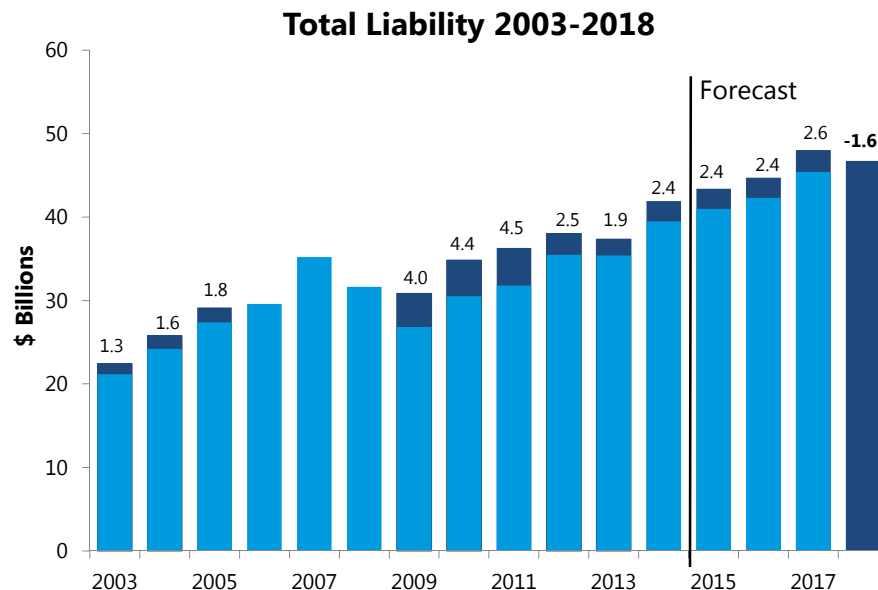
Source: NYS Department of Taxation and Finance; DOB staff estimates.

Wages, the largest contributor to NYSAGI, are also one of the most stable. At the recession's end in 2009, they made up 77.8 percent of NYSAGI. Since other components such as capital gains realizations grow relatively faster during recoveries, the share of wage income fell to an estimated 72.3 percent by 2015.

As one of the larger and most volatile components of total taxable income, capital gains realizations contribute prominently to changes in NYSAGI. Much of the volatility in net capital gains realizations growth is the direct result of taxpayers behaving strategically to avoid the higher tax rates on long-term capital gains that were initially anticipated to start in 2011 but really began in 2013. This strategic taxpayer behavior dwarfed the impact of strong underlying growth in equity and real estate markets. After five years of solid equity and real estate market growth, however, the contribution to NYSAGI from net capital gains income more than doubled from 5 percent in 2009 at the end of the recession to 11.7 percent in 2014 and is anticipated to be the same in 2015.

Other income components were also affected by income shifting, though to a lesser extent. For example, companies paid out dividends early so that investors could enjoy the lower rates in 2012, and the strong 13.8 percent partnership, S corporation and business income growth in 2012, followed by a 0.4 percent estimated decline in 2013, suggests that businesses were able to shift some of their income as well.

As a result of income shifting, the 2013 income base is lower than would otherwise be the case, making the estimated NYSAGI growth rate of 8.7 percent for 2014 stronger than underlying economic conditions would suggest. Note the decline to 3.4 percent growth in 2015. Going forward, DOB projects NYSAGI growth of 2.5 percent in 2016, followed by a 5 percent gain in 2017 and an increase of 5.2 percent for 2018.



Note: Values above bars indicate additional liability due to temporary brackets and rates for those tax years as represented by the dark blue shading; "current law" for 2006-2018 includes changes in State and Federal Tax Law that are effective with the 2006 tax year and beyond. The 2018 value shows the effect of the 2016 PIT reform in its first year.

Source: New York State Department of Taxation and Finance; DOB staff estimates.

TABLE 6
LIABILITY AND EFFECTIVE TAX RATES*
Current Law
2003-2017
(millions of dollars)

	NYSAGI		Liability		Effective Tax Rate (percent)
	Amount	Growth Rate	Amount	Growth Rate	
2003	473,778	3.0	22,456	8.3	4.74
2004	525,964	11.0	25,769	14.8	4.90
2005	571,916	8.7	28,484	10.5	4.98
2006	632,601	10.6	29,838	4.8	4.72
2007	725,245	14.6	35,215	18.0	4.86
2008	662,053	(8.7)	31,621	(10.2)	4.78
2009	596,471	(9.9)	31,162	(1.5)	5.22
2010	638,855	7.1	34,836	11.8	5.45
2011	657,298	2.9	36,296	4.2	5.52
2012	714,698	8.7	38,017	4.7	5.32
2013	714,046	(0.1)	37,331	(1.8)	5.23
2014	776,477	8.7	41,910	12.3	5.40
2015**	803,186	3.4	43,402	3.6	5.40
2016**	823,481	2.5	44,719	3.0	5.43
2017**	864,705	5.0	48,002	7.3	5.55

* Liability divided by AGI.
** Estimate/Forecast
Source: NYS Department of Taxation and Finance; DOB staff estimates.

Risks to the Liability Forecast

The collapse of the housing bubble and financial markets in the crises that attended the Great Recession caused the share of liability originating with the top one percent of taxpayers to fall from 43.1 percent in 2007 to 33.2 percent in 2009 on a constant-law basis. Over time the State has become increasingly reliant on its high-income taxpayers as a source of income tax revenues. The reformed State tax law enacted in December 2011 and effective with the 2012 tax year increased this proportion to 43.2 in its first year, a recent high. While income shifting in conjunction with federal tax law changes in December 2012 helped bring the proportion for 2013 down to 39.9 percent. The proportion rebounded to 42 percent in 2014. The Budget Division expects it to remain there in 2015 before slipping to 41.5 percent in 2016 and 41.3 percent in 2017. However, the possibility that high-income earners may be anticipating tax reductions under the new administration creates particular risk for the 2016 and 2017 liability forecast. The complex interaction between tax policy and taxpayer behavior is only one example of how changes in the economy, government policy, or the institutional practices of firms (i.e., the timing and types, not to mention the size, of bonus payments) that affect a small number of taxpayers in the high-income groups can have disproportionately large effects on State tax revenues.

TABLE 7
PERCENT DISTRIBUTION OF RETURNS, LIABILITY
AND AGI BY INCOME GROUPS UNDER CURRENT LAW

Income Group	2014 (Actual)			2017 (Forecast)		
	Returns	Liability	AGI	Returns	Liability	AGI
0 - \$50,000	65.1	3	13	62.9	2.9	13.7
\$50,000 - \$100,000	19	13.8	17.9	19.5	13	16.7
\$100,000 - \$200,000	10.8	18.4	19.4	11.7	18.5	19.3
\$200,000 - \$1,000,000	4.6	24.5	22.1	5.2	25.3	22.6
\$1,000,000 and above	0.6	40.2	27.6	0.6	40.4	27.6

Source: NYS Department of Taxation and Finance; DOB staff estimates.

TABLE 8
CHANGES IN THE SHARE OF LIABILITY ORIGINATING WITH
THE TOP ONE PERCENT OF NYS TAXPAYERS

Year	1995-2002, 2006-08 Tax Law			2003-05, 2009-11 Brackets and Rates; Reformed Law Begins in 2012		
	Liability, Top 1 Percent (millions)	Liability, All Taxpayers (millions)	Top 1 Percent Share of Total Liability	Liability, Top 1 Percent (millions)	Liability, All Taxpayers (millions)	Top 1 Percent Share of Total Liability
2003	7,146	21,173	33.8%	8,079	22,456	36.0%
2004	8,487	24,218	35.0%	9,607	25,769	37.3%
2005	9,794	26,741	36.6%	11,093	28,484	38.9%
2006	11,539	29,587	39.0%	--	--	--
2007	15,195	35,215	43.1%	--	--	--
2008	11,890	31,621	37.6%	--	--	--
2009	9,138	27,522	33.2%	12,194	31,162	39.1%
2010	10,548	30,349	34.8%	14,282	34,836	41.0%
2011	10,733	31,596	34.0%	14,513	36,296	40.0%
2012	12,976	35,258	36.8%	16,408	38,017	43.2%
2013	11,925	35,214	33.9%	14,913	37,331	39.9%
2014	13,945	39,643	35.2%	17,590	41,910	42.0%
2015*	14,475	41,509	34.9%	18,249	43,402	42.0%
2016*	14,724	42,930	34.3%	18,558	44,719	41.5%
2017*	15,686	45,615	34.4%	19,805	48,002	41.3%

* Estimated

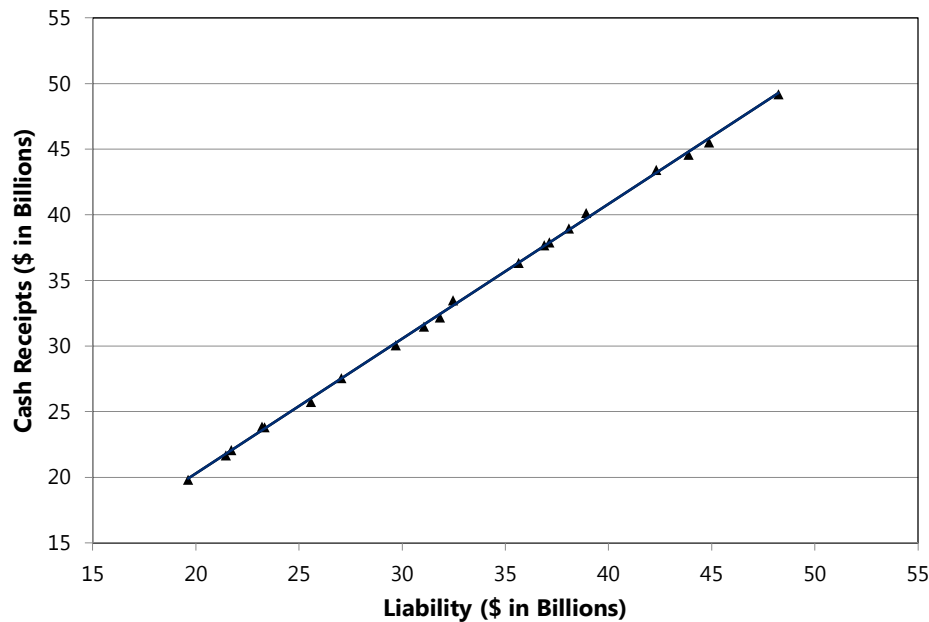
Notes: The 2003-2005 surcharges expired at the end of the 2005 tax year; the 2009-2011 brackets and rates expired at the end of the 2011 tax year.

Source: NYS Department of Taxation and Finance, DOB staff estimates.

Tax Liability and Cash Payments

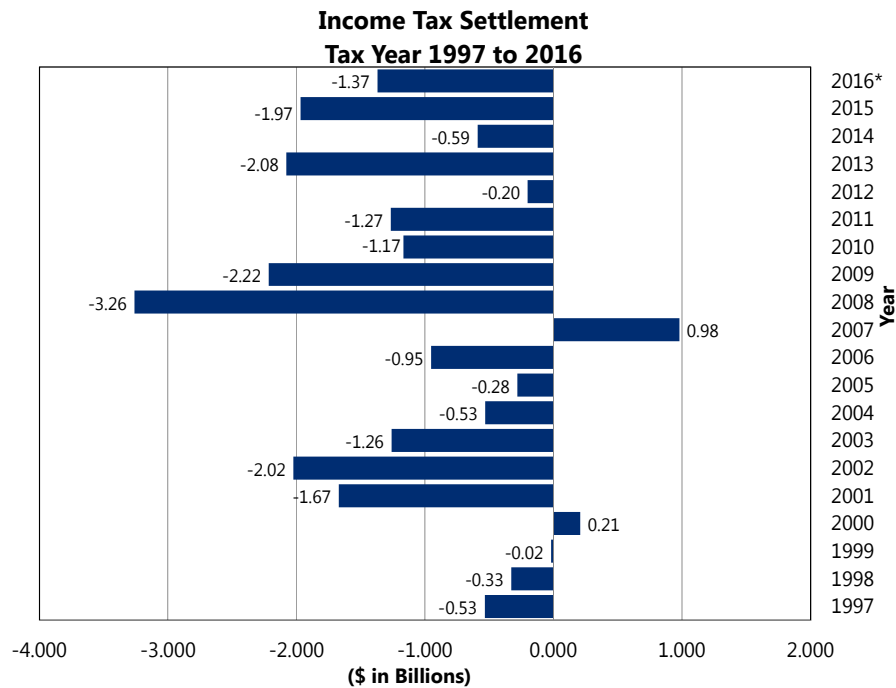
Although significant risks necessarily remain in any estimates of income tax liability, the estimation of the level of tax liability for a particular tax year leads, with a high degree of confidence, to the approximate level of cash receipts that can be expected for the particular tax year. The consistency in this relationship is shown in the graph below, which shows a trend line for the history of liability and cash receipts beginning in 1998, and data points to denote actual liability and cash results or estimates.

**PIT Liability vs. PIT Cash Receipts
1998-2017 Tax Year**



Despite the strong relationship between tax-year liability and cash receipts, estimation of cash payments is subject to an important complication that pervades forecasts for the Executive Budget and other State Financial Plan updates. This complication is determining the portions of tax-year liability that will occur in particular State fiscal years. Income tax prepayments – withholding tax and quarterly estimated tax payments – tend to be received not long after income is earned. For example, most withholding tax payments and quarterly estimated tax payments for the 2016 tax year will be received before the end of FY 2017. Settlement payments – those payments received when taxpayers file final returns for a tax year – tend to be received in the next State fiscal year after the end of a tax year. Thus, settlement payments for the 2016 tax year will be received largely in FY 2018.

As is evident in the following graph showing net settlement payments for the 1997 through 2016 tax years, the amount of liability received in the settlement can vary widely from year to year. In most years, the net settlement has been very negative, with State settlement outlays (such as refunds and offsets) far exceeding taxpayer settlement payments (such as those sent with returns and extension requests). There have been some important exceptions to this pattern – most notably during times of tax reform and rapid economic growth, and during periods with large increases in non-wage income.



The income tax settlement varies significantly on a year-to-year basis, but is typically negative, and has been consistently negative since tax year 2008. Due to the recessionary economic environment, the 2008 settlement was extremely negative (\$3.26 billion). The significantly less negative 2009 settlement (\$2.22 billion) was the result of an income tax surcharge that went into effect part-way through the tax year. Due to strong extension payments, the 2010 settlement ended at a smaller negative \$1.17 billion. Extension payments declined in 2011, leading to a slightly more negative net settlement of \$1.27 billion. In 2012, strong end-of-year capital gains realizations (due to impending Federal Tax Law changes) led to record-high April extension payments, improving the settlement to negative \$200 million. The net settlement for tax year 2013 shifted to a firmly negative \$2.08 billion, the result of a nearly 35 percent decline in extension payments following an inflated 2012 base. Driven by robust growth in nonwage income, extension payments and final returns related to tax year 2014 grew rapidly while refund payments increased conservatively, ultimately improving the net settlement to approximately negative \$590 million. The alteration in Family Tax Relief credit payment timing, from an advanced credit to a “standard” credit, provided strong growth in current refunds related to tax year 2015. This was coupled with a correction of quarterly estimated payment overpayment, in the form of a year-over-year decline in extension payments, resulting in a net settlement of negative \$1.97 billion. The tax year 2016 settlement is expected to be less negative at \$1.37 billion, attributable to an increase in the share of liability collected through extensions (at the expense of quarterly estimated payments).

For a more detailed discussion of the methods and models used to develop estimates and projections for the PIT, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$32,878 million, a decrease of \$1,143 million (3.4 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$47.6 billion, an increase of \$584 million (1.2 percent) from FY 2016. This primarily reflects weak growth in withholding and a decline in total refund payments, partially offset by declines in current estimated payments for tax year 2016, extension (i.e., prior year estimated) payments for tax year 2015, and final returns.

Withholding in FY 2017 is projected to be \$1 billion (2.8 percent) higher compared to the prior year. This reflects the net effect of moderate non-bonus wage growth and weak bonus wage growth. Total estimated payments are expected to decrease by \$805 million (5 percent). Estimated payments for tax year 2016 are projected to decline by \$316 million (2.7 percent), driven mainly by a decline in capital gains. Extension payments (i.e., prior year estimated) for tax year 2015 declined \$489 million (10.7 percent). Delinquent collections are projected to be \$48 million (3.7 percent) higher, while final return payments are projected to decrease by \$15 million (0.6 percent).

The decline in total refunds of \$330 million (3.5 percent) reflects decreases of \$800 million (31.4 percent) in current year refunds related to tax year 2016 (due to a decrease in the January to March 2017 administrative refund cap to \$1.75 billion) and \$119 million (19.3 percent) in refunds related to tax years prior to 2015, partially offset by increases of \$105 million (2 percent) in prior refunds related to tax year 2015, \$173 million (25.6 percent) in the State-City offset, and \$312 million (54.6 percent) in advanced credit payments attributable to tax year 2016. The suppressed growth in prior refunds related to tax year 2015 reflects a \$600 million increase in the administratively determined refund “cap” between FY 2015 and FY 2016. The increase in advanced credit payments is attributable to the first year of both the Property Tax Relief credit and the STAR Transformation credit.

Table 9 shows the components of the PIT from FY 2016 through FY 2018.

TABLE 9
FISCAL YEAR COLLECTION COMPONENTS
ALL FUNDS
(millions of dollars)

	FY 2016 (Actual)	FY 2017 (Estimated)	FY 2018 (Projected)
Receipts			
Withholding	36,549	37,575	39,359
Estimated Payments	16,111	15,306	17,025
Current Year	11,561	11,245	12,379
Prior Year*	4,550	4,061	4,646
Final Returns	2,630	2,615	2,836
Current Year	269	287	299
Prior Year*	2,360	2,328	2,537
Delinquent Collections	1,310	1,358	1,418
Gross Receipts	56,600	56,854	60,638
Refunds			
Prior Year*	5,130	5,235	6,216
Previous Years	618	499	470
Current Year*	2,550	1,750	1,749
Advanced Credit Payment	571	883	647
State-City Offset*	675	848	873
Total Refunds	9,545	9,215	9,955
Net Receipts	47,055	47,639	50,683

* These components, collectively, are known as the "settlement" on the prior year's tax liability.

The primary risks to the FY 2017 receipts estimate result from uncertainty surrounding both bonus payments paid by financial services companies and the fourth quarterly estimated tax payment. With respect to financial sector bonuses, a large portion of these payments are typically paid in the last quarter of the state fiscal year. Consequently, complete information about such payments is not available when Budget estimates are constructed. Similarly, the fourth quarterly estimated tax payment is consistently the largest payment, and a significant portion of this revenue is not received until after the Division's forecast has been produced.

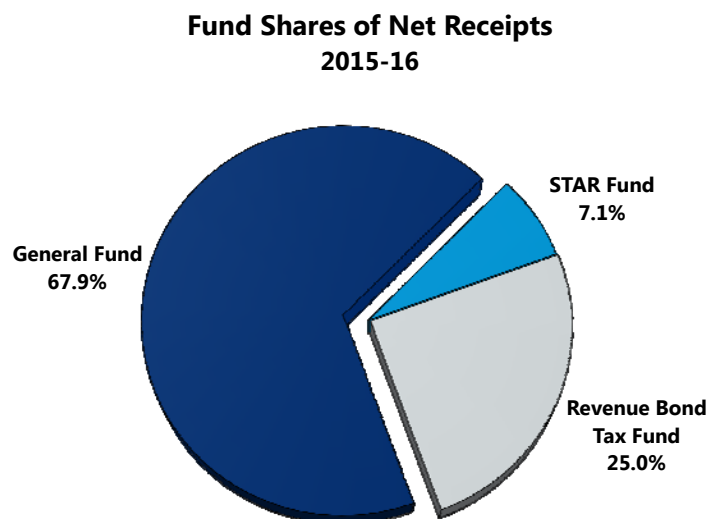
FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$50.7 billion, an increase of \$3 billion (6.4 percent) from FY 2017.

This increase primarily reflects increases of \$1.8 billion (4.7 percent) in withholding and \$1.7 billion (11.2 percent) in total estimated payments, partially offset by a \$741 million (8 percent) increase in total refunds. The increase in total refunds is driven almost exclusively by prior year refunds related to tax year 2016, which are projected to grow substantially in response to the \$800 million year-over-year decline in the January to March 2017 administrative refund cap. The growth in withholding is driven by projected FY 2018 wage growth of 4.2 percent. The growth in total estimated payments includes increases of \$1.1 billion (10.1 percent) in estimated payments related to tax year 2017 and \$585 million (14.4 percent) in extension (i.e., prior year estimated) payments for tax year 2016. The growth in estimated payments related to tax year 2017 is in response to projected nonwage income growth of 7.5 percent, including 7 percent growth in net capital gains.

Payments from final returns are expected to increase \$221 million (8.5 percent) and delinquent collections are projected to increase by \$60 million (4.4 percent) compared to the prior year. The aforementioned increase in total refunds of \$741 million reflects increases of \$981 million (18.7 percent) in prior year refunds for tax year 2016 (due to an expected decline in the administrative refund cap in January to March of 2017 to \$1.75 billion) and \$25 million (2.9 percent) in State-City offsets, partially offset by declines of \$236 million (26.7 percent) in advanced credit payments for tax year 2017 and \$29 million (5.8 percent) in previous years refunds related to tax returns prior to 2016.

The aforementioned projections include revenue increases attributable to Executive proposals. The increases are as follows: \$683 million in withholding (surcharge extension), \$20 million in tax year 2017-related estimated payments (loophole closers), and \$22 million in delinquent collections (tax enforcement initiatives).



General Fund

General Fund net PIT receipts are estimated to be \$32,521 million in FY 2017 and are projected to be \$35,406 million in FY 2018.

Other Funds

In FY 2017 and FY 2018, respectively, dedicated PIT receipts of \$3,208 million and \$2,606 million will be deposited into the School Tax Relief Fund. The decline in FY 2018 deposits is attributable to a combination of the proposed NYC PIT rate reduction conversion credit and the ongoing conversion of STAR homeowner benefits into a PIT credit for new and relocating homeowners. The STAR Transformation credit was enacted as part of the FY 2017 Budget, and conversion will continue indefinitely.



Personal Income Tax

In FY 2017 and FY 2018, respectively, dedicated receipts of \$11,910 million and \$12,671 million will be deposited into the Revenue Bond Tax Fund (RBTF). This increase reflects the growth in net income tax collections upon which the RBTF is based.

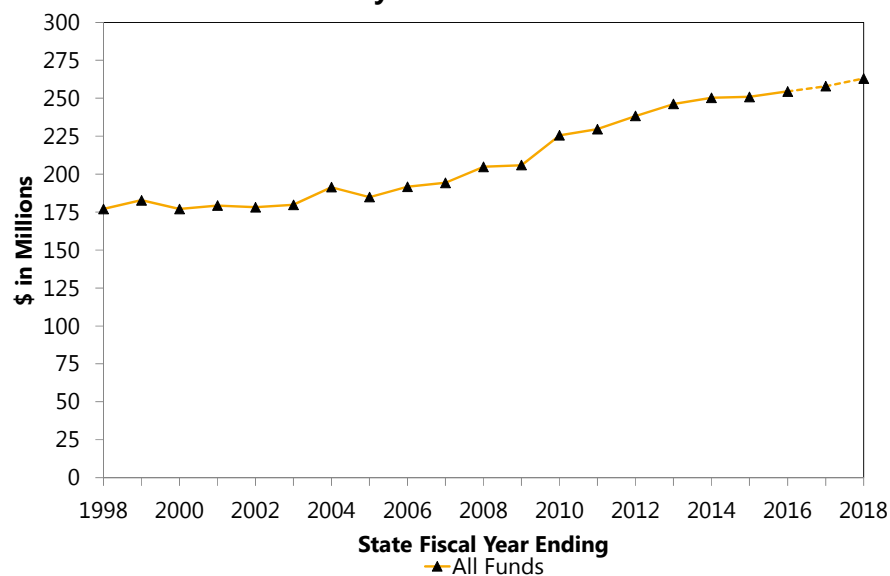
Alcoholic Beverage Taxes



ALCOHOLIC BEVERAGE TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	254.5	258.0	3.5	1.4	263.0	5.0	1.9
Other Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Funds	254.5	258.0	3.5	1.4	263.0	5.0	1.9

Note: Totals may differ due to rounding.

Alcoholic Beverage Tax Receipts History and Estimates



ALCOHOLIC BEVERAGE TAXES BY FUND (thousands of dollars)				
	Gross			
	General Fund	Refunds	General Fund	All Funds Receipts
FY 2008	205,375	546	204,829	204,829
FY 2009	205,913	5	205,908	205,908
FY 2010	225,647	87	225,560	225,560
FY 2011	229,698	0	229,698	229,698
FY 2012	238,379	116	238,263	238,263
FY 2013	246,240	23	246,217	246,217
FY 2014	250,312	6	250,306	250,306
FY 2015	250,871	12	250,859	250,859
FY 2016	254,551	3	254,548	254,548
Estimated				
FY 2017	258,100	100	258,000	258,000
FY 2018				
Current Law	263,100	100	263,000	263,000
Proposed Law	263,100	100	263,000	263,000



Alcoholic Beverage Taxes

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

New York State imposes excise taxes at various rates on liquor, beer, wine and specialty beverages.

STATE TAX RATES (dollars per unit of measure)		
Liquor over 24 percent alcohol	1.70	per liter
All other liquor with more than 2 percent alcohol	0.67	per liter
Liquor with not more than 2 percent alcohol	0.01	per liter
Naturally sparkling wine	0.30	per gallon
Artificially carbonated sparkling wine	0.30	per gallon
Still wine	0.30	per gallon
Beer with 0.5 percent or more alcohol	0.14	per gallon
Cider with more than 3.2 percent alcohol	0.04	per gallon

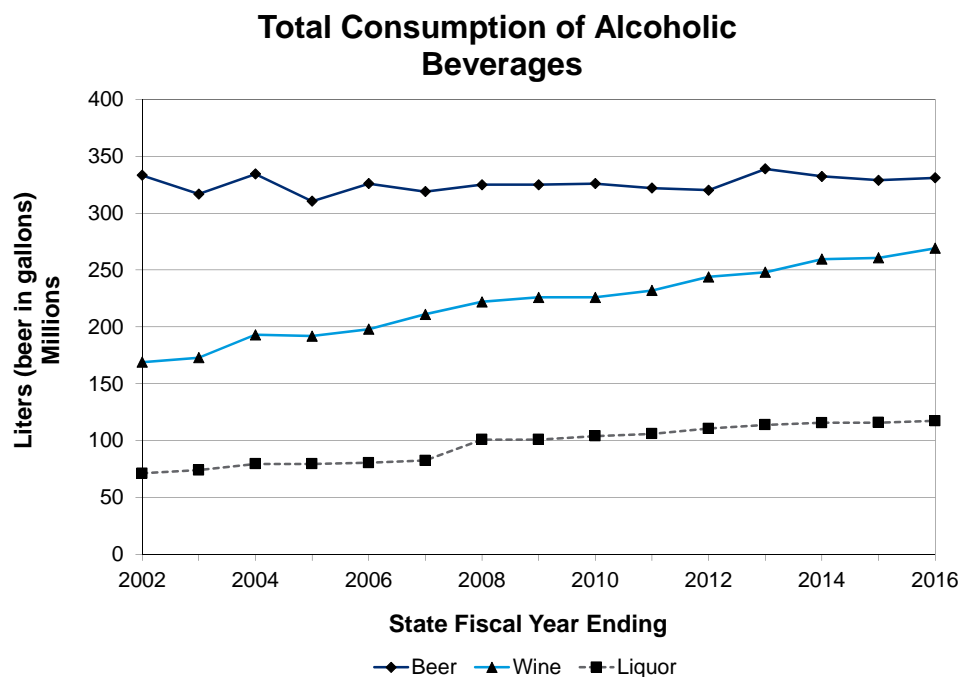
Administration

Generally, the tax is remitted by licensed distributors and noncommercial importers of such beverages in the month following the month of delivery. Small taxpayers file the tax annually.

Significant Legislation

Significant statutory changes to this tax since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2012		
Small Brewers' Tax Credit	Repealed the exemption for certain small brewers, and replaced the benefit with personal income and business tax credits.	March 28, 2012
Legislation Enacted in 2016		
Tasting Exemptions	Exempted any product used in on-site tastings from the alcoholic beverage tax.	March 31, 2016



Tax Liability

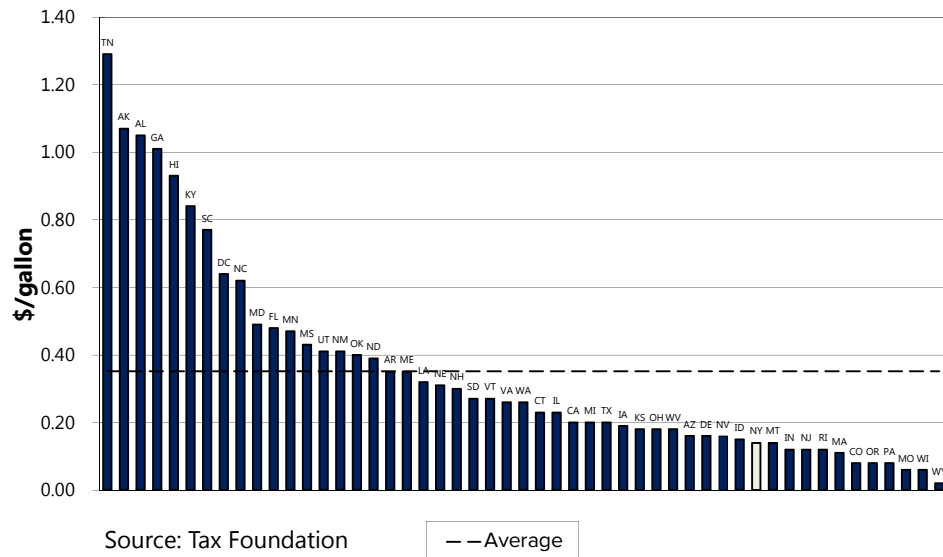
Generally, consumption of taxed wine and liquor has increased annually since FY 2008, while taxable beer consumption has remained relatively flat, with a few exceptions, during the same period.

Other States

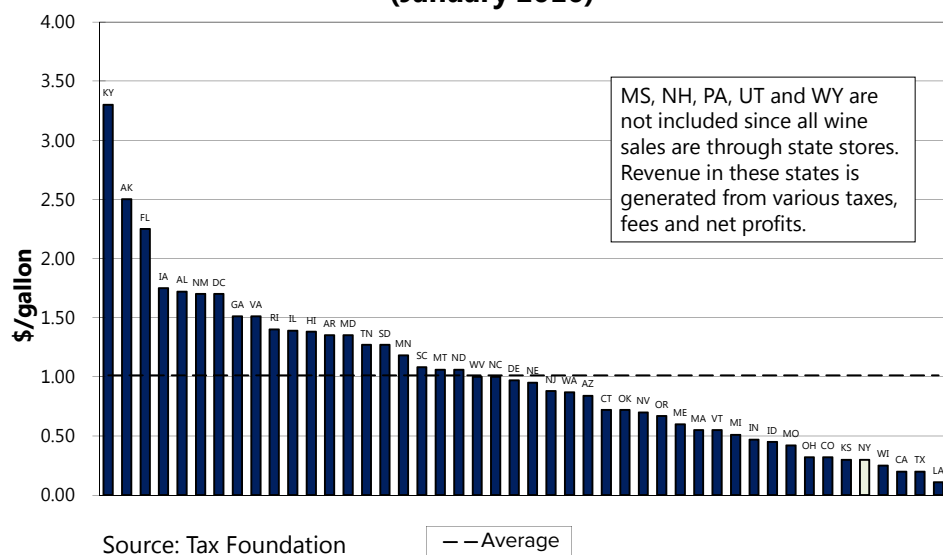
Compared with the alcohol tax rates in the other states in the nation, New York State currently has:

- The eleventh lowest beer tax;
- The fifth lowest wine tax (of those participating states); and
- The twenty-first highest liquor tax (of those participating states).

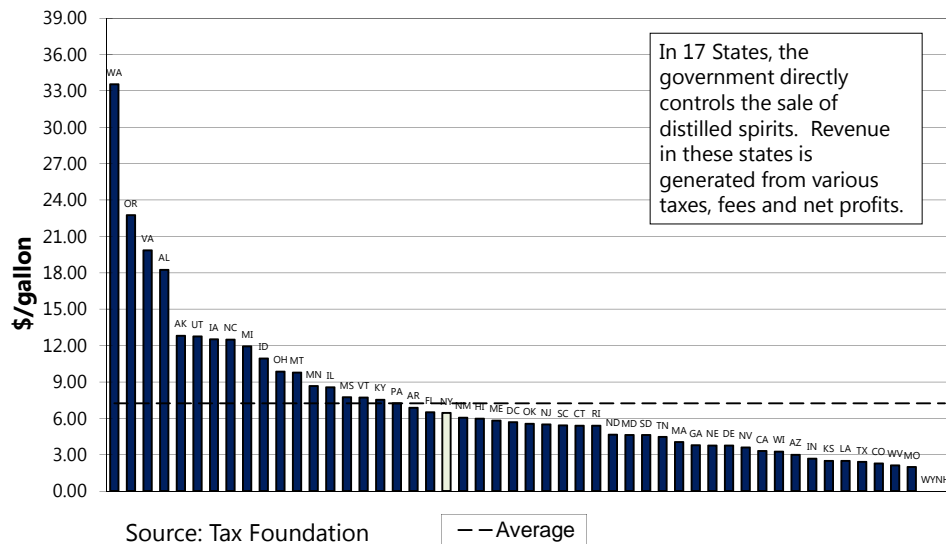
Beer Tax Rates by State (January 2016)



Wine Tax Rates by State (January 2016)



Liquor Tax Rates by State (January 2016)



Note: 17 States have direct control over the sale of distilled spirits. The implied excise tax rate is calculated using methodology designed by the Distilled Spirits Council of the United States (DISCUS).

The New York State tax on liquor is relatively high compared to other forms of alcohol, but still below the average of all states. The alcoholic beverage enforcement provisions summarized below have provided some protection to the State's liquor industry and tax base, thereby improving State alcoholic beverage tax receipts.

Alcoholic Beverage Tax Enforcement Provisions

Violations	Volume	Penalties
Import liquor without registration		Class A misdemeanor
Produce, distill, manufacture, compound, mix or ferment liquors without registration or tax payments		Class A misdemeanor
Cause liquor covered by a warehouse receipt to be removed from a warehouse		Class A misdemeanor
Three or more above violations in a five-year period		Class E felony
Import liquor without registration	More than 360 liters within one year	Class E felony
Produce, distill, manufacture, compound, mix or ferment liquors without registration or tax payments	More than 360 liters within one year	Class E felony
Cause liquor covered by a warehouse receipt to be removed from a warehouse	More than 360 liters within one year	Class E felony

Violations	Volume	Penalties
Custody, possession or control of liquor without registration or tax payments		Class B misdemeanor
Custody, possession or control of liquor without registration or tax payments	Exceeds 360 liters	Class E felony
Import liquor without registration	More than 90 liters	Seize transportation vehicles and liquor.
Distribute or hold liquor for sale without paying alcoholic beverage taxes	More than 90 liters	Seize transportation vehicles and liquor.
Failure by a distributor to pay the tax		10 percent of the tax amount due, plus 1 percent each month after the expiration. The penalty shall not be less than \$100 but shall not exceed 30 percent in aggregate.
Failure by any other person to pay the tax		50 percent of the tax amount due, plus 1 percent each month after the expiration. The penalty shall not be less than \$100.

For a more detailed discussion of the methods and models used to develop estimates and projections for the alcohol beverage taxes, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$195 million, an increase of \$3.3 million (1.7 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$258 million, an increase of \$3.5 million (1.4 percent) from FY 2016. Estimated growth is primarily based on the continuation of recent wine and liquor consumption trends.

Of total estimated receipts, \$190.9 million is projected to be derived from liquor, \$46.6 million from beer, and \$20.5 million from wine and other taxed beverages.

COMPONENTS OF ALCOHOLIC BEVERAGE TAXES RECEIPTS (millions of dollars)							
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Estimated FY 2017	Projected FY 2018
Beer	45.0	47.6	46.7	46.0	46.5	46.6	46.7
Liquor	174.2	179.5	183.8	185.4	188.0	190.9	195.3
Wine and Other	19.1	19.1	19.8	19.5	20.0	20.5	21.0
Total	238.3	246.2	250.3	250.9	254.5	258.0	263.0

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$263 million, an increase of \$5 million (1.9 percent) from FY 2017.

Liquor and wine receipts are expected to grow modestly and beer consumption is expected to remain relatively flat.

Of total projected alcoholic beverage tax receipts, \$195.3 million is projected to be derived from liquor, \$46.7 million from beer, and \$21 million from wine and other specialty beverages.

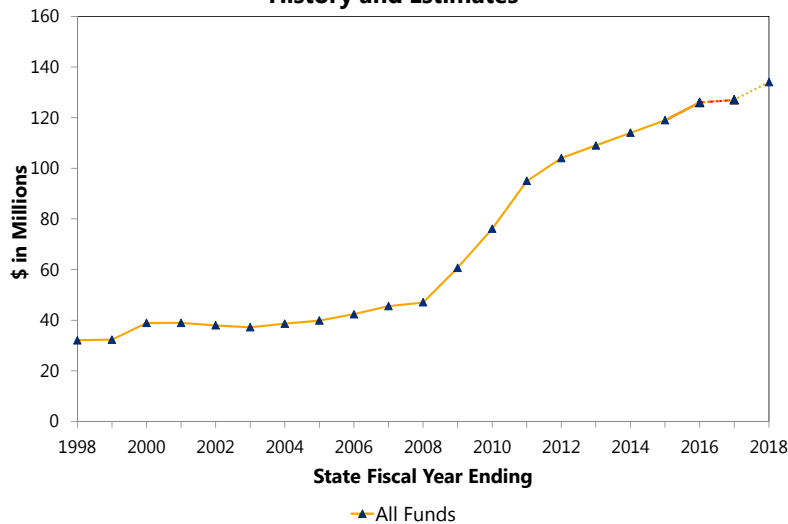
General Fund

Currently, all receipts from the alcoholic beverage tax are deposited in the General Fund.

AUTO RENTAL TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	126.1	127.0	0.9	0.7	134.0	7.0	5.5
All Funds	126.1	127.0	0.9	0.7	134.0	7.0	5.5

Note: Totals may differ due to rounding.

Auto Rental Tax Receipts History and Estimates



AUTO RENTAL TAX BY FUND (millions of dollars)			
	Capital Project Funds ¹	Special Revenue Funds ²	All Fund Receipts
FY 2008	47	0	47
FY 2009	61	0	61
FY 2010	52	24	76
FY 2011	60	35	95
FY 2012	65	39	104
FY 2013	68	41	109
FY 2014	71	43	114
FY 2015	74	45	119
FY 2016	79	47	126
Estimated			
FY 2017	78	49	127
FY 2018			
Current Law	82	52	134
Proposed Law	82	52	134

¹ Dedicated Highway and Bridge Trust Fund.
² MTA Aid Trust Account.

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

On June 1, 1990, the State imposed a 5 percent tax on charges for the rental or use in New York State of a passenger car with a gross vehicle weight of 9,000 pounds or less. On June 1, 2009, the rate was increased to 6 percent and a supplemental tax at the rate of 5 percent was imposed on the receipts from the rental of a passenger car within the Metropolitan Commuter Transportation District (MCTD). For more information, please see the Metropolitan Transportation Authority (MTA) Financial Assistance Fund Receipts Section.

The auto rental tax applies to a vehicle rented by a resident or a nonresident, regardless of where the vehicle is registered. The tax does not apply to a car lease covering a period of one year or more.

Administration

The auto rental tax is remitted quarterly by the vendor on the vendor's sales tax return to the Department of Taxation and Finance.

Tax Liability

Receipts from the auto rental tax are influenced by the overall health of the economy, particularly consumer and business spending on travel. Unusual events that affect travel have had a significant influence on receipts.

For a more detailed discussion of the methods and models used to develop estimates and projections for the auto rental tax, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$104.4 million, a decrease of \$0.2 million (0.2 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$127 million, an increase of \$0.9 million (0.7 percent) from FY 2016. This growth reflects a continuing increase in New York tourism spending.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$134 million, an increase of \$7 million (5.5 percent) from FY 2017. This increase reflects projected growth in New York tourism spending.

General Fund

No auto rental tax receipts are deposited into the General Fund.

Other Funds

All receipts from the State auto rental tax are deposited to the Dedicated Highway and Bridge Trust Fund. Receipts are estimated to be \$78 million in FY 2017 and \$82 million in FY 2018.

All receipts from the supplemental tax on passenger cars in the MCTD are deposited to the MTA Aid Trust Account of the MTA Financial Assistance Fund. Receipts are estimated to be \$49 million in FY 2017 and \$52 million in FY 2018.

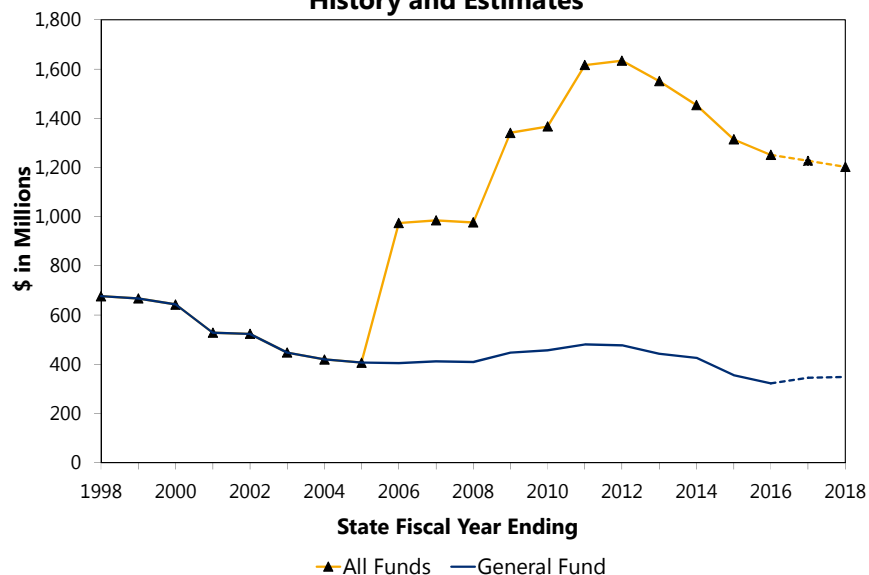
Cigarette and Tobacco Taxes



CIGARETTE AND TOBACCO TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	322.2	345.0	22.8	7.1	348.0	3.0	0.9
Other Funds	928.4	882.0	(46.4)	(5.0)	854.0	(28.0)	(3.2)
All Funds	1,250.6	1,227.0	(23.6)	(1.9)	1,202.0	(25.0)	(2.0)

Note: Totals may differ due to rounding.

Cigarette and Tobacco Taxes Receipts History and Estimates



CIGARETTE AND TOBACCO TAXES BY FUND (millions of dollars)					
	Gross General Fund	Refunds	General Fund	Special Revenue Funds	All Funds Receipts
FY 2008	410	1	409	567	976
FY 2009	447	1	446	894	1,340
FY 2010	457	1	456	910	1,366
FY 2011	481	1	480	1,136	1,616
FY 2012	472	1	471	1,162	1,633
FY 2013	447	4	443	1,108	1,551
FY 2014	430	2	426	1,027	1,453
FY 2015	394	34	355	958	1,314
FY 2016	373	51	322	928	1,251
Estimated					
FY 2017	357	12	345	882	1,227
FY 2018					
Current Law	341	8	333	851	1,184
Proposed Law	356	8	348	854	1,202

Proposed Legislation

Legislation proposed with this Budget would:

- Expand jeopardy assessments to the cigarette and tobacco tax;
- Clarify the amount of untaxed cigarettes required to seize a vehicle;
- Reform the taxation of cigars; and
- Tax and regulate vapor products.

Description

Tax Base and Rate

The New York State cigarette excise tax is imposed by Article 20 of the Tax Law on the sale or use of cigarettes within the State. The current tax rate is \$4.35 per package of 20 cigarettes.

The Federal government imposes a cigarette excise tax at a rate of \$1.01 per pack on manufacturers and first importers of cigarettes. New York City also levies a separate cigarette excise tax of \$1.50 per pack.

STATE, FEDERAL AND NEW YORK CITY CIGARETTE EXCISE TAX RATES Per Pack of 20 Cigarettes (since 1950)					
State	Rate (cents)	Federal	Rate (cents)	New York City	Rate (cents)
July 1, 1939	2	Before November 1, 1951	7	Before May 1, 1959	1
January 1, 1948	3	November 1, 1951	8	May 1, 1959	2
April 1, 1959	5	January 1, 1983	16	June 1, 1963	4
April 1, 1965	10	January 1, 1991	20	January 1, 1976	8
June 1, 1968	12	January 1, 1993	24	July 2, 2002	150
February 1, 1972	15	January 1, 2000	34		
April 1, 1983	21	January 1, 2002	39		
May 1 1989	33	April 1, 2009	101		
June1 1990	39				
June 1, 1993	56				
March 1, 2000	111				
April 3, 2002	150				
June 3, 2008	275				
July 1, 2010	435				

The State also imposes a tax on other tobacco products, such as chewing tobacco, snuff, cigars, pipe tobacco and roll-your-own cigarette tobacco, at a rate of 75 percent of their wholesale price except for snuff products, which are taxed at a rate of \$2.00 per ounce. Cigars with a weight of less than 4 pounds per 1,000 are taxed at a rate equivalent to the state cigarette tax. The Federal

Cigarette and Tobacco Taxes



government also imposes an excise tax on manufacturers and importers of tobacco products at various rates, depending on the type of product.

Retail establishments that sell cigarettes are required to register with the Department of Taxation and Finance. Vending machine owners are required to purchase stickers from the Department. The following table provides a comparison of state cigarette tax rates.

CIGARETTE TAX RATES Cents Per Pack Ranked by State Tax Rate <i>As of October 1, 2016</i>			
Rank (High to Low)	State Rate	Rank (High to Low)	State Rate
New York	435.0	South Dakota	153.0
Connecticut	390.0	Texas	141.0
Rhode Island	375.0	Iowa	136.0
Massachusetts	351.0	Florida	133.9
Hawaii	320.0	Oregon	132.0
Vermont	308.0	Kansas	129.0
Washington	302.5	West Virginia	120.0
Minnesota	300.0	Arkansas	115.0
New Jersey	270.0	Louisiana	108.0
Pennsylvania	260.0	Oklahoma	103.0
Wisconsin	252.0	Indiana	99.5
Dist. of Columbia	250.0	California	87.0
Alaska	200.0	Colorado	84.0
Arizona	200.0	Mississippi	68.0
Maine	200.0	Alabama	67.5
Maryland	200.0	Nebraska	64.0
Michigan	200.0	Tennessee	62.0
Illinois	198.0	Kentucky	60.0
Nevada	180.0	Wyoming	60.0
New Hampshire	178.0	Idaho	57.0
Montana	170.0	South Carolina	57.0
Utah	170.0	North Carolina	45.0
New Mexico	166.0	North Dakota	44.0
U.S. Median	165.0	Georgia	37.0
Delaware	160.0	Virginia	30.0
Ohio	160.0	Missouri	17.0
Source: www.tobaccofreekids.org .			

Administration

State-registered stamping agents, who are mostly wholesalers, purchase tax stamps from the State and affix the stamps to cigarette packages to be sold by New York State registered retailers. The excise tax is paid by the stamping agent and is passed on. Purchasers of non-State stamped cigarettes, such as cigarettes sold out-of-State or on Native American lands, must remit the

cigarette excise tax directly to the Department of Taxation and Finance. An individual may bring two cartons into the State without being subject to the excise tax.

Tax Evasion

Cigarette tax evasion is a serious problem in New York and throughout the Northeast. The most significant area of concern is the importation of cigarettes from low-tax states. Widespread evasion not only reduces State and local revenues, but also reduces the income of legitimate wholesalers and retailers. The Department of Taxation and Finance has acted vigorously to curb cigarette bootlegging through investigatory and enforcement efforts. These efforts may lead to less severe declines in taxable cigarette consumption than otherwise would have occurred.

In 2013, legislation was enacted that increased the penalty for possession of unstamped or unlawfully stamped cigarettes from \$150 per carton to \$600 per carton to reflect increases in the excise tax on cigarettes and to strengthen the deterrent effect in the current environment.

In 2014, a multi-agency task force was formed to reduce illegal tobacco trafficking and sales. The multi-agency Cigarette Strike Force is composed of state, local and federal agencies dedicated to stopping the influx of counterfeit and untaxed tobacco products into New York. The Strike Force also focuses on tracing any illicit financial earnings from that criminal activity.

Significant Legislation

Significant statutory changes to cigarette and tobacco taxes since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Cigarette Tax	Repealed the graduated annual retail registration fee of between \$1,000 and \$5,000 annually and replaced it with a flat \$300 annual fee.	January 1, 2010
Legislation Enacted in 2013		
Cigarette Tax	Increased the penalty for possession of unstamped or unlawfully stamped cigarettes from a maximum of \$150 per carton or fraction of a carton to a maximum of \$600 per carton or fraction of a carton.	June 1, 2013

Tax Liability

Taxable cigarette consumption is a function of retail cigarette prices and a long-term downward trend in consumption. The decline in consumption reflects the impact of increased public awareness of the adverse health effects of smoking, smoking restrictions imposed by governments, anti-smoking education programs, and changes in consumer preferences toward other types of tobacco.

For a more detailed discussion of the methods and models used to develop estimates and projections for the cigarette and tobacco taxes, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$970.3 million, a decrease of \$17.8 million (1.8 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$1,227 million, a decrease of \$23.6 million (1.9 percent) from FY 2016.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$1,202 million, a decrease of \$25 million (2 percent) from FY 2017.

Health Care Reform Act (HCRA)

Currently, 76 percent of the proceeds from the State cigarette tax of \$4.35 are deposited in the HCRA Resources Pool.

HCRA preliminary receipts through December are \$686.5 million, a decrease of \$40.2 million (5.5 percent) from the comparable period in the prior fiscal year. HCRA FY 2017 receipts are estimated to be \$882 million, a decrease of \$46.4 million (5 percent) from FY 2016.

HCRA FY 2018 receipts are projected to be \$854 million, a decrease of \$28 million (3.2 percent) from FY 2017. This includes \$3 million from Budget proposals that allow for jeopardy assessments and clarify and reduce vehicle seizure thresholds.

As part of the agreement allowing New York City to increase its cigarette tax from eight cents to \$1.50 per pack in July 2002, the City provides the State with 46 percent of the receipts generated through its tax. These receipts are deposited into the HCRA Resources Pool. The New York State share of the City's cigarette tax is projected to be \$36 million in FY 2017 and \$33 million in FY 2018.

General Fund

General Fund preliminary receipts through December are \$283.7 million, an increase of \$22.5 million (8.6 percent) from the comparable period in the prior fiscal year.

General Fund FY 2017 receipts are estimated to be \$345 million, an increase of \$22.8 million (7.1 percent) from FY 2016. Receipts from the cigarette tax are projected to be \$278.5 million, a decrease of \$14.7 million (5 percent) from FY 2016. This decrease reflects declines in taxable consumption observed during the current fiscal year, at least in part due to bootlegging. Receipts

from the tobacco products tax are projected to increase to \$59.5 million, as the estimated amount of large cigar refunds to be issued as a result of the change in the way the wholesale cigar tax is administered by the Department of Taxation and Finance is much lower compared to FY 2016.

Receipts from retail cigarette registrations are estimated to be \$7 million in FY 2017.

General Fund FY 2018 receipts are projected to be \$348 million, an increase of \$3 million (0.9 percent) from FY 2017. Cigarette tax receipts are expected to be \$268.7 million, or \$9.8 million below FY 2017. The cigarette tax decrease reflects a trend decline in cigarette consumption that has been reduced in large part due to enforcement efforts of the Cigarette Strike Force. Tobacco products tax receipts are estimated to be \$72.3 million, an increase of \$12.8 million from FY 2017. This projected increase is mainly the result of cigar tax reform (\$12 million) and vapor products tax legislation (\$3 million), partially offset by a small projected increase in the amount of large cigar refunds still to be issued due to timing between the two fiscal years.

Receipts from retail registrations are projected to be \$7 million in FY 2018.

CIGARETTE AND TOBACCO TAXES RECEIPTS (millions of dollars)						
Fiscal Year	General Fund				HCRA	General
	Cigarette	Tobacco	Other	Total	Cigarette	Fund Plus
	Tax	Tax			Tax	HCRA
FY 2008	359	47	3	409	567	976
FY 2009	395	48	3	446	894	1,340
FY 2010	378	64	14	456	910	1,366
FY 2011	382	96	3	481	1,136	1,616
FY 2012	367	103	2	471	1,162	1,633
FY 2013	348	91	3	443	1,108	1,551
FY 2014	324	95	7	426	1,027	1,453
FY 2015	303	46	7	355	959	1,314
FY 2016	293	22	7	322	928	1,251
Estimated						
FY 2017	279	60	7	345	882	1,227
FY 2018	269	72	7	348	854	1,202

Note: Components may not add to total due to rounding.

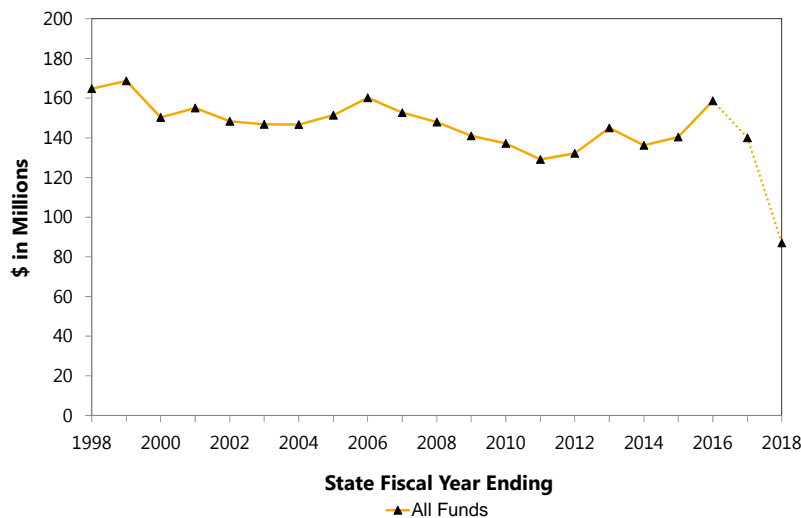
Highway Use Tax



HIGHWAY USE TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	158.6	140.0	(18.6)	(11.7)	87.0	(53.0)	(37.9)
All Funds	158.6	140.0	(18.6)	(11.7)	87.0	(53.0)	(37.9)

Note: Totals may differ due to rounding.

Highway Use Tax Receipts History and Estimates



HIGHWAY USE TAX COLLECTIONS BY FUND (millions of dollars)					
	Gross Capital Projects Funds ¹	Refunds	Net Capital Projects Funds ¹	Special Revenue Funds ²	Net All Funds Receipts
FY 2008	150	2	148	N/A	148
FY 2009	143	2	141	N/A	141
FY 2010	139	2	137	N/A	137
FY 2011	131	2	129	N/A	129
FY 2012	134	2	132	N/A	132
FY 2013	147	2	145	N/A	145
FY 2014	138	2	136	N/A	136
FY 2015	142	2	140	N/A	140
FY 2016	161	2	159	N/A	159
Estimated					
FY 2017	140	2	138	2	140
FY 2018					
Current Law	141	55	86	1	87
Proposed Law	141	55	86	1	87

¹ Dedicated Highway and Bridge Trust Fund.
² Highway Use Tax Administration Account.

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Articles 21 and 21-A of the Tax Law impose a highway use tax on commercial vehicles using the public highways of the State. Highway use tax revenues are derived from three sources: the truck mileage tax, the fuel use tax and registration fees.

Truck Mileage Tax

The truck mileage tax (TMT) is levied on commercial vehicles having a loaded gross weight of more than 18,000 pounds, or an unloaded weight in excess of 8,000 pounds for trucks and 4,000 pounds for tractors. The tax is imposed at rates graduated according to gross vehicle weight. Under the gross weight method, the tax is calculated by multiplying the number of “laden” or “unladen” miles traveled on public highways of the State by the appropriate tax rate.

BASE TRUCK MILEAGE TAX RATES			
Gross Weight Method		Unloaded Weight Method	
Laden Miles			
Gross Weight of Vehicle	Mills Per Mile	Unloaded Weight of Truck	Mills Per Mile
18,001 to 20,000	6.0	8,001 to 9,000	4.0
20,001 to 22,000	7.0	9,001 to 10,000	5.0
(increased gradually to)		(increased gradually to)	
74,001 to 76,000	35.0	22,501 to 25,000	22.0
76,001 and over	add 2 mills per ton and fraction thereof	25,001 and over	27.0
Unladen Miles		Unloaded Weight of Tractor	
Unloaded Weight of Truck		Unloaded Weight of Tractor	
18,001 to 20,000	6.0	4,001 to 5,500	6.0
20,001 to 22,000	7.0	5,501 to 7,000	10.0
(increased gradually to)		(increased gradually to)	
28,001 to 30,000	10.0	10,001 to 12,000	25.0
30,001 and over	add 0.5 mill per ton and fraction thereof	12,001 and over	33.0
Unloaded Weight of Tractor			
7,001 to 8,500	6.0		
8,501 to 10,000	7.0		
(increased gradually to)			
16,001 to 18,000	10.0		
18,001 and over	add 0.5 mills per ton and fraction thereof		

Fuel Use Tax

The fuel use tax is a complement to the motor fuel tax and the sales tax, and is levied on commercial vehicles: (1) having two axles and a gross vehicle weight of more than 26,000 pounds; (2) having three or more axles, regardless of weight; or (3) used in combination when the gross vehicle weight exceeds 26,000 pounds. In contrast to the sales tax and motor fuel tax, which are imposed upon the amount of fuel purchased within the State, the fuel use tax is imposed on fuel purchased outside but used within New York. This tax is based on the number of miles traveled on the public highways of the State.

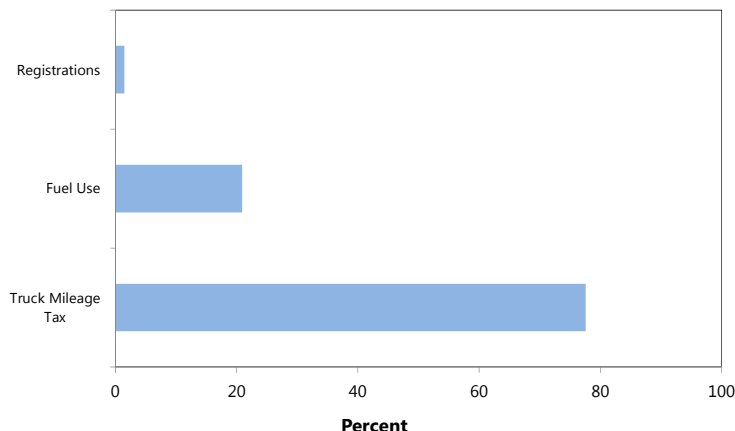
The aggregate fuel use tax rate is the sum of the appropriate motor fuel tax rate and the sales tax rate. The motor fuel tax component is eight cents per gallon. The sales tax component is derived by adding the amount from the State sales tax rate and the amount from the lowest county sales tax rate. The current fuel use tax rate is \$0.22. A credit or refund is allowed for motor fuel tax, petroleum business tax or sales tax paid on fuels purchased in New York, but not used within the State.

Registration System

The current registration system is based on the license plate number of each vehicle and a registration decal. The Commissioner can deny registration if the carrier has not paid monies due from any other tax and there is a civil penalty for any person who fails to obtain a certificate of registration when it is required. Special permits are issued for the transportation of motor vehicles, for automotive fuel carriers, and for trips into New York State not to exceed 72 hours.

The FY 2017 Enacted Budget eliminated the separate HUT registration (previously \$15) and decal (previously \$4) fees and replaced them with a combined HUT registration and decal fee of \$1.50. The revenue from the HUT registration and decal fee is now directed to a newly created HUT Administration Account instead of the Dedicated Highway and Bridge Trust Fund.

Components of Highway Use Tax Receipts
Estimated FY 2017



Administration

Most taxpayers remit the truck mileage tax on a monthly basis. The tax is remitted on or before the last day of each month for the preceding month. Fuel use taxpayers file quarterly with their home state under the rules of the International Fuel Tax Agreement (IFTA). The home state subsequently distributes the funds to the state where the liability occurred.

Significant Legislation

Significant statutory changes to the highway use tax since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Alternative Fuel	Extended the exemption on alternative fuels through August 31, 2012.	September 1, 2011
Legislation Enacted in 2012		
Alternative Fuel	Extended the exemption on alternative fuels through August 31, 2014.	September 1, 2012
Legislation Enacted in 2014		
Alternative Fuel	Extended the exemption on alternative fuels through August 31, 2016.	September 1, 2014
Legislation Enacted in 2016		
Registration Fees	Replaced the HUT registration and decal fees with a combined HUT registration and decal fee of \$1.50.	April 13, 2016
Alternative Fuel	Extended the exemption on alternative fuels through August 31, 2021.	September 1, 2016

Tax Liability

Highway use tax receipts are a function of the demand for trucking, which fluctuates with national and State economic conditions.

For a more detailed discussion of the methods and models used to develop estimates and projections for the highway use tax, please see *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$109.5 million, a decrease of \$16.5 million (13.1 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$140 million, a decrease of \$18.6 million (11.7 percent) from FY 2016. Net truck mileage tax receipts are estimated at \$108.7 million, fuel use

tax receipts at \$29.2 million and registration fees at \$2.1 million. The decrease is mainly due to the registration fee decrease from \$15 to \$1.50 and elimination of the decal fee (previously \$4). Both fee changes were the result of the Independent Owner Operator Drivers Association v. New York Department of Taxation and Finance court decision.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$87 million, a decrease of \$53 million (37.9 percent) from FY 2017. The projected decrease is attributable to refunds resulting from the litigation noted above.

General Fund

No highway use tax receipts are deposited into the General Fund.

Other Funds

Prior to April 13, 2016, all highway use tax receipts were directed to the Dedicated Highway and Bridge Trust Fund (DHBTF). As of April 13, 2016, all HUT registration revenue is directed to the HUT Administration Account (HUTAA) while all other revenue is directed to the DHBTF. In FY 2017, the DHBTF will receive an estimated \$137.9 million and the HUTAA will receive an estimated \$2.1 million. In FY 2018, the DHBTF will receive a projected \$86.4 million, and the HUTAA will receive a projected \$0.6 million.

MEDICAL MARIHUANA (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	0.0	0.5	0.5	N/A	1.0	0.5	100.0
All Funds	0.0	0.5	0.5	N/A	1.0	0.5	100.0

Note: Totals may differ due to rounding.

MEDICAL MARIHUANA TAX BY FUND (thousands of dollars)		
	Special Revenue Funds	All Fund Receipts
FY 2015	N/A	N/A
FY 2016	11	11
Estimated		
FY 2017	500	500
FY 2018		
Current Law	1,000	1,000
Proposed Law	1,000	1,000

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

On July 5, 2014, the medical use of marihuana was authorized for the regulated treatment of the following conditions and ailments:

- Cancer;
- Positive status for human immunodeficiency virus or acquired immune deficiency syndrome;
- Amyotrophic lateral sclerosis;
- Parkinson's disease;
- Multiple sclerosis;

- Damage to the nervous tissue of the spinal cord with objective neurological indication of intractable spasticity;
- Epilepsy;
- Inflammatory bowel disease;
- Neuropathies; and
- Huntington's disease.

In addition, medical marihuana can be prescribed for a complication of treatment for:

- Cachexia or wasting syndrome;
- Severe or chronic pain;
- Severe nausea;
- Seizures; and
- Severe or persistent muscle spasms.

The Commissioner of the Department of Health has the authority to add conditions to either list (chronic pain is now being considered for inclusion). Effective November 30, 2016, nurse practitioners can now prescribe medical marihuana to offer greater access to the product. The product must be administered in a smokeless form.

A seven percent excise tax is imposed when a New York dispensary sells the product to a patient or designated caregiver, and is remitted by the dispensary. The tax amount cannot be added as a separate charge on a receipt given to the retail customer.

The dispensing of medical marihuana began on January 7, 2016.

Administration

The statutory maximum of five manufacturers was selected in 2015, and each manufacturer can have up to four dispensing sites. The manufacturers and dispensaries are geographically distributed throughout the State, as statutorily required.

MANUFACTURERS AND RELATED DISPENSARY LOCATIONS		
Organization Name	Manufacturing	Dispensing
Bloomfield Industries Inc.	Queens	Nassau Manhattan Onondaga Erie
Columbia Care NY LLC	Monroe	Manhattan Suffolk Clinton Monroe
Etain, LLC	Warren	Albany Ulster Westchester Onondaga
PharmaCann LLC	Orange	Erie Onondaga Albany Bronx
Vireo Health of NY LLC	Fulton	Broome Albany Westchester Queens

Revenues from the State excise tax will be directed to the Medical Marihuana Trust Fund. The monies of the Fund are split in the following order:

- 22.5 percent transferred to the counties in which the medical marihuana was manufactured and allocated in proportion to the gross sales originating from medical marihuana manufactured in each such county;
- 22.5 percent transferred to the counties in which the medical marihuana was dispensed and allocated in proportion to the gross sales occurring in each such county;
- 5 percent transferred to the Office of Alcoholism and Substance Abuse Services. The monies will be used for additional drug abuse prevention, counseling and treatment services; and
- 5 percent transferred to the Division of Criminal Justice Services. The monies will be used to provide discretionary grants to state and local law enforcement agencies. These grants could be used for personnel costs of state and local law enforcement agencies.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds FY 2017 receipts are estimated to be \$0.5 million.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$1 million, an increase of \$0.5 million (100 percent) from FY 2017.

General Fund

No medical marihuana receipts are deposited into the General Fund.

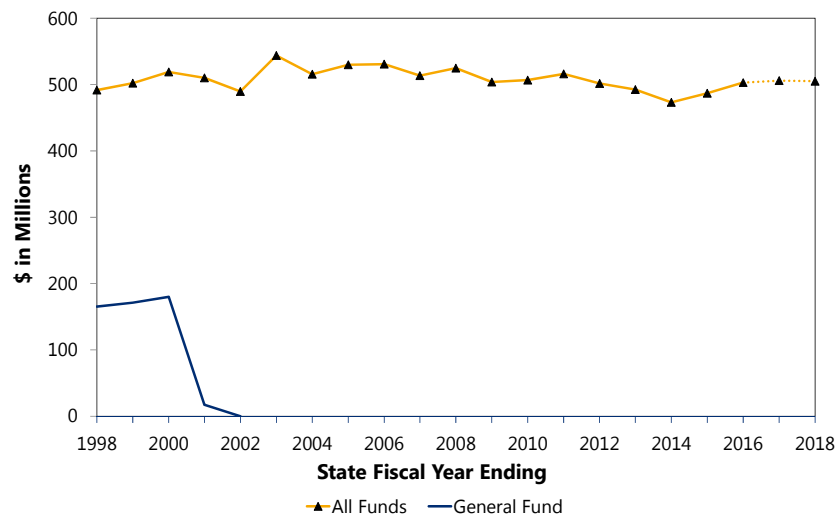
Other Funds

All receipts from the medical marihuana tax are deposited to the Medical Marihuana Trust Fund.

MOTOR FUEL TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	503.1	506.0	2.9	0.6	505.0	(1.0)	(0.2)
All Funds	503.1	506.0	2.9	0.6	505.0	(1.0)	(0.2)

Note: Totals may differ due to rounding.

Motor Fuel Tax Receipts History and Estimates



MOTOR FUEL TAX BY FUND (millions of dollars)					
	Gross All Funds Receipts	Special Revenue Funds ¹	Capital Projects Funds ²	All Funds Refunds	All Funds Receipts
FY 2008	543	110	415	18	525
FY 2009	528	106	398	24	504
FY 2010	523	106	401	16	507
FY 2011	540	108	408	24	516
FY 2012	527	105	396	25	502
FY 2013	513	103	389	21	492
FY 2014	495	99	375	22	473
FY 2015	518	101	386	31	487
FY 2016	522	105	398	19	503
Estimated					
FY 2017	527	106	400	21	506
FY 2018					
Current Law	530	106	399	25	505
Proposed Law	530	106	399	25	505

¹ Dedicated Mass Transportation Trust Fund.
² Dedicated Highway and Bridge Trust Fund.

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base

Gasoline motor fuel and diesel motor fuel taxes are imposed by Article 12-A of the Tax Law upon the sale, generally for highway use, of motor fuel and diesel motor fuel, respectively. The motor fuel tax is levied primarily on fuel used in motor vehicles operating on the public highways of the State or on fuel used in recreational motorboats operating on the State's waterways. Exemptions, credits and refunds are allowed for certain other uses of gasoline and diesel motor fuel.

Tax Rate

The motor fuel tax on gasoline motor fuel and diesel fuel is eight cents. A motor fuel tax of two cents was imposed on gasoline motor fuel in 1929. The tax on gasoline was increased to 3 cents in 1932, to four cents in 1937, to six cents in 1956, to seven cents in 1959 and to eight cents in 1972. A motor fuel tax of two cents was imposed on diesel motor fuel in 1936. The tax on diesel fuel was increased to four cents in 1947, to six cents in 1956, to nine cents in 1959 and to ten cents in 1972. The tax on diesel fuel was reduced to eight cents in 1996.

RANKING OF STATE TAXES PER GALLON (January 1, 2017) ¹		
State	State Motor Fuel Tax (cents per gallon)	Total State Tax ² (cents per gallon)
PENNSYLVANIA	0.0	58.2
WASHINGTON	49.4	49.4
CONNECTICUT**	25.0	38.3
NEW JERSEY	10.5	37.5
N. CAROLINA	34.3	34.3
MARYLAND	25.5	33.5
W. VIRGINIA	20.5	33.2
RHODE ISLAND	33.0	33.0
CALIFORNIA*	27.8	32.3
NEW YORK *	8.0	32.2
IDAHO	32.0	32.0
ILLINOIS *	19.0	31.8
MICHIGAN *	19.0	30.9
WISCONSIN	30.9	30.9
IOWA	30.7	30.7
MAINE	30.0	30.0
OREGON	30.0	30.0
VERMONT	12.1	29.5
UTAH	29.4	29.4
INDIANA *	18.0	29.4
MINNESOTA	28.5	28.5
OHIO	28.0	28.0
S. DAKOTA	28.0	28.0
HAWAII *	17.0	27.5
MONTANA	27.0	27.0
NEBRASKA	25.8	26.8
GEORGIA	26.0	26.0
KENTUCKY	24.6	24.6
KANSAS	24.0	24.0
MASSACHUSETTS	24.0	24.0
WYOMING	23.0	24.0
DIST. OF COLUMBIA	23.5	23.5
DELAWARE	23.0	23.0
NEVADA	23.0	23.0
N. DAKOTA	23.0	23.0
NEW HAMPSHIRE	22.2	22.2
COLORADO	22.0	22.0
ARKANSAS	21.5	21.5
TENNESSEE	20.0	21.0
LOUISIANA	20.0	20.0
TEXAS	20.0	20.0
ARIZONA	18.0	18.0
MISSISSIPPI	18.0	18.0
FLORIDA	4.0	17.4
MISSOURI	17.0	17.0
NEW MEXICO	17.0	17.0
VIRGINIA	16.2	16.2
ALABAMA	16.0	16.0
OKLAHOMA	16.0	16.0
S. CAROLINA	16.0	16.0
ALASKA	8.0	8.0

NOTES:

¹ Assumes a base price of \$2.00.

² Includes applicable State taxes (local taxes not included).

* State sales tax applies on sales of gasoline in these states - NYS's rate capped at 8 cents per gallon.

** Includes other tax based on price of fuel.

Source: OPA compilation from various sources including CCH Tax Guides and FTA.

Administration

Although the motor fuel tax is imposed on the consumer, the tax is remitted upon importation into New York. This tax-on-first-import system is designed to reduce gasoline tax evasion, which previously involved bootlegging from other states and successions of tax-free sales among “dummy” corporations masked by erroneous record keeping and reporting.

Prior to 1988, the diesel motor fuel tax was collected at the time of retail sale or use by a bulk user. Since 1988, taxes on diesel motor fuel have been collected upon the first non-exempt sale in the State. Interdistributor sales of highway diesel motor fuel sold below the rack are considered tax-exempt.

The tax is generally remitted monthly, although vendors whose average monthly tax is less than \$200 may remit quarterly. Chapter 55 of the Laws of 1992 required accelerated remittance of the tax by taxpayers with annual liability of more than \$5 million for motor fuel and petroleum business tax (PBT) combined. These taxpayers are required to remit taxes electronically or by certified check by the third business day following the first 22 days of each month. Taxpayers can choose to make either a minimum payment of three-fourths of the comparable month’s tax liability for the preceding year, or 90 percent of actual liability for the first 22 days. Taxes for the balance of the month are remitted by the twentieth of the following month.

Tax Expenditures

Exemptions from the motor fuel tax include:

- kerosene and crude oil;
- fuel not used in motor vehicles. “Motor vehicle” is defined as any vehicle propelled by power, except muscular power. However, vehicles such as boats (other than pleasure craft), road building machinery and tractors used exclusively for agricultural purposes are excluded from the definition of motor vehicles;
- fuel used in tanks of vehicles entering New York State;
- sales to state, local and Federal governments, the United Nations and qualifying Native American nations; and
- certain exempt organizations.

Other exemptions apply only to the diesel motor fuel tax, including certain sales for heating purposes and sales of kero-jet fuel for use in airplanes.

Full and partial refunds and credits for tax paid are available for fuel used by:

- omnibus carriers or taxicabs;

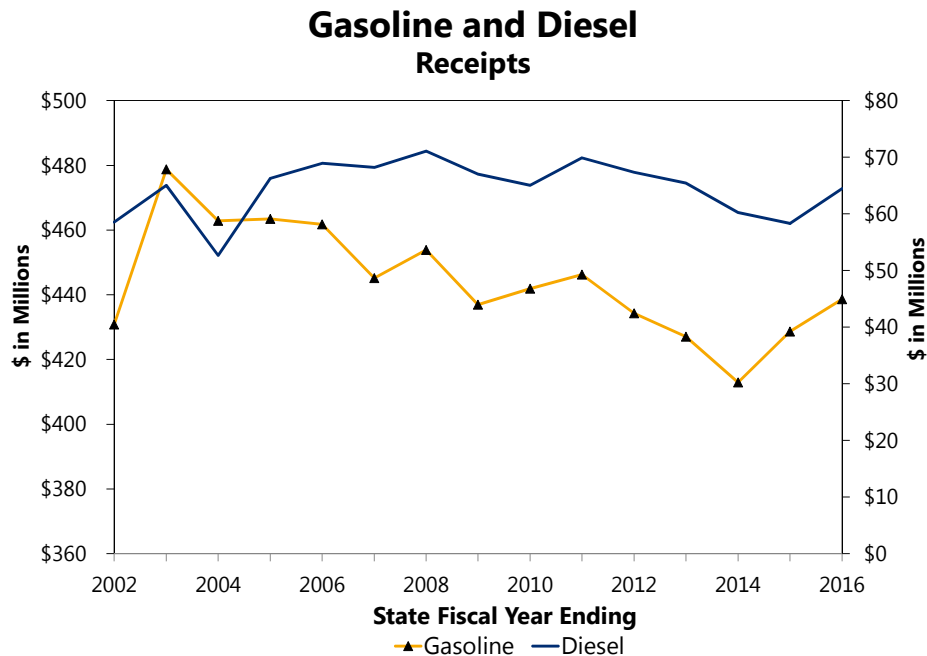
- nonpublic school vehicle operators, exclusively for education-related purposes; and
- volunteer ambulance services.

Significant Legislation

Significant statutory changes to the motor fuel tax since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Modernize Fuel Definitions	Modernized fuel definitions to conform with changes in Federal and State Law.	September 1, 2011
Alternative Fuels	Extended the exemption on alternative fuels through August 31, 2012.	September 1, 2011
Legislation Enacted in 2012		
Alternative Fuels	Extended the exemptions on alternative fuels through August 31, 2014.	September 1, 2012
Legislation Enacted in 2013		
Interdistributor Sales	Allowed for tax free interdistributor sales of highway diesel motor fuel sold below the rack (i.e., not delivered by truck).	August 1, 2013
Legislation Enacted in 2014		
Alternative Fuels	Extended the exemption on alternative fuels through August 31, 2016.	September 1, 2014
Legislation Enacted in 2016		
Alternative Fuels	Extended the exemption on alternative fuels through August 31, 2021.	September 1, 2016
Expand Motor Fuel Wholesaler Registration Requirements	Required certain wholesalers of motor fuel to file informational returns and register with the Department of Taxation and Finance. This information will be used to detect and prevent tax evasion.	December 1, 2016

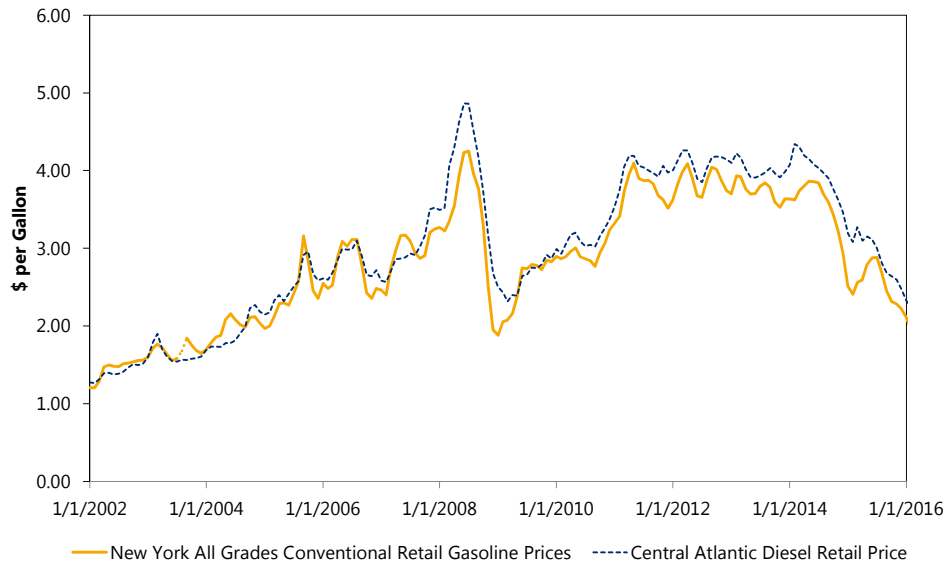
Tax Liability



Gasoline taxable receipts are driven more heavily by fuel prices. Reduced fuel demand at the beginning of the Great Recession caused fuel prices to drop, with NY gasoline prices falling from a peak of \$4.25 per gallon in July 2008 to \$1.89 in January 2009. Prices quickly began to rise, reaching over \$3 in November 2010 and fluctuating between \$3.50 and \$4.08 until late 2014. This was due to improved economic conditions and increased oil demand in the developing world. Since then, crude oil prices have experienced a significant decline, which in turn contributed to gasoline prices declining sharply, as well. In December 2014, gas prices dropped below \$3.00 and have remained below that level ever since. The decline in crude oil prices is largely the result of an increase in OPEC oil production contributing to an ever-growing global supply, as well as falling global oil consumption. Crude oil prices are expected to remain relatively low in the short-run. As of December 2016, the New York gasoline price average is \$2.38 per gallon.

A further discussion of energy prices can be found in the Economic Backdrop section of this volume.

Gasoline and Diesel Monthly Prices



Source: U.S. Department of Energy, Energy Information Administration (EIA)

Diesel receipts are correlated with economic activity. With the collapse of the financial markets and the deterioration of labor markets in the Great Recession, diesel receipts declined from \$71.1 million in FY 2008 to \$65 million in FY 2010. As the economy slowly began to recover, diesel receipts rebounded in FY 2011 to \$69.9 million. In recent years, diesel receipts have declined mainly due to the amount of refunds that were processed due to multiple Wall Street firms selling off large quantities of tax-paid gallons of highway diesel fuel. These large refunds were paid out for highway diesel motor fuel gallons that were sold outside of New York State up to two years after the tax was originally collected. Effective August 1, 2013, interdistributor sales of highway diesel motor fuel are no longer taxable, meaning the tax is not imposed on highway diesel until it is sold at the rack.

For a more detailed discussion of the methods and models used to develop estimates and projections for the motor fuel tax, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$396.2 million, an increase of \$20.7 million (5.5 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$506 million, an increase of \$2.9 million (0.6 percent) from FY 2016. Gasoline receipts are estimated to increase due to the to-date impact of lower gasoline prices and an expected increase in audit collections. Diesel receipts are estimated to increase due to anticipated economic growth, and an expected increase in audit collections.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$505 million, a decrease of \$1 million (0.2 percent) from FY 2017. In FY 2018, it is projected that there will be a decrease in gasoline receipts and a slight increase in diesel receipts. The decrease in gasoline receipts is mainly due to an expected increase in refund payments combined with anticipated increases in gasoline prices resulting from the recent OPEC agreement, partially offset by an increase in audit collections. The projected increase in diesel receipts is due to the long-term expectation that economic growth, and therefore heavy-duty vehicles miles traveled, will outpace increases in heavy-duty vehicle fuel economy and an expected increase in audit collections.

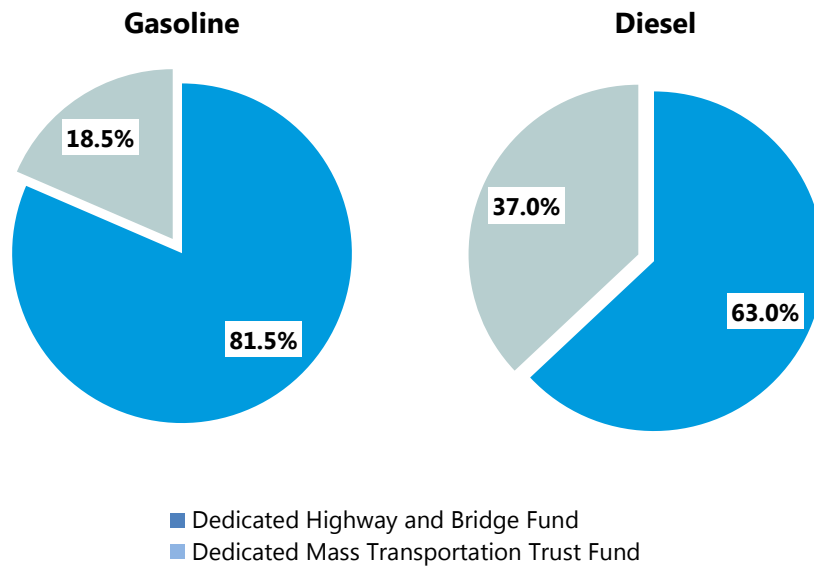
General Fund

No motor fuel tax receipts are deposited into the General Fund.

Other Funds

The current law distribution of motor fuel tax receipts is shown below.

Motor Fuel Tax Receipts Current Distributions



Motor fuel tax receipts in FY 2017 are estimated to be \$400 million for the DHBTF and \$106 million for the DMTTF. Motor fuel tax receipts in FY 2018 are projected to be \$399 million for DHBTF and \$106 million for the DMTTF.

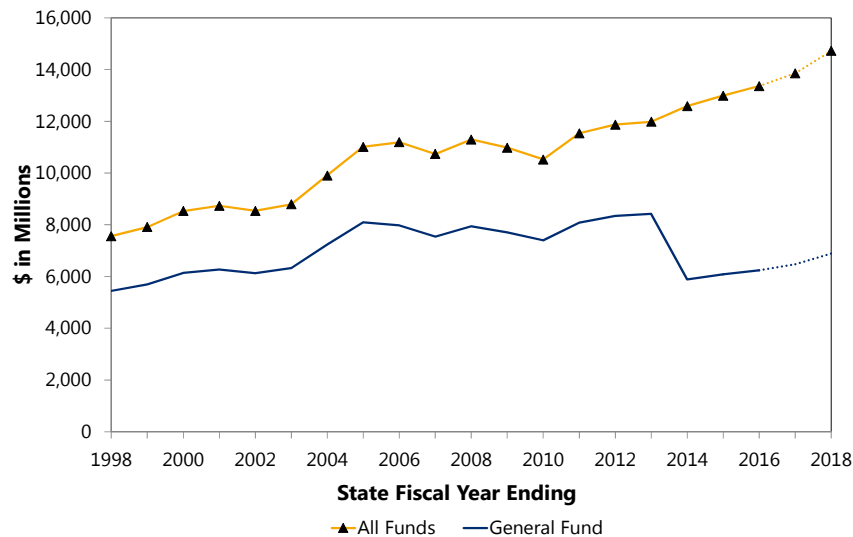
Sales and Use Tax



SALES AND USE TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	6,242.6	6,478.5	235.9	3.8	6,891.5	413.0	6.4
Debt Service	6,242.5	6,478.5	236.0	3.8	6,891.5	413.0	6.4
MTOAF	874.2	903.0	28.8	3.3	943.0	40.0	4.4
All Funds	13,359.3	13,860.0	500.7	3.7	14,726.0	866.0	6.2

Note: Totals may differ due to rounding.

Sales and Use Tax Receipts History and Estimates



SALES AND USE TAX BY FUND (millions of dollars)						
	Gross General Fund	Refunds	General Fund	Special Revenue Funds ¹	Debt Service Funds ²	All Fund Receipts
FY 2008	8,009	64	7,945	705	2,646	11,296
FY 2009	7,771	64	7,707	711	2,567	10,985
FY 2010	7,457	53	7,404	656	2,467	10,527
FY 2011	8,168	83	8,085	756	2,697	11,538
FY 2012	8,448	102	8,346	750	2,780	11,875
FY 2013	8,487	64	8,423	758	2,809	11,989
FY 2014	5,947	62	5,885	802	5,901	12,588
FY 2015	6,323	80	6,243	874	6,243	13,360
FY 2016	6,305	62	6,243	874	6,243	13,359
Estimated						
FY 2017	6,539	60	6,479	903	6,479	13,860
FY 2018						
Current Law	6,916	60	6,856	938	6,856	14,649
Proposed Law	6,952	60	6,892	943	6,892	14,726

¹Mass Transportation Operating Assistance Fund.
²Local Government Assistance Corporation Fund and Sales Tax Revenue Bond Fund.

Proposed Legislation

Legislation proposed with this Budget would:

- Close sales tax related entities loophole;
- Modernize sales tax collection to reflect the internet economy; and
- Make technical amendments to the State and local sales tax statute.

Description

Tax Base

In general, all retail sales of tangible personal property are taxed under Article 28 of the Tax Law unless specifically exempt, but services are taxable only if they are enumerated in the Tax Law.

Specifically, the sales tax is applied to receipts from the retail sale of:

- Tangible personal property (unless specifically exempt);
- Certain gas, electricity, refrigeration and steam and telephone service;
- Selected services;
- Food and beverages sold by restaurants, taverns and caterers;
- Hotel occupancy; and
- Certain admission charges and dues.

Examples of taxable services include installing or maintaining tangible personal property and protective and detective services.

States are currently constrained by United States Supreme Court decisions limiting which out-of-state vendors can be required to collect the sales tax on a state's behalf. In general, a vendor must have some physical presence or nexus in a state to be required to collect that particular state's sales tax. Thus, a compensating use tax complements the sales tax, and is imposed on the use of taxable property or services in-state, if the transaction has not already been subject to tax. This will include, for example, taxable items purchased via mail order or on the Internet if the vendor has no taxable nexus with New York. The use tax also applies to certain uses of self-produced property or services. With some exceptions, the base of the use tax mirrors the base of the sales tax. The use tax is remitted by the purchaser directly to the New York State Department of Taxation and Finance.

Effective with the 2003 personal income tax filing year, the New York State personal income tax return contains a line on which taxpayers may enter the amount of use tax owed for the preceding calendar year. New York State collected \$40.6 million from this program in FY 2015 and \$37.8 million in FY 2016.

Tax Rate

The sales and compensating use tax was enacted in 1965 at a rate of 2 percent. The tax rate was increased to 3 percent in 1969, to 4 percent in 1971 and temporarily to 4.25 percent in 2003. The rate reverted to 4 percent on June 1, 2005.

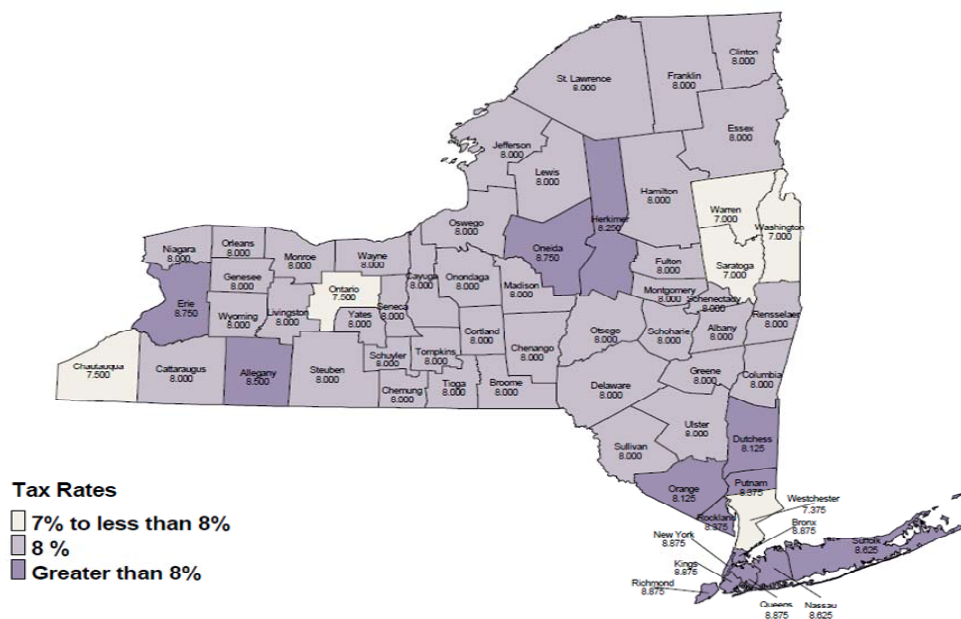
Effective June 1, 2006, the State sales tax rate on motor fuel and diesel motor fuel was capped at 8 cents per gallon.

An additional 5 percent sales tax is imposed on the receipts from the sale of telephone entertainment services that are exclusively delivered aurally.

Counties and cities are authorized to impose general sales tax rates up to 3 percent. Of the 57 counties that impose the general sales tax, only four counties (Saratoga, Warren, Washington and Westchester) impose at the statutory 3 percent maximum general sales tax rate. Of the 20 cities that impose the general sales tax, only three cities (New York City, Oswego and Yonkers) received legislative authority to impose additional rates of tax above the statutory 3 percent general sales tax rate. Over 95 percent of the State's population resides in an area where the tax rate equals or exceeds 8 percent.

An additional 0.375 percent sales and use tax is imposed in the Metropolitan Commuter Transportation District (MCTD). All proceeds from the additional MCTD tax are earmarked for the Mass Transportation Operating Assistance Fund (MTOAF).

**Combined State and Local Sales Tax Rate
Effective December 1, 2016**



Administration

There are currently 548,828 sales tax vendors selling taxable property or services who are required to register with the Department of Taxation and Finance. Vendors generally are required to remit the tax quarterly. However, vendors with more than \$300,000 of taxable sales and purchases in one of the immediately preceding four quarters must remit the tax monthly by the twentieth of the month following the month of collection. Vendors collecting less than \$3,000 yearly may elect to file annually, in March.

Monthly vendors with an annual sales and use tax liability exceeding \$500,000 or with an annual liability for prepaid sales tax on motor fuel and diesel motor fuel exceeding \$5 million are required to file using the Tax Department's PromptTax program. The payment schedule requires tax for the first 22 days of a month to be paid within three business days thereafter. Roughly 66 percent of sales tax receipts are remitted by the 7,408 vendors that are required to remit by PromptTax. Effective May 30, 2011, all filers are subject to a \$50 penalty for each failure to e-file unless the taxpayer can show that the failure was due to reasonable cause.

SALES TAX VENDORS AND TAXABLE SALES			
Filing Status	Number of Active Vendors*	Percent of Total Vendors	Percent of State and Local Receipts
Monthly PromptTax	7,408	1.3	65.9
Monthly Other	43,765	8.0	22.6
Quarterly	253,980	46.3	11.2
Annual	243,675	44.4	0.3
Total	548,828	100.0	100.0
*Vendors identified as of November 16, 2016			
Selling period March 1, 2014 through February 28, 2015			
Source: New York State Department of Taxation and Finance			

Quarterly and annual sales tax filers are allowed to retain a portion of the sales tax that they have collected, both as partial compensation for the administrative costs of collecting and remitting the tax and as an incentive for timely payment of the tax to the State. The vendor allowance applies to non-monthly filers and is 5 percent of tax liability, up to a maximum of \$200 per quarter for returns filed on time.

To reduce tax evasion, special provisions for remitting the sales tax on motor fuel and cigarettes have been enacted. Since 1985, the sales tax on gasoline has been remitted by the first importer of the fuel into New York. Effective June 1, 2014, there are three regions for computing the prepaid sales tax. Region 1 (MCTD, excluding Long Island) is 17.5 cents per gallon; Region 2 (Long Island) is 21 cents per gallon; and Region 3 (all other counties) is 16 cents per gallon. The cigarette prepayment rate is 8 percent and is prepaid by cigarette agents at the same time as payment for cigarette excise tax stamps.

Tax Expenditures

A myriad of exemptions from the sales tax have been enacted over the life of the tax. Broad exemptions have been provided for sales for resale and for machinery and equipment used in production or in research and development. These particular exemptions prevent multiple taxation of the same property, a situation known as tax pyramiding.

Other exemptions, such as sales to exempt organizations, certain vending machine sales and certain other coin-operated sales, are also provided. Legal, medical and other professional services, sales of real property, and rental payments are also excluded from the base of the sales tax. For a more detailed discussion of tax expenditures, see the *Annual Report on New York State Tax Expenditures*, prepared by the Department of Taxation and Finance and the Division of the Budget.

Significant Legislation

Significant statutory changes to the sales and use tax since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Electronic News Exemption	Provided an exemption for certain electronic news services and electronic periodicals.	March 1, 2012
Alternative Fuels	Extended alternative fuel exemptions through August 31, 2012.	September 1, 2011
Economic Transformation and Facility Redevelopment Program	Provided tax incentives to businesses to stimulate redevelopment in targeted communities where certain correctional or juvenile facilities are closed (economic transformation areas). This program will expire on December 31, 2021.	March 31, 2011
Legislation Enacted in 2012		
Alternative Fuels	Extended alternative fuel exemptions through August 31, 2014.	September 1, 2012
Flag exemption	Tax exemption for blue star and gold star banners and prisoner of war flags.	December 1, 2012
Segregated Bank Accounts	Extension of the requirement to deposit sales tax into a separate bank account until December 31, 2013.	January 1, 2012
Legislation Enacted in 2013		
New York State Business Incubator and Innovation Hot Spot Program	Created a new high tech incubator program in which start-up businesses will be free of property, sales and business income taxes for the first five years. Hot spots must demonstrate an affiliation with, and the support of, at least one college, university or independent research institution and offer programs consistent with regional economic development strategies.	March 28, 2013
Segregated Bank Accounts	Extension of the requirement to deposit sales tax into a separate bank account until December 31, 2016.	January 1, 2014
IDA reform	Placed restrictions on Industrial Development Agencies' (IDAs) ability to provide assistance for retail projects and added new clawback requirements.	March 28, 2013
Drivers' License Suspension	Ability to suspend drivers' licenses of taxpayers with a past-due tax liability of \$10k or more.	April 1, 2013
START-UP NY	Established tax-free zones on or near qualifying university and college campuses. Qualifying businesses operating within such zones are exempt from taxation.	January 1, 2014
Protection Programs	Tax exemption for water and sewer service line protection programs sold to residential property owners.	October 21, 2013
Vehicles Sold To Military Members	Tax exemption for vehicles purchased out-of-State by an active military member.	December 18, 2013
Legislation Enacted in 2014		
Vending Machine	Increased the sales tax exemption from \$0.75 to \$1.50 on certain food and drink items sold through vending machines.	June 1, 2014
Fuel Prepaid	Established three regions for the prepaid sales tax on fuel to reduce evasion at retail.	June 1, 2014
Lower Manhattan	Retroactively extended the lease period for commercial office space for the Murray Street area. The exemption for the Murray Street area is extended to December 1, 2016, and the lower Manhattan area is extended to December 1, 2018.	March 31, 2014

Subject	Description	Effective Date
Alternative Fuels	Extended alternative fuel exemptions through August 31, 2016.	September 1, 2014
Legislation Enacted in 2015		
Alcoholic Beverage Tastings	Exempted beer, cider and liquor used at tastings (per ABC Law) from the use tax, as well as bottles, corks and labels used in packaging. Also clarified that items used in wine packaging at tastings are exempt, and wine tastings held on or off-premises may qualify.	June 1, 2015
Prepaid Mobile Calling Services	Clarified that the imposition of tax is sourced to (1) the location of the retailer of such services; (2) unless an item is shipped directly to a consumer, in which case the tax is sourced to the shipping address; or (3) the billing address of the consumer if an item is neither shipped nor sold at a retail location.	April 1, 2015
Solar Power Purchase Agreements	Exempted certain solar-generated electricity produced by equipment located at the customer's residence and owned by a person other than the purchaser of the electricity from tax.	December 1, 2015
Cap Tax on Boats	Exempted the portion of the purchase or lease of a boat in excess of \$230,000; and provided a 90-day "safe harbor" from use tax for boats brought in from out-of-State by conforming the imposition of such tax to the Department of Motor Vehicles' registration requirements.	June 1, 2015
General Aviation Aircraft Exemption	Exempted general aviation aircraft and machinery or equipment installed on such aircraft from tax.	September 1, 2015
Dodd-Frank Conformity	Exempted certain related-party sales arising as a result of the Federal Dodd-Frank Wall Street Reform and Consumer Protection Act. The exemption expires on July 1, 2019.	September 1, 2015
Small Brewer Informational Returns	Exempted certain brewers that produce less than 60,000 barrels of beer annually from filing informational tax returns.	August 14, 2015
Small Winery Informational Returns	Exempted certain wineries that produce less than 150,000 gallons annually from filing informational tax returns.	November 20, 2015
Legislation Enacted in 2016		
Expand Motor Fuel Wholesaler Registration Requirements	Required certain wholesalers of motor fuel to file informational returns and register with the Department of Taxation and Finance. This information will be used to detect and prevent tax evasion.	December 1, 2016
Comply with Federal Tax Regulations on Aviation Fuel	Repealed the local sales tax on aviation fuel. Required that all petroleum business tax revenue imposed on aviation fuel is directed to a new dedicated airport fund.	December 1, 2017
Alternative Fuels	Extended alternative fuel exemptions through August 21, 2021.	September 1, 2016
Commercial Fuel Cell Systems	Exempted commercial fuel cell systems and the servicing of such systems from the sales tax.	June 1, 2016
Feminine Hygiene Products	Exempted certain feminine hygiene products from the sales tax.	September 1, 2016
Room Remarketers	Streamlined the collection of sales tax on remarketed hotel rooms.	June 1, 2016

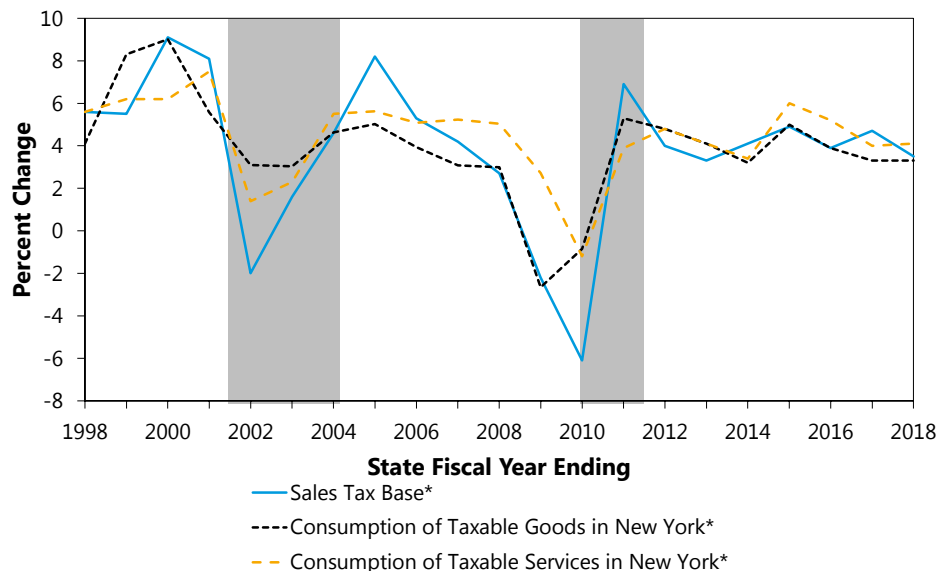
Tax Liability

The sales and compensating use tax, which accounted for 17.9 percent of FY 2016 All Funds tax receipts, is the second largest State tax revenue source (the personal income tax is the largest).

In the long run, sales tax receipts are a function of changes in the tax rate and economic activity, as measured by such factors as disposable income and employment. Short-run fluctuations in receipts can result from rapid changes in consumer prices, auto sales, and home sales. The following table and graphs show the growth rate of major economic factors affecting the sales tax. For a more detailed discussion of the methods and models used to develop estimates and projections for the sales and use tax, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

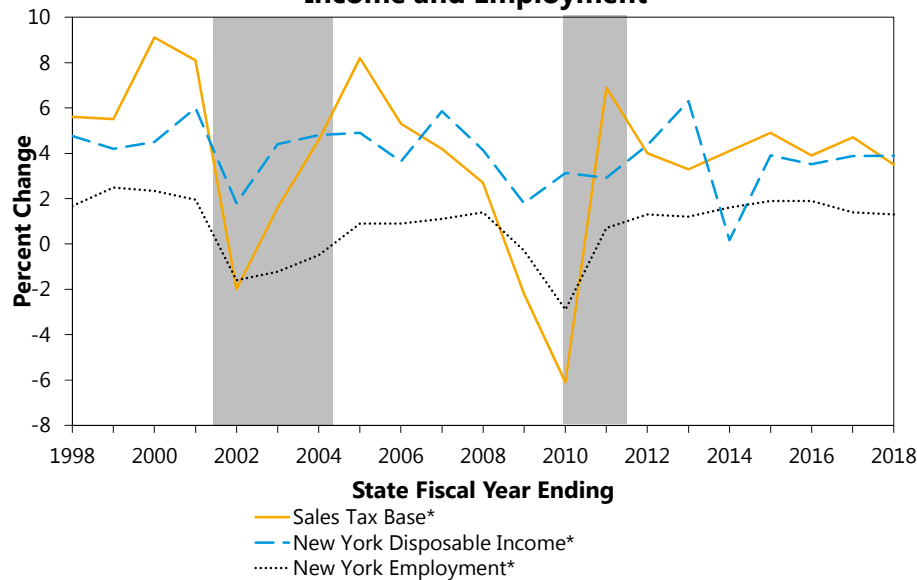
MAJOR ECONOMIC FACTORS AFFECTING SALES TAX RECEIPTS										
FY 2009 to FY 2018										
Percent Change										
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Estimated FY 2017	Projected FY 2018
Consumption of Taxable Goods in NY	(2.7)	(0.9)	5.3	4.8	4.1	3.2	5.0	3.9	3.3	3.3
Consumption of Taxable Services in NY	2.7	(1.2)	3.9	4.8	4.1	3.4	6.0	5.2	4.0	4.1
NY Employment	(0.3)	(2.9)	0.7	1.3	1.2	1.6	1.9	1.9	1.4	1.3
NY Disposable Income	1.8	3.1	2.9	4.4	6.3	0.2	3.9	3.5	3.9	3.9
NY Nominal Value of New Auto and Light Truck Sales	(20.3)	(1.7)	21.8	4.6	10.9	7.0	6.6	9.1	1.6	2.6
Sales Tax Base	(2.2)	(6.1)	6.9	4.0	3.3	4.1	4.9	3.8	4.6	4.1

Historical Growth in State Sales Tax Base and Taxable Consumption



*Based on Division of the Budget estimate (Shading represents State economic recessions)

Historical Growth in State Sales Tax Base Income and Employment



Although numerous exemptions from tax on the sales of tangible personal property have been enacted (see *Tax Expenditure Report*), roughly 46 percent of total sales and purchases subject to the sales and use tax are collected by the retail trade industry. The increase in the retail trade share after 2008 reflects repeal of the clothing exemption from October 2010 to April 2012 and the increase in online sales tax collections. In addition, there has been a shift of industry share from wholesalers to retailers due to gasoline wholesalers' divesting of their convenience stores and gasoline stations. The service industry (including accommodations, food and administrative services) collects roughly 28 percent of the statewide total and accounts for the next largest share of taxable sales and purchases.

HISTORY OF INDUSTRY SHARES OF NEW YORK SALES TAX RECEIPTS									
FYE ¹	Retail Trade	Services	Wholesale Trade	Information	Other ²	Utilities	Manufacturing	Construction	Unclassified
2006	50.0	21.0	8.6	7.1	4.2	3.5	2.4	2.1	1.2
2007	45.8	23.4	8.7	7.5	4.7	3.4	2.7	2.4	1.4
2008	44.1	25.0	8.8	7.6	4.8	3.5	2.8	2.5	1.0
2009	44.2	25.1	9.0	7.7	4.6	3.6	2.7	2.5	0.7
2010	45.1	25.4	8.4	7.8	4.6	3.5	2.5	2.3	0.4
2011 ³	48.2	25.7	5.0	6.4	4.5	3.5	4.3	2.3	0.2
2012	48.4	26.2	5.2	6.0	4.5	3.1	4.2	2.4	0.0
2013	46.4	26.7	5.5	7.0	4.6	3.1	4.2	2.5	0.1
2014	45.8	27.3	5.6	6.8	4.6	3.0	4.1	2.7	0.2
2015 ⁴	45.5	27.7	5.5	6.8	4.6	3.1	4.0	2.6	0.2

¹ March to February

² Includes Agriculture, Mining, Transportation, FIRE (Finance, Insurance and Real Estate), Education, and Government.

³ The shift in industry shares in 2011 reflects the updating of NAICS code during the re-registration process and suspension of the clothing exemption.

⁴ Preliminary

Source: New York State Department of Taxation and Finance.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$10,521.7 million, an increase of \$402.4 million (4 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$13,860 million, an increase of \$500.7 million (3.7 percent) from FY 2016. Through November, there has been year-over-year taxable sales growth of roughly \$287 million (1.6%). Food services increased by roughly \$128 million (6.1 percent) while four other industries (general merchandise, agriculture and mining, administrative services, and professional) grew by 3.8 percent, 3.4 percent, 7.1 percent and 5.7 percent, respectively. Utilities and gas stations fell by \$35 million (14.7 percent) and \$32 million (22.1 percent), respectively. For the first three fiscal year quarters, the sales tax base has grown 3.9 percent, 6 percent and 2 percent, respectively. Base growth during the final quarter of FY 2017 is estimated to be 6.5 percent. This equates to total base growth of 4.6 percent for FY 2017.

Base growth exceeds cash growth primarily due to an agreement between certain mobile telecommunications providers and the State to allow such providers to remit less sales tax for a period in lieu of receiving State refunds due them under Tax Law Section 184. This agreement resulted from acknowledgement by the Department of Taxation and Finance that mobile telecommunication providers were not subject to the Tax Law Section 184 franchise tax imposed on them between 2005 and 2014.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$14,726 million, an increase of \$866 million (6.2 percent) from FY 2017. Projected base growth of 4.1 percent is based on the economic factors noted earlier. Cash growth exceeds base growth primarily due to the payments withheld in FY 2017 due to Section 184.

The primary risk factor for the sales and use tax estimate is the economic forecast, which provides the basis for the sales tax estimates. Unexpected slowdowns in income, employment, auto sales, and the associated consumption of taxable goods would adversely impact the level of taxable sales.

General Fund

Direct deposits to the General Fund for FY 2017 are estimated to be \$6,478.5 million, an increase of \$235.9 million (3.8 percent) from FY 2016 receipts. General Fund receipts for FY 2018 are projected to be \$6,891.5 million, an increase of \$413 million (6.4 percent) from FY 2017 receipts.

Local Government Assistance Corporation Fund

The Local Government Assistance Corporation (LGAC) was created in 1990 to help the State eliminate its annual spring borrowing. To pay the debt service on the bonds issued by LGAC, the State has diverted an amount equal to the yield of one-fourth of net sales and use tax collections from the 4 percent statewide sales tax to the Local Government Assistance Tax Fund (LGATF). Sales tax deposits to LGATF are estimated to be \$3,239.3 million in FY 2017, and \$3,445.8 million in FY 2018. LGATF receipts in excess of debt service requirements on LGAC bonds are transferred to the General Fund.

Sales Tax Revenue Bond Fund

Effective April 1, 2013, receipts from one percent of the State's four percent sales tax rate are directed to the Sales Tax Revenue Bond Fund (STBF). This increases to a two percent rate when LGAC bonds have been retired or defeased. Sales tax deposits to the STBF are estimated to be \$3,239.3 million in FY 2017 and \$3,445.8 million in FY 2018. STBF receipts in excess of debt service requirements on STBF bonds are transferred to the General Fund.

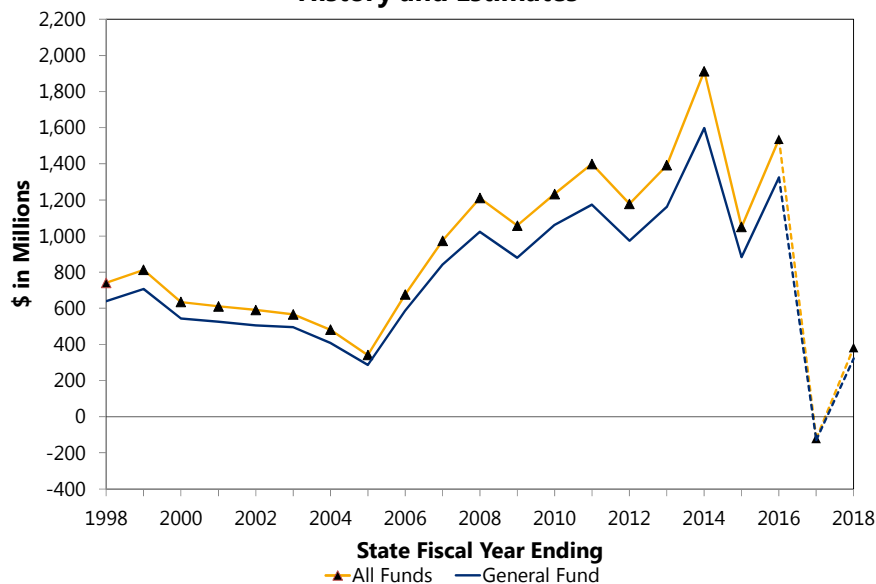
Mass Transportation Operating Assistance Fund

The MTOAF was created in 1981 to finance State public transportation needs. MTOAF derives part of its revenues from the 0.375 percent sales and compensating use tax imposed in the MCTD. MTOAF will receive an estimated \$903 million in FY 2017 and \$943 million in FY 2018. All proceeds from the MCTD tax are earmarked for MTOAF.

BANK TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	(129.0)	323.0	452.0	(350.4)	162.0	(161.0)	(49.8)
Other Funds	7.6	60.0	52.4	689.5	28.0	(32.0)	(53.3)
All Funds	(121.4)	383.0	504.4	(415.5)	190.0	(193.0)	(50.4)

Note: Totals may differ due to rounding.

Bank Tax Receipts History and Estimates



BANK TAX BY FUND (millions of dollars)							
	Gross General Fund	Refunds	General Fund	Gross Special Revenue Funds	Refunds	Special Revenue Funds ¹	All Funds Receipts
FY 2008	1,002	122	880	196	18	178	1,058
FY 2009	1,296	234	1,062	208	36	172	1,234
FY 2010	1,243	70	1,173	241	15	226	1,399
FY 2011	1,199	226	973	245	40	205	1,178
FY 2012	1,280	117	1,163	254	25	229	1,392
FY 2013	1,741	144	1,597	326	11	315	1,912
FY 2014	991	103	888	178	16	162	1,050
FY 2015	1,525	202	1,323	264	51	213	1,536
FY 2016 ²	(57)	72	(129)	19	11	8	(121)
Estimated							
FY 2017	349	26	323	64	4	60	383
FY 2018	169	7	162	29	1	28	190

¹ Receipts from the MTA surcharge are deposited in the Mass Transportation Operating Assistance Fund.
² Corporate tax reform merged the bank tax with the corporation franchise tax.

Description

Effective with tax years beginning on and after January 1, 2015, the bank tax (Article 32) is merged with the corporation franchise tax (Article 9-A). Chapter 59 of the Laws of 2014 enacted corporate tax reform which established a single modern system of taxation for general business corporations and banking corporations by repealing the separate provisions of the Tax Law for banking corporations (Article 32) and amending the business corporation tax under Article 9-A to accommodate changes in the financial services industry and make other modernization changes.

Receipts: Estimates and Projections

BANK TAX (millions of dollars)							
	FY 2016	FY 2017		Percent	FY 2018		Percent
	Actual	Estimated	Change	Change	Projected	Change	Change
General Fund							
Non-Audit Receipts	(355)	(70)	285	(80.3)	(20)	50	(71.4)
Audit Receipts	226	393	167	73.9	182	(211)	(53.7)
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	(129)	323	452	(350.4)	162	(161)	(49.8)
Other Funds							
Non-Audit Receipts	(32)	(11)	21	(65.6)	(3)	8	(72.7)
Audit Receipts	40	71	31	77.5	31	(40)	(56.3)
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	8	60	52	650.0	28	(32)	(53.3)
All Funds							
Non-Audit Receipts	(387)	(81)	306	(79.1)	(23)	58	(71.6)
Audit Receipts	266	464	198	74.4	213	(251)	(54.1)
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	(121)	383	504	(415.5)	190	(193)	(50.4)

Note: Totals may differ due to rounding.

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$390.7 million, an increase of \$472.2 million (579.4 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$383 million, an increase of \$504.4 million (415.5 percent) from FY 2016. This increase is attributable to a reduction in prior period adjustments and higher audit collections.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$190 million, a decrease of \$193 million (50.4 percent) from FY 2017. This decrease is mainly attributable to lower projected audit collections.

General Fund

General Fund FY 2017 receipts are expected to be \$323 million, an increase of \$452 million (350.4 percent) from FY 2016. General Fund collections reflect the same trends impacting FY 2017 All Funds receipts.

For FY 2018, General Fund receipts are projected to be \$162 million, a decrease of \$161 million (49.8 percent) from FY 2017. General Fund collections reflect the trends described above for FY 2018 All Funds receipts.

Other Funds

Bank tax receipts from the business tax surcharge deposited to MTOAF generally reflect the All Funds trends described above. The MCTD business tax surcharge will result in MTOAF deposits of an estimated \$60 million in FY 2017 and a projected \$28 million in FY 2018.

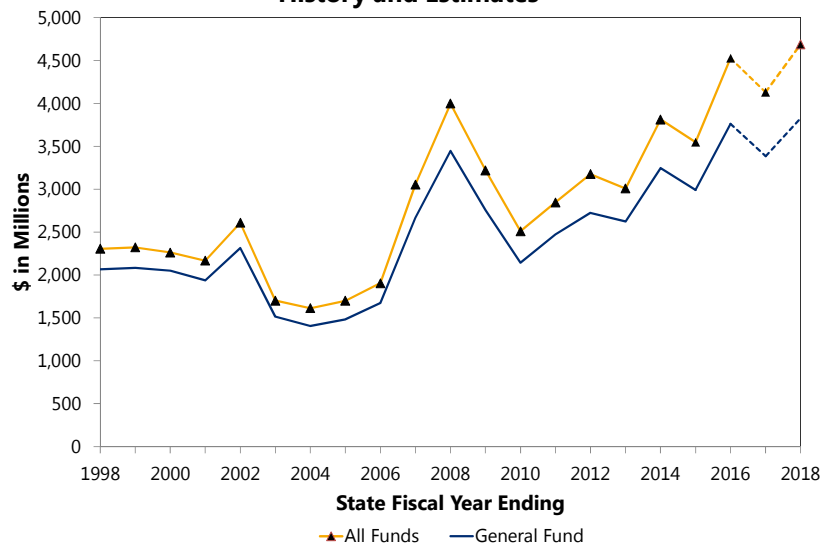
Corporation Franchise Tax



CORPORATION FRANCHISE TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	3,763.0	3,334.0	(429.0)	(11.4)	3,827.0	493.0	14.8
Other Funds	764.3	795.0	30.7	4.0	860.0	65.0	8.2
All Funds	4,527.3	4,129.0	(398.3)	(8.8)	4,687.0	558.0	13.5

Note: Totals may differ due to rounding.

Corporation Franchise Tax Receipts History and Estimates



CORPORATION FRANCHISE TAX BY FUND (millions of dollars)							
	Gross General Fund	Refunds	General Fund	Gross Special Revenue Funds	Refunds	Special Revenue Funds ¹	All Funds Receipts
FY 2008	4,035	589	3,446	592	41	551	3,997
FY 2009	3,579	824	2,755	541	76	465	3,220
FY 2010	2,942	797	2,145	442	76	366	2,511
FY 2011	3,234	762	2,472	458	84	374	2,846
FY 2012	3,432	708	2,724	495	43	452	3,176
FY 2013	3,283	659	2,624	434	49	385	3,009
FY 2014	3,878	633	3,245	613	46	567	3,812
FY 2015	3,898	908	2,990	598	40	558	3,548
FY 2016 ²	4,943	1,180	3,763	823	59	764	4,527
Estimated							
FY 2017	4,611	1,277	3,334	876	81	795	4,129
FY 2018							
Current Law	5,159	1,332	3,827	944	84	860	4,687
Proposed Law	5,159	1,332	3,827	944	84	860	4,687

¹ Receipts from the MTA surcharge are deposited in the Mass Transportation Operating Assistance Fund.
² Corporate tax reform merged the bank tax into the corporation franchise tax.

Proposed Legislation

Legislation proposed with this Budget would:

- Reform the Investment Tax Credit;
- Create the New York Youth Jobs Program Tax Credit;
- Extend the Alternative Fuels Property and Electric Vehicle Recharging Property Credit for five years;
- Establish a Workforce Training Credit;
- Extend the Empire State Film and Post Production Tax Credits for three years;
- Create Excelsior Business Program;
- Establish the Life Sciences Tax Credits; and
- Treat disregarded entities as a single taxpayer for tax credit purposes.

Description

Tax Base and Rate

Chapter 59 of the Laws of 2014 enacted corporate tax reform which established a single modern system of taxation for general business corporations and banking corporations by repealing the separate provisions of the Tax Law for banking corporations (Article 32) and amending the business corporation tax under Article 9-A to accommodate changes in the financial services industry and make other modernization changes. This was accomplished by replacing the entire net income base with a similar business income base, effective January 1, 2015, subject to a fully effective tax rate of 6.5 percent effective January 1, 2016.

The corporation franchise tax is levied by Articles 9-A and 13 of the Tax Law. Article 9-A imposes a franchise tax on domestic and foreign corporations for the privilege of exercising their corporate franchise or doing business, employing capital, owning or leasing property, or maintaining an office in New York. The Article 9-A tax is made up of business entities classified as either C corporations or S corporations. Article 13 of the Tax Law imposes a 9 percent tax on certain not-for-profit entities on business income earned from activities not related to their exempt purpose.

For C corporations, current law requires corporation franchise tax liability to be computed under three alternative bases, with tax due based on the highest tax calculated under three alternative bases. The three alternative bases are:

- A business income base, which begins with Federal taxable income before net operating loss deductions and special deductions, and is further adjusted by the exclusion, deduction or addition of certain items. The resulting base is allocated to New York and subject to a tax rate of 6.5 percent. Certain manufacturers and qualified emerging technology companies are subject to the rates as shown in the table below.

Type of Business	Tax Year 2016	Tax Year 2017	Tax Year 2018 and Thereafter
Qualified New York Manufacturers	0%	0%	0%
Qualified Emerging Technology Companies (QETCs)	5.5%	5.5%	4.875%
Remaining Taxpayers	6.5%	6.5%	6.5%

- A capital base, imposed at a rate of 0.125 percent on business and investment capital allocated to New York. For most taxpayers, the maximum annual tax is \$5 million. The capital base is being phased out over six years according to the schedule shown below.

Type of Business	Tax Year 2016	Tax Year 2017	Tax Year 2018	Tax Year 2019	Tax Year 2020	Tax Year 2021 and Thereafter
Qualified New York Manufacturers and QETCs	0.106%	0.085%	0.056%	0.380%	0.019%	0%
Cooperative Housing Corporations	0.040%	0.040%	0.040%	0.040%	0.025%	0%
Remaining Taxpayers	0.125%	0.100%	0.075%	0.050%	0.025%	0%

- A fixed dollar minimum tax, which is based on a taxpayer's New York receipts as shown in the following schedule.

QUALIFIED NEW YORK MANUFACTURER C CORPORATIONS AND QETCS FIXED DOLLAR MINIMUM TAXES			
New York Receipts	Tax Year 2016	Tax Year 2017	Tax Year 2018 and Thereafter
\$100,000 or less	\$21	\$21	\$19
\$100,001 - \$250,000	\$63	\$63	\$56
\$250,001 - \$500,000	\$148	\$148	\$131
\$500,001 - \$1,000,000	\$423	\$423	\$375
\$1,000,001 - \$5,000,000	\$1,269	\$1,269	\$1,125
\$5,000,001 - \$25,000,000	\$2,961	\$1,961	\$2,625
Over \$25,000,000	\$4,230	\$4,230	\$3,750

REMAINING C CORPORATION TAXPAYERS FIXED DOLLAR MINIMUM TAXES	
New York Receipts	Tax Year 2015 and Thereafter
\$100,000 or less	\$25
\$100,001 - \$250,000	\$75
\$250,001 - \$500,000	\$175
\$500,001 - \$1,000,000	\$500
\$1,000,001 - \$5,000,000	\$1,500
\$5,000,001 - \$25,000,000	\$3,500
\$25,000,001 - \$50,000,000	\$5,000
\$50,000,001 - \$100,000,000	\$10,000
\$100,000,001 - \$250,000,000	\$20,000
\$250,000,001 - \$500,000,000	\$50,000
\$550,000,001 - \$1,000,000,000	\$100,000
Over \$1 billion	\$200,000

S corporations are subject to a fixed dollar minimum tax imposed at the rates shown in the table below.

S CORPORATIONS FIXED DOLLAR MINIMUM TAXES	
New York Receipts	S Corp Min Tax
\$100,000 or less	\$25
\$100,001 - \$250,000	\$50
\$250,001 - \$500,000	\$175
\$500,001 - \$1,000,000	\$300
\$1,000,001 - \$5,000,000	\$1,000
\$5,000,001 - \$25,000,000	\$3,000
Over \$25,000,000	\$4,500

Additionally, corporations conducting business in the Metropolitan Commuter Transportation District (MCTD) are subject to a surcharge on the portion of the total State tax liability allocated to the MCTD region. The tax year 2016 surcharge tax rate is 28 percent. The Department of Taxation and Finance will compute the surcharge tax rate for each tax year beginning with tax year 2016 with the goal of achieving revenue neutrality for the MCTD based on the most recent Enacted Budget forecast. Additionally, the MCTD surcharge is now permanent. Collections from the surcharge are deposited into the Mass Transportation Operating Assistance Fund (MTOAF).

Administration

Corporations that reasonably expect their tax liability to exceed \$1,000 for the current tax year are required to make a mandatory first installment of estimated tax and three additional estimated payments. The mandatory first installment is due 75 days from the end date of a taxpayer's fiscal year. The remaining three estimated tax payments are due on the 15th day of the third month of

the fiscal year quarter. The majority of taxpayers have a fiscal year that ends December 31. The mandatory first installment for these taxpayers is due March 15 with the remaining three estimated payments due on June 15, September 15 and December 15. A final payment is also required of all taxpayers. This payment is due 106 days (April 15 for taxpayers that have a fiscal year that ends December 31) from the end date of a taxpayer's fiscal year. Taxpayers that expect their tax liability to exceed \$100,000 for the current tax year are required to make a mandatory first installment equal to 40 percent of their tax from two tax years prior. Taxpayers with expected liability greater than \$1,000 and less than \$100,000 are required to make a mandatory first installment equal to 25 percent of their tax from two tax years prior. Taxpayers may make periodic adjustments to these payments after the close of the tax year as their actual liability for a given tax year becomes more definite.

Tax Expenditures

Tax expenditures are defined as features of the Tax Law that by exclusion, exemption, deduction, allowance, credit, deferral, preferential tax rate or other statutory provisions reduce the amount of a taxpayer's liability to the State by providing either economic incentives or tax relief to particular entities to achieve a public purpose. The corporation franchise tax structure includes various tax expenditures, and the distribution of these benefits varies widely among firms and industries. Among the major tax expenditure items for the corporation franchise tax are modifications to federal taxable income for qualified residential loan portfolios and community banks and small thrifts and deductions for investment income and other exempt income from New York business income as well as the investment tax credit, Empire Zones, the Excelsior Jobs Program, Brownfields and Film Production tax credits, and the preferential tax rates for manufacturers. For a more detailed discussion of tax expenditures, see the *Annual Report on New York State Tax Expenditures*, prepared by the Department of Taxation and Finance and the Division of the Budget.

Significant Legislation

Significant statutory changes to the corporation franchise tax since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Excelsior Jobs Program Amendments	Modified the credit to make it more widely available and attractive, and created a new energy incentive. It also lengthened the benefit period from five to ten years.	March 31, 2011
Economic Transformation and Facility Redevelopment Program	Provided tax incentives to businesses to stimulate redevelopment in targeted communities where certain correctional or juvenile facilities are closed (economic transformation areas). This program will expire on December 31, 2021.	March 31, 2011
Manufacturing Tax Reduction	Reduced the rate on the entire net income base, the rate on the alternative minimum taxable income base and the fixed dollar minimum tax by 50 percent for eligible qualified manufacturers for tax years 2012, 2013, and 2014. The Tax Department will administer an annual total tax benefit limit of \$25 million by directing tax relief to economic regions with special economic challenges.	January 1, 2012



Corporation Franchise Tax

Subject	Description	Effective Date
New York Youth Works Tax Credit Program	Provided a tax credit to businesses that employ at-risk youth in part-time or full-time positions in 2012 and 2013.	January 1, 2012
Empire State Jobs Retention Program	Provided a jobs tax credit to businesses that are at risk of leaving the State due to the negative impact on their business from a natural disaster. The tax credit is 6.85 percent of gross wages of jobs that are retained in New York.	January 1, 2012
Legislation Enacted in 2012		
Empire State Commercial Production Tax Credit	Extended the annual allocation of \$7 million in tax credits for two years through 2014. Also, changed the distribution of the tax credits between the MTA district and the rest of the State.	January 1, 2012
New York Youth Works Tax Credit Program	Extended the deadline for participation in the program and for youths to commence employment by an additional six months to November 30, 2012 and December 31, 2012, respectively.	January 1, 2012
Empire State Post Production Tax Credit	Increased post-production credit percentage from 10 percent to 30 percent within the MTA region and to 35 percent in areas outside the MTA region.	July 24, 2012
Legislation Enacted in 2013		
Empire State Film Production Credit	Extended the Empire State film production tax credit allocation of \$420 million per year for an additional five years (2015 - 2019). For the period 2015 through 2019 certain upstate counties will receive an additional 10 percent credit for wages and salaries paid.	January 1, 2015
	Restrictions on the post production portion of the credit were reduced and additional reporting will be required to document the effectiveness of the credit in creating jobs.	March 28, 2013
Royalty Income Loophole	Closed a loophole that allowed New York companies earning royalty income to avoid paying taxes on that income. New York taxpayers must show on their tax return that the taxpayer's Non-New York parent company included the royalty income in its tax liability. The demonstration absolves taxpayers of the obligation to pay tax on their royalty income.	January 1, 2013
New York State Business Incubator and Innovation Hot Spot Program	Created a new high tech incubator program in which start-up businesses will be free of property, sales and business income taxes for the first five years. Hot spots must demonstrate an affiliation with, and the support of, at least one college, university or independent research institution and offer programs consistent with regional economic development strategies.	March 28, 2013
Hire-a-Vet Tax Credit	Provided a refundable tax credit for tax years 2015 and 2016 equaling 10 percent of the wages paid to a qualified veteran (capped at \$5,000) and 15 percent of wages paid to a qualified veteran (capped at \$15,000).	January 1, 2015
Youth Works Tax Credit	Provided a four year refundable tax credit capped at \$6 million per year for tax years 2014 through 2017 for hiring unemployed, low-income or at risk youth ages 16-24 in cities with populations greater than 55,000 or towns with populations greater than 480,000.	January 1, 2014
Excelsior Jobs Program	Changed the job requirement parameters for the Excelsior Jobs Program and allowed a portion of the unallocated tax credits from any taxable year to be used to award tax credits in another taxable year.	May 27, 2013
Manufacturer Tax Reduction	Provided a phased in manufacturing tax reduction of 9.2 percent in tax year 2014, 12.3 percent in 2015, 15.4 percent in 2016 and 2017, and 25 percent effective for tax years beginning in 2018.	January 1, 2014
Historic Properties Tax Credit	Extended for five years the maximum Historic Preservation Tax Credit amount of \$5 million, which had previously been scheduled to revert to \$100,000 following the conclusion of tax year 2014, and permanently made the credit refundable for tax years beginning on or after January 1, 2015.	January 1, 2015

Corporation Franchise Tax



Subject	Description	Effective Date
Charge NY Electric Vehicle Recharging Equipment Credit	Created a credit equal to 50 percent or \$5,000 per station, whichever is less, of the cost of electric vehicle recharging or alternative fuel vehicle refueling equipment. The credit sunsets December 31, 2017.	January 1, 2013
Minimum Wage Reimbursement Credit	Provided a refundable tax credit for tax years 2014 through 2018 equal to the product of the number of hours worked by qualifying minimum wage-earning employees and 1) \$0.75 in tax year 2014; 2) \$1.31 in tax year 2015; and 3) \$1.35 in tax years 2016 through 2018. Qualifying employees must be students aged 16 to 19, and the credit is reduced if the federal minimum wage is increased to a level in excess of 85 percent of the New York minimum wage.	January 1, 2014
START-UP NY	Established tax-free zones on or near qualifying university and college campuses. Qualifying businesses operating within such zones are exempt from taxation under the Corporate Franchise Tax.	January 1, 2014
Legislation Enacted in 2014		
Corporate Tax Reform	Merged the bank tax with the corporation franchise tax. Repealed the separate provisions of the bank tax and amended the corporate franchise tax to accommodate changes in the financial services industry and make other modernization changes.	January 1, 2015
	Lowered the business income tax rate from 7.1 percent to 6.5 percent for non-manufacturers.	January 1, 2016
	Phased out the capital base over a 6-year period.	January 1, 2016
	Made the MTA surcharge permanent.	January 1, 2015
Property Tax Credit for Manufacturers	Made qualified New York manufacturers eligible for a new tax credit equal to 20 percent of the real property taxes paid.	January 1, 2014
Enhance the Youth Works Tax Credit	Enhanced the credit by providing additional credit for youth retained in either a full-time or part-time status for one additional year, lowered the part-time hourly threshold from 20 hours to 10 hours for full-time high school students and increased the allocation from \$6 million to \$10 million for programs two through five (2014-2017).	January 1, 2014
Expand the Upstate Counties Eligible for the Enhanced Film Production Tax Credit	Added the counties of Albany and Schenectady to the list of upstate counties eligible for the additional 10 percent credit on wages and salaries.	January 1, 2015
Workers with Disabilities Tax Credit	Provided a non-refundable tax credit for tax years 2015 through 2019 equaling 15 percent of wages paid to a developmentally disabled individual employed full time (capped at \$5,000) and 10 percent of wages paid if the individual is employed part time (capped at \$2,500). This credit has an annual allocation of \$6 million.	January 1, 2015
Musical and Theatrical Production Credit	Provided a refundable tax credit for tax years 2015 through 2018 equaling 25 percent of qualified expenses for qualified musical and theatrical productions in certain upstate theaters. This credit is capped at \$4 million annually.	January 1, 2015
START-UP NY Amendments	Provided a refundable tax credit equal to the excise tax paid on telecommunications services paid by businesses in START-UP NY areas.	January 1, 2014
	Added four correctional facilities owned by the State of New York to be included as START-UP NY areas.	January 1, 2014
Entire Net Income Tax Rate for Qualified Manufacturers	Lowered the entire net income tax rate to zero percent.	January 1, 2014
Empire State Commercial Production Tax Credit	Extended the annual allocation of \$7 million for two years through tax year 2016. Also, lowered the minimum required production costs for upstate productions from \$200,000 to \$100,000.	March 31, 2014



Corporation Franchise Tax

Subject	Description	Effective Date
Legislation Enacted in 2015		
Expand the Excelsior Jobs Program	Expanded eligibility for the program to include entertainment companies that meet certain criteria, music production companies and video game software developers.	April 13, 2015
Employee Training and Incentive Program (ETIP) Tax Credit	Provided a refundable tax credit for tax years 2015 and after equaling 50 percent of employee training costs (\$10,000 cap per employee) or internship costs (\$3,000 cap per intern). The amount of tax credits allocated per year is capped at \$5 million and will be allotted from funds available under the Excelsior Jobs Program.	January 1, 2015
Section 186-e on Mobile Telecommunication Services	Imposed a state excise tax rate of 2.9 percent and a 0.721 percent MCTD rate on the sale of mobile communications services and dedicated 7.6 percent of Section 186-e receipts to the MTOAF and the DHBTF. Both of these changes are effective May 1, 2015.	May 1, 2015
Urban Youth Jobs Program	Enhanced the credit (formerly the New York Youth Works Tax Credit) by increasing the allocation from \$10 million to \$20 million for programs three through five (2015-2017).	April 13, 2015
Alternative Fuel Vehicle Refueling Property Tax Credit	Allowed the credit for spending not covered by a grant. The amount of the credit is amended to equal the lesser of \$5,000 or the product of 50 percent and the cost of any property less any costs paid from the proceeds of a grant.	January 1, 2015
Brownfields Clean-Up Program	Reformed the program and extended the tax credits through March 31, 2026. Reforms included the prioritization of (1) site redevelopment in economically distressed areas, (2) low income housing, or (3) properties that are upside down or underutilized; also provided for the creation of an expedited remediation program (BCP-EZ), a more detailed description of eligible costs for redevelopment tax credits, and allowed the real property tax and environmental remediation insurance credits to sunset.	July 1, 2015
START-UP NY Amendments	Added two airport facilities owned by the State of New York to be included as START-UP NY areas.	April 13, 2015
Corporate Tax Reform Technical Amendments	Made several changes to the 2014 Corporate Tax Reform statute, including: changes to the definition of investment capital and income; changes to the apportionment rules for qualified financial instruments (QFI); clarifications to the economic nexus test, certain tax rates for QETC and qualified manufacturers, net operating losses, and the alternative base tax credit.	January 1, 2015
Legislation Enacted in 2016		
Conform to New Federal Tax Filing Dates	New York State tax filing deadlines were changed to conform to federal filing deadlines. C corporations are now required to file their final return on or before the 15 th day of the fourth month following the close each taxable year, which is April 15 for calendar year filers. Taxpayers are still required to remit mandatory first installments (MFI) of estimated taxes on or before the 15 th day of the third month following the close of each taxable year, which is March 15 for calendar year filers. The amount of the MFI will now be a percentage of tax from two tax years prior, instead of the preceding year's tax.	January 1, 2016
Hire-a-Veteran Credit	Extended the credit for two additional years to January 1, 2019.	January 1, 2017
Commercial Production Credit	Extended the credit for two additional years to January 1, 2019.	January 1, 2017
Credit for Companies That Provide Transportation to People with Disabilities	Extended the expiration date of this credit for six years until December 31, 2022.	December 31, 2016

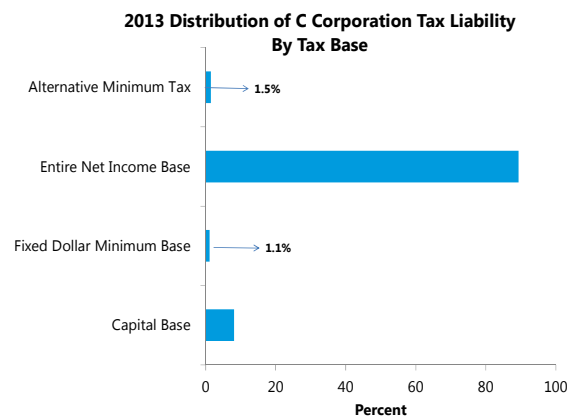
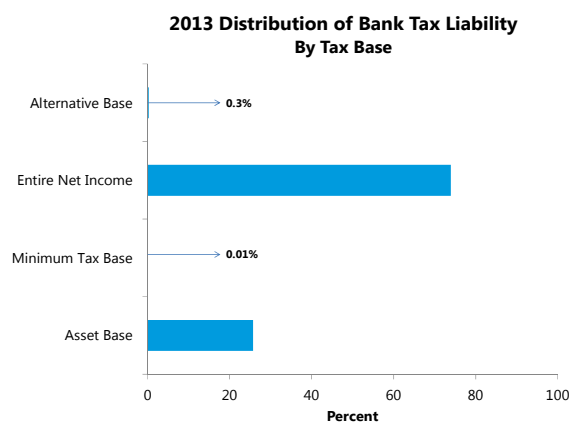
Low-Income Housing Credit	Extended the statewide limitation for the aggregate dollar amount of credit the Commissioner of Division of Housing and Community Renewal (DHCR) may allocate to eligible low-income buildings. The credit allocation pool was increased by \$8 million for each of the next five fiscal years.	April 1, 2017
Clean Heating Fuel Credit	Modified and extended the clean heating fuel credit. The minimum biodiesel fuel thresholds were increased. The credit was extended for three years to January 1, 2020.	January 1, 2017
Excelsior Jobs Program Tax Credit	Extended claims period through 2026, allowing Empire State Development the ability of offering a 10 year benefit period for companies entering the program in 2016 and 2017. Unused credits from previous years will be used to fund the extension. Reduce annual credit allocations a total of \$150 million over the period 2016 through 2024.	April 13, 2016
Real Property Tax Credit for Manufacturers	Extended the real property tax credit for manufacturers to agricultural businesses. This change conforms the Article 9-A credit to the personal income tax credit for these businesses.	January 1, 2014
Urban Youth Jobs Tax Credit	Increased the allocation for the final two program years from \$20 million to \$50 million.	April 13, 2016
Economic Transformation and Facility Redevelopment Program	Modified to include any psychiatric facility previously owned by New York State and located within the MCTD (excluding NYC) to qualify as a closed facility under this program. Prospective participants must submit an application by September 1, 2016.	April 13, 2016
Special Additional Mortgage Recording Tax Credits	Allows Article 9-A taxpayers to claim a refund of the credit attributable to the special additional mortgage recording tax that a taxpayer pays on or after January 1, 2015 as a lender with respect to residential mortgages.	January 1, 2015
Alcoholic Beverage Production Credit	Expanded the beer production credit available under the corporation franchise tax to include wine, liquor and cider.	January 1, 2016
The Farm Workforce Retention Credit	Created a refundable credit that is available to farm employers equal to a fixed amount per eligible farm employee. The credit varies between \$250 per eligible farm employee in tax year 2017 up to \$600 for tax year 2021. This credit expires after tax year 2021.	January 1, 2017

Tax Liability

The Corporation Franchise Tax Study File, which is compiled by the Department of Taxation and Finance's Office of Tax Policy Analysis (OTPA), contains the most recent tax liability data available for corporations filing under Article 9-A. The most current liability information is for the 2013 tax year. Liability for tax years 2010 through 2012 is artificially inflated as a result of 2010 legislation that deferred certain tax credit claims (to tax years 2013 through 2015) that would have otherwise been included on tax returns for tax years 2010 through 2012. Due to the repeal of Article 32 and absorption of former Article 32 taxpayers into Article 9-A, effective January 1, 2015, select Article 32 information for tax year 2013 is also included in this section for informational purposes.

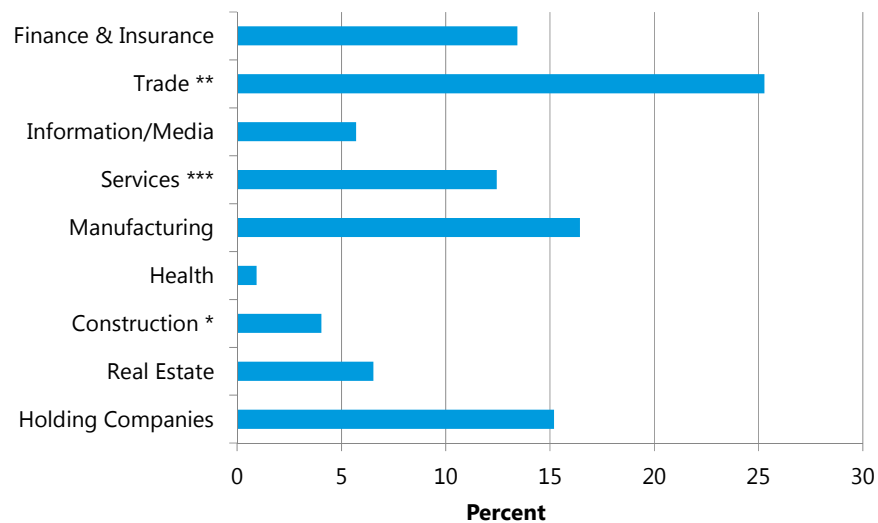
Although the Division of the Budget Corporation Franchise Tax Study File does not include information on non-allocating fixed dollar minimum tax filers and S corporations, OTPA compiles corporate tax return data relating to the total number of C and S corporations and tax liability for these entities. For 2013, 278,986 taxpayers filed as C corporations, while 410,445 taxpayers filed as S corporations.

In tax year 2013, C corporations paid under the highest of four alternative bases. In 2013, 89 percent of liability was paid under the entire net income base (see graph below). The capital base was the second largest liability base, at 9 percent. For the past several years, both the alternative minimum tax and the fixed dollar minimum tax bases have represented a minimal percentage of total tax liability. A similar pattern is seen for bank taxpayers, although the asset base represents a larger share of tax liability for bank taxpayers than it does for C corporations. This is unsurprising, however, as the bank tax asset base provided for uncapped tax liability, while the corporation franchise tax liability under the capital base was capped at \$1 million.



The next chart shows the distribution of tax liability by major industry sector. The 2013 Study File indicates that nearly 25 percent of total C corporation liability was paid by the trade sector and 16 percent by the manufacturing sector. The trade sector has consistently been the largest sector since 2009 while manufacturing has represented the second largest sector since 2011 when it displaced Finance and Insurance.

**2013 Tax Base Industry Profile
(Share of Total Tax Liability of
C Corporation Taxpayers)**



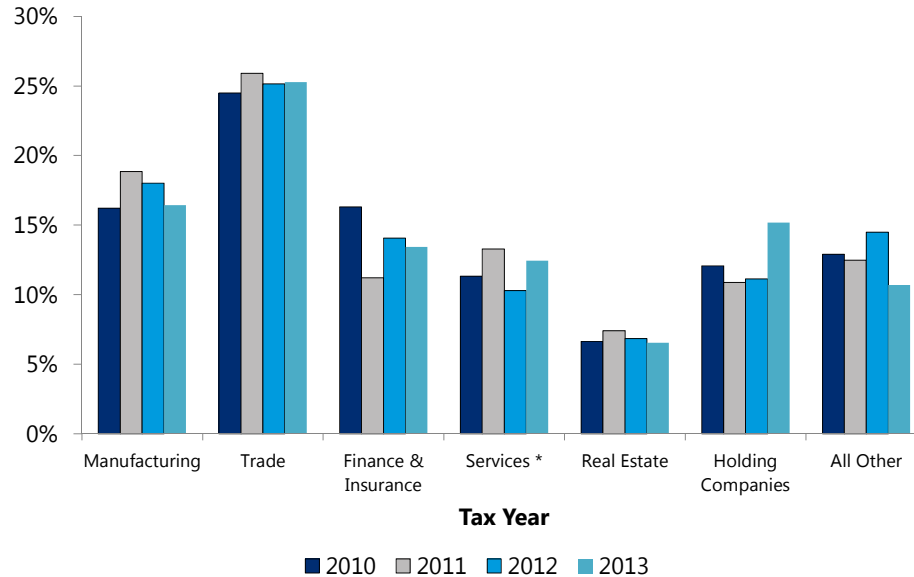
* Construction, agriculture, mining, and utilities. (NAICS Sectors 11, 21, 22, and 23)

** Wholesale trade, retail trade and transportation and warehousing. (NAICS Sectors 42, 44, 45, 48 and 49)

*** Services consist of: professional, scientific, and technical services; administrative and support and waste management and remediation services; art, entertainment, and recreation services; accommodation and food services; and other services. (NAICS Sectors 54, 56, 71, 72, and 81)

The following chart illustrates the percentage of liability paid by the industry groups of the State's tax base between 2010 and 2013. Liability for the finance and insurance, manufacturing and trade sectors represent the largest share of liability paid over this period. Beginning in tax year 2015, it is likely finance and insurance will become a larger percentage of liability due to the addition of former bank taxpayers to the Corporation Franchise Tax.

**Industry Profile: Percent of Total Liability
(2010-2013)**



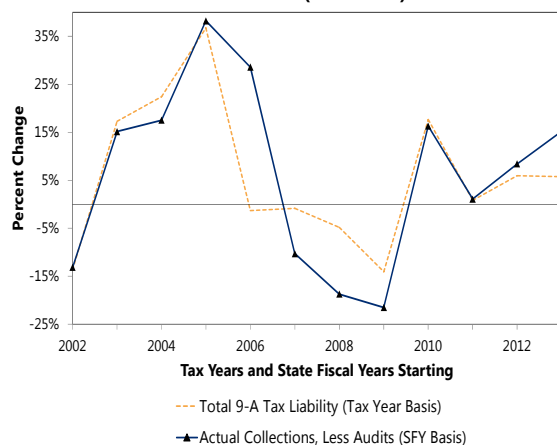
Starting with 2011, the study file contains NAICS codes as reported by the taxpayer.

*Services consist of: professional, scientific, and technical services; administrative and support and waste management and remediation services; art, entertainment, and recreation services; accommodation and food services; and other services. (NAICS Sectors 53, 54, 55, 56, 71, 72, and 81)

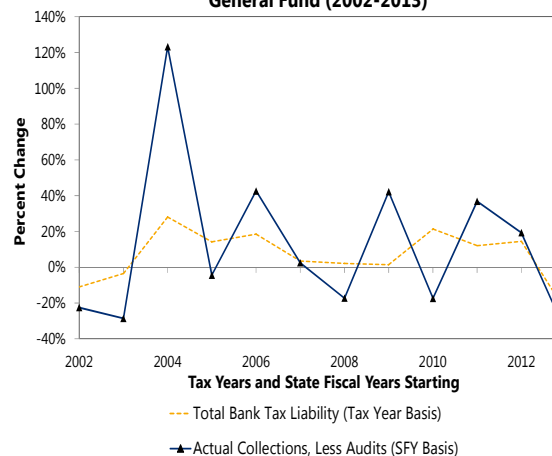
The link between underlying corporate tax liability and cash receipts in any given State fiscal year is often obscured by the timing of payments, the carry forward of prior year losses or credits and the reconciliation of prior year liabilities. Tax collections are the net payments and adjustments made by taxpayers on returns and extensions over the course of a State fiscal year. Taxpayers with a fiscal year ending December 31 make up the majority of taxpayers and follow the payment schedule described earlier under “Administration.”

Tax liability in the current year is based on estimated performance for the same year. It is generally calculated by using tax bases, tax rates, special deductions and additions, losses and tax credits. Since taxpayers must pay estimated taxes months in advance of knowing actual liability, it is difficult for taxpayers to determine the proper level of payments needed over the course of a year. This is especially true if business or economic conditions change. The accompanying graphs compare historical corporation tax liability and bank tax liability and fiscal year cash receipts. They illustrate the volatility in the underlying relationship between payments and liability, which, for many taxpayers, is often compounded by the difference between a taxpayer’s tax year and the State fiscal year. As seen in the graph, bank tax liability and collections have been more volatile than 9-A liability and collections.

**Growth in Total 9-A Tax Liability and Collections
General Fund (2002-2013)**



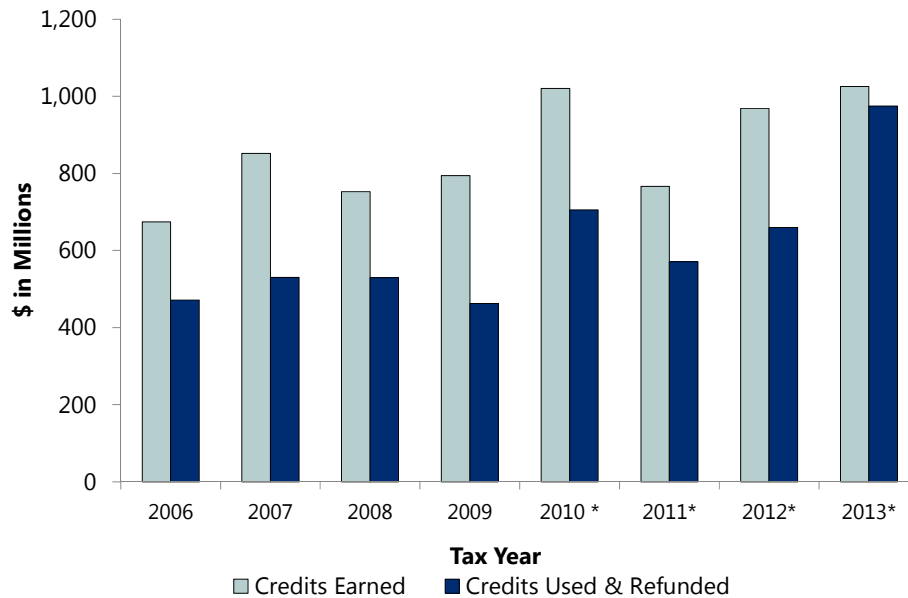
**Growth in Total Bank Tax Liability and Collections
General Fund (2002-2013)**



Credits

The following graph shows all available credits earned and used by Article 9-A taxpayers, and illustrates that the amount of credits earned has significantly exceeded the amount of credits used, with the exception of 2013. The divergence in 2013 is driven by the Investment Tax Credit. The information and professional, science and technical services industries both used more Investment Tax Credit in 2013 than 2012. Credit earned is the amount of credit earned by a taxpayer in the current tax year. This is prior to any credit recapture, and does not include credits earned in or carried over from prior years. Generally, Tax Law provisions prevent taxpayers from using tax credits to reduce final liability below the fixed dollar minimum tax. This results in taxpayers carrying forward a significant amount of non-refundable tax credits into subsequent tax years. The majority of recently enacted tax credits are refundable. Refundable credits can be used to more than offset tax liability through requests for cash refunds. For these credits, the credit earned and used and refunded amounts will be equal for a tax year. The four largest tax credit programs in terms of credit earned and used and refunded over the period shown in the following chart are the Investment Tax Credit (including the Financial Services Investment Tax Credit), Empire Zones, the Film Production Tax Credit and the Brownfield Clean-Up program. These four credits have comprised the majority of credits earned and credits used and refunded in recent years.

Total Credits Earned and Credits Used/Refunded (2006-2013)



*Amounts shown assume credits deferred to tax years 2013-2015 under the tax credit deferral program were used or refunded in the year shown.

As seen above, credits earned and credits used and refunded have generally trended upward. The slight declines in credits earned and credits used and refunded in 2008, 2009 and 2011 reflect activity in the Brownfield Clean-Up Program. Credits claimed in this program reflect the number and size of projects being completed and claims have been volatile since the first year of credit claims in 2006. Both credits earned and credits used and refunded for the investment tax credit and Empire Zones have been relatively stable each year. However in tax year 2013 the investment tax credit saw an increase in credits used and refunded causing credits earned and credits used and refunded to be closer to one another in 2013 compared to previous years. Credits earned and credits used and refunded for the Film Production tax credit have increased steadily over this period. The current annual allocation for the Film Production Tax credit is \$420 million and will remain at that level through tax year 2019. This makes the Film Production Tax credit the largest tax credit program in the State's economic development portfolio. Entry into the Empire Zone program expired June 30, 2010, and the program was replaced by the Excelsior Jobs program. There are no new entrants into the Empire Zone program, but current participants will be claiming credits for the remainder of their benefit period which will result in credits earned and credits used and refunded continuing for several more years. Tax years 2012 and 2013 were the first years of credit claims for the Excelsior Jobs Program. This program is expected to continue to grow in the future.

For a more detailed discussion of the methods and models used to develop estimates and projections for the corporation franchise tax, please see the *Economic, Revenue and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

CORPORATION FRANCHISE TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund							
Non-Audit Receipts	3,225	2,533	(692)	(21.5)	2,876	343	13.5
Audit Receipts	538	801	263	48.9	951	150	18.7
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	3,763	3,334	(429)	(11.4)	3,827	493	14.8
Other Funds							
Non-Audit Receipts	650	670	20	3.1	704	34	5.1
Audit Receipts	114	125	11	9.6	156	31	24.8
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	764	795	31	4.1	860	65	8.2
All Funds							
Non-Audit Receipts	3,875	3,203	(672)	(17.3)	3,580	377	11.8
Audit Receipts	652	926	274	42.0	1,107	181	19.5
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	4,527	4,129	(398)	(8.8)	4,687	558	13.5

Note: Totals may differ due to rounding.

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$2,596 million, a decrease of \$666.2 million (20.4 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$4,129 million, a decrease of \$398.3 million (8.8 percent) from FY 2016. Effective for tax year 2016, the business income tax rate was reduced to 6.5 percent from 7.1 percent and 2016 is the first year of the asset tax base phase-out. These changes were part of corporate tax reform enacted in the FY 2015 Budget. Additionally, December 2016 estimated tax payments from calendar year filers were weak, declining 23 percent from December 2015.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$4,687 million, an increase of \$558 million (13.5 percent) from FY 2017. This increase can be attributed to projected higher year over year audits and growth in 2017 liability from improved corporate profits.

General Fund

General Fund FY 2017 receipts are estimated to be \$3,334 million, a decrease of \$429 million (11.4 percent) from FY 2016. The increase reflects the same trends impacting FY 2017 All Funds receipts.

General Fund FY 2018 receipts are projected to be \$3,827 million, an increase of \$493 million (14.8 percent) from FY 2017. The increase reflects the same trends impacting All Funds receipts for FY 2018.

Other Funds

Corporation franchise tax receipts from the business tax surcharge deposited to MTOAF generally reflect the All Funds trends described above. The MCTD business tax surcharge will result in MTOAF deposits of an estimated \$795 million in FY 2017 and a projected \$860 million in FY 2018.

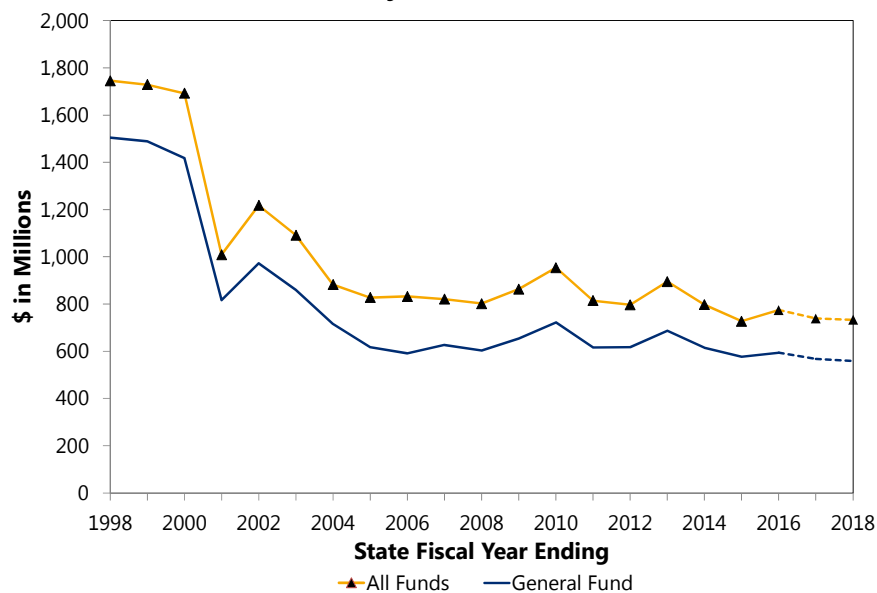
Corporation and Utilities Tax



CORPORATION AND UTILITIES TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	593.9	568.0	(25.9)	(4.4)	559.0	(9.0)	(1.6)
Other Funds	180.0	171.0	(9.0)	(5.0)	173.8	2.8	1.6
All Funds	773.9	739.0	(34.9)	(4.5)	732.8	(6.2)	(0.8)

Note: Totals may differ due to rounding.

Corporation and Utilities Tax Receipts History and Estimates



CORPORATION AND UTILITIES TAXES BY FUND (millions of dollars)										
	Gross General Fund	Refunds	General Fund	Gross Special Revenue Funds	Refunds	Special Revenue Funds ¹	Gross Capital Project Funds	Refunds	Capital Projects Funds ²	All Funds Receipts
FY 2008	618	15	603	189	6	183	16	1	15	802
FY 2009	666	12	654	198	7	191	19	2	18	863
FY 2010	741	19	722	225	13	212	21	2	20	954
FY 2011	635	19	616	200	19	181	19	3	16	814
FY 2012	642	25	617	185	18	167	16	3	13	797
FY 2013	691	5	686	201	8	194	16	2	15	895
FY 2014	657	43	615	187	18	169	15	2	14	797
FY 2015	582	6	577	151	10	141	11	2	10	727
FY 2016	607	13	594	170	5	165	15	0	15	774
Estimated										
FY 2017	588	20	568	169	12	157	15	1	14	739
FY 2018										
Current Law	579	20	559	172	12	160	15	1	14	733
Proposed Law	579	20	559	172	12	160	15	1	14	733

¹ Receipts from the MTA surcharge and a portion of receipts from the taxes imposed by sections 183, 184 and 186-e of the Tax Law deposited in accounts of the Mass Transportation Operating Assistance Fund (MTOAF).
² A portion of receipts from taxes imposed by sections 183, 184 and 186-e of the Tax Law deposited to Dedicated Highway and Bridge Trust

Proposed Legislation

Legislation proposed with this Budget would:

- Extend the Alternative Fuels Property and Electric Vehicle Recharging Property Credit for Five Years; and
- Permanently extend the Disposition of Certain Revenues to the Public Transportation Operating Account.

Description

Tax Base and Rate

Article 9 of the Tax Law imposes taxes and fees on a number of specialized industries, including public utilities, transportation and transmission companies, and agricultural cooperatives. The telecommunications industry and regulated utilities are the primary collection sources.

Section 183 provides for a franchise tax on the capital stock of transportation and transmission companies, including telecommunication, trucking, railroad, and other transportation companies. The tax is imposed at the highest of the following three alternatives:

- 1.5 mills per dollar of the net value of capital stock allocated to New York State;
- 0.375 mills per dollar of par value for each one percent of dividends paid on capital stock if dividends amount to 6 percent or more; or
- A minimum tax of \$75.

Section 184 levies an additional franchise tax of 0.375 percent on the gross earnings of transportation and transmission companies. Gross earnings from international, interstate, and inter-Local Access Transport Areas (LATAs) services and 30 percent of intra-LATA gross receipts are excluded from the tax.

Railroad and trucking companies that elected to remain subject to Article 9 taxes (rather than to become subject to the corporate franchise tax imposed under Article 9-A) pay the tax at a rate of 0.375 percent of gross earnings, including an allocated portion of receipts from interstate transportation-related transactions.

Section 185 imposes a franchise tax on farmers, fruit-growers and other agricultural cooperatives through taxable years beginning before January 1, 2018. The tax is imposed at the highest of the following three alternatives:

- One mill per dollar of the net value of capital stock allocated to New York State;

- 0.25 mill per dollar of par value for each one percent of dividends paid on capital stock if dividends amount to 6 percent or more; or
- A minimum tax of \$10.

Section 186-a imposes a two percent gross receipts tax on charges for the transportation, transmission, distribution, or delivery of electric and gas utility services for residential customers.

Section 186-e imposes a 2.5 percent gross receipts tax on charges for non-mobile telecommunication services. A 2.9 percent gross receipts tax is imposed on mobile telecommunication services.

Article 9 taxpayers that conduct business in the Metropolitan Commuter Transportation District (MCTD) are subject to a 17 percent surcharge on their liability attributable to the MCTD. The collections from the surcharge are deposited into the Mass Transportation Operating Assistance Fund (MTOAF).

Administration

Taxpayers subject to Sections 184, 186-a and 186-e make quarterly tax payments of equal installments on an estimated basis in June, September and December. A final payment is made in April. Additionally, taxpayers are required to make a mandatory first installment equal to 40 percent of their tax from two tax years prior. This is paid in March.

Significant Legislation

Significant statutory changes to the corporation and utilities taxes since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Power for Jobs Program Extension	Extended the Power for Jobs Program through June 30, 2012. It was replaced with the Recharge New York program effective on the same date.	March 31, 2011
Legislation Enacted in 2012		
Sections 183 and 184	Lowered the distribution to the Metropolitan Mass Transportation Operating Assistance account to 54 percent from 80 percent. The remaining 26 percent is distributed to the Public Transportation Systems Operating Assistance account. This distribution is in effect for one year, through March 31, 2013.	April 1, 2012
Legislation Enacted in 2013		
Charge NY Electric Vehicle Recharging Equipment Credit	Created a credit equal to 50 percent or \$5,000 per station, whichever is less, of the cost of electric vehicle recharging or alternative fuel vehicle refueling equipment. The credit sunsets December 31, 2017.	January 1, 2013
LIPA Restructuring	Eliminated the requirement for LIPA to pay tax under Section 186. LIPA is still liable for the MTA surcharge.	January 1, 2014

Subject	Description	Effective Date
Sections 183 and 184	Extended the distribution to the Metropolitan Mass Transportation Operating Assistance account of 54 percent of receipts and the Public Transportation Systems Operating Assistance account's distribution of 26 percent of receipts, through March 30, 2018.	April 1, 2013
START-UP NY	Established tax-free zones on or near qualifying university and college campuses. Qualifying businesses operating within such zones are exempt from taxation under Sections 180 and 181.	January 1, 2014
Minimum Wage Reimbursement Credit	Provided a refundable tax credit for tax years 2014 through 2018 equal to the product of the number of hours worked by qualifying minimum wage-earning employees and 1) \$0.75 in tax year 2014; 2) \$1.31 in tax year 2015; and 3) \$1.35 in tax years 2016 through 2018. Qualifying employees must be students aged 16 to 19, and the credit is reduced if the federal minimum wage is increased to a level in excess of 85 percent of the New York minimum wage.	January 1, 2014
Legislation Enacted in 2014		
Repeal the franchise tax on agricultural cooperatives (Section 185)	Repeals the Article 9, Section 185 tax on agricultural co-operatives effective for tax years beginning on or after January 1, 2018.	January 1, 2018
Corporate Tax Reform	Repealed the organization tax on In-State corporations (Section 180) and the license and maintenance fees on Out-of-State corporations (Section 181).	January 1, 2015
	Made the MTA surcharge permanent.	January 1, 2015
Legislation Enacted in 2015		
Section 186-e on Mobile Telecommunication Services	Imposed a state excise tax rate of 2.9 percent and a 0.721 percent MCTD rate on the sale of mobile communications services and dedicated 7.6 percent of Section 186-e receipts to the MTOAF and the DHBTF. Both of these changes are effective May 1, 2015.	May 1, 2015
Alternative Fuel Vehicle Refueling Property Tax Credit	Allowed the credit for spending not covered by a grant. The amount of the credit is amended to equal the lesser of \$5,000 or the product of 50 percent and the cost of any property less any costs paid from the proceeds of a grant.	January 1, 2015
Brownfields Clean-Up Program	Reformed the program and extended the tax credits through March 31, 2026. Reforms included the prioritization of (1) site redevelopment in economically distressed areas, (2) low income housing, or (3) properties that are upside down or underutilized; also provided for the creation of an expedited remediation program (BCP-EZ), a more detailed description of eligible costs for redevelopment tax credits, and allowed the real property tax and environmental remediation insurance credits to sunset.	July 1, 2015
START-UP NY Amendments	Added two airport facilities owned by the State of New York to be included as START-UP NY areas.	April 13, 2015
Legislation Enacted in 2016		
Conform to New Federal Tax Filing Dates	New York State tax filing deadlines were changed to conform to federal filing deadlines. Taxpayers that file under Section 184, 184-a, 186-A, 186-e and 186-c are now required to file their final return on or before April 15. Taxpayers are still required to remit mandatory first installments (MFI) of estimated taxes on or before March 15. The amount of the MFI will now be a percentage of tax from two tax years prior, instead of the preceding year's tax.	January 1, 2016
	Taxpayers filing under Sections 183 and 183-a are subject to the same changes described above.	January 1, 2017

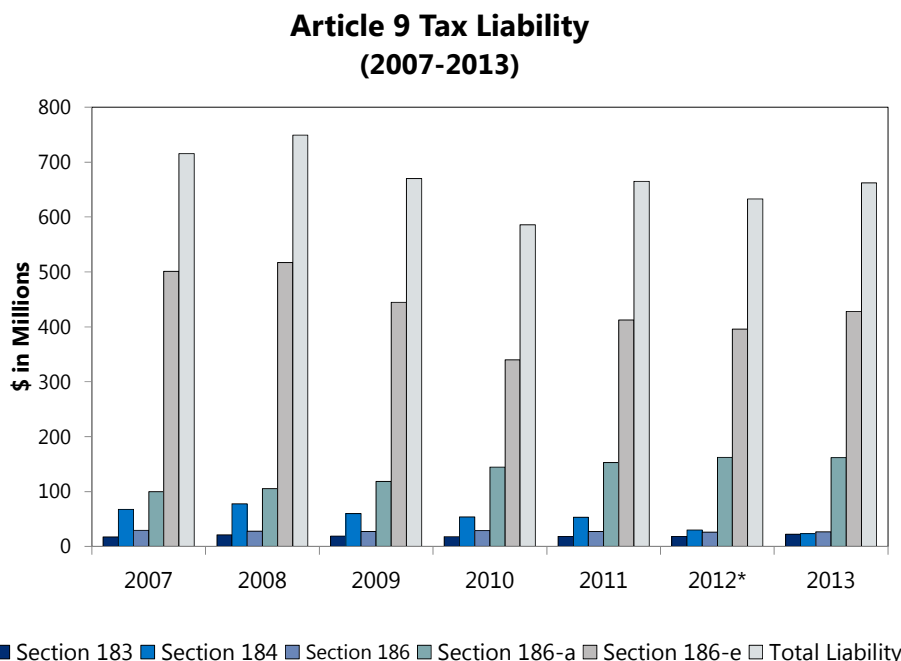
Clean Heating Fuel Credit

Modified and extended the clean heating fuel credit. The minimum biodiesel fuel thresholds were increased. The credit was extended for three years to January 1, 2020.

January 1, 2017

Tax Liability

The chart below shows Article 9 liability by tax section over the most recent seven available years, from 2007 through 2013. Data for 2013, the most recent data available, is from the Article 9 Tax Study File compiled by the Department of Taxation and Finance's Office of Tax Policy Analysis (OTPA). The tax year 2012 Study File liability includes inflated liability resulting from the 2010 legislation that deferred certain tax credit claims that would have otherwise been included on tax returns for tax years 2010 through 2012.



*Section 184 includes amended returns from taxpayers that provide mobile telecommunication services.

The increase in liability from 2007 to 2008 is primarily attributable to Sections 183, 184, and 186-e as the telecommunications industry experienced significant revenue growth due to a net increase in new wireless subscribers. The overall decline since tax year 2008 marked the beginning of several significant changes to the telecommunications industry. An increasing share of monthly bills consist of data plans which are non-taxable as the result of legislation signed into law in October 1998 that codified existing State policy with regard to the taxation of internet access. Effective February 1, 1997, internet access service is not subject to the telecommunications excess tax imposed under Section 186-e. Households with both mobile and landline phones increasingly opted to discontinue their use of landlines, customers began moving towards inexpensive prepaid plans instead of postpaid plans, and use of internet-based communication tools such as Twitter, Facebook and other messaging applications (apps) and services became more widespread.

The table below shows significant events in the telecommunications industry that have impacted tax liability as described above. Changes to the telecommunications industry since 2013 could negatively impact the tax liability going forward because they shift revenue from the taxable base to the non-taxable base.

SIGNIFICANT EVENTS IN THE TELECOMMUNICATIONS INDUSTRY	
Year	Event
2007	First iPhone sold with AT&T as the sole carrier
2008	Peak household ownership of landline and wireless telephone service in US
2010	First 4G LTE phone sold in US
2011	Verizon starts selling the iPhone, the first time a carrier other than AT&T carries the iPhone
2011	Facebook Messenger introduced
2011	iMessage released
2012	Smartphones account for more than half of active cell phones in the US for the first time
2012	Verizon begins offering new shared data plans
2012	Average text messages per month per person in the US declines for the first time
2013	Major carriers offer unsubsidized phone plans
2013	Data revenue exceeds voice revenue for the first time in the US
2015	AT&T purchases DirecTV which may promote bundling
2016	Mobile data revenue now accounts for 75% of overall revenue
2016	Device revenue declined sharply as consumers are upgrading at a slower pace

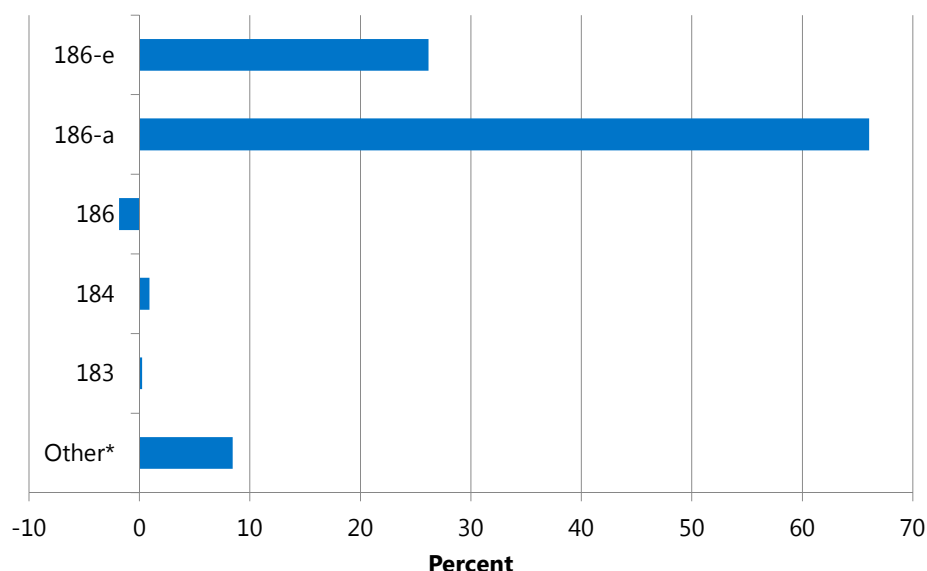
Industry Profile

For tax year 2013, Sections 186-a and 186-e represented the largest share of tax liability under Article 9 representing a combined 89 percent of total liability. Combined, sections 183 and 184 represented just under seven percent of total liability. Although a broad range of industries are represented on the study file for Sections 183 and 184, the overwhelming portion of the tax is paid by the telecommunications industry, which represented approximately 50 percent of total tax paid for Section 183 and approximately 89 percent for Section 184. For Section 183, management of companies and enterprises made up the second largest industry (approximately 28 percent). In Section 184, truck transportation represented approximately seven percent of total liability. The same pattern is exhibited by Section 186-e, the excise tax on telecommunication services. Nearly all of Section 186-e tax liability was paid by the telecommunications industry. Section 186-a is the gross receipts tax paid on the furnishing of utility services and the majority of that tax was paid by the utilities industry.

Receipts: By Section

The bar graph below depicts the share of total FY 2016 Article 9 All Funds attributable to each section of Article 9. Section 186-e, the gross receipts tax on telecommunications services, represents nearly 66 percent of All Funds receipts. The next largest section, 186-a, the gross receipts tax on utility services, represents approximately 26 percent.

FY 2016 All Funds Percent Distribution by Section



* Other includes sections 180, 181 and 185

The table below reflects the tax collections attributable to each section of Article 9 for FY 2016, FY 2017, and FY 2018. The All Funds total reflects taxes from the various sections prior to the distribution of receipts from sections 183, 184 and 186-e to MTOAF and DHBTF.

CORPORATION AND UTILITIES BY TAX LAW SECTION (millions of dollars)				
Section of Law	Type of Companies	FY 2016 Actual	FY 2017 Estimated	FY 2018 Projected
180 ¹	Organization tax on New York (domestic) corporations	0.0	0.0	0.0
181 ^{1,2}	License and maintenance fees on out-of-State (foreign) corporations	25.1	21.0	5.0
183	Franchise tax on transportation and transmission companies	16.7	16.3	16.0
184	Additional franchise tax on transportation and transmission companies	23.4	23.0	22.8
185 ³	Franchise tax on agricultural cooperatives	0.0	0.0	0.0
186	Franchise tax on water, steam, gas, electric, light and power companies	(10.0)	1.0	1.0
186a	Gross receipts tax on public utilities	175.7	181.0	189.0
186e	Excise tax on telecommunications	436.0	397.4	396.5
Other	186-a (non-PSC) and 189	0.0	0.0	0.0
Various	MTA Surcharge	107.1	99.3	102.5
All Funds Total		773.8	739.0	732.8
Less Other Funds				
	MTA Surcharge	107.1	99.3	102.5
	MTOAF ⁴	58.3	57.3	57.0
	DHBTF ⁴	14.6	14.4	14.3
General Fund		593.8	568.0	559.0

¹ Repealed for tax years beginning on or after January 1, 2015.

² Due to the filing period, payments are expected to continue to be received through FY 2018.

³ Repealed for tax years beginning on or after January 1, 2018.

⁴ Includes Sections 183, 184, and a portion of 186e.

For a more detailed discussion of the methods and models used to develop estimates and projections for the corporation and utilities tax, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

CORPORATION AND UTILITIES TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund							
Non-Audit Receipts	532	538	6	1.1	529	(9)	(1.7)
Audit Receipts	62	30	(32)	(51.6)	30	0	0.0
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	594	568	(26)	(4.4)	559	(9)	(1.6)
Other Funds							
Non-Audit Receipts	160	157	(3)	(1.9)	160	3	1.8
Audit Receipts	20	14	(6)	(30.0)	14	0	0.0
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	180	171	(9)	(5.0)	174	3	1.6
All Funds							
Non-Audit Receipts	692	695	3	0.4	689	(6)	(0.9)
Audit Receipts	82	44	(38)	(46.3)	44	0	0.0
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	774	739	(35)	(4.5)	733	(6)	(0.8)
Note: Totals may differ due to rounding.							

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$464 million, a decrease of \$19.4 million (4 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$739 million, a decrease of \$34.9 million (4.5 percent) from FY 2016. Lower audits and weaker growth from regulated public utilities contribute to the year-over-year decline.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$732.8 million, a decrease of \$6.2 million (0.8 percent) from FY 2017. In FY 2018 there will be minimal receipts from Section 181 which was

repealed as part of Corporate Tax Reform. This decline is partially offset by an increase in projected receipts from regulated public utilities.

General Fund

General Fund FY 2017 receipts are estimated to be \$568 million, a decrease of \$25.9 million (4.4 percent) from FY 2016. The increase reflects the same trends impacting FY 2017 All Funds receipts.

General Fund FY 2018 receipts are projected to be \$559 million, a decrease of \$9 million (1.6 percent) from FY 2017. The decrease reflects the same trends impacting FY 2018 All Funds receipts.

Other Funds

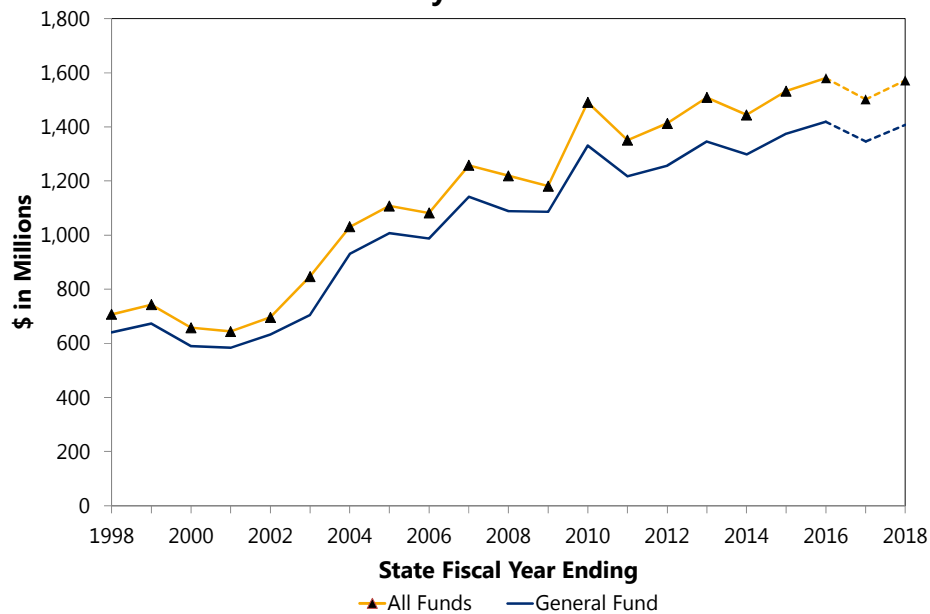
Eighty percent of Section 183 and 184 and 6.08 percent of Section 186-e collections are deposited into the MTOAF and will total an estimated \$57.3 million for FY 2017 and \$57 million for FY 2018. The remaining twenty percent of Section 183 and 184 and 1.52 percent of Section 186-e are earmarked for the DHBTF. DHBTF receipts are estimated at \$14.4 million in FY 2017 and projected at \$14.3 million for FY 2018.

Corporation and utilities tax receipts from the business tax surcharge deposited to MTOAF generally reflect the All Funds trends described above. The MCTD 17 percent business tax surcharge will result in MTOAF deposits of an estimated \$99.3 million in FY 2017 and a projected \$102.5 million in FY 2018.

INSURANCE TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	1,419.4	1,346.0	(73.4)	(5.2)	1,407.0	61.0	4.5
Other Funds	160.6	156.0	(4.6)	(2.9)	165.0	9.0	5.8
All Funds	1,580.0	1,502.0	(78.0)	(4.9)	1,572.0	70.0	4.7

Note: Totals may differ due to rounding.

Insurance Tax Receipts History and Estimates



INSURANCE TAXES BY FUND (millions of dollars)							
	Gross General Fund	Refunds	Gross General Fund	Gross Special Revenue Funds	Refunds	Special Revenue Funds ¹	All Funds Receipts
FY 2008	1,122	34	1,088	139	8	131	1,219
FY 2009	1,135	49	1,086	106	11	95	1,181
FY 2010	1,360	29	1,331	167	7	160	1,491
FY 2011	1,248	31	1,217	140	6	134	1,351
FY 2012	1,290	33	1,257	163	6	157	1,414
FY 2013	1,397	51	1,346	171	8	163	1,509
FY 2014	1,335	37	1,298	154	8	146	1,444
FY 2015	1,391	16	1,375	167	9	158	1,533
FY 2016	1,433	14	1,419	167	7	161	1,580
Estimated							
FY 2017	1,376	30	1,346	163	7	156	1,502
FY 2018							
Current Law	1,437	30	1,407	172	7	165	1,572
Proposed Law	1,437	30	1,407	172	7	165	1,572

¹Receipts from the MTA surcharge are deposited in the Mass Transportation Operating Assistance Fund.

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

Under Article 33 of the Tax Law and the Insurance Law, the State imposes taxes on insurance corporations, insurance brokers and certain insured for the privilege of conducting business or otherwise exercising a corporate franchise in New York.

Tax Rate on Non-Life Insurers

Non-life insurers are subject to a premiums-based tax. Accident and health premiums received by non-life insurers are taxed at the rate of 1.75 percent and all other premiums received by non-life insurers are taxed at the rate of 2 percent. A \$250 minimum tax applies to all non-life insurers.

Tax Rate on Life Insurers

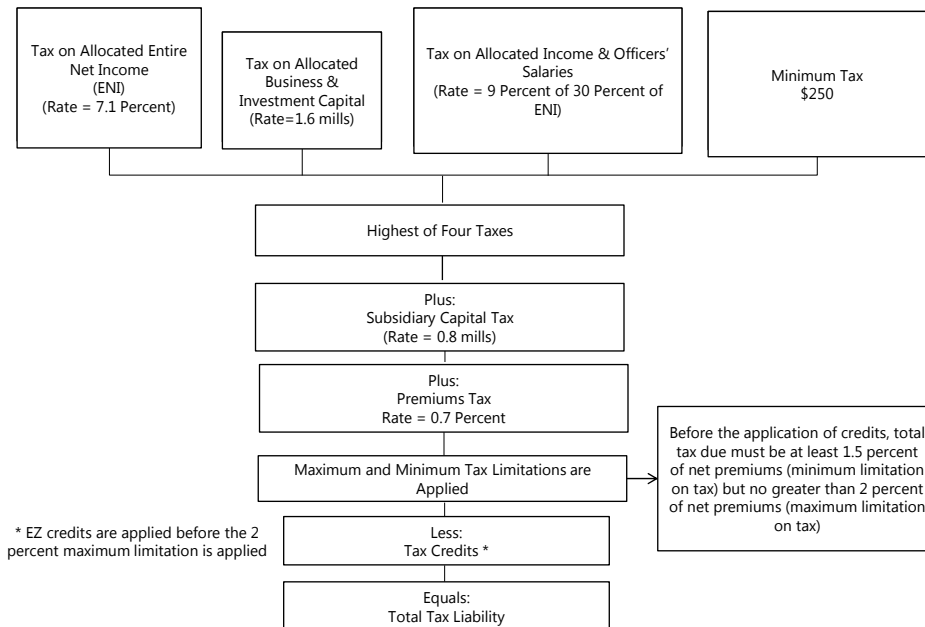
The franchise tax on life insurers has two components. The first component is a franchise tax computed under four alternative bases, with tax due based on the highest tax calculated under the four alternative bases. In addition, a 0.8 of one mill tax rate applies to each dollar of subsidiary capital allocated to New York.

Tax is allocated to New York under the entire net income (ENI) base by a formula that apportions ENI based on weighted ratios of premiums (with a weight of nine) and wages (with a weight of one) earned or paid in New York, to total premiums and total wages for all employees for the tax year.

The second component is an additional franchise tax on gross premiums, less returned premiums. The tax rate on premiums is 0.7 percent and applies to premiums written on risks located or resident in New York. This tax is added to the sum of the tax due on the highest of the alternatives from the income base plus the tax imposed on subsidiary capital.

Maximum and minimum tax limitations are computed based on net premiums. Life insurers determine their maximum limitation by multiplying net premiums by 2 percent and their minimum limitation by multiplying net premiums by 1.5 percent. Under these limitations, the total tax calculated under the highest of the four alternative bases plus the tax imposed on subsidiary capital plus the 0.7 percent tax on net premiums must be at least as high as the minimum tax or “floor” (1.5 percent of net premiums) but no greater than the maximum limitation (2 percent of net premiums).

Computation of Article 33 Tax on Life Insurance Companies



Generally, taxpayers with a tax liability that exceeds the floor may not reduce their liability with tax credits to a level below the floor. However, taxpayers may use Empire Zone and Zone Equivalent Area tax credits to do so. Entry into the Empire Zone Program expired on June 30, 2010. There are no new entrants into the program, but current participants will be claiming credits for the remainder of their benefit period.

Article 33 taxpayers conducting business in the Metropolitan Commuter Transportation District (MCTD) are subject to a 17 percent surcharge on the portion of their tax liability which is attributable to the MCTD area. The collections from the surcharge are deposited into the Mass Transportation Operating Assistance Fund (MTOAF).

Article 33 of the Tax Law also imposes a premiums tax on captive insurance companies licensed by the Superintendent of the Department of Financial Services (DFS) for the privilege of conducting business or otherwise exercising a corporate franchise in New York. The tax is imposed on net premiums and net reinsurance premiums (gross premiums less return premiums) written on risks located or resident in the State at rates which vary with the amount of net premiums. The top rate is 0.4 percent on direct premiums and 0.225 percent on reinsurance premiums. Captive (i.e., affiliates that insure the risks of the other corporate members) insurers are subject to a minimum tax of \$5,000. Tax credits are not allowed against the tax imposed on captive insurance companies and these companies are not subject to the MTA business tax surcharge.

Other Taxes Imposed on Insurers

Article 33-A of the Tax Law imposes a tax at the rate of 3.6 percent of premiums on independently procured insurance. This tax is imposed on any insured purchasing or renewing an insurance contract covering certain property and casualty risks from an unauthorized insurer where the home state of the insured is New York. An unauthorized insurer is an insurer not authorized to transact business in New York under a certificate of authority from the Superintendent of the DFS.

The Insurance Law imposes a premiums tax on a licensed excess line (i.e., covering unique or very large risks) insurance broker when a policy covering a risk where the home state of the insured is New York is procured through such broker from an unauthorized insurer. Transactions involving a licensed excess lines broker and an insurer not authorized to do business in New York are permissible under limited circumstances delineated in Article 21 of the Insurance Law. The tax is imposed at a rate of 3.6 percent of premiums covering risks located in New York.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 gave the “home state” of the insured the sole authority to regulate and collect taxes on these transactions. Generally, the insured’s home state is the state where it is headquartered, or in the case of individuals, their place of residence.

The Insurance Law authorizes the Superintendent of the DFS to assess and collect retaliatory taxes from a foreign insurance corporation when the overall tax rate imposed by its home jurisdiction on New York companies exceeds the comparable tax rate imposed by New York on such foreign insurance companies.

Retaliatory taxes have been employed by the states since the nineteenth century to ensure a measure of fairness in the interstate taxation of insurance corporations. Retaliatory taxes deter other states from discriminating against foreign corporations and effectively require states with a domestic insurance industry to maintain an overall tax rate on insurance corporations that is generally consistent with other states.

Nevertheless, there are a variety of mechanisms for taxing insurance corporations throughout the states, and differences in overall tax rates among the states are inevitable. New York provides an additional measure of protection for its domestic insurance industry by allowing domestic corporations to claim a credit under Article 33 of the Tax Law for 90 percent of the retaliatory taxes legally required to be paid to other states.

Administration

Insurance companies that reasonably expect their tax liability to exceed \$1,000 for the current tax year are required to make a mandatory first installment of estimated tax and three additional estimated payments. The mandatory first installment is due 75 days from the end date of a taxpayer's fiscal year. The remaining three estimated tax payments are due on the 15th day of the third month of the fiscal year quarter. The majority of taxpayers have a fiscal year that ends December 31. The mandatory first installment for these taxpayers is due March 15 with the

remaining three estimated payments due on June 15, September 15 and December 15. A final payment is also required of all taxpayers. This payment is due 106 days (April 15 for taxpayers that have a fiscal year that ends December 31) from the end date of a taxpayer's fiscal year. Taxpayers that expect their tax liability to exceed \$100,000 for the current tax year are required to make a mandatory first installment equal to 40 percent of their tax from two tax years prior. Taxpayers with expected liability greater than \$1,000 and less than \$100,000 are required to make a mandatory first installment equal to 25 percent of their tax from two tax years prior. Life insurance companies with expected liability of less than \$1,000 make no mandatory first installment.

Tax Expenditures

Tax expenditures are defined as features of the Tax Law that by exclusion, exemption, deduction, allowance, credit, deferral, preferential tax rate or other statutory provision reduce the amount of a taxpayer's liability to the State by providing either economic incentives or tax relief to particular entities to achieve a public purpose. Article 33 taxpayers are eligible for several targeted tax credits, including the investment tax credit (ITC), the long-term care insurance credit, the low income housing credit, and the Excelsior Jobs program tax credits. For a more detailed discussion of tax expenditures, see the *Annual Report on New York State Tax Expenditures*, prepared by the Department of Taxation and Finance and the Division of the Budget.

There are also several types of insurance contracts that are exempt from the franchise tax. These include, but are not limited to, certain annuity contracts, certain reinsurance premiums and certain health insurance contracts for insured's aged 65 years and older. Certain corporations and other entities that provide insurance are exempt from State franchise taxes and the regional business surcharge. Non-profit medical expense indemnity corporations and other health service corporations, organized under Article 43 of the Insurance Law, are exempt from these State taxes. In addition, cooperative insurance companies in effect (operation) prior to January 1, 1974, are exempt from taxation while those formed on or after that date are subject to the tax.

Significant Legislation

Significant statutory changes to insurance taxes since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Conformity with Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010	Conformed New York's taxation of excess lines and independently procured insurance to this Federal change. The Dodd-Frank legislation gave the "home state" of the insured the sole authority to regulate and collect taxes on these transactions.	July 21, 2011
Excelsior Jobs Program Amendments	Modified the credit to make it more widely available and attractive and created a new energy incentive. It also lengthened the benefit period from five to ten years.	March 31, 2011
Economic Transformation and Facility Redevelopment Program	Provided tax incentives to businesses to stimulate redevelopment in targeted communities where certain correctional or juvenile facilities are closed (economic transformation areas). This program will expire on December 31, 2021.	March 31, 2011

Subject	Description	Effective Date
Legislation Enacted in 2013		
Royalty Income Loophole	Closed a loophole that allowed New York companies that earn royalty income to avoid paying taxes on that income. New York taxpayers must show on their tax return that the taxpayer's Non-New York parent company included the royalty income in its tax liability. The demonstration absolves taxpayers of the obligation to pay tax on their royalty income.	January 1, 2013
Historic Properties Tax Credit	Extended for five years the maximum Historic Preservation Tax Credit amount of \$5 million, which had previously been scheduled to revert to \$100,000 following the conclusion of tax year 2014, and permanently made the credit refundable for tax years beginning on or after January 1, 2015.	January 1, 2015
Hire-a-Vet	Provided a refundable tax credit for tax years 2015 and 2016 equaling 10 percent of the wages paid to a qualified veteran (capped at \$5,000) and 15 percent of wages paid to a qualified veteran (capped at \$15,000).	January 1, 2015
Minimum Wage Reimbursement Credit	Provided a refundable tax credit for tax years 2014 through 2018 equal to the product of the number of hours worked by qualifying minimum wage-earning employees and 1) \$0.75 in tax year 2014; 2) \$1.31 in tax year 2015; and 3) \$1.35 in tax years 2016 through 2018. Qualifying employees must be students aged 16 to 19, and the credit is reduced if the federal minimum wage is increased to a level in excess of 85 percent of the New York minimum wage.	January 1, 2014
Excelsior Jobs Program	Changed the job requirement parameters for the Excelsior Jobs Program and allowed a portion of the unallocated tax credits from any taxable year to be used to award tax credits in another taxable year.	May 27, 2013
Legislation Enacted in 2014		
Corporate Tax Reform	Made the MTA surcharge permanent.	January 1, 2015
Legislation Enacted in 2015		
Expand the Excelsior Jobs Program	Expanded eligibility for the program to include entertainment companies that meet certain criteria, music production companies and video game software developers.	April 13, 2015
Brownfields Clean-Up Program	Reformed the program and extended the tax credits through March 31, 2026. Reforms included the prioritization of (1) site redevelopment in economically distressed areas, (2) low income housing, or (3) properties that are upside down or underutilized; also provided for the creation of an expedited remediation program (BCP-EZ), a more detailed description of eligible costs for redevelopment tax credits, and allowed the real property tax and environmental remediation insurance credits to sunset.	July 1, 2015
Legislation Enacted in 2016		
Conform to New Federal Tax Filing Dates	New York State tax filing deadlines were changed to conform to federal filing deadlines. C corporations are now required to file their final return on or before the 15 th day of the fourth month following the close each taxable year, which is April 15 for calendar year filers. Taxpayers are still required to remit mandatory first installments (MFI) of estimated taxes on or before the 15th day of the third month following the close of each taxable year, which is March 15 for calendar year filers. The amount of the MFI will now be a percentage of tax from two tax years prior, instead of the preceding year's tax.	January 1, 2016
Hire a Veteran Credit	Extended the credit for two additional years to January 1, 2019.	January 1, 2017
Low-Income Housing Credit	Extended the statewide limitation for the aggregate dollar amount of credit the Commissioner of DHCR (Division of Housing and Community Renewal) may allocate to eligible low-income buildings. The credit allocation pool was increased by \$8 million for each of the next five fiscal years.	April 1, 2017

Economic Transformation
and Facility
Redevelopment Program

Modified to include any psychiatric facility previously owned by New York State and located with the MCTD (excluding NYC) to qualify as a closed facility under this program. Prospective participants must submit an application by September 1, 2016.

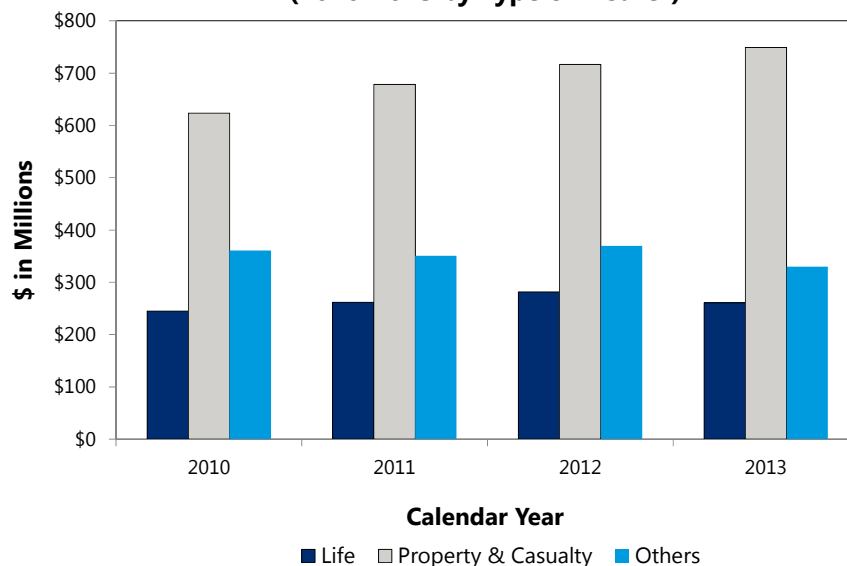
April 13, 2016

Tax Liability

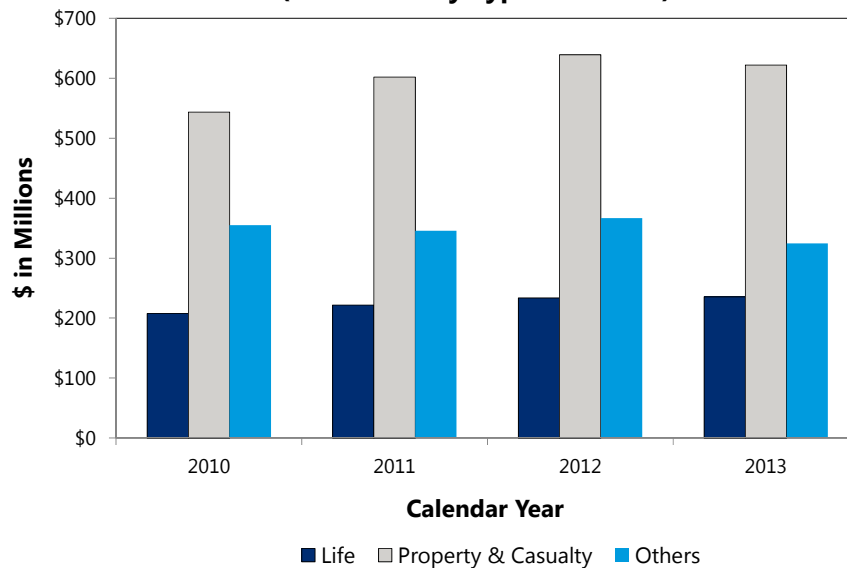
The Department of Taxation and Finance's Insurance Franchise Tax Study File contains tax liability data for the 2013 tax year, the most recent year for which such data are available. Liability for tax years 2010 through 2012 is artificially inflated as a result of 2010 legislation that deferred certain tax credit claims (to tax years 2013 through 2015) that would have otherwise been included on tax returns for tax years 2010 through 2012. The most recent Study File indicates that the property and casualty sector is the largest sector, accounting for 53 percent of total tax liability. Other insurers, which include accident and health insurers, are the second largest, with 27 percent of total liability. The 20 percent balance is attributable to life insurers. These ratios have remained consistent over the past several years.

The following graphs show insurance tax liability for life insurers, property and casualty insurers and all other insurers from 2010 through 2013 before and after the application of the limitation of tax due as determined by taxable premiums and credits.

**Article 33 Tax Liability *before* Limitation and Credits
(2010-2013 by Type of Insurer)**



**Article 33 Tax Liability *after* Limitation and Credits
(2010-2013 by Type of Insurer)**



Property and Casualty and Life Companies

The table below reports actual property and casualty premiums and growth from 2009 through 2015 for New York State. The three largest lines of business under the property and casualty sector in 2015 were automobile, general liability and worker's compensation. Total premiums for property and casualty companies grew by 3.2 percent in 2015, a decrease in growth from 2014, and the slowest growth since 2010.

PROPERTY AND CASUALTY INSURANCE PREMIUMS NEW YORK CALENDAR YEAR (millions of dollars/percent)							
Lines of Insurance	2009	2010	2011	2012	2013	2014	2015
Automobile	11,744.2	11,895.0	12,148.3	12,636.8	13,074.0	13,583.6	14,145.1
percent change	0.3	1.3	2.1	4.0	3.5	3.9	4.1
Worker's Compensation	3,423.1	3,623.2	4,157.4	4,754.7	5,191.5	5,261.1	5,523.6
percent change	(2.2)	5.8	14.7	14.4	9.2	1.3	5.0
Commercial Multi-Peril	3,025.6	2,986.5	3,056.9	3,249.5	3,487.5	3,613.5	3,591.8
percent change	(1.1)	(1.3)	2.4	6.3	7.3	3.6	(0.6)
General Liability	4,154.6	4,137.6	4,089.0	4,466.1	4,977.7	5,313.7	5,709.7
percent change	(7.4)	(0.4)	(1.2)	9.2	11.5	6.8	7.5
Homeowner's Multi-Peril	4,219.3	4,336.1	4,499.7	4,704.4	4,901.5	5,085.5	5,195.8
percent change	3.4	2.8	3.8	4.5	4.2	3.8	2.2
Other	6,314.0	6,036.0	6,196.3	6,133.0	6,373.1	6,436.3	6,391.7
percent change	(10.6)	(4.4)	2.7	(1.0)	3.9	1.0	(0.7)
TOTAL P/C PREMIUMS	32,880.8	33,014.4	34,147.6	35,944.4	38,005.2	39,293.8	40,557.8
percent change	(3.0)	0.4	3.4	5.3	5.7	3.4	3.2

Source: New York State Department of Financial Services Annual Report to the Governor and the Legislature and the NAIC's I-site for 2015.

For a more detailed discussion of the methods and models used to develop estimates and projections for insurance taxes, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

INSURANCE TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund							
Non-Audit Receipts	1,404	1,325	(79)	(5.6)	1,386	61	4.6
Audit Receipts	15	21	6	40.0	21	0	0.0
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	1,419	1,346	(73)	(5.1)	1,407	61	4.5
Other Funds							
Non-Audit Receipts	152	146	(6)	(3.9)	155	9	6.2
Audit Receipts	9	10	1	11.1	10	0	0.0
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	161	156	(5)	(3.1)	165	9	5.8
All Funds							
Non-Audit Receipts	1,556	1,471	(85)	(5.5)	1,541	70	4.8
Audit Receipts	24	31	7	29.2	31	0	0.0
Executive Budget Initiatives	0	0	0	--	0	0	--
Total	1,580	1,502	(78)	(4.9)	1,572	70	4.7

Note: Totals may differ due to rounding.

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$1,005.3 million, an increase of \$75.9 million (8.2 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$1,502 million, a decrease of \$78 million (4.9 percent) from FY 2016. Projected growth in insurance tax premiums and a positive prior period adjustment (i.e., a current cash payment related to a prior tax liability period) resulting from the resolution of an IRS case is more than offset by the first full year impact of the tax credit for assessments paid to the Life Insurance Guaranty Corporation (LIGC) subsequent to the bankruptcy of the Executive Life Insurance Company. The LIGC exists to ensure policy-holders are held harmless when their insurer becomes insolvent.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$1,572 million, an increase of \$70 million (4.7 percent) from FY 2017. Projected growth in insurance tax premiums combined with lower expected LIGC credit claims contribute to year-over-year growth.

General Fund

General Fund FY 2017 receipts are estimated to be \$1,346 million, a decrease of \$73.4 million (5.2 percent) from FY 2016. The increase reflects the same trends impacting FY 2017 All Fund receipts.

General Fund FY 2018 receipts are projected to be \$1,407 million, an increase \$61 million (4.5 percent) from FY 2017. The decrease reflects the same trends impacting All Funds receipts for FY 2018.

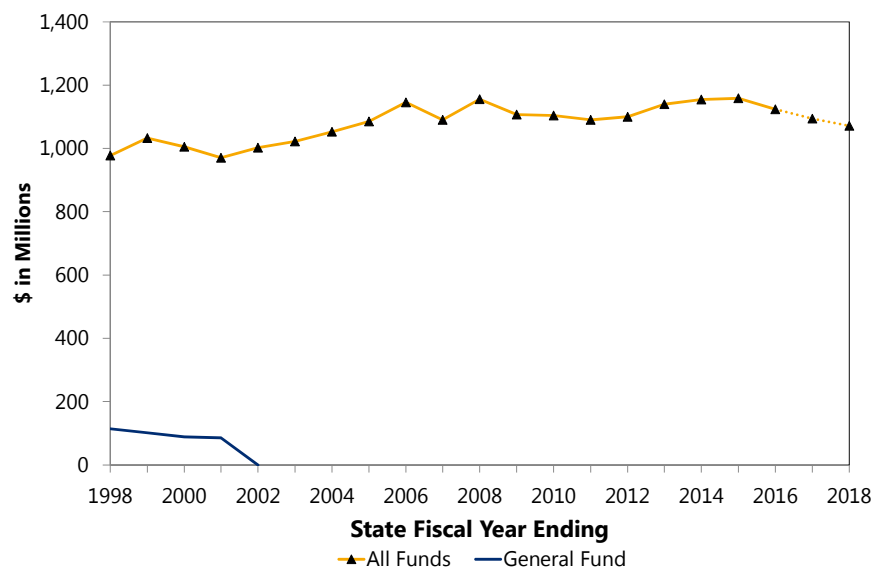
Other Funds

Insurance tax receipts from the business tax surcharge deposited to MTOAF generally reflect the All Funds trends described above. The MCTD 17 percent business tax surcharge will result in MTOAF deposits of an estimated \$156 million in FY 2017 and a projected \$165 million in FY 2018.

PETROLEUM BUSINESS TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	1,123.9	1,094.0	(29.9)	(2.7)	1,071.0	(23.0)	(2.1)
All Funds	1,123.9	1,094.0	(29.9)	(2.7)	1,071.0	(23.0)	(2.1)

Note: Totals may differ due to rounding.

Petroleum Tax Receipts History and Estimates



PETROLEUM BUSINESS TAXES BY FUND (millions of dollars)								
	Net General Fund	Gross Special Revenue Funds	Refunds	Net Special Revenue Funds ¹	Gross Capital Projects Funds	Refunds	Net Capital Projects Funds ²	Net All Funds Receipts
FY 2008	0	525	11	514	659	18	641	1,155
FY 2009	0	508	15	493	639	25	614	1,107
FY 2010	0	502	11	491	631	18	613	1,104
FY 2011	0	497	13	484	626	20	606	1,090
FY 2012	1	505	17	488	638	27	611	1,100
FY 2013	0	521	15	506	658	24	634	1,140
FY 2014	0	531	17	514	668	27	641	1,155
FY 2015	0	537	23	514	681	37	644	1,158
FY 2016	0	515	16	499	650	25	625	1,124
Estimated								
FY 2017	0	502	16	486	633	25	608	1,094
FY 2018								
Current Law	0	490	16	474	622	25	597	1,071
Proposed Law	0	490	16	474	622	25	597	1,071

¹ Dedicated Mass Transportation Trust Fund and Mass Transportation Operating Assistance Fund.
² Dedicated Highway and Bridge Trust Fund.

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

Article 13-A of the Tax Law imposes a tax on petroleum businesses for the privilege of operating in the State, based upon the quantity of various petroleum products imported for sale or use in the State. PBT rates have two components: the base tax, whose rates vary by product type; and the supplemental tax, which is imposed, in general, at a uniform rate.

Tax rates are indexed with annual adjustments made on January 1 of each year to the base and supplemental tax rates to reflect the percent change in the producer price index (PPI) for refined petroleum products for the 12 months ending August 31 of the preceding year. To prevent significant changes in tax rates resulting from large changes in the petroleum PPI, tax rates cannot increase or decrease by more than 5 percent per year. In addition to the 5 percent cap on tax rate changes, the statute requires, in general (i.e., excluding diesel), that the base and supplemental tax rates each be rounded to the nearest tenth of one cent. As a result, the percentage change in tax rates is usually less than the 5 percent limit.

Based on changes in the petroleum PPI, the PBT rate index decreased by 5 percent on January 1, 2016, and decreased by another 5 percent on January 1, 2017. The petroleum PPI is estimated to increase by 8.6 percent through August 2017, resulting in a 5 percent increase in PBT rates on January 1, 2018.

PETROLEUM BUSINESS NET TAX RATES FOR 2016 - 2018 (cents per gallon)									
Petroleum Product	2016			2017			2018 ¹		
	Base	Supp	Total	Base	Supp	Total	Base	Supp	Total
Automotive fuel									
Gasoline and other non diesel	10.20	6.80	17.00	9.70	6.50	16.20	10.10	6.80	16.90
Highway Use Diesel	10.20	5.05	15.25	9.70	4.75	14.45	10.10	4.98	15.08
Aviation gasoline or Kero-Jet Fuel	6.80	0.00	6.80	6.50	0.00	6.50	6.80	0.00	6.80
Non-Highway Use diesel fuels									
Commercial Gallonage	9.30	0.00	9.30	8.90	0.00	8.90	9.30	0.00	9.30
Nonresidential heating	5.00	0.00	5.00	4.80	0.00	4.80	5.00	0.00	5.00
Residual petroleum products									
Commercial gallonage	7.10	0.00	7.10	6.80	0.00	6.80	7.10	0.00	7.10
Nonresidential heating	3.80	0.00	3.80	3.70	0.00	3.70	3.80	0.00	3.80
Railroad diesel fuel	8.90	0.00	8.90	8.40	0.00	8.40	8.80	0.00	8.80

¹ Projected – The projected petroleum producer price index increase of 8.6 percent through August 2017 will result in a projected increase of 5 percent in the PBT rate index on January 1, 2018.

¹ Projected – The projected petroleum producer price index increase of 8.6 percent through August 2017 will result in a projected increase of 5 percent in the PBT rate index on January 1, 2018.

PETROLEUM PPI AND PETROLEUM BUSINESS TAX RATE INDEX (percent change)		
Year	Petroleum PPI	PBT Rate Index
2008	(1.2)	(1.2)
2009	42.1	5.0
2010	(34.9)	(5.0)
2011	18.6	5.0
2012	29.8	5.0
2013	9.2	5.0
2014	(0.8)	(0.8)
2015	(3.2)	(3.2)
2016	(29.1)	(5.0)
2017	(30.6)	(5.0)
2018*	8.6	5.0
* Estimated		

The Motor Fuel Tax section contains a table showing New York's combined fuel tax rank among the 50 states and the District of Columbia.

Administration

The tax is collected monthly in conjunction with the State motor fuel tax (Article 12-A). Article 13-A also imposes the petroleum business carrier tax on fuel purchased outside New York and consumed within the State. The carrier tax is collected quarterly along with the fuel use tax portion of the highway use tax (see section titled Highway Use Tax).

Businesses with yearly motor fuel and petroleum business tax liability of more than \$5 million are required to remit, using electronic funds transfer, their tax liability for the first 22 days of the month within three business days after that date. Taxpayers can choose to make either a minimum payment of three-fourths of the comparable month's tax liability for the preceding year, or 90 percent of actual liability for the first 22 days. The tax for the balance of the month is paid with the monthly returns filed by the twentieth of the following month.

Tax Expenditures

Specifically exempted from Article 13-A taxes are fuels used for manufacturing, residential or not-for-profit organization heating purposes, fuel sold to governments, sales for export from the State, kerosene other than kero jet fuel, crude oil, liquefied petroleum gas (LPG), certain bunker fuel, and motor fuels sold to volunteer ambulance and volunteer fire departments. For a complete list of tax expenditure items related to the PBT, see the *New York State Tax Expenditure Report*.

Significant Legislation

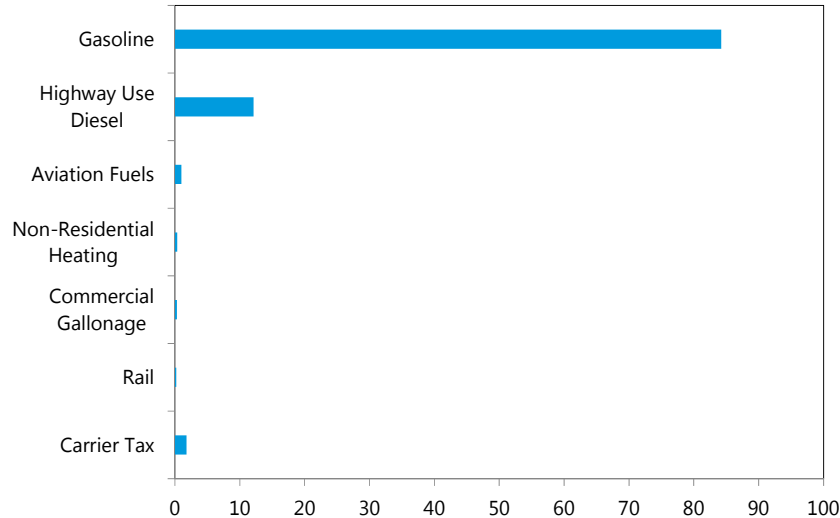
Significant statutory changes to petroleum business taxes since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Alternative Fuels	Extended PBT exemptions on alternative fuels through August 31, 2012.	September 1, 2011
Modernize Fuel Definitions	Modernized fuel definitions to conform to changes in Federal and State Law.	September 1, 2011
Legislation Enacted in 2012		
Alternative Fuels	Extended PBT exemptions on alternative fuels through August 31, 2014.	September 1, 2012
Legislation Enacted in 2013		
Volunteer First Responders	Provides a reimbursement for motor fuel and diesel motor fuel used by volunteer ambulance and fire departments.	June 1, 2013
Interdistributor Sales	Allowed for tax free interdistributor sales of highway diesel motor fuel sold below the rack (i.e., not delivered by truck).	August 1, 2013
Legislation Enacted in 2014		
Alternative Fuels	Extended the exemption on alternative fuels through August 31, 2016.	September 1, 2014
Legislation Enacted in 2016		
Alternative Fuels	Extended the exemption on alternative fuels through August 31, 2021.	September 1, 2016
Expand Motor Fuel Wholesaler Registration Requirements	Required certain wholesalers of motor fuel to file informational returns and register with the Department of Taxation and Finance. This information will be used to detect and prevent tax evasion.	December 1, 2016
Comply with Federal Tax Regulations on Aviation Fuel	Required that all revenue collected from the petroleum business tax on aviation fuel is directed to a new dedicated airport fund.	April 1, 2017

Tax Liability

Petroleum business tax receipts are primarily a function of the number of gallons of fuel imported into the State by distributors. Taxable gallonage is largely determined by overall fuel prices, the number of gallons held in inventories, the fuel efficiency of motor vehicles and State economic performance. The following chart displays the composition of PBT receipts by fuel type.

PBT Components
Share of FY 2016 Receipts



For a more detailed discussion of the methods and models used to develop estimates and projections for the petroleum business taxes, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$862.9 million, an increase of \$14.8 million (1.7 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$1,094 million, a decrease of \$29.9 million (2.7 percent) from FY 2016. The decrease in receipts is primarily due to the 5 percent decrease in the PBT index on January 1, 2016, paired with the 5 percent decrease in the PBT index on January 1, 2017.

Petroleum business tax receipts derived from motor fuel and diesel motor fuel are assumed to follow the same consumption trends as fuel subject to the motor fuel excise tax (see section titled Motor Fuel Tax).

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$1,071 million, a decrease of \$23 million (2.1 percent) from FY 2017. This is due to a 5 percent decrease in the PBT index, effective January 1, 2017, partially offset with a projected 5 percent increase in the PBT index on January 1, 2018.

General Fund

No PBT receipts are deposited into the General Fund.

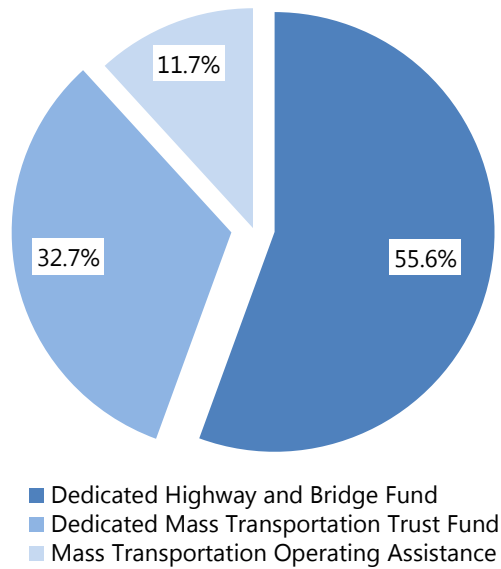
Other Funds

The base and supplemental tax are split as follows:

PBT BASE AND SUPPLEMENTAL TAX FUND DISTRIBUTION (current law) (percent)		
Tax Category	MTOAF ¹	Dedicated Funds Pool ²
Base Tax	19.7	80.3
Supplemental Tax	0.0	100.0
¹ This fund is split between the Public Transportation System Operating Assistance Account and the Metropolitan Mass Transportation Operating Assistance Account.		
² This pool is split between the Dedicated Mass Transportation Trust Fund (37 percent) and the Dedicated Highway and Bridge Trust Fund (63 percent).		

Petroleum business tax receipts in FY 2017 are estimated to be \$129 million for the Mass Transportation Operating Assistance Fund (MTOA), \$608 million for the Dedicated Highway and Bridge Trust Fund (DHBTF), and \$357 million for the Dedicated Mass Transportation Trust Fund (DMTTF). Petroleum business tax receipts in FY 2018 are projected to be \$125 million for MTOA, \$597 million for the DHBTF, and \$349 million for DMTTF. Effective FY 2018, revenue collected from the tax on aviation fuel will be directed to an Aviation Purpose Account within the DHBTF. This revenue is estimated to be \$3.6 million in FY 2018.

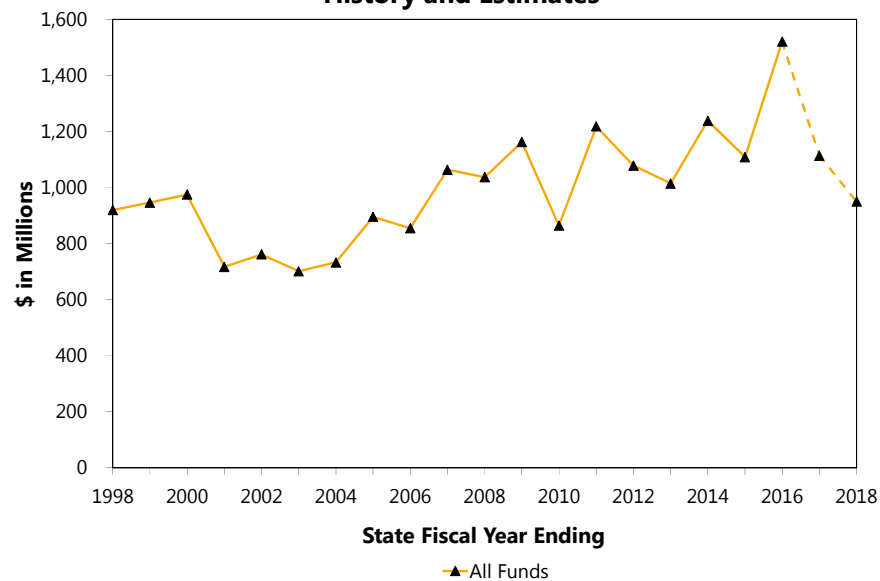
Estimated PBT Receipts FY 2017



ESTATE TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	1,520.7	1,114.0	(406.7)	(26.7)	950.0	(164.0)	(14.7)
Other Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Funds	1,520.7	1,114.0	(406.7)	(26.7)	950.0	(164.0)	(14.7)

Note: Totals may differ due to rounding. Excludes gift tax residual payments.

Estate Tax Receipts History and Estimates



ESTATE TAX BY FUND (millions of dollars)				
	Gross			
	General Fund	Refunds	General Fund	All Funds Receipts
FY 2008	1,079	43	1,037	1,037
FY 2009	1,277	114	1,163	1,163
FY 2010	910	45	865	865
FY 2011	1,269	51	1,218	1,218
FY 2012	1,148	69	1,078	1,078
FY 2013	1,070	56	1,014	1,014
FY 2014	1,300	61	1,238	1,238
FY 2015	1,179	71	1,108	1,108
FY 2016	1,598	77	1,521	1,521
Estimated				
FY 2017	1,174	60	1,114	1,114
FY 2018				
Current Law	1,010	60	950	950
Proposed Law	1,010	60	950	950

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

New York imposes a tax on the estates of deceased State residents and on the part of a nonresident's estate made up of real and tangible personal property located within New York State. The New York estate tax is based on the estate tax provisions of the Federal Internal Revenue Code, with New York modifications.

The tax base is calculated by first determining the value of the gross estate using Federal estate tax provisions. The Federal gross estate comprises the total amount of real estate, stocks and bonds, mortgages, notes, cash, insurance on the decedent's life, jointly owned property, other miscellaneous property, transfers during the decedent's life, powers of appointment, and annuities that the decedent owned.

The Federal gross estate is reduced by the Qualified Conservation Easement Exclusion and the following deductions: funeral expenses and expenses incurred in administering property subject to claims; debts of the decedent; mortgages and liens; net losses during administration, and expenses incurred in administration of the property not subject to claims; bequests to a surviving spouse (marriage deduction); charitable, public, and similar gifts; and a qualified family-owned business interest deduction. This yields the taxable estate for New York and becomes the basis for calculating New York's estate tax.

The total value of all items of real and tangible personal property of the taxpayer located outside of New York State is divided by the taxpayer's Federal gross estate to arrive at the proportion of the estate outside New York State. This proportion is then used to allocate the taxable estate to New York.

The computation of New York State estate taxes is a graduated schedule with rates that range from 3.06 percent on adjusted taxable estates not in excess of \$500,000, to 16 percent on adjusted taxable estates for New York State of \$10,100,000 or more. Practically, however, the tax is not imposed below the threshold as noted in the following paragraph.

The FY 2014 Enacted Budget replaced the unified threshold of \$1 million (associated with the State's prior "pick-up tax" methodology) with an applicable credit equal to the tax on a basic threshold amount equal to \$2,062,500 for those dying in FY 2015; \$3,125,000 in FY 2016; \$4,187,500 in FY 2017; and \$5,250,000 from April 1, 2017 to December 31, 2018. The basic threshold will equal the Federal basic threshold amount with annual indexing for those dying on or after January 1, 2019. The credit, similar to the results under the pick-up tax, phases out in the range from the threshold amount to 5 percent above the threshold amount (i.e., taxable estates at more than 105 percent of the threshold pay the full tax calculated on the rate table).

Administration

The Surrogate Court has jurisdiction of the probate of the estate and the authority to finalize the amount of the tax. The tax due is required to be paid on or before the date fixed for filing the return, nine months after the decedent's date of death. A twelve-month extension may be granted by the Commissioner of Taxation and Finance.

If the payment of the tax will cause undue hardship, the Commissioner may authorize a payment extension for up to four years from the decedent's date of death. It may be necessary for the taxpayer to provide a bond in an amount of no more than twice the amount due if an extension is approved for payment of the tax.

If the payment of the tax due is not made within nine months of the decedent's date of death, additional interest is charged to the remaining payments of the tax. The interest for extended payments is computed and compounded daily on the portion remaining from the first day of the tenth month following the decedent's date of death to the date of the payment. There is no discount for early payment of the estate tax.

The executor and the beneficiaries who have received property are personally liable for the payment of the estate tax. If there is no will, the Federal, New York and foreign death taxes paid or payable by the estate's representatives are apportioned among the beneficiaries.

There is reciprocity with other states for the collection of inheritance and estate taxes in nonresident estates. Refund claims of an overpayment of the tax must be filed by the executor within three years from the time the return was filed or two years from the time the tax was paid, whichever is later.

Tax Expenditures

The principal policy tool used to relieve the estate tax burden is the tax threshold, which effectively exempts otherwise taxable estates under such amounts. The increased threshold amounts enacted in 2014 were intended to provide relief to small business and farmers, and the eventual conformity to the Federal exclusion amount (in 2019) should lead to simplified estate planning and compliance.

Significant Legislation

Significant statutory changes to the estate tax since 2011 are summarized below.

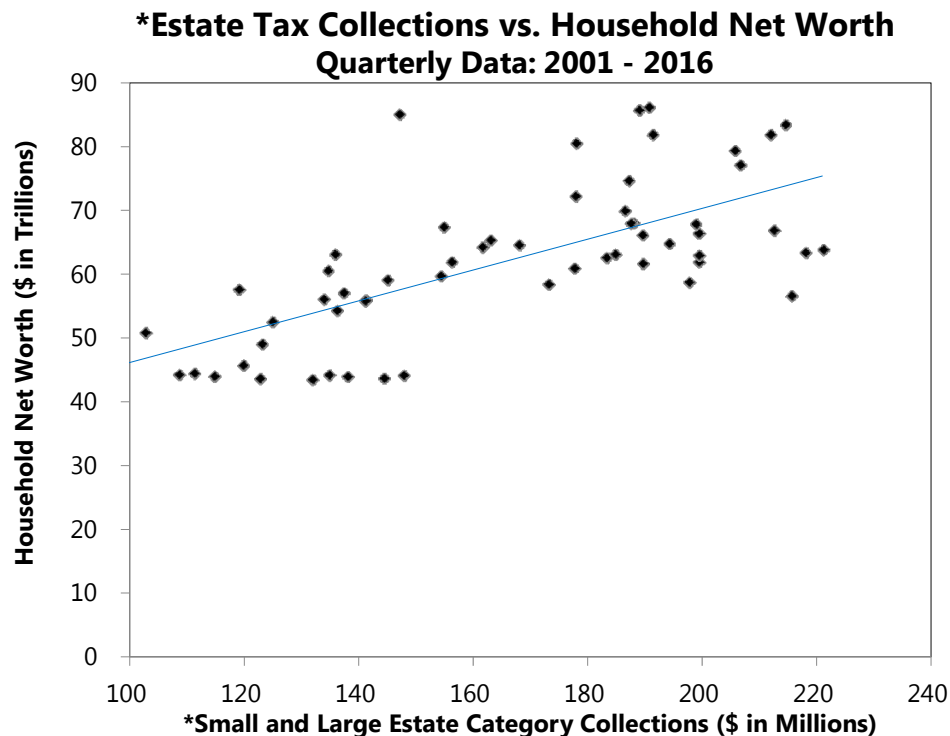
Subject	Description	Effective Date
Legislation Enacted in 2014		
Reform Estate Tax	Created a "stand-alone" NYS estate tax with a basic threshold amount that increases over four years and equals the Federal basic exemption starting January 1, 2019.	April 1, 2014

Tax Liability

The recent yield of this tax has been heavily influenced by two factors: 1) annual variations in the relatively small number of large estates, and 2) the value of the equity market, given the large component of corporate stock in large taxable estates. As a result, volatility is expected to remain a characteristic of this revenue source.

In developing projections for estate tax receipts, the value of household net worth is used to forecast receipts from estates that make payments of less than \$4 million. In addition to the value of equities, a distributional analysis is utilized to estimate receipts and the number of estates where payments exceed \$4 million.

For a more detailed discussion of the methods and models used to develop estimates and projections for the estate tax, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.



Receipts: Estimates and Projections

All Funds

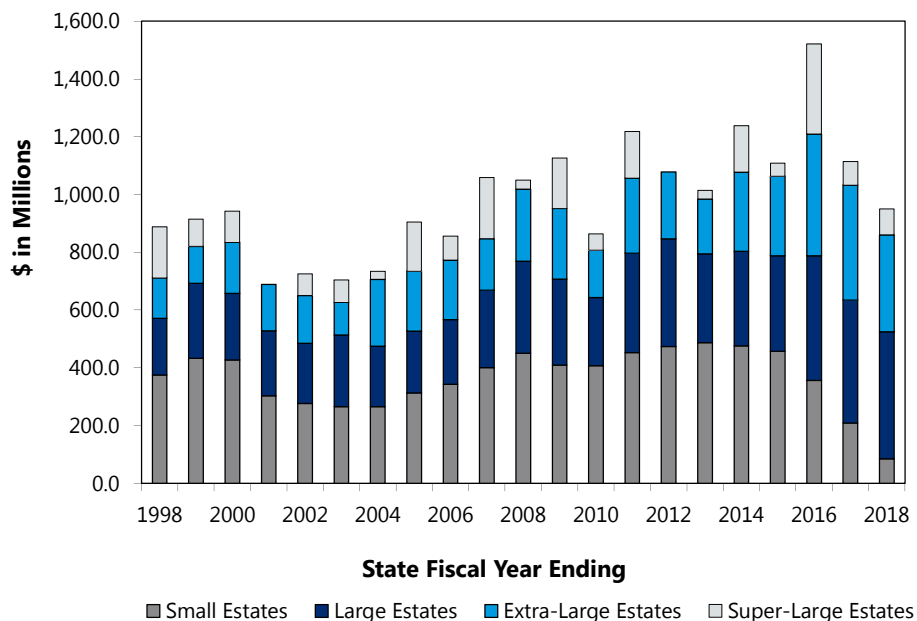
FY 2017 Estimates

All Funds preliminary receipts through December are \$886.3 million, a decrease of \$353.5 million (28.5 percent) from the comparable period in the prior fiscal year.

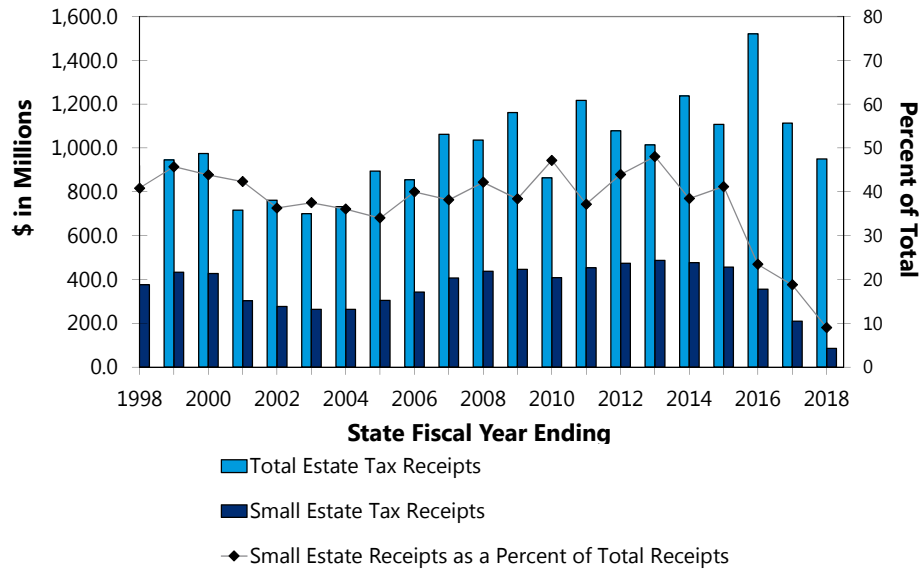
All Funds FY 2017 receipts are estimated to be \$1,114 million, a decrease of \$406.7 million (26.7 percent) from FY 2016. This decrease is mainly the result of an estimated decrease in the number of super-large payments compared to FY 2016, as well as 2014 legislation that raised the estate tax threshold.

Small estate FY 2017 receipts are estimated to be \$209 million, a decrease of \$147.1 million (41.3 percent) from FY 2016. Large estate FY 2017 receipts are estimated to be \$425 million, a decrease of \$6.6 million (1.5 percent) from FY 2016. Extra-large (payments between \$4 million and \$25 million) and super-large (payments greater than \$25 million) estate FY 2017 payments are estimated to be \$480 million, a decrease of \$253 million (34.5 percent) from FY 2016.

New York State Estate Tax Receipts



New York State Total Estate Tax Receipts vs. Receipts from Small Estates



FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$950 million, a decrease of \$164 million (14.7 percent) from FY 2017. This decrease is mainly the result of 2014 legislation that raised the estate tax filing threshold to the Federal exemption level over five years.

Large estate FY 2018 receipts are projected to be \$440 million, an increase of \$15 million (3.5 percent), and collections from small estate payments are projected to be \$85 million, a decrease of \$124 million (59.3 percent) from FY 2017.

Super-large and extra-large estate FY 2018 receipts are projected to be \$425 million, a decrease of \$55 million (11.5 percent) from FY 2017.

ESTATE TAX RECEIPTS BY SIZE OF ESTATE (millions of dollars)						
	Super-Large ¹ and Extra-Large ² Estates		Large Estates ³		Small Estates ⁴	Grand Total
	Number	Taxes	Number	Taxes	Taxes	Taxes
FY 2008	31	280.9	264	318.3	437.5	1,036.7
FY 2009	30	418.9	246	297.4	446.3	1,162.6
FY 2010	23	220.2	197	236.4	408.0	864.6
FY 2011	34	420.8	279	344.1	453.2	1,218.1
FY 2012	30	232.1	306	371.9	474.4	1,078.4
FY 2013	25	219.8	273	306.9	487.3	1,014.0
FY 2014	36	434.8	285	327.1	476.4	1,238.3
FY 2015	38	320.8	285	330.6	456.8	1,108.2
FY 2016	55	733.0	358	431.6	356.1	1,520.7
Estimated						
FY 2017	47	480.0	345	425.0	209.0	1,114.0
FY 2018	37	425.0	350	440.0	85.0	950.0

¹ Payment of at least \$25 million.

² Payment of at least \$4 million, but less than \$25 million.

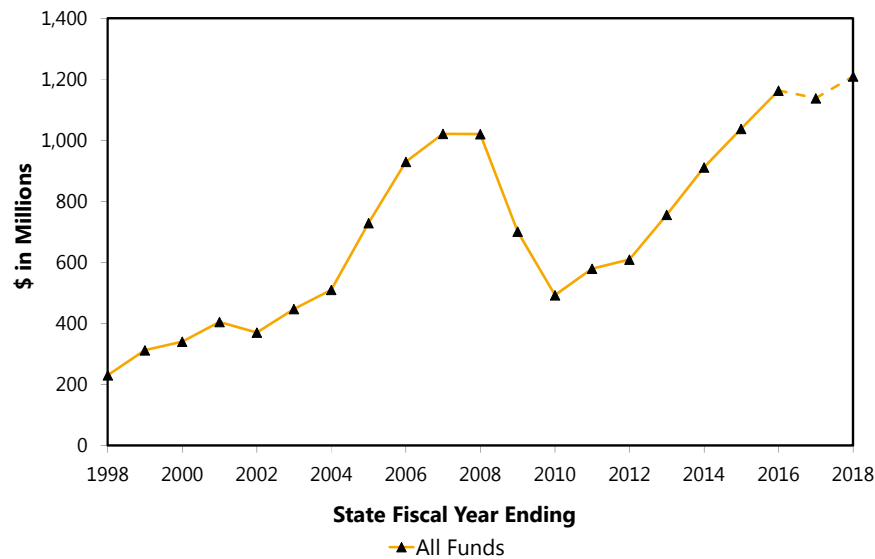
³ Payment of at least \$0.5 million, but less than \$4 million.

⁴ Payment less than \$0.5 million. (Small estates include all CARTS less all refunds.)

REAL ESTATE TRANSFER TAX (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	1,163.1	1,138.0	(25.1)	(2.2)	1,210.0	72.0	6.3
All Funds	1,163.1	1,138.0	(25.1)	(2.2)	1,210.0	72.0	6.3

Note: Totals may differ due to rounding.

Real Estate Transfer Tax Receipts History and Estimates



REAL ESTATE TRANSFER TAX BY FUND (millions of dollars)					
	Capital Projects Funds ¹	Gross Debt Service Funds ²	Refunds	Net Debt Service Funds ²	All Funds Receipts
FY 2008	212	810	1	809	1,021
FY 2009	237	465	1	464	701
FY 2010	199	295	1	294	493
FY 2011	119	461	0	461	580
FY 2012	119	492	1	491	610
FY 2013	119	637	0	637	756
FY 2014	119	793	1	792	911
FY 2015	119	919	0	919	1,038
FY 2016	119	1,044	0	1,044	1,163
Estimated					
FY 2017	119	1,020	1	1,019	1,138
FY 2018					
Current Law	119	1,086	1	1,085	1,204
Proposed Law	119	1,092	1	1,091	1,210

¹ Environmental Protection Fund.
² Clean Water/Clean Air Bond Debt Service Fund.

Proposed Legislation

Legislation proposed with this Budget would:

- Impose the real estate transfer tax on the transfer of a real estate business interest; and
- Close the real estate transfer tax loophole.

Description

Tax Base and Rate

The New York State real estate transfer tax is imposed by Article 31 of the Tax Law on each conveyance of real property or interest therein, when the consideration exceeds \$500, at a rate of \$4 per \$1,000 of consideration (price). The tax became effective August 1, 1968. Prior to May 1983, the rate was \$1.10 per \$1,000 of consideration. Effective July 1, 1989, an additional 1 percent tax was imposed on residential conveyances for which the consideration is \$1 million or more.

Administration

Typically, the party conveying the property (grantor) is responsible for payment of the tax, either through the purchase of adhesive documentary stamps, by the use of a metering machine, or through other approaches provided by the Commissioner of Taxation and Finance.

For deeded transfers, the tax is paid to a recording agent (generally the county clerk). For non-deeded transactions, payments are made directly to the Commissioner of Taxation and Finance ("central office" collections). All payments are due to the recording agent within 15 days of the transfer. For counties with more than \$1.2 million in liability during the previous calendar year, payments received between the first and fifteenth day of the month are due to the Commissioner by the twenty-fifth day of the same month. Payments received in such counties between the sixteenth and the final day of the month are due to the Commissioner by the tenth day of the following month. Payments from all other counties are due to the Commissioner by the tenth day of the month following their receipt. Although the county payment schedule is statutory, it is not useful for predicting monthly cash flows, due to the unpredictable payment behavior of some large counties.

Tax Expenditures

The tax rate imposed on conveyances into new or existing real estate investment trusts (REITs) is \$2 per \$1,000 of consideration. New York State (including agencies, instrumentalities, subdivisions, and public corporations), the United States (including agencies and instrumentalities), and the United Nations are exempt. If an exempt entity is the grantor in a transfer, the tax burden falls upon the grantee. Other significant exemptions from the tax are: conveyances pursuant to the Federal bankruptcy act and mere change of identity conveyances. A deduction from taxable



Real Estate Transfer Tax

consideration is allowed for any lien or encumbrance remaining at the time of sale involving a one, two, or three-family house or individual residential condominium unit.

Significant Legislation

Significant statutory changes to the real estate transfer tax since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2013		
START-UP NY	Established tax-free zones on or near qualifying university and college campuses. Qualifying businesses operating within such zones are exempt from taxation under the real estate transfer tax.	January 1, 2014

Tax Liability

Real estate transfer tax receipts are a function of the number and type of conveyances and the consideration per conveyance. Conveyances and prices are largely determined by mortgage rates, vacancy rates and inflation. The Manhattan commercial real estate market, which has historically been subject to large swings in demand and capacity, can have a significant impact on receipts.

For a more detailed discussion of the methods and models used to develop estimates and projections for the real estate transfer tax, please see the *Economic, Revenue, and Spending Methodologies* at www.budget.ny.gov.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$864.3 million, a decrease of \$2.1 million (0.2 percent) from the comparable period in the prior fiscal year.

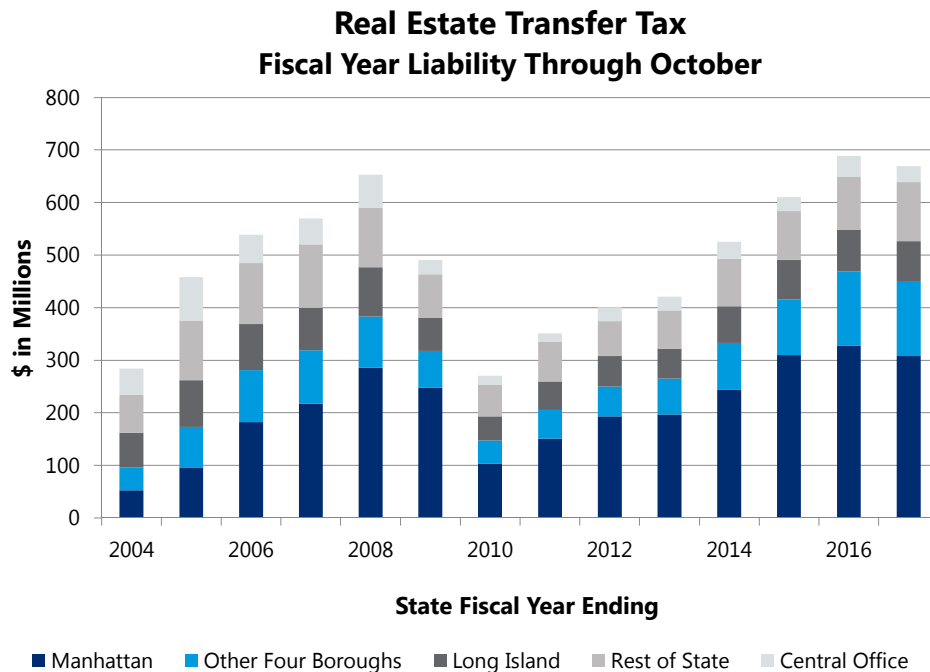
All Funds FY 2017 receipts are estimated to be \$1,138 million, a decrease of \$25.1 million (2.2 percent) from FY 2016.

New York's recent residential real estate experience has largely followed nationwide trends, though at a more accelerated pace, driven by the New York City market. The potential expiration of New York's 421-a program (property tax abatement for affordable housing) caused a spin-up of building permits and housing starts that likely would have occurred in FY 2017 to take place in FY 2016. Through November 2016, both pending and closed sales have exhibited double digit growth compared to the same period in the prior year. New York City continues to exhibit growth in housing prices, but it has slowed compared to the record growth and levels that have

characterized recent years. While overall price indicators continue to increase, transaction volumes have declined slightly in New York City, pointing to a possible slowdown or cooling of the market. Mortgage rates remain relatively low, but are expected to tick up and inventory levels have been on the rise, as well. Statewide, the expectation for the remainder of the fiscal year is that market growth will be moderate compared to the same period in FY 2016.

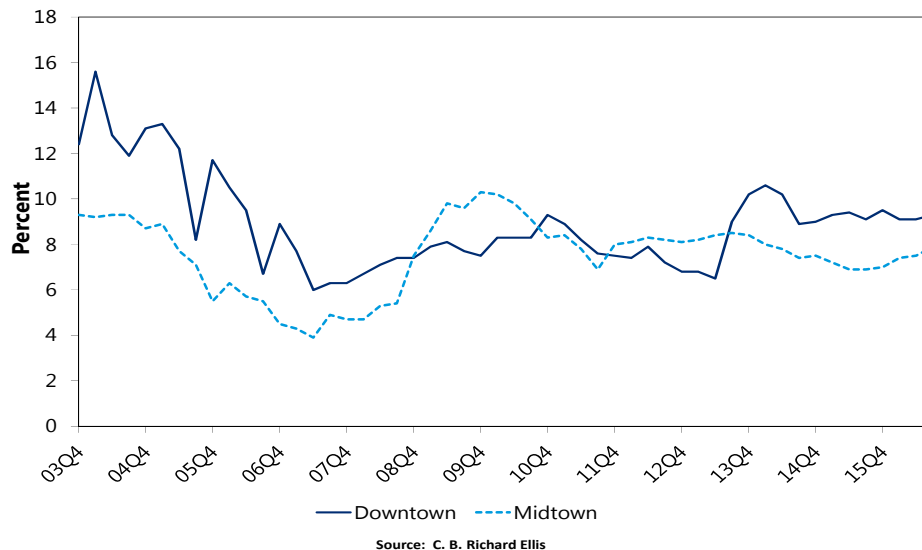
The mansion tax has played an important role in the receipts growth that has characterized recent fiscal years. In FY 2008, mansion tax receipts were \$316 million (31 percent of total receipts). In FY 2016, mansion tax receipts were \$352 million (30 percent of total receipts), in line with the 2008 pre-recession peak. Mansion tax receipts are expected to total \$388 million (34 percent of total receipts) in FY 2017.

The following chart compares tax liability by location through October since FY 2004.



In New York City, commercial real estate transfer tax collections and transactions have increased year-over-year. A strong local economy helped bolster demand for Manhattan's commercial real estate market in calendar year 2016. Overall, the Manhattan commercial market has slightly higher vacancies when compared to the prior year. Downtown's vacancy rates were 9.1 and 9.3 percent during the second and third quarter of 2016 compared to 9.4 and 9.1 percent during the same period in 2015. Midtown rates increased from 6.9 and 6.9 percent to 7.5 and 7.9 percent during the same period.

Vacancy Rates in Manhattan



FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$1,210 million, an increase of \$72 million (6.3 percent) from FY 2017. This includes \$6 million from Budget proposals that impose the real estate transfer tax on the transfer of a real business interest and close the mansion tax loophole.

The short term outlook for the housing market is based upon a number of factors, including mortgage rates continuing to slowly rise, a moderate loosening of credit standards and continued slow and steady recovery of the overall economy. Average existing home prices are expected to grow steadily compared to FY 2017.

In FY 2018, modest growth in REIT and other commercial activity is expected, following recent years of significant price increases and record sales volumes. The continuing diversification of the NYC economy is likely to positively impact the commercial market and demand for office space in the coming years.

General Fund

The General Fund receives no direct deposit of real estate transfer tax receipts.

Other Funds

A statutory annual amount of real estate transfer tax receipts of \$119.1 million is deposited into the Environmental Protection Fund. The remaining real estate transfer tax receipts amount is deposited into the Clean Water/Clean Air Fund for debt service. The balance of the Clean Water/Clean Air Fund not needed for debt service is transferred into the General Fund.

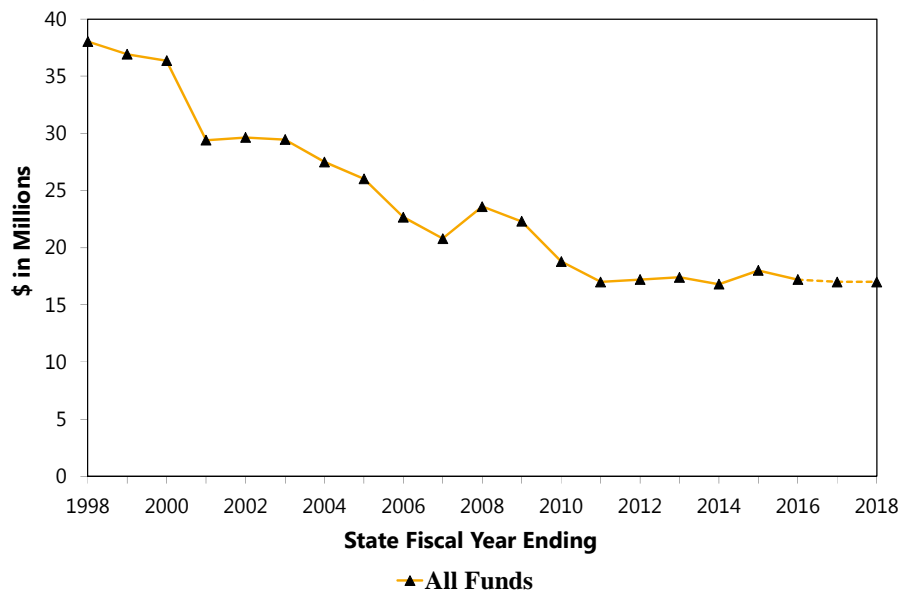
Pari-Mutuel Taxes



PARI-MUTUEL TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	17.2	17.0	(0.2)	(1.2)	17.0	0.0	0.0
Other Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Funds	17.2	17.0	(0.2)	(1.2)	17.0	0.0	0.0

Note: Totals may differ due to rounding.

Pari-Mutuel Taxes Receipts History and Estimates



PARI-MUTUEL TAXES BY FUND (thousands of dollars)				
	General Fund			All Funds Receipts
	Flat	Harness	OTB	
FY 2008	8,287	672	14,621	23,580
FY 2009	7,602	589	14,110	22,301
FY 2010	6,710	669	11,439	18,818
FY 2011	7,355	661	9,024	17,040
FY 2012	10,903	589	5,706	17,198
FY 2013	11,407	593	5,416	17,416
FY 2014	11,039	538	5,244	16,821
FY 2015	12,428	482	5,128	18,038
FY 2016	11,423	466	5,293	17,182
Estimated				
FY 2017	11,200	500	5,300	17,000
FY 2018				
Current Law	11,200	500	5,300	17,000
Proposed Law	11,200	500	5,300	17,000

Proposed Legislation

Legislation proposed with this Budget would extend certain tax rates and certain simulcasting provisions for one year.

Description

Tax Base and Rate

The State has levied taxes on pari-mutuel wagering activity conducted at horse racetracks since 1940. There are numerous tax rates imposed on wagering on horse races, which varies depending upon the type of racing, the type of wager (regular, multiple, or exotic) and location at which it is placed.

Receipts are broken down into three categories:

- Flat: There are four thoroughbred (“flat”) facilities including Finger Lakes, Aqueduct, Belmont and Saratoga. In 2008, the State awarded a 25-year license to the New York Racing Association (NYRA) to operate Aqueduct, Belmont, and Saratoga Racetracks;
- Harness: There are seven harness tracks located in Batavia, Buffalo, Monticello, Saratoga, Tioga, Vernon and Yonkers; and
- Off-track Betting (OTB): There are operational OTBs in five regions (Capital District, Catskill, Nassau, Suffolk and Western). In December 2010, the New York City OTB ceased pari-mutuel wagering operations after failure to reach an agreement on a restructuring plan to bring the corporation out of bankruptcy. Since that time, the statewide handle from OTBs has declined from over 75 percent to 40 percent in 2015.

To promote industry growth, the State has authorized higher take-outs to support capital improvements at non-NYRA tracks and, more importantly, reduced its on-track tax rates by as much as 90 percent at thoroughbred and harness tracks, authorized the expansion of simulcasting at racetracks and OTB facilities, allowed in-home simulcasting experiments and telephone betting, lowered the tax rates on simulcast wagering, reduced tax rates on NYRA bets, and directed a portion of video lottery gaming receipts to be used for purse enhancements and for the breeders’ fund.

Administration

The New York State Gaming Commission has general jurisdiction over all horse racing activities and all pari-mutuel betting activities, both on-track and off-track, in the State and over the corporations, associations, and persons engaged in gaming activities. Racetracks and OTBs calculate the pari-mutuel tax owed to the State from the portion of the commission (the “takeout”) withheld from wagering pools (the “handle”) and then remit the taxes to the Department of Taxation and Finance as prescribed by law.

Significant Legislation

Significant statutory changes to pari-mutuel taxes since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2013		
Market Origin Fee	Provided for the regulation of out-of-state advanced deposit wagering (ADW) and imposed a Market Origin Fee equal to five percent of wagers taken by out-of-state ADWs from New York residents. Five percent of the Market Origin Fee is transferred to the Department of Taxation and Finance to be treated as pari-mutuel taxes.	January 1, 2014

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$12.9 million, a decrease of \$1.1 million (7.6 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$17 million, a decrease of \$0.2 million (1.2 percent) from FY 2016. OTBs and harness track wagering receipts are estimated to be slightly higher than receipts in the prior fiscal year. Based on results-to-date, thoroughbred on-track receipts are estimated to be \$11.2 million.

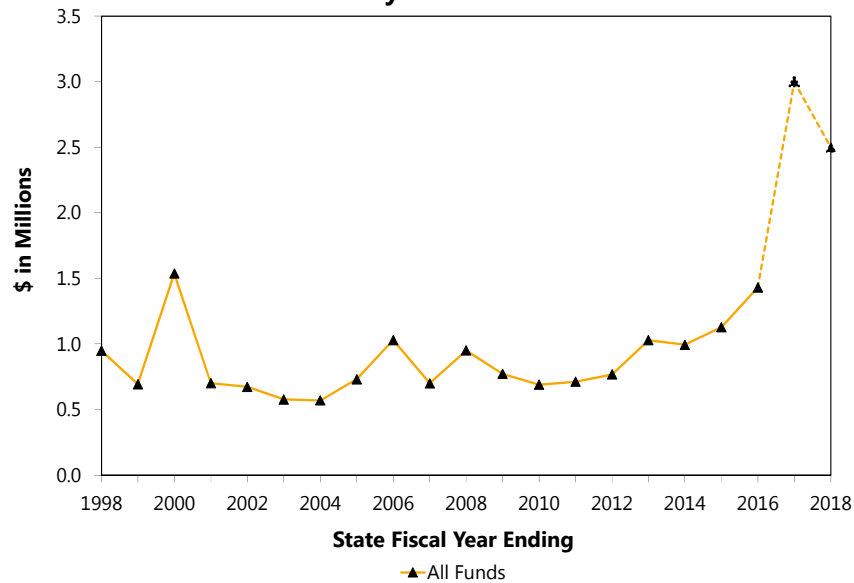
FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$17 million, no change from FY 2017.

OTHER TAXES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	1.4	3.0	1.6	114.3	2.5	(0.5)	(16.7)
Other Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Funds	1.4	3.0	1.6	114.3	2.5	(0.5)	(16.7)

Note: Totals may differ due to rounding.

Other Taxes Receipts History and Estimates



OTHER TAXES BY FUND (thousands of dollars)			
	General Fund		All Funds
	Admissions	Exhibitions	Receipts
FY 2008	370	581	951
FY 2009	369	404	773
FY 2010	340	350	690
FY 2011	352	361	713
FY 2012	355	413	768
FY 2013	371	658	1,029
FY 2014	350	645	995
FY 2015	501	627	1,128
FY 2016	554	871	1,425
Estimated			
FY 2017	540	2,460	3,000
FY 2018			
Current Law	700	1,800	2,500
Proposed Law	700	1,800	2,500

Proposed Legislation

No new legislation is proposed with this Budget.

Description

Tax Base and Rate

Racing Admissions Tax – A tax is levied on the charge for admissions to racetracks and simulcast theaters throughout the State. The racing admissions tax rate is 4 percent of the admissions charge.

Authorized Combative Sports Tax – Two tax rates including:

- A 3 percent tax on gross receipts from boxing and wrestling exhibitions, including receipts from broadcast and motion picture rights.
- Effective September 1, 2016, for all other authorized combative sports, a tax of 8.5 percent of the admissions charge and 3 percent on broadcasting rights, with the broadcasting portion limited to \$50,000 annually.

Administration

The Department of Taxation and Finance is responsible for collecting the receipts of the racing admissions tax and the authorized combative sports tax.

Tax Liability

The major factors that affect racing admissions tax liability are the number of customers who attend on-track races and the price of admission. Customer volume is dependent on factors such as the weather and competition from other types of entertainment.

The authorized combative sports tax can be affected by the importance of the events held in a given fiscal year and by the degree of competition from other types of entertainment venues.

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$2.4 million, an increase of \$1.2 million (98.4 percent) from the comparable period in the prior fiscal year. All Funds FY 2017 receipts are

estimated to be \$3 million, an increase of \$1.6 million (114.3 percent) from FY 2016. This increase assumes two premier combative sports events in FY 2017.

FY 2018 Projections

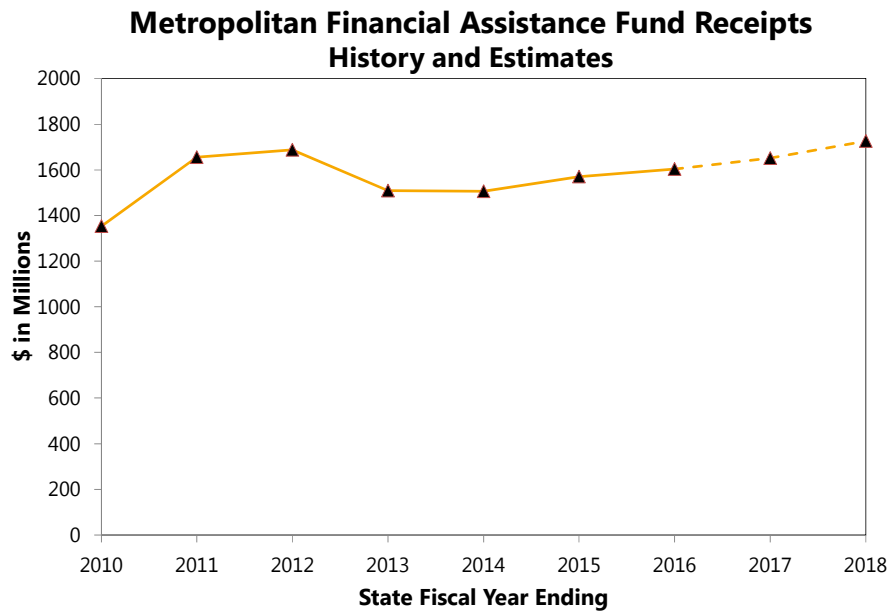
All Funds FY 2018 receipts are projected to be \$2.5 million, a decrease of \$0.5 million (16.7 percent) from FY 2017. This decrease assumes one premier combative sports event takes place in FY 2018.

Metropolitan Transportation Authority Financial Assistance Fund Receipts



METROPOLITAN FINANCIAL ASSISTANCE FUND RECEIPTS (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	1,604.2	1,652.0	47.8	3.0	1,726.0	74.0	4.5
All Funds	1,604.2	1,652.0	47.8	3.0	1,726.0	74.0	4.5

Note: Totals may differ due to rounding.



METROPOLITAN FINANCIAL FUND (millions of dollars)					
	Mobility Tax	MVF	ART (MCTD)	Taxicab	All Funds Receipts
FY 2009	0	0	0	0	0
FY 2010	1,228	88	24	13	1,353
FY 2011	1,360	180	35	81	1,656
FY 2012	1,376	186	39	87	1,688
FY 2013	1,205	180	41	83	1,509
FY 2014	1,204	174	43	85	1,506
FY 2015	1,271	171	45	82	1,570
FY 2016	1,306	178	47	73	1,604
Estimated					
FY 2017	1,361	178	49	64	1,652
FY 2018					
Current Law	1,421	189	52	64	1,726
Proposed Law	1,421	189	52	64	1,726



Metropolitan Transportation Authority Financial Assistance Fund Receipts

Proposed Legislation

No new legislation is proposed with this Budget.

Description

The Metropolitan Transportation Authority Financial Assistance Fund (MTAFAF) is under the joint custody of the Commissioner of Taxation and Finance and the State Comptroller. Monies in this special fund are to be kept separately from and not be commingled with any other monies in the joint or sole custody of the State Comptroller or the Commissioner of Taxation and Finance. The fund contains all monies collected, credited or transferred to it from any other fund, account or source, including the revenues derived from the following sources:

- The metropolitan commuter transportation mobility tax;
- The supplemental tax on passenger car rentals in the Metropolitan Commuter Transportation District (MCTD);
- The tax on New York City taxicab and hail vehicle trips; and
- Supplemental motor vehicle fees: a supplemental learner permit/license fee and registration fee in the MCTD.

Revenues generated from the mobility tax are directed to the Mobility Tax Trust Account of the MTA Financial Assistance Fund. Revenues generated from supplemental motor vehicle fees, the supplemental tax on car rentals, and the tax on taxicab rides are directed to the MTA Aid Trust Account of the MTA Financial Assistance Fund.

Metropolitan Commuter Transportation Mobility Tax

Tax Base and Rate

Article 23 of the Tax Law imposes the metropolitan commuter transportation mobility tax on certain employers and self-employed individuals engaging in business within the Metropolitan Commuter Transportation District. The MCTD consists of New York City (NYC) and the counties of Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester. Article 23 applies to:

- Employers (other than exemptions noted below); and
- Self-employed individuals (other than exemptions noted below).

The mobility tax is imposed at a rate of 0.34 percent of an employer's payroll expense for all covered employees for each calendar quarter. For individuals with net earnings from self-employment, the tax is 0.34 percent of the net earnings from self-employment allocated to the MCTD for the tax year.

Metropolitan Transportation Authority

Financial Assistance Fund Receipts



Entities exempt from the mobility tax are as follows:

- 1) An employer that is an agency or instrumentality of the United States, the United Nations, or an interstate agency or public corporation created under an agreement or compact with another state or Canada (for example, the Port Authority of New York and New Jersey);
- 2) All elementary and secondary schools; and
- 3) All public libraries, free association libraries, and public library systems (effective January 1, 2016).

Credits: no tax credit may be used to reduce the amount of mobility tax due.

No mobility tax is due from employers with a quarterly payroll of \$312,500 or less; individuals with net earnings from self-employment allocated to the MCTD of \$50,000 or less; and the non-wage portion of S corporation member income. Employers with quarterly payroll greater than \$312,500, but no greater than \$375,000 are taxed at a reduced rate of 0.11 percent and employers with a quarterly payroll greater than \$375,000 but no greater than \$437,500 are taxed at a reduced rate of 0.23 percent.

Administration

Taxpayers who make electronic withholding tax payments must make their mobility tax payments at the same time. These payments are due within three days of the respective payroll date. Taxpayers who make quarterly withholding payments and those with self-employment income must make quarterly payments. For employers, these payments are due on the last business day of the month following the end of the calendar quarter in which the taxpayer made the payroll (e.g., January 31 for the calendar quarter ending December 31). Taxpayers with self-employment income must make quarterly estimated MCTMT payments in conjunction with personal income tax quarterly estimated payments.

Significant Legislation

Significant statutory changes to the mobility tax since 2011 are summarized below:

Subject	Description	Effective Date
Legislation Enacted in 2011		
Tax Rate and Exemption Changes	Expanded the annual tax exemption threshold for self-employment from \$10,000 to \$50,000 annually.	January 1, 2012
	Exempted all elementary and secondary schools from the tax; exempted employers with quarterly payroll not greater than \$312,500; lowered the rate on employers with quarterly payroll greater than \$312,500 but no greater than \$375,000 to 0.11 percent; and lowered the rate on employers with quarterly payroll greater than \$375,000 but no greater than \$437,500 to 0.23 percent.	April 1, 2012



Metropolitan Transportation Authority Financial Assistance Fund Receipts

Legislation Enacted in 2014

Filing Due Date Alignment with PIT for Self Employed	Changed the due dates for filing returns and making estimated tax payments for self-employed individuals subject to the MCTMT to the same due dates as PIT estimated payments and final returns.	January 1, 2015
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Legislation Enacted in 2015

Exemption Changes	Exempted all public libraries, free association libraries, and public library systems from the mobility tax.	January 1, 2016
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FY 2017 Estimates and FY 2018 Projections

Preliminary mobility tax receipts through December are \$923 million, an increase of \$33.5 million (3.8 percent) from the comparable period in the prior fiscal year. Mobility tax FY 2017 receipts are estimated to be \$1,361 million, an increase of \$54.8 million (4.2 percent) from FY 2016, reflecting moderate wage and self-employment income growth. Mobility tax FY 2018 receipts are projected to be \$1,421 million, an increase of \$60 million (4.4 percent) from FY 2017.

Supplemental Tax on Passenger Car Rentals

A supplemental tax of 5 percent is imposed on the rental of a passenger vehicle in the MCTD. The tax base and administration of this tax are the same as the State auto rental tax.

FY 2017 Estimates and FY 2018 Projections

Preliminary auto rental tax receipts through December are \$39.9 million, a decrease of \$0.7 million (1.8 percent) from the comparable period in the prior fiscal year.

Auto rental tax FY 2017 receipts are estimated to be \$49 million, an increase of \$2 million (4.3 percent) from FY 2016. Auto rental tax FY 2018 receipts are projected to be \$52 million, an increase of \$3 million (6.1 percent) from FY 2017.

Tax on New York City Taxicab and Hail Vehicle Trips

Significant Legislation

There has been no significant legislation with the NYC taxicabs and hail vehicle trips since 2011.

Tax Base and Rate

A tax of 50 cents is imposed on all NYC taxicab and hail vehicle trips that originate in NYC and end in the MCTD. The quarterly period and filing due dates are:

Quarterly Period	Due Date for Filing Return
January through March	April 20
April through June	July 20
July through September	October 20
October through December	January 20

Metropolitan Transportation Authority

Financial Assistance Fund Receipts



FY 2017 Estimates and FY 2018 Projections

Preliminary taxicab/hail tax receipts through December are \$49.3 million, a decrease of \$6.2 million (11.2 percent) from the comparable period in the prior fiscal year.

Taxicab/hail tax FY 2017 receipts are estimated to be \$64 million, a decrease of \$9.1 million (12.4 percent) from FY 2016. The decrease reflects an increase in the use of alternative transportation options not subject to the taxicab/hail tax in New York City.

Taxicab/hail tax FY 2018 receipts are projected to be \$64 million, no change from FY 2017.

Supplemental Motor Vehicle Fees

There is a supplemental motor vehicle license fee of one dollar per six month interval and a supplemental registration fee of \$25 in the MCTD. The timing and administration of these fees are the same as the State fee.

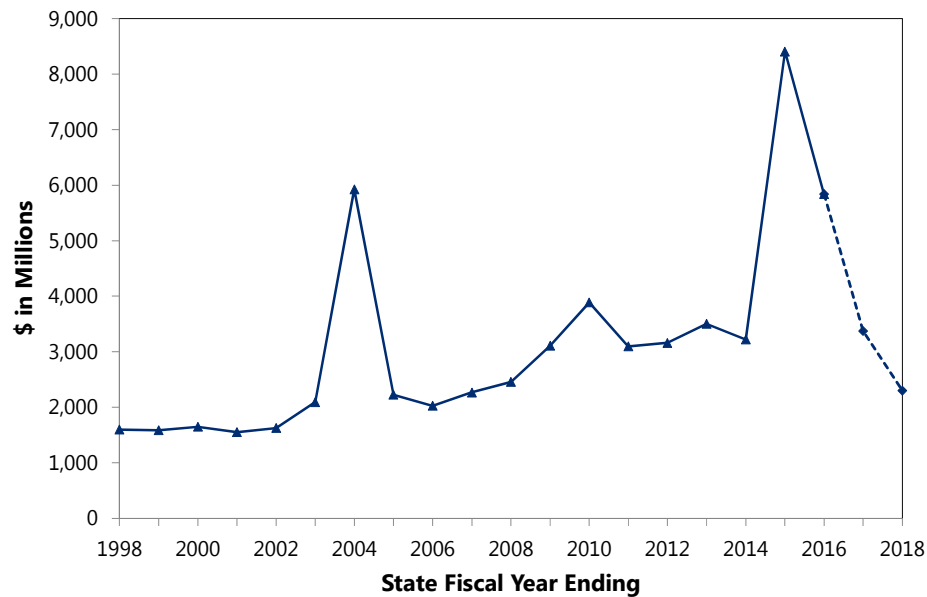
FY 2017 Estimates and FY 2018 Projections

Preliminary motor vehicle fee receipts through December are \$138.7 million, an increase of \$1.2 million (0.9 percent) from the comparable period in the prior fiscal year. Motor vehicle fee FY 2017 receipts are estimated to be \$178 million, an increase of \$0.2 million (0.1 percent) from FY 2016. Motor vehicle fee FY 2018 receipts are projected to be \$189 million, an increase of \$11 million (6.2 percent) from FY 2017. This increase is primarily due to FY 2018 representing a peak year during the eight-year driver's license renewal cycle.

MISCELLANEOUS RECEIPTS - GENERAL FUND (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Percent Change
General Fund	5,842.0	3,374.0	(2,468.0)	(42.2)	2,298.0	(1,076.0) (31.9)

Note: Totals may differ due to rounding.

Miscellaneous Receipts History and Estimates



MISCELLANEOUS RECEIPTS - GENERAL FUND (millions of dollars)					
	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimated	FY 2018 Projected
Licenses, Fees, Etc.	622.3	588.0	630.0	619.0	661.0
Abandoned Property	532.8	652.0	527.0	435.0	450.0
Reimbursements	281.0	266.0	232.0	263.0	302.0
Investment Income	0.7	4.0	13.0	20.0	13.0
ABC License Fees	64.6	61.0	66.0	59.0	65.0
Motor Vehicle Fees	1.7	191.0	194.0	178.0	228.0
Other Transactions	1,716.3	6,648.0	4,180.0	1,800.0	579.0
Total	3,219.4	8,410.0	5,842.0	3,374.0	2,298.0

Note: Totals may differ due to rounding.

Proposed Legislation

Legislation proposed with this Budget would:

- Expand the e-911 surcharge on wireless phones to include pre-paid cellular phones and cards;
- Establish a Motion Picture Theater alcohol permit; and
- Establish a Taste-NY alcohol permit.

Description

Miscellaneous receipts cover a broad range of unrelated revenue sources with significant recurring income derived from abandoned property, investment earnings, fees, licenses, fines, and various reimbursements to the State's General Fund. Each year, reported receipts may be significantly impacted by various nonrecurring transactions.

Significant Legislation

Significant statutory changes to General Fund Miscellaneous Receipts since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Abandoned Property	Reduced dormancy periods on various abandoned property items from five or six years to three years.	March 31, 2011
Legislation Enacted in 2012		
18-a Utility Assessment	Lowered and phased out the temporary PSL Article 18-a utility assessment.	March 29, 2012
Traffic Ticket Plea Bargaining	Established \$25 State surcharge to a series of lesser violations that speeding tickets are frequently pled down to, and increased the State surcharge on most other vehicle and traffic violations by \$8.	March 29, 2012
Legislation Enacted in 2013		
18-a Utility Assessment	Extended the temporary PSL Article 18-a utility assessment.	April 1, 2013
Legislation Enacted in 2014		
Motor Vehicle Fees	Simplified the fund distribution of Motor Vehicle Fee Receipts.	March 31, 2014
Legislation Enacted in 2015		
Fee Repeal	Repealed 16 nuisance fees charged by various State agencies.	April 1, 2015

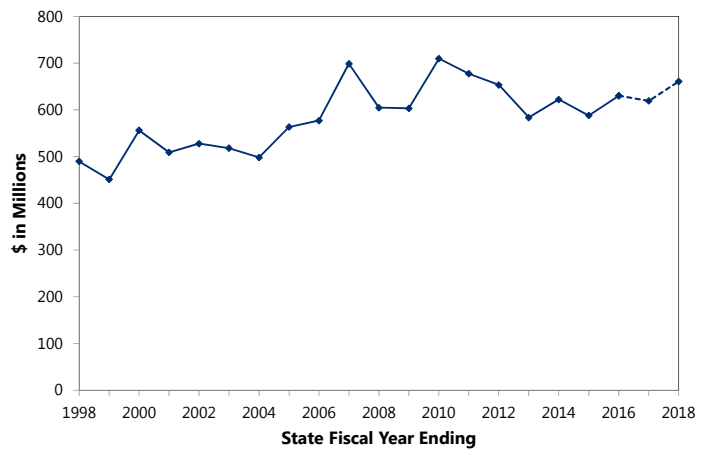
Components of Miscellaneous Receipts

Historically, General Fund license and fee revenues have grown modestly and fairly consistently, aside from minimal peaks and troughs associated with law changes. In FY 2017 and FY 2018, revenues are expected to remain relatively constant.

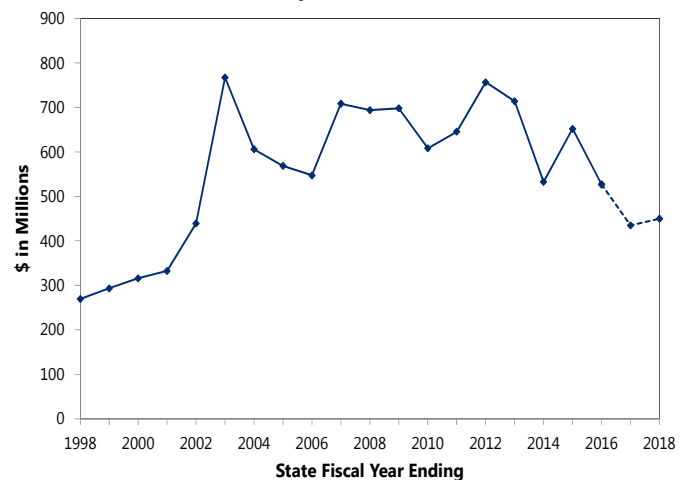
Historically, unclaimed and abandoned property revenue has remained relatively stable with minimal growth, aside from spikes in FY 2003 and FY 2004. This property was associated with the sale of stocks as well as a reduction in the dormancy period of uncashed checks. Unclaimed and abandoned property revenue increased significantly in FY 2012 due to 2011 legislation that reduced dormancy periods on several items, then decreased in FY 2013 and FY 2014 as more claims were paid. In FY 2017 and FY 2018, revenues are expected to decline as fewer dormant securities are remitted to NYS as a result of recent SEC regulations accelerating customer contact requirements with holders of dormant accounts.

Historically, reimbursements of General Fund expenses and revenue advances have remained on a relatively constant three year cycle with occasional exceptions. Receipts in FY 2017 and FY 2018 are expected to maintain historical trends. In FY 2006, a portion of General Fund Federal Grants was reclassified to this category.

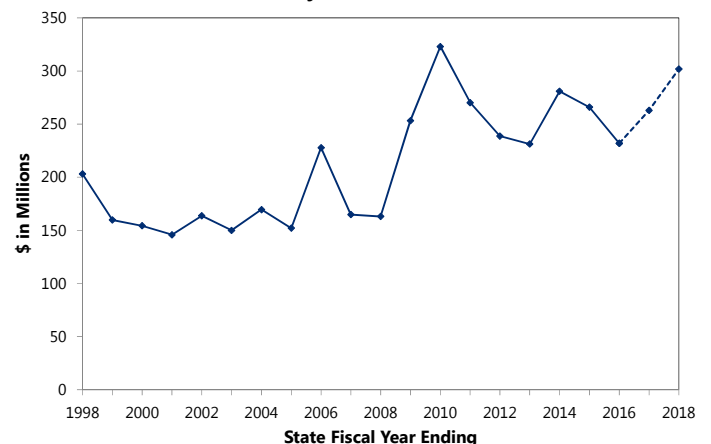
**Licenses and Fees
History and Estimates**



**Unclaimed and Abandoned Property
History and Estimates**



**Reimbursements
History and Estimates**

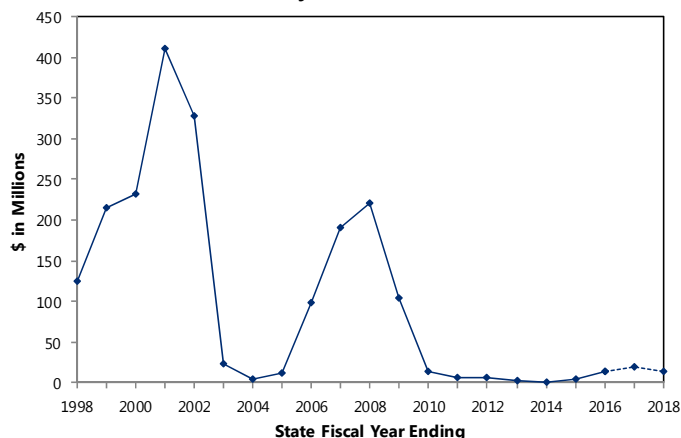


Miscellaneous Receipts General Fund



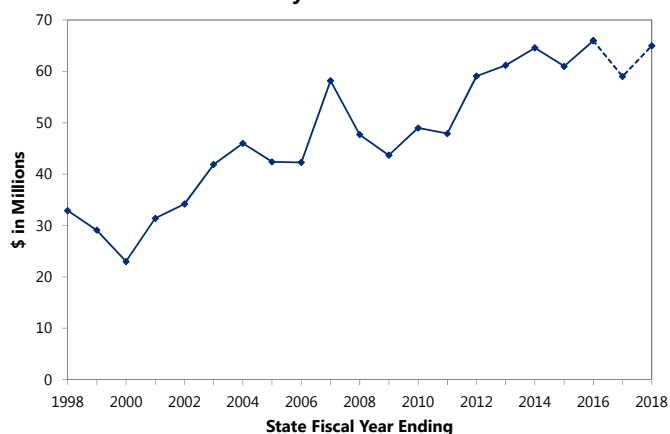
Trends in investment income are directly related to General Fund Account balances and interest rates. For example, the large increases in FY 2001 and FY 2007 followed by the severe drops in FY 2003 and FY 2010 were the result of the impact of economic growth and subsequent recession on State finances; balances declined and interest rates declined sharply. The forecast for investment income is expected to remain relatively low and constant in FY 2017 and FY 2018 as both balances and interest rates slowly rise.

**Investment Income
History and Estimates**



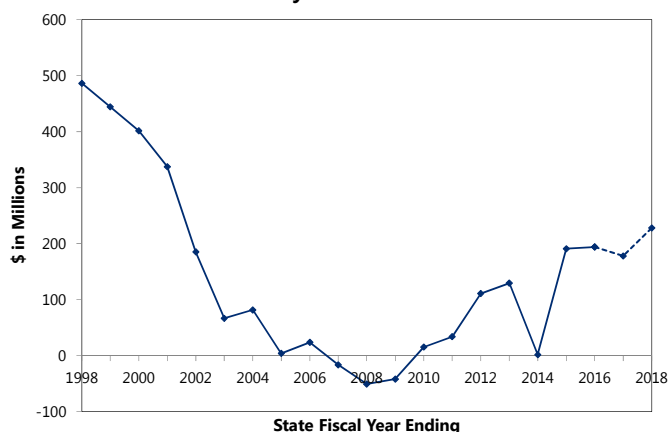
Historically, the number of alcoholic beverage control licenses has remained relatively constant. However, changes in license fees and length of licenses have caused variation in receipts. Overall this revenue is cyclical and based on license renewal patterns. In FY 2017 revenue is expected to decrease slightly then increase in FY 2018.

**Alcohol Beverage Control License Fees
History and Estimates**

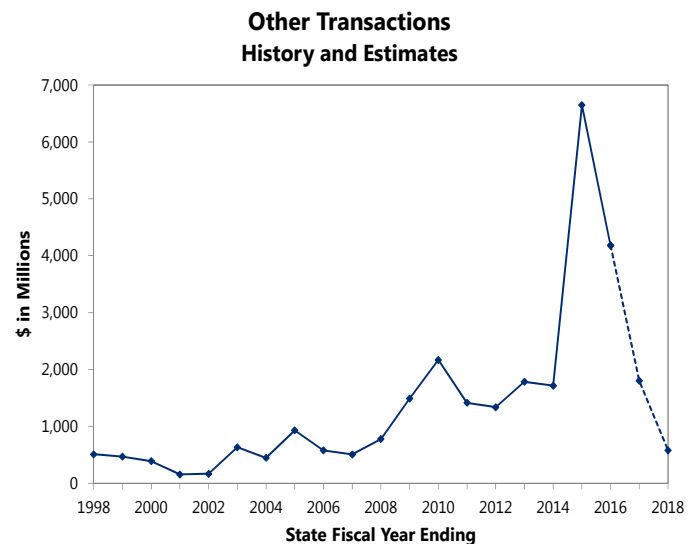


From FY 2006 to FY 2014, \$169.4 million of General Fund receipts were swept into the Dedicated Transportation Funds. Effective FY 2015, this fund sweep was replaced with generic transfers to these Dedicated Funds. In addition, all revenue from the Driver Responsibility Assessment is now directed to the Dedicated Highway and Bridge Trust Fund. This law change had no net impact on the Financial Plan. For a further discussion of motor vehicle fees, please see the Motor Vehicle Fees section of this document.

**Motor Vehicle Fees
History and Estimates**



Other transactions are an unrelated grouping of transactions and payments, which do not fall under the other miscellaneous receipts categories. Differences in collections year-to-year are the result of large, unusual payments to the State, including: bond issuance charges; a supplemental wireless surcharge; SONYMA, timing-of-payments pursuant to Section 18a of Public Service Law, and atypical fines. In FY 2015 and FY 2016, other transactions received \$4.9 billion and \$3.3 billion, respectively, in one-time monetary settlements reached by the Department of Financial Services (DFS), Department of Law, and Manhattan District Attorney's Office. For more information on settlements, please see the Monetary Settlements section in the 5 Year Financial Plan volume of this publication.



FY 2017 Estimates

General Fund FY 2017 receipts are estimated to be \$3.374 billion, a decrease of \$2.5 billion (42.2 percent) from FY 2016 collections. The FY 2017 estimate includes: \$851 million in atypical fines and civil recoveries; \$619 million in fees, licenses, fines, royalties, and rents; \$435 million in unclaimed and abandoned property; \$263 million in reimbursements; \$250 million in released State Insurance Fund reserves; \$183 million in realized refunding savings from the city of New York associated with Sales Tax Asset Receivable Corporation (STARC) bonding accruals; \$178 million in receipts from motor vehicle fees; \$123 million in receipts from the temporary utility assessment; \$96 million in additional bond issuance charges and cost recovery assessments; \$88 million in medical provider assessments; \$80 million in Bottle Bill proceeds; \$79 million from the supplemental wireless surcharge; \$59 million in receipts from alcohol beverage control license fees; \$23 million in resources transferred from the New York State Energy Research and Development Authority (NYSERDA) to the General Fund from proceeds collected from the auction or sale of carbon dioxide emissions under the Regional Greenhouse Gas Initiative (RGGI); \$20 million in payments from the New York Power Authority; \$20 million in interest earnings on short-term investments and bank accounts (this amount is net of certain expenses incurred in providing banking services to various State agencies); and \$7 million for certain health care revenues, pursuant to the proposed consolidation of operations from the DOH offset accounts to the General Fund as part of an ongoing effort to simplify the State accounting structure.

FY 2018 Projections

Miscellaneous receipts are projected to be \$2.298 billion in fiscal year FY 2017, a decrease of \$1.1 billion (31.9 percent) from FY 2017 estimates. The FY 2018 projection includes: \$661 million in fees, licenses, fines, royalties, and rents; \$450 million in unclaimed and abandoned property; \$302 million in reimbursements; \$228 million in receipts from motor vehicle fees; \$200 million in realized refunding savings from the city of New York associated with Sales Tax Asset Receivable Corporation (STARC) bonding accruals; \$98 million in additional bond issuance charges and cost recovery assessments; \$89 million in medical provider assessments; \$82 million from the supplemental wireless surcharge; \$80 million in Bottle Bill proceeds; \$65 million in receipts from alcohol beverage control license fees; \$23 million in resources transferred from the New York State Energy Research and Development Authority (NYSERDA) to the General Fund from proceeds collected from the auction or sale of carbon dioxide emissions under the Regional Greenhouse Gas Initiative (RGGI); \$13 million in interest earnings on short-term investments and bank accounts (this amount is net of certain expenses incurred in providing banking services to various State agencies); and \$7 million for certain health care revenues, pursuant to the proposed consolidation of operations from the DOH offset accounts to the General Fund as part of an ongoing effort to simplify the State accounting structure.

MISCELLANEOUS RECEIPTS - SPECIAL REVENUE FUNDS (millions of dollars)							
	FY 2016 Results	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	FY 2017 Change	Percent Change
State Fund	16,926	16,662	(264)	-1.6%	16,416	(246)	-1.5%
Federal Funds	191	235	44	23.0%	216	(19)	-8.1%
All Funds	17,117	16,897	(220)	-1.3%	16,632	(265)	-1.6%

Miscellaneous receipts deposited to special revenue funds represent 22 percent of total special revenue receipts, excluding transfers from other funds. These receipts include: SUNY tuition, fees, and patient income; revenues from lottery ticket sales and Video Lottery Terminals (VLTs) for supplemental education aid; health care surcharges, assessments, and conversion proceeds used to finance Health Care Reform Act (HCRA) programs; assessments on regulated industries, and a variety of fees and licenses. All of which are dedicated to support specific programs. The following table summarizes miscellaneous receipts for FY 2016 results through projected FY 2018.

MISCELLANEOUS RECEIPTS - SPECIAL REVENUE FUNDS (millions of dollars)			
	FY 2016	Estimated	
		FY 2017	FY 2018
HCRA	4,727	4,715	4,848
State University Income	4,561	4,292	4,494
Lottery and VLTs	3,472	3,436	3,301
Industry Assessments	686	825	830
Medicaid (non-HCRA)	833	852	832
Motor Vehicle Fees	431	385	396
All Other	2,407	2,392	1,931
Total	17,117	16,897	16,632

HCRA Financing

HCRA receipts include recurring surcharges and assessments on hospital revenues, physician procedures, a “covered lives” assessment paid by insurance carriers, a portion of cigarette tax revenues, and other revenues dedicated by statute, as well as proceeds from insurance company conversions. These resources help finance the State’s Medicaid program, workforce recruitment and retention, the Elderly Pharmaceutical Insurance Coverage (EPIC) program, Child Health Plus (CHP), Graduate Medical Education, AIDS programs, disproportionate share payments to hospitals and other various public health initiatives and the NYSOH Exchange.

State University Income

The majority of special revenue receipts that support SUNY's operations are provided by tuition, patient revenue, and user fees. SUNY's three teaching hospitals at Brooklyn, Stony Brook and Syracuse, as well as the Long Island Veterans' Home, receive patient revenue from third-party payers including Medicare, Medicaid, insurance companies, and individuals. User fees, which include fees for food, parking, career placement and recreation, are generated from service users; including students, faculty, staff, and the public. Other receipts primarily include interest earnings and fringe benefit recoveries from SUNY's other special revenue accounts.

Lottery

Receipts from the sale of lottery tickets and proceeds from VLTs at racetracks are used to support public education, as well as administrative costs associated with Lottery operations. The State Lottery is discussed in detail in a separate section.

Industry Assessments

State agencies funded entirely from assessments include the Department of Financial Services, the Public Service Commission, and the Workers' Compensation Board.

Medicaid

In addition to the General Fund, State Medicaid costs are financed by various Special Revenue Funds which include the HCRA Resources Fund (described above) and the Provider Assessments Fund, which is currently supported by a partially-reimbursable assessment of 6.8 percent on nursing home revenues and a 0.35 percent assessment on hospital and home care revenues.

Motor Vehicle Fees

Motor vehicle fees are imposed by the Vehicle and Traffic Law. In general, motor vehicles, motorcycles, trailers, semi-trailers, buses, and other types of vehicles operating in New York are required to be registered with the Department of Motor Vehicles. Numerous other fees, related to the processes of registration or licensing, are also components of motor vehicle fees. Examples are: fees for inspection and emission stickers; repair shop certificates; and insurance civil penalties. Motor Vehicle Fees are discussed in more detail in a separate section.

All Other

ALL OTHER COMPONENTS OF MISCELLANEOUS RECEIPTS (millions of dollars)		
	Estimated	
	FY 2017	FY 2018
Other Public Health	182	184
Environmental Conservation	200	183
Tribal State Compact	207	200
Labor	182	139
Other Education	120	120
Housing	121	116
Homeland Security	115	119
State Police	179	127
SUNY Dormitory	344	344
Commercial Gaming	30	266
All Other	712	133
Total Miscellaneous Receipts	2,392	1,931

This category includes fees, licenses, and other assessments collected by State agencies, primarily to support all or specific components of their operations. The major sources of all other miscellaneous receipts are detailed below.

Other public health receipts include reimbursement for patient care provided at the Department's health care facilities, regulatory fees, audit recoveries, and registration, testing and certification fees for various public health services.

Environmental Conservation fees include vehicle emission inspection fees and fees on regulated pollutants, sporting license fees, revenues from the sale of forest products, and recreational user fees.

Tribal State Compact receipts consist of all revenues resulting from tribal state compacts executed pursuant to Executive Law.

Labor receipts reflect fees received by the Department of Labor associated with the implementation of labor laws and regulations.

Other education miscellaneous revenue sources include professional licensing fees and disciplinary fines, teacher certification fees and filing fees on certain documents filed in county clerks' offices.

Miscellaneous Receipts

Special Revenue Funds



Housing receipts include income received from New York City and other cities associated with enforcement of housing laws and regulations.

Homeland Security and Emergency Services miscellaneous receipts consist of wireless telephone surcharge revenues collected by telephone companies pursuant to Tax Law.

State Police miscellaneous revenue sources include seized assets, fees for accident reports and an annual fee on insurance policies of all registered motor vehicles.

SUNY Dormitory revenue is generated by student rents of these facilities. All rental revenues initially flow to DASNY for the payment of debt service on SUNY Dormitory Facilities, after which the balance of rental revenues is credited to the State's SUNY Dormitory Income Fund to support other costs associated with SUNY Dormitory Facilities.

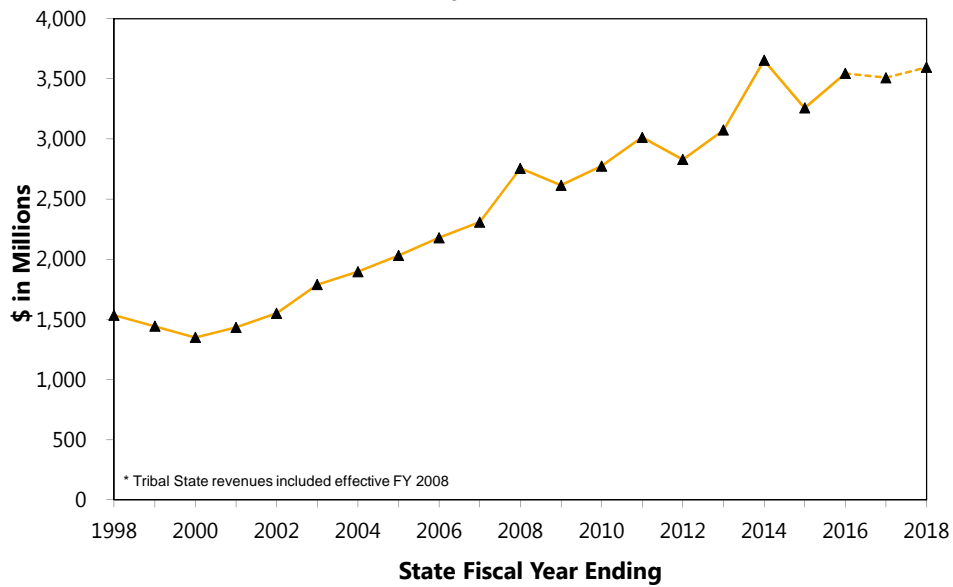
Commercial Gaming revenues represent licensing fee revenue collected by the Gaming Commission from licensed commercial gaming facilities. Commercial Gaming is discussed in more detail in a separate section.

Consistent with past years, the aggregate spending projections (i.e., the sum of all projected spending by individual agencies) in State Special Revenue Funds have been adjusted downward in all fiscal years, based on typical spending patterns and the observed variance between estimated and actual results over time. A corresponding downward adjustment is also made to miscellaneous receipts which is reflected in all other miscellaneous receipts.

MISCELLANEOUS RECEIPTS - GAMING (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Funds	3,695.6	3,508.6	(187.0)	(5.1)	3,595.4	86.8	2.5
All Funds	3,695.6	3,508.6	(187.0)	(5.1)	3,595.4	86.8	2.5

Note: Totals may differ due to rounding.

Gaming Receipts History and Estimates



GAMING RECEIPTS BY COMPONENT (millions of dollars)						
	Traditional Lottery	VLTs	Commercial Gaming	IFS	TSC	Total Receipts
FY 2008	2,116.9	490.8	N/A	N/A	148.0	2,755.7
FY 2009	2,109.1	434.9	N/A	N/A	71.3	2,615.3
FY 2010	2,152.2	492.5	N/A	N/A	129.6	2,774.3
FY 2011	2,108.2	906.6	N/A	N/A	0.0	3,014.8
FY 2012	2,147.4	681.7	N/A	N/A	0.0	2,829.1
FY 2013	2,217.0	857.0	N/A	N/A	0.0	3,074.0
FY 2014	2,235.0	937.7	N/A	N/A	481.9	3,654.6
FY 2015	2,190.6	906.8	N/A	N/A	160.9	3,258.3
FY 2016	2,350.7	961.2	151.0	N/A	232.7	3,695.6
Estimated						
FY 2017	2,322.0	958.2	18.4	3.0	207.0	3,508.6
FY 2018						
Current Law	2,301.0	958.2	134.2	4.0	200.0	3,597.4
Proposed Law	2,301.0	958.2	132.2	4.0	200.0	3,595.4

Note: Totals may differ due to rounding.

Proposed Legislation

Legislation proposed with this Budget would:

- Reprivatize the New York Racing Association;
- Extend the Video Lottery Gaming (VLG) vendor's capital awards program for one year;
- Extend Monticello Video Lottery Terminal (VLT) rates for one year; and
- Alter local gaming aid distribution.

Description

Gaming Miscellaneous Receipts includes traditional lottery, Video Lottery Terminal (VLT) games, commercial gaming, interactive fantasy sports (IFS) and Tribal State Compact (TSC).

Traditional Lottery

There are three types of traditional lottery games:

- Instant scratch-off games have either a 65 or 75 percent prize-payout (approximately 55 games are currently active with prices ranging from \$1 to \$25). In FY 2016, roughly 34 percent of the education contribution from traditional lottery games was derived from scratch-off games;
- Jackpot games include Mega Millions, Powerball, Lotto and Cash4Life. For Lotto, Mega Millions and Powerball games, the value of any top prize not won is added to the top prize in the subsequent drawing. In FY 2016, roughly 17 percent of the education contribution from traditional lottery games was derived from jackpot games; and
- Daily games include Numbers, Win 4, Quick Draw, Take 5 and Pick 10. Instant Win, Lucky Sum, Close Enough are offered as add-on games to Numbers and Win 4. The base top payout is \$500,000 in Pick 10 and \$100,000 in Quick Draw. In FY 2016, roughly 49 percent of the education contribution from traditional lottery games was derived from daily games.

There have also been short-run promotional lottery games, including the Raffle to Riches game in both FY 2007 and FY 2008, the Turkey Raffle held in November 2008, and the Halloween Millions Raffle in October 2013.

The table below shows the statutory distribution of lottery sales among prizes, revenue for education and the allowance for expenses related to administration of the games. Any unused administration revenue is earmarked for education.

PERCENT DISTRIBUTION OF LOTTERY SALES AND FREQUENCY OF DRAWINGS					
	Prizes	Education	Admin. Allowance	Inception Date	Frequency of Drawings
Cash4Life	55	30	15	2014	Monday and Thursday at 9:30 PM
Instant (65%)	65	10	15	1999	N/A
Instant (75%)	75	10	15	2002	N/A
Lotto	40	45	15	1976	Wednesday and Saturday at 11:21 PM
Mega Millions*	55	30	15	2002	Tuesday and Friday at 11:00 PM
Numbers	50	35	15	1980	Twice Daily
Pick 10	50	35	15	1988	Once Daily
Powerball*	55	30	15	2010	Wednesday and Saturday at 10:59 PM
Quick Draw	60	25	15	1995	Every four minutes
Take 5	50	35	15	1992	Once Daily
Win 4	50	35	15	1981	Twice Daily

* Mega Millions and Powerball currently offer a 50% prize payout.

VLT Games

There are currently VLT machines at Batavia Downs Gaming, Empire City Casino (Yonkers Raceway), Finger Lakes Gaming & Racetrack, Hamburg Gaming, Monticello Casino & Raceway, Resorts World Casino, Saratoga Casino, Tioga Downs Casino, and Vernon Downs Casino. Over 70 percent of the education contribution from VLTs is derived from Resorts World and Yonkers.

VLT games are authorized at certain thoroughbred and harness tracks; and Nassau and Suffolk Off-track Betting (OTB) are authorized to have one site each with up to 1,000 terminals. There are currently VLT machines at Batavia Downs Gaming, Empire City Casino (Yonkers Raceway), Finger Lakes Gaming & Racetrack, Hamburg Gaming, Monticello Casino & Raceway, Resorts World Casino, Saratoga Casino, Tioga Downs Casino and Vernon Downs Casino. In FY 2016, over 70 percent of the education contribution from VLTs was derived from Resorts World and Empire City.

In addition, Nassau OTB transferred its authority to host 1,000 terminals to Resorts World, and Suffolk OTB is planning to operate 1,000 terminals in Islandia. Tioga was recently approved to convert from a VLT facility to a destination resort (casino).

The following table shows the current distribution of VLT receipts (after prizes) among revenue for education, administration, operator commission, and funds available for promotions and capital. Distributions to purses and breeders' funds are made from the operators' commissions, and are not separately shown.

DISTRIBUTION OF VLT RECEIPTS AFTER PRIZES* (Percent)

Tracks with 1,100 or more machines (Saratoga)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$62.5 million	45	10	31	10	4
More than \$62.5 million up to \$100 Million	49	10	31	10	0
Over \$100 million	51	10	31	8	0

Tracks with 1,100 or more machines west of State Route 14 (Finger Lakes)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$62.5 million	45	10	31	10	4
Over \$62.5 million	49	10	31	10	0

Tracks with less than 1,100 machines west of State Route 14 (Batavia)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$50 million	41	10	35	10	4
More than \$50 million to \$62.5 million	48	10	28	10	4
More than \$62.5 million up to \$100 Million	52	10	28	10	0
More than \$100 million up to \$150 Million	54	10	28	8	0
Over \$150 million	57	10	25	8	0

Tracks within 15 miles of a Class III Native American Casino (Vernon)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$62.5 million	35	10	41	10	4
More than \$62.5 million to \$100 million	39	10	41	10	0
Over \$100 million	41	10	41	8	0

Tracks within 15 miles of a Class III Native American Casino west of State Route 14 (Buffalo Fairgrounds)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$62.5 million	35	10	41	10	4
Over \$62.5 million	39	10	41	10	0

Tracks Located in Sullivan County within 60 miles of Gaming Facility in a Contiguous State (Monticello)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$100 million	39	10	41	10	0
Over \$100 million	41	10	41	8	0

Facilities located in Nassau or Suffolk County operated by an Off-Track Betting Corporation**

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$100 million	45	10	35	10	0
Over \$100 million	47	10	35	8	0

Tracks with 1,100 or more machines located in Westchester County (Yonkers)

Net Machine Income	Education	Lottery Administration	Commission	Marketing	Capital
Up to \$62.5 million	47	10	31	8	4
Over \$62.5 million	51	10	31	8	0

Aqueduct Racetrack

Net Machine Income	Education	Lottery Administration	Commission (see note 1)	Marketing	Capital
No Nassau OTB terminals hosted	44	10	38	8	0
400 to 999 Nassau OTB terminals hosted	43	10	38	8	1
1,000 or more Nassau OTB terminals hosted	40	10	38	8	4

*Not less than 90 percent of sales must be used for prizes.

**Includes terminals designated as hosted by Resorts World on behalf of Nassau OTB.

1) Resorts World (Aqueduct Racetrack) pays 7 percent of NMI to NYRA for operating and capital expenditure subsidies, and an additional 9 percent of NMI to NYRA for purse subsidies and breeders' fund contributions.

Does not include the additional commission that Saratoga, Monticello and Finger Lakes will receive when a competing casino opens in their gaming region.

Net Machine Income is gross receipts minus prize payments. Free-play, up to 15 percent of the facilities' NMI, is excluded from the calculation of NMI.

Effective December 2, 2016, Tioga is considered a casino, not a VLT facility.

Commercial Gaming

In 2013, New York State voters approved a referendum allowing no more than seven commercial gaming facilities as authorized and prescribed by the Legislature. The “Upstate New York Gaming Economic Development Act of 2013” authorized up to four commercial gaming facilities within three development regions in Zone 2. Those regions are:

- Region One comprised of the Counties of Columbia, Delaware, Dutchess, Greene, Orange, Sullivan and Ulster;
- Region Two comprised of the Counties of Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie and Washington; and
- Region Five comprised of the Counties of Broome, Chemung (east of State Route 14), Schuyler (east of State Route 14), Seneca, Tioga, Tompkins and Wayne (east of State Route 14).

On December 17, 2014, the New York Gaming Facility Location Board recommended the following applicants to be considered for a commercial gaming license from the New York State Gaming Commission: Montreign Resort Casino (Region One); Rivers Casino & Resort at Mohawk Harbor (Region Two) and Lago Resort and Casino (Region Five). On December 21, 2015, the New York State Gaming Commission unanimously approved licenses to these three destination resorts.

On October 14, 2015, the New York Gaming Facility Location Board recommended to the New York State Gaming Commission that Tioga Downs, an existing Video Lottery Terminal Facility in Region Five, be considered for a commercial gaming license. On August 30, 2016, the New York State Gaming Commission unanimously approved a license to this destination resort. Tioga Downs opened on December 2, 2016.

Interactive Fantasy Sports

On August 3, 2016, the State legalized the operation of IFS in New York State. These companies offer fee-based contests in which participants (using their skills and knowledge) assemble a fantasy roster of players and compete against other participants. There is a 15 percent tax on IFS gross revenue generated in New York and an additional tax rate of one-half of one percent (capped at \$50,000 per taxpayer annually). All revenues are directed to the IFS Fund for the sole purpose of providing aid to education.

The law put in place much needed consumer safeguards to protect the integrity of the contests, which include:

- allowing only one account per user;
- prohibiting minors from playing;
- providing accurate odds of winning;

- addressing addictive personality concerns;
- identifying all highly experienced players;
- disclosing the number of entries permissible by each user (cannot be more than 150 entries per player per contest or 3 percent of total entries) and the maximum number of entries allowed per contest;
- addressing privacy concerns;
- making the value of prizes known;
- ensuring that winning outcomes reflect the relative knowledge and skill of the player; and
- ensuring that no winning outcome is based on the score of a single sports team or single performance.

Tribal State Compact

The Indian Gaming Regulatory Act permitted federally recognized Indian tribes the ability to conduct gaming activities such as bingo, pull tabs, lotto, punch boards, tip jars, and certain card games on tribal land. However, it requires a TSC for all other forms of gaming. The State has a compact agreement with three Nations, the Seneca Nation of Indians, the St. Regis Mohawk and the Oneida Nation of New York to host “class III gaming” facilities.

Seneca operates three casinos in the Western region including Seneca Niagara Casino (2002), Seneca Allegany Casino (2004) and Seneca Buffalo Casino (2007). In 2013, the Seneca Nation and the State reached a settlement agreement of \$349.7 million, in which \$209.8 million was directed to the State and \$139.9 million was directed to host counties. The Seneca were allowed to keep \$209 million (that would have otherwise gone to the State) and resumed ongoing payments from casino operations to the State. The Western New York zone is excluded from bidding on casino gaming. For FY 2016, the State received \$156.8 million in payments of which host counties received \$35.5 million and the regional communities received \$12.6 million. The remaining amount of \$108.7 million was directed to the State.

The Mohawk Nations operate the Akwesasne Mohawk Casino (1999). There was a settlement payment of \$30 million in 2013 from which the State received \$23 million, and the remaining \$7 million was directed to the host counties. Under the agreement, the State will not authorize casino gaming in the eight-county Mohawk exclusivity zone. The agreement did not resolve outstanding land claim disputes between the Tribe, the State and St. Lawrence and Franklin Counties. In FY 2016, the State received \$19.8 million in payments in which host counties received \$6.2 million and regional communities received \$2.5 million. The remaining amount of \$11.1 million was directed to the State.

In 2014, the State, the Oneida Nation and Oneida and Madison Counties came to an agreement in which Madison County received a one-time payment of \$11 million from the Oneida Nation to settle

past tax claims and receives an annual amount of \$3.5 million from the State share. Oneida County is considered the host county (25 percent of the State's payment) and receives an additional \$2.5 million annual payment from the State for 19 and one-quarter years to settle prior property tax claims. At the time, the Oneida Nation only operated one casino, Turning Stone, located in Oneida County. However, in 2015, the Oneida Nation opened Yellow Brick Road Casino in Madison County. Based on the settlement agreement, Oneida County was considered the host county for both casinos. The Budget proposes to address this inequity by amending the local gaming aid distribution to include Madison County. In FY 2016, the State received \$56.1 million in payments in which the host county received \$14 million, regional communities received \$5.6 million and Oneida and Madison Counties each received their annual payments. The remaining amount of \$30.4 million was directed to the State.

Administration

In 2013, the Division of the Lottery was merged with the Racing and Wagering Board to create the New York State Gaming Commission.

Traditional Lottery and VLT Games

The Gaming Commission develops new lottery games, markets and advertises, distributes games, provides terminals and computer programming, regulatory oversight and otherwise performs all functions necessary to operate an effective State lottery. The Comptroller, pursuant to an appropriation, distributes all net receipts from the Lottery directly to school districts. This aid includes special allowances for textbooks for all school children and additional amounts for pupils in approved State-supported schools for the deaf and the blind.

The Lottery game vendor notifies sales agents of the State's share of sales proceeds by the Monday following the liability week. The agent has until Tuesday to deposit sufficient funds into a specified bank account, at which time the operations vendor sweeps the funds and transfers them to the Gaming Commission by Wednesday morning. For VLTs, the Commission sweeps the accounts daily. All gaming funds are transferred to the State on Wednesday.

Under the Gaming Act, there is a transfer from the Commercial Gaming Revenue Fund for education to the State Lottery Fund for education to maintain VLT base year revenue. The base year revenue is all VLT revenue generated to support education for the twelve months preceding the initial operation of a casino or the Nassau/Suffolk OTB terminals. Since the Nassau OTB terminals became operational in October 2016, VLT revenues must be at least \$958.2 million on an annual basis.

The Gaming Act also provides that three facilities (Finger Lakes, Monticello and Saratoga) will receive additional compensation to offset the reduction in revenues from an opening of a nearby casino. The Gaming Commission shall remit this additional compensation two months after the end of the fiscal year.

Commercial Gaming

The Gaming Commission regulates commercial gaming facilities and administers the tax on gaming revenues. The Commission also collects license fees as established by the New York State Resort Gaming Facility Location Board.

Commercial gaming taxes are paid as a percent of gaming revenue generated at each licensed facility. Factors that affect commercial gaming revenue include proximity to population centers, regional income variations, proximity to and competition from existing facilities, and the applicable tax rates in the different gaming regions. Those rates are: 10 percent on table game receipts in all regions; 39 percent on slot machine receipts at Montreign (Region One); 45 percent on slots at Rivers (Region Two); and 37 percent on slots at Lago and Tioga (Region Five).

All commercial gaming tax (see below) and license fee revenue collected by the Gaming Commission is deposited into the Commercial Gaming Revenue Fund. From that Fund, tax and license fee revenue is distributed as follows: 80 percent of all commercial gaming revenue (less an amount transferred to the State Lottery Fund for education required to maintain VLT base revenue) for elementary and secondary education or property tax relief; 10 percent of the revenue generated by any commercial gaming facility in a gaming region is provided equally to the host county and municipality in that region and 10 percent of the revenue generated by any commercial gaming facility in a gaming region is provided on a per capita basis to non-host counties within such region.

Interactive Fantasy Sports

The New York State Gaming Commission administers and regulates IFS entities and administers the two tax components. The Commission also imposes regulatory fees to cover the cost of regulating this industry. Operators must file an annual report by June 30 covering activity from June of the previous year to May of the current year detailing the number of accounts held by all players and experienced players, new and closed accounts, financial information and the number of registrants that excluded themselves from contests (similar to other gaming venues where customers voluntarily ban themselves from a gaming establishment). The Commission must then publish a report based on this information no later than 180 days after submission.

The first filing date was October 10, 2016, and filing will continue on a monthly basis. Nine entities operational before November 10, 2015, were issued temporary permits and have begun remitting the tax.

Tribal State Compact

Section 99-h of the State Finance Law established the tribal-state revenue account. Based on the compacts, the State receives a payment of 25 percent of the net drop from gaming devices in which the host county or counties receive 25 percent of this payment. The Upstate New York Gaming and Economic Development Act directed 10 percent of the State payment to the regional communities on a per capita basis.

The Gaming Commission regulates Indian gaming facilities and administers the payments made to the State on gaming revenues and the distribution to localities. The Gaming Commission maintains a twenty-four hour presence in each casino. Board Gaming Inspectors ensure that gaming operations, such as dealing procedures, internal accounting and other controls, strictly conform to the applicable provisions of the compact and their appendices.

The Certification and Registration Unit is responsible for the review and subsequent approval or denial of the applications submitted by all persons involved with Indian gaming in the State. No employee or manager may be employed by the casino operator unless the individual has been previously approved by the Board. All applicants are fingerprinted and must undergo a background investigation by the Federal Bureau of Investigation, the New York State Division of Criminal Justice Services and the New York State Police - Casino Detail.

All of the State's regulatory expenses, for both personnel and equipment, are paid for or reimbursed by the regulated Indian Nation or Tribe as required under federal law.

Significant Legislation

Significant lottery statutory changes since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Multi-jurisdictional	Increased the maximum prize payout from 50 to 55 percent of sales of multi-jurisdictional lottery games.	March 31, 2011
Instant Games	Increased the number of new 75 percent prize payout Instant ticket games to be offered during the fiscal year from three to five.	March 31, 2011
Video Lottery Gaming	Authorized the Lottery to participate in Multi-Jurisdictional progressive video lottery games.	March 31, 2011
	Provided a free-play allowance that excluded free-play credits up to 10 percent of net machine income at each track from the calculation of NMI.	
Legislation Enacted in 2012		
Gaming Commission	Established the Gaming Commission by merging the Division of the Lottery and the Racing and Wagering Board.	February 1, 2013
Quick Draw	Eliminated the restriction requiring minimum food sales at locations that have a license for on-premises liquor consumption.	March 30, 2012
Legislation Enacted in 2013		
Video Lottery Gaming	Authorized two video lottery facilities with up to 1,000 terminals each in Nassau and Suffolk Counties operated by Off-Track Betting Corporations.	January 1, 2014
Commercial Gaming	Authorized up to four resort destination gaming facilities.	January 1, 2014
Legislation Enacted in 2014		
Video Lottery Gaming	Increased the free-play allowance from 10 to 15 percent	March 31, 2014
Legislation Enacted in 2015		
Electronic Games	Provided that electronic table games that include an element of skill can be offered at certain racetracks.	May 1, 2015

Subject	Description	Effective Date
Legislation Enacted in 2016		
Additional Compensation	Provided for an additional commission for the Finger Lakes facility.	January 1, 2014

Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

All Funds preliminary receipts through December are \$2,249.9 million, a decrease of \$3.7 million (0.2 percent) from the comparable period in the prior fiscal year. All Funds FY 2017 receipts are estimated to be \$3,508.6 million, a decrease of \$187 million (5.1 percent) from FY 2016.

All Funds FY 2017 traditional lottery receipts are estimated to be \$2,322 million, a decrease of \$28.7 million (1.2 percent) from FY 2016. This includes a reduction in receipts of \$33.6 million from having one less sales week in FY 2017. Instant Game receipts are estimated to decrease by \$2 million with a stronger sales emphasis on 75 percent games rather than 65 percent games. Jackpot games are estimated to decline by roughly \$11 million as large roll-ups are not expected to recur at the same level in FY 2017 as in FY 2016 and due to the continued decline of Cash4Life sales. Daily games receipts are estimated to increase by roughly \$15 million reflecting continuing trend growth in Numbers and Win4 and the continuing increase in Quick Draw receipts due to the use of incentives (i.e., bonus play). Administrative allowances and miscellaneous income are estimated to increase by \$3 million.

All Funds FY 2017 VLT receipts are estimated to be \$958.2 million, a decrease of \$3 million from FY 2016. This includes a transfer of \$8.2 million from the Commercial Gaming Revenue Fund for education to the State Lottery Fund for education to maintain VLT base revenue now statutorily set at \$958.2 million annually based on the twelve months of revenue preceding the operation of Nassau OTB terminals. This includes a reduction in receipts of \$18.4 million from having one less sales week in FY 2017. Resorts World receipts are estimated to decrease by roughly \$6 million, reflecting a decline in the Resorts World designated terminals partially offset by an increase in receipts from Nassau OTB designated electronic table games. Empire City receipts are estimated to increase by roughly \$17 million, reflecting year-to-date results. Saratoga Casino and Raceway receipts are estimated to increase by roughly \$3 million based on the opening of their adjacent hotel in July 2016. Tioga Downs converted to a casino in December, which is estimated to negatively impact VLT receipts by \$5.7 million. All other facilities generated negligible changes.

All Funds FY 2017 Commercial Gaming receipts are estimated to be \$18.4 million, a decrease of \$132.6 million from FY 2016. In FY 2016, the State received three casino license fees totaling \$151 million. In FY 2017, the commercial gaming estimate reflects the license fee revenue from Tioga Downs in November and the facility opening in December offset by a decrease in receipts due to a transfer of \$8.2 million from the Commercial Gaming Revenue Fund for education to the State Lottery Fund for education to maintain VLT base revenue.

All Funds FY 2017 IFS receipts are estimated to be \$3 million based on year-to-date results. While receipts are currently being collected for IFS, these monies will not appear in State Financial reports until January-month-end due to timing constraints and inter-agency coordination required in creating a new fund and accounts.

All Funds FY 2017 TSC revenues are estimated to be \$207 million, a decrease of \$25.7 million (11 percent) from FY 2016. Excluding a timing issue (there was an extra Seneca Nation payment in FY 2016, which artificially increased the total by \$31.4 million), revenues are estimated to be \$5.7 million (2.5 percent) higher than in FY 2016. This primarily reflects an increase in Oneida payments due to the opening of the Yellow Brick Road Casino in June 2015.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$3,595.4 million, an increase of \$86.8 million (2.5 percent) from FY 2017.

All Funds FY 2018 traditional lottery receipts are estimated to be \$2,301 million, a decrease of \$21 million (0.9 percent) from FY 2017. This assumes continual declines in Take 5 and Cash4Life sales and a \$6 million reduction in administrative allowances and miscellaneous income.

All Funds FY 2018 VLT receipts are statutorily fixed at \$958.2 million, no change from FY 2017. This includes a transfer of \$123.8 million from the Commercial Gaming Revenue Fund for education to the State Lottery Fund for education. This transfer amount reflects the additional compensation for certain facilities and the loss in VLT revenue from the opening of all four casinos.

All Funds FY 2018 Commercial Gaming receipts are projected to be \$132.2 million, an increase of \$113.8 million from FY 2017. This reflects the opening of Tioga Downs and anticipated openings of the remaining three casinos during FY 2018 offset by a decrease in receipts due to a transfer of \$123.8 million from the Commercial Gaming Revenue Fund for education to the State Lottery Fund for education to maintain VLT base revenue.

All Funds FY 2018 IFS receipts are projected to be \$4 million, an increase of \$1 million (33.3 percent) from FY 2017.

All Funds FY 2018 TSC revenues are estimated to be \$200 million, a decrease of \$7 million (3.4 percent) from FY 2017. This reflects the estimated casino impact on the Oneida Nation gaming revenues.

Other Funds

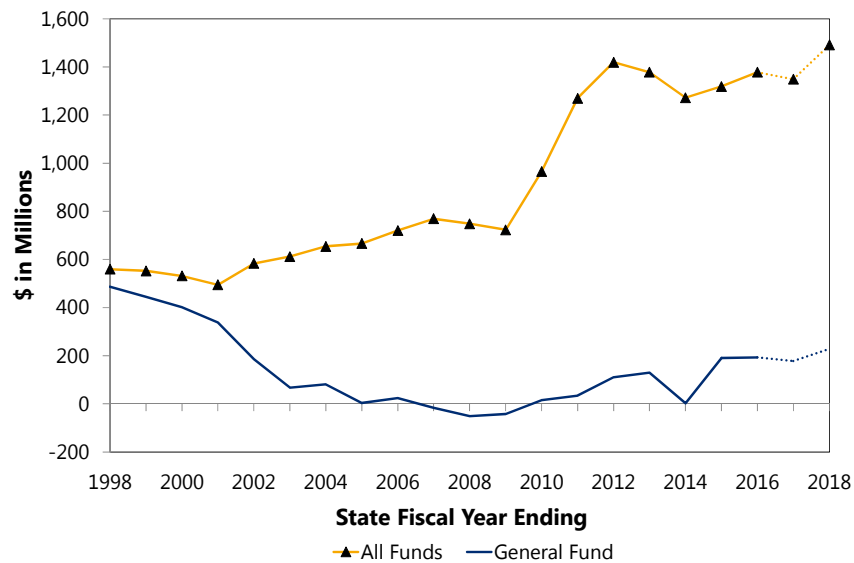
Revenues from traditional lottery, VLT lottery and IFS are all directed to education. Eighty percent of commercial gaming receipts (less the transfer amount) are directed to education. FY 2017 receipts of \$3,296.3 million and FY 2018 receipts of \$3,344.2 million will be used for aid to education.

Twenty percent of commercial gaming receipts and 35 percent of TSC revenues (including \$6 million in annual aid payments) are directed to certain localities. FY 2017 receipts of \$82.2 million and FY 2018 receipts of \$124 million will be directed to certain localities. This includes a Budget proposal to direct \$1.4 million from local revenue to the General Fund, for ultimate payment to Madison County, and a reduction in aid to regional communities by \$600,000 in FY 2018.

MOTOR VEHICLE FEES (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	193.5	178.0	(15.5)	(8.0)	228.0	50.0	28.1
Capital Funds	753.9	786.0	32.1	4.3	867.3	81.3	10.3
SR Funds	430.8	385.0	(45.8)	(10.6)	396.0	11.0	2.9
All Funds	1,378.2	1,349.0	(29.2)	(2.1)	1,491.3	142.3	10.5

Note: Totals may differ due to rounding.

Motor Vehicle Fee Receipts History and Estimates



MOTOR VEHICLE FEES BY FUND (millions of dollars)								
	Gross General Fund	Refunds	General Fund	Special Revenue Funds ¹	Gross Capital Projects Funds	Refunds	Capital Projects Funds ²	All Fund Receipts
FY 2008	(46)	5	(51)	230	585	16	569	748
FY 2009	(37)	5	(42)	218	562	16	546	722
FY 2010	20	5	15	322	643	15	628	965
FY 2011	39	5	34	422	830	17	813	1,269
FY 2012	116	5	111	496	837	25	812	1,419
FY 2013	134	5	129	453	821	25	796	1,378
FY 2014	7	5	2	485	810	25	785	1,272
FY 2015	196	5	191	401	752	25	727	1,319
FY 2016	199	5	194	431	779	25	754	1,378
Estimated								
FY 2017	183	5	178	385	811	25	786	1,349
FY 2018								
Current Law	233	5	228	396	811	25	786	1,410
Proposed Law	233	5	228	396	892	25	867	1,491

¹ Dedicated Mass Transportation Trust Fund (DMTTF), the MTA Aid Trust Account and other SR Accounts.
² Dedicated Highway and Bridge Trust Fund (DHBTF).

Proposed Legislation

Legislation proposed with this Budget would:

- Implement Real ID licenses; and
- Increase title fees.

Description

Fee Base

Motor vehicle fees are imposed by the Vehicle and Traffic Law. In general, motor vehicles, motorcycles, trailers, semi-trailers, buses, and other types of vehicles operating in New York are required to be registered with the Department of Motor Vehicles. In 2015, 11.1 million vehicles were registered in New York State, including 9.4 million standard series vehicles and 781,879 commercial vehicles. The Vehicle and Traffic Law also requires drivers to be licensed by the Department of Motor Vehicles. The current license renewal period is eight years. In 2015, New York State had 11.7 million licensed drivers. Numerous other fees, related to the processes of registration or licensing, are also components of motor vehicle fees. Examples are: fees for inspection and emission stickers; repair shop certificates; and insurance civil penalties.

Fee Schedules

Most vehicle registration fees in New York are based on weight. Two important exceptions are buses, which are charged according to seating capacity, and semi-trailers, which are charged a flat fee. Registration fees for vehicles weighing less than 18,000 pounds are imposed biennially. The main registration fees are as follows:

MAIN REGISTRATION FEES		
Type of Vehicle	Weight of Vehicle	Annual Fee* (dollars)
Passenger vehicle	Each 100 lbs. or major fraction thereof up to 3,500 lbs.	0.81
	Plus: for each 100 lbs. or major fraction thereof above 3,500 lbs.	1.21
Passenger vehicle - minimum fee		12.94
Passenger vehicle - maximum fee		70.08
Passenger vehicle propelled by electricity		16.18
Auto truck and light delivery vehicle	Each 500 lbs. maximum gross weight or fraction thereof	3.60
Tractors (registered separately from semi-trailers)	Each 100 lbs. maximum gross weight or fraction thereof	1.51
Trailers	Each 500 lbs. maximum gross weight or fraction thereof	5.39
Semi-trailers - pre-1989 model year		28.75 per year
Semi-trailers - model year 1989 or later		28.75 per year or 86.25 for a period of 5.5 to 6.5 years
Bus - seating capacity 15 to 20 passengers		74.75
*This does not include the \$25 supplemental fee imposed on registrations in the Metropolitan Commuter Transportation District (MCTD).		

The main licensing fees are listed below:

MAIN DRIVER LICENSING FEES	
Type of License	Fee* (dollars)
Photo Fee	12.50
Original/Renewal	
• A, B, CDL, or C (Commercial)	9.50 - for each six months
• Non CDL/C or E	6.25 - for each six months
• D (Passenger)	3.25 - for each six months
• M (Motorcycle)	3.75 - for each six months
*This does not include the \$1 supplemental fee per six months imposed on licenses in the MCTD.	

Administration

Registration and licensing occur in person or by mail at the central and district offices of the Department of Motor Vehicles, and county clerks' offices in most counties. Many transactions can also be completed via the Internet. County clerks receive 12.7 percent of gross receipts as compensation. This totaled \$43.4 million in FY 2016.

Fee Exemptions

Certain vehicles registered in New York are exempt from registration fees. The exemptions include: vehicles owned by the State or municipalities; passenger vehicles owned by consular offices; and vehicles owned and used for the transportation of animals by societies for the prevention of cruelty to animals. Vehicles owned by nonresidents and registered with a political

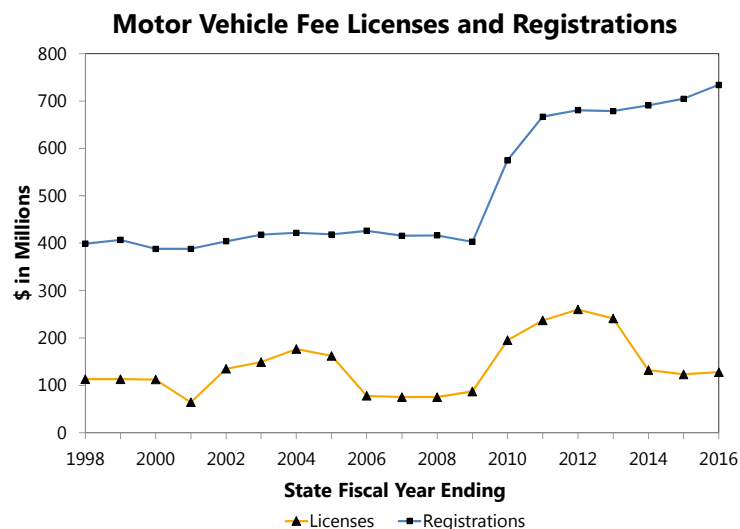
jurisdiction outside the State are not usually required to be registered in New York. The revenue loss from these exemptions is minimal.

Significant Legislation

Significant statutory changes to motor vehicle fees since 2011 are summarized below.

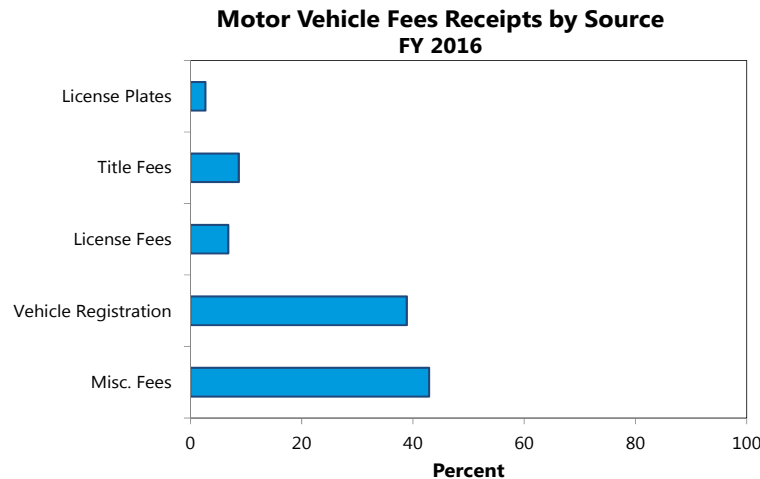
Subject	Description	Effective Date
Legislation Enacted in 2011		
General Fund	Included fines and assessments in the definition of General Fund receipts.	April 1, 2011
Legislation Enacted in 2014		
GF MVF Transfer	General Fund transfers to the DMTTF and DHBTF that are specifically sourced from General Fund motor vehicle fee receipts were replaced with generic General Fund transfers to these two funds.	April 1, 2014
DRA Receipts	The first \$40.7 million in Driver Responsibility Assessment (DRA) receipts that remained in the General Fund were instead directed to the DHBTF thereby accomplishing direction of all revenue from this Assessment to the DHBTF.	April 1, 2014
Legislation Enacted in 2016		
Redirect funds to DHBTF	Redirected fees from the DMV Seized Assets, Compulsory Insurance, Internet Point Insurance Reduction Program, and the Motorcycle Safety Funds to the DHBTF.	April 13, 2016

Fee-Liability



Vehicle registration and driver licensing fee totals are a function of fee schedules, the number of licensed drivers and registered vehicles, and the number of years between license and vehicle registration renewals. These motor vehicle fees have fluctuated little as a result of economic

conditions, but law changes in 2000 and in 2009 altered revenue collections. In 2000, the license renewal period was extended to eight years. In 2009, most registration and license fees were increased by 25 percent.



Receipts: Estimates and Projections

All Funds

FY 2017 Estimates

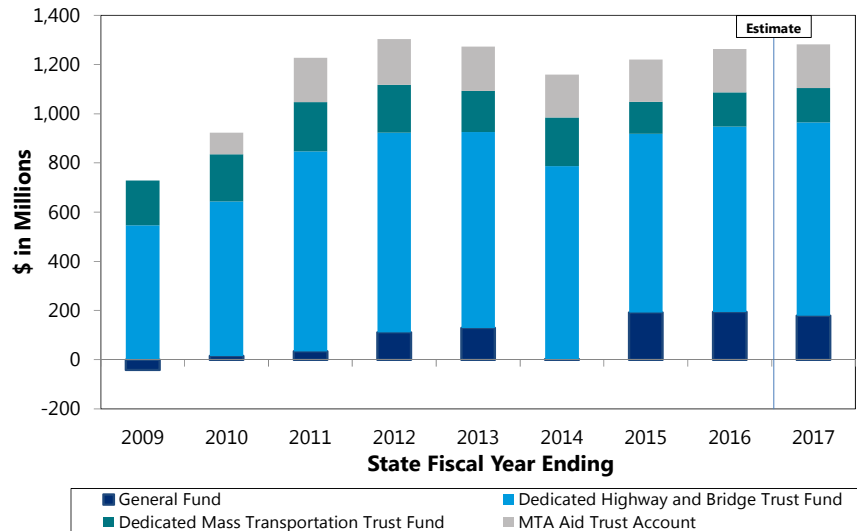
All Funds preliminary receipts through December are \$1,035.5 million, a decrease of \$21.9 million (2.1 percent) from the comparable period in the prior fiscal year.

All Funds FY 2017 receipts are estimated to be \$1,349 million, a decrease of \$29.2 million (2.1 percent) from FY 2016. General Fund revenues will decrease by \$15.5 million due to timing of payments and on net, Other Funds revenue is estimated to decline \$13.7 million.

FY 2018 Projections

All Funds FY 2018 receipts are projected to be \$1,491.3 million, an increase of \$142.3 million (10.5 percent) from FY 2017. This is primarily due to the Executive Budget proposals that increase title fees, as well as implement Real ID driver's licenses and non-driver IDs, the revenue from which is directed to the Dedicated Highway and Bridge Trust Fund. Additionally, there is an increase in General Fund receipts as FY 2018 represents a peak year during the eight-year driver's license renewal cycle.

Motor Vehicle Fees Fund Distribution History and Estimate



General Fund

General Fund motor vehicle fees are estimated to be \$178 million in FY 2017 and \$228 million in FY 2018.

Other Funds

Since April 1, 1993, a percentage of registration fees has been deposited in the Dedicated Highway and Bridge Trust Fund (DHBTF). The percentage dedicated to the fund has been adjusted several times.

Revenues from the 25 percent registration and license fee increase, effective September 1, 2009, are directed solely to the DHBTF. The balance of registration and license fees is dedicated as follows: 80 percent to the DHBTF and 20 percent to the Dedicated Mass Transportation Trust Fund (DMTTF).

Since 2009, all receipts from the supplemental fee on registrations and licenses are dedicated to the MTA Aid Trust Account of the MTA Special Assistance Fund.

As of April 13, 2016, revenue from the DMV Seized Assets, Compulsory Insurance, Internet Point Insurance Reduction Program, and the Motorcycle Safety Funds are redirected from Special Revenue Other to the DHBTF.

In FY 2017, the DHBTF will receive an estimated \$786 million and the DMTTF will receive an estimated \$140 million. The MTA Aid Trust Account is estimated to receive \$178 million. Various other dedicated funds (Special Revenue Other) will receive a total of \$67 million.



Motor Vehicle Fees

In FY 2018, the DHBTF is projected to receive \$867 million and the DMTTF is projected to receive \$140 million. The MTA Aid Trust Account is projected to receive \$189 million. Various other dedicated funds (Special Revenue Other) will receive a total of \$67 million.

Miscellaneous Receipts Capital Projects Funds



MISCELLANEOUS RECEIPTS - CAPITAL PROJECTS FUNDS (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
State Funds	3,822	4,679	857	22%	7,219	2,540	54%
Federal Funds	2,140	2,156	16	1%	2,088	(68)	-3%
All Funds	5,962	6,835	873	15%	9,351	2,516	37%

Note: Totals may differ due to rounding.

MISCELLANEOUS RECEIPTS - CAPITAL PROJECTS FUNDS (millions of dollars)			
	FY 2016	FY 2017	FY 2018
Authority Bond Proceeds			
Transportation	1,085	1,678	2,095
Public Protection	250	306	354
Health and Social Welfare	123	183	553
Education	39	52	86
Mental Hygiene	217	299	401
Economic Development	194	1,142	1,158
General Government	105	151	227
Other*	1,434	361	1,945
State Park Fees	37	26	26
Environmental Revenues	121	80	93
All Other	785	1,113	1,038
Total	4,390	5,391	7,976
Accounting Adjustment	(568)	(712)	(757)
Financial Plan Total	3,822	4,679	7,219

*Increase between FY2017 and FY2018 is attributable to the management of debt issuances due to the influx of monetary settlement funds. For more information, please see the Executive Summary of the Capital Program and Financing Plan.

Miscellaneous receipts in the Capital Projects Fund type include reimbursements from the proceeds of bonds sold by public authorities, fees, and other sources of revenue dedicated to specific capital projects funds, primarily for environmental or transportation capital purposes. The Miscellaneous Receipts table reflects an accounting adjustment for spending made directly from bonds sold by public authorities for State projects. This capital activity, commonly referred to as “Off-Budget Spending,” is not reflected in the Comptroller’s accounting system, but is included in the Five-Year Capital Program and Financial Plan estimates and projections. Federal Funds receipts are shown above to provide a more complete picture of non-tax receipts, but the discussion of Federal Funds is included in a separate section.

State Funds receipts finance two types of capital spending. Authority bond proceeds are used for spending financed with Authority Bonds, while Other Miscellaneous Receipts (Parks, Environmental, and Other receipts) finance State Pay-As-You-Go spending. Federal Funds receipts (Federal Grants) finance Federal Pay-As-You-Go spending.

Reimbursement from Authority Bond Proceeds

Pursuant to statutory authorizations, State agencies enter into contractual arrangements with public authorities to provide for the financing of State capital projects. Such contractual arrangements for financing capital project spending exist with the Empire State Development Corporation, the Dormitory Authority of the State of New York, the Environmental Facilities Corporation, the New York State Housing Finance Authority, and the New York State Thruway Authority. Currently, the primary functional areas for which authority bond proceeds finance capital projects spending are transportation, higher education, and economic development. After the State makes payments directly from appropriations for project costs, it is reimbursed by the public authority from the proceeds of bonds sold previously, except for the "Off-Budget Spending" mentioned previously. The amount of reimbursements received annually reflects the level of bondable capital spending in that year and may fluctuate depending upon when the spending occurs and the timing of related bond sales. As bondable spending fluctuates to reflect the progress of capital programs across all areas, so do the bond receipts received as reimbursements.

State Parks, Environmental, and Other Revenues

The following miscellaneous receipts do not include reimbursements from authority bond proceeds.

State Parks user fees and related revenues are deposited into the State Parks Infrastructure Fund and the Miscellaneous Capital Projects Fund. These revenues, which are projected at \$106 million in FY 2017 and \$119 million in FY 2018, will be used to finance improvements at various facilities across the State's park system.

Other miscellaneous environmental revenues include receipts primarily from the sale of surplus State lands, the leases of coastal State property, and the sale of environmental license plates. These are deposited into the Environmental Protection Fund. Other environmental revenues from settlements with individuals and other parties who are liable for damage caused to State environmental properties are deposited in the Natural Resource Damages Fund.

Other moneys and fees are received in the various Capital Projects Funds to support capital programs. Finally, certain receipts reimburse the State for capital spending on behalf of municipalities, public authorities, and private corporations, primarily for transportation and environmental projects. A major portion of these receipts reflect repayments pursuant to previously negotiated agreements.

Miscellaneous Receipts Debt Service Funds



MISCELLANEOUS RECEIPTS - DEBT SERVICE FUNDS (millions of dollars)							
	FY 2016 Actual	FY 2017 Estimated	Change	Percent Change	FY 2018 Projected	Change	Percent Change
General Fund	0	0	0	0.0	0	0	0.0
Other Funds	487	489	2	0.5	459	(30)	(6.0)
All Funds	487	489	2	0.5	459	(30)	(6.0)

Note: Totals may differ due to rounding.

MISCELLANEOUS RECEIPTS - DEBT SERVICE FUNDS (millions of dollars)			
	FY 2016	FY 2017	FY 2018
Mental Hygiene Patient Receipts	308	336	310
Health Patient Receipts	173	146	144
All Other	6	7	5
	487	489	459

Miscellaneous receipts in the Debt Service fund type include patient revenues, rental fees, medical insurance payments, interest income on investments, and other revenues. These revenues are typically first dedicated for the payment of lease-purchase agreements, contractual obligations, and debt service. These revenues support about 8 percent of the State's debt service payments and have been pledged as security for bonds issued for Mental Hygiene facilities and Department of Health facilities. The revenues are also used by the State to pay debt service on general obligation housing bonds. After such requirements are satisfied, the balance of most miscellaneous receipts, together with other receipts and transfers, flow back to the General Fund or to Special Revenue funds to offset the cost of State operations.

Mental Hygiene Patient Receipts

Payments from patients and various third-party payers, including Medicare and insurance companies, for services provided by the mental hygiene agencies are deposited in the Mental Health Services Fund as miscellaneous receipts. The revenues received are used to make lease-purchase payments to the Dormitory Authority of the State of New York (DASNY) for debt service on mental health services bonds. Additionally, portions of State and local assistance and Federal Medicaid payments to not-for-profit community facilities are earmarked to pay their share of debt service. These are also deposited as miscellaneous receipts in the Mental Health Services Fund. DASNY makes loans to eligible not-for-profit agencies providing mental health services and, in return, the voluntary agencies make rental payments equal to the amount of debt service on bonds issued to finance their projects.



Miscellaneous Receipts Debt Service Funds

Health Patient Receipts

Patient care reimbursements from the Department of Health's hospitals and the veterans' homes (Oxford, New York City and Western New York) are deposited into the Health Income Fund to make lease-purchase rental payments to DASNY. Similar to the Mental Hygiene Services Fund, the receipts are pledged for debt service of bonds issued by DASNY to finance the construction and rehabilitation of State hospitals and veteran's homes. These receipts are composed of payments from Medicaid, Medicare, insurance, and individuals.

All Other

The all other miscellaneous receipts category primarily includes investment income receipts from the Local Government Assistance Corporation, and payments from local housing agencies to finance the debt service costs on general obligation bonds.

To qualify to receive Federal grants, the State must comply with guidelines established by the Federal government. Each Federal grant must be used pursuant to Federal laws and regulations. Additionally, the State is required to follow specific cash management practices regarding the timing of cash draws from the Federal government pursuant to regulations for each grant award. In most cases, the State finances spending in the first instance, then receives reimbursement from the Federal government.

Total receipts from the Federal government are projected at \$52.9 billion in FY 2017 and \$54.3 billion in FY 2018. These revenues represent approximately one-third of total receipts in governmental funds, excluding general obligation bond proceeds, and are deposited into the General Fund, Special Revenue, Capital Projects and the Debt Service fund types.

FEDERAL GRANTS BY FUND (millions of dollars)								
	General Fund	Special Revenue Funds				Capital Projects Funds	Debt Service Funds	Total All Funds
		Medicaid	Welfare	All Other	Total			
FY 2003	6	17,297	2,542	11,847	31,686	1,567	0	33,259
FY 2004	654	21,435	2,018	11,668	35,121	1,548	0	37,323
FY 2005	9	22,666	1,998	9,828	34,492	1,721	0	36,222
FY 2006	0	21,524	2,097	9,741	33,362	1,767	0	35,129
FY 2007	151	22,906	2,243	8,540	33,689	1,738	0	35,578
FY 2008	69	22,417	2,184	8,494	33,095	1,745	0	34,909
FY 2009	45	24,844	2,597	9,466	36,907	1,882	0	38,834
FY 2010	71	30,054	2,721	10,605	43,380	2,061	13	45,525
FY 2011	55	31,423	2,674	12,596	46,693	2,499	57	49,304
FY 2012	60	28,195	2,520	11,640	42,355	2,115	80	44,610
FY 2013	62	27,043	2,583	10,950	40,576	2,126	79	42,843
FY 2014	0	26,538	3,168	11,699	41,405	2,313	71	43,789
FY 2015	2	31,852	2,633	12,047	46,531	2,030	73	48,636
FY 2016	0	34,874	2,863	11,367	49,105	2,146	73	51,324
Estimated								
FY 2017	0	36,546	2,627	11,479	50,651	2,161	73	52,885
FY 2018	0	38,520	2,627	10,953	52,099	2,093	73	54,265

General Fund

Federal grants are deposited into the General Fund only in limited instances. The Federal subsidy payment related to Medicare Part D was the main Federal grant in the General Fund in prior years, however, starting in FY 2014, the State has received this payment through a different reimbursement mechanism.

Special Revenue Funds

Federal grants account for nearly two-thirds of all special revenue receipts and are used to support a wide range of programs at the State and local government level. Medicaid is the single largest program supported by Federal funds, and helps finance health care, medical supplies, and professional services for eligible persons. The State receives funds from the Federal government to make payments to providers for both State-operated and non-State-operated facilities. The State-operated category includes facilities of the Offices of Mental Health and Mental Retardation and Developmental Disabilities. These facilities receive Medicaid funds for the delivery of eligible services to patients.

Other Federal grants in the Special Revenue Funds support programs administered primarily by the departments of Education, Family Assistance, Health, and Labor. These programs include Public Assistance, Foster Care, Food and Nutrition Services, and Supplementary Educational Services. The State also receives Federal grants to support extraordinary costs associated with disaster assistance.

Capital Projects Funds

Federal grants in Capital Projects Funds finance transportation planning, engineering, and construction projects. Federal grants also support local wastewater treatment projects financed through the State's Revolving Loan Fund. Other Federal grants are for the rehabilitation of State armories, eligible housing programs, and other environmental purposes.

Debt Service Funds

Federal grants in the Debt Service fund type reflect interest subsidies received on Build America Bonds (BABs), pursuant to a financing option provided to the State through the American Recovery and Reinvestment Act (ARRA).

All or portions of several tax sources, including the personal income tax, transportation-related taxes and fees, cigarette taxes, sales and use taxes, and corporate taxes are statutorily dedicated to various Special Revenue, Debt Service and Capital Projects Funds. The following discussion identifies the statutory provisions which establish the dedicated funds, the source of dedicated tax receipts and the formula used to allocate tax receipts to the funds, and the purposes for which those deposits may be used.

Special Revenue Funds

School Tax Relief Fund (“STAR” Fund-053)

The School Tax Relief Fund was established by Section 97 of the State Finance Law. The Fund consists of all moneys credited or transferred thereto from the General Fund or from any other fund or sources. The moneys of the Fund are appropriated for school property tax exemptions granted pursuant to the Real Property Tax Law and for payments to the city of New York pursuant to State Finance Law and Tax Law.

SCHOOL TAX RELIEF FUND (STAR) (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Personal Income Tax	3,335	3,208	2,606	2,448	2,336	2,226
Total STAR	3,335	3,208	2,606	2,448	2,336	2,226

Dedicated Mass Transportation Trust Fund (“DMTTF” Fund-073)

The Dedicated Mass Transportation Trust Fund was established by Section 89-c of the State Finance Law. State tax receipts of the DMTTF are derived from the State’s motor fuel tax, motor vehicle fees, and a portion of the petroleum business tax. The moneys of the DMTTF, pursuant to an appropriation, are used for the reconstruction, replacement, purchase, modernization, improvement, reconditioning, preservation and maintenance of mass transit facilities, vehicles, and rolling stock, or the payment of debt service or operating expenses incurred by mass transit operating agencies, and for rail projects. Revenue shown below does not include motor vehicle fees.

DEDICATED MASS TRANSPORTATION TRUST FUND (DMTTF) (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Petroleum Business Tax	367	357	349	357	353	351
Motor Fuel Tax	105	106	106	105	104	103
Total DMTTF	472	463	455	462	457	454

Metropolitan Transportation Authority Financial Assistance Fund (“MTAFAF” Fund-225)

The Metropolitan Transportation Authority Financial Assistance Fund was established by Section 92-ff of the State Finance Law under the joint custody of the Commissioner of Taxation and Finance and the State Comptroller. The fund contains all revenues derived from the metropolitan commuter transportation mobility tax, supplemental motor vehicle fees, the supplemental tax on passenger car rentals in the MCTD and the tax on New York City taxicab and hail vehicle trips. Revenues generated from the mobility tax are directed to the Mobility Tax Trust Account of the MTA Financial Assistance Fund. Revenues generated from the supplemental motor vehicle fees, supplemental tax on car rentals, and the tax on taxicab rides are directed to the MTA Aid Trust Account of the MTA Financial Assistance Fund. The amounts below do not include motor vehicle fees.

METROPOLITAN TRANSPORTATION AUTHORITY FINANCIAL ASSISTANCE FUND (MTAFAF) (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Payroll Tax	1,306	1,361	1,421	1,487	1,562	1,630
Auto Rental Tax	47	49	52	55	56	60
Taxicab Surcharge	73	64	64	64	64	64
Total MTAFAF	1,426	1,474	1,537	1,606	1,682	1,754

Mass Transportation Operating Assistance Fund (“MTOA” Fund-313)

The Mass Transportation Operating Assistance Fund was established by Section 88-a of the State Finance Law. Tax receipts dedicated to the fund are comprised of a business tax surcharge levied on the portion of the State general business corporation tax, corporations and utilities tax, and the insurance tax allocated to the Metropolitan Commuter Transportation District (MCTD), a 0.375 percent sales tax levied in the MCTD, a portion of the petroleum business tax, and a portion of the taxes on transportation and transmission companies and telecommunication services. The moneys of the MTOAF are subject to appropriation and are allocated among two accounts within the Fund. The moneys in each account must be used for the transportation assistance purposes for which each account was established. The accounts of MTOAF include:

- Public Transportation Systems Operating Assistance Account (PTOA - Fund 313-01); and
- Metropolitan Mass Transportation Operating Assistance Account (MMTOA - Fund 313-02).

The PTOA receives:

- 45 percent of the 19.7 percent of the basic petroleum business tax that is dedicated to the MTOAF;
- 26 percent of the receipts collected from the tax imposed on transportation and transmission companies by Sections 183 and 184 of Article 9 of the Tax Law for FY 2013 through FY 2018;

Dedicated Fund Tax Receipts



- 1.976 percent of the receipts collected from the tax on charges for telecommunication services by section 186-e of Article 9 of the Tax Law for FY 2016 through FY 2018; and
- Included in the FY 2018 Executive Budget is a proposal to make the current distributions imposed on the revenue from transportation and transmission companies, as well as the receipts from the tax on telecommunication services, permanent.

The MMTOA receives:

- 54 percent of the receipts collected from the taxes imposed on transportation and transmission companies by Sections 183 and 184 of Article 9 of the Tax Law for FY 2013 through FY 2018;
- 4.104 percent of the receipts collected from the tax on charges for telecommunication services by section 186-e of Article 9 of the Tax Law for FY 2016 through FY 2018;
- Included in the FY 2018 Executive Budget is a proposal to make the current distributions imposed on the revenue from transportation and transmission companies, as well as the receipts from the tax on telecommunication services, permanent;
- All tax receipts from the business tax surcharge imposed on taxpayers that are subject to the corporation franchise tax, corporation and utilities tax, and the insurance tax and that conduct business in the MCTD;
- Tax receipts from the 0.375 percent sales and use tax imposed in the MCTD; and
- 55 percent of the 19.7 percent of the basic petroleum business tax that is dedicated to the MTOAF.

MASS TRANSPORTATION OPERATING ASSISTANCE FUND (MTOA) (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Corporate Surcharges						
Corporate Franchise Tax	764	795	860	903	940	970
Corporation and Utilities Tax	107	99	103	111	114	119
Insurance Tax	161	156	165	180	187	201
Bank Tax	8	60	28	21	11	0
Other						
Sales and Use Tax	874	903	943	982	1,017	1,054
Petroleum Business Tax	132	128	125	127	126	125
Transmission Tax ¹	58	57	57	57	56	56
Total MTOA	2,104	2,199	2,281	2,381	2,452	2,525

¹ Includes sections 183, 184, and 186-e.

Health Care Reform Act Resources Fund (“HCRA” Fund-061)

The Health Care Reform Act (HCRA) Resources Fund was established by Section 92-dd of the State Finance Law and receives 76 percent of total State cigarette tax revenues. Other revenues dedicated to this Fund include hospital surcharges and assessments, a Covered Lives Assessment

on commercial insurers and a portion of cigarette revenue from New York City's locally imposed cigarette tax. These resources support numerous public health, Medicaid and insurance programs for the uninsured/underinsured; including Family Health Plus, Healthy NY, Child Health Plus, anti-tobacco initiatives, graduate medical education, working disabled, and indigent care.

HEALTH CARE REFORM ACT RESOURCE FUND (HCRA)						
(millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Cigarette Tax	928	882	854	823	788	755
Total HCRA	928	882	854	823	788	755

Medical Marihuana Trust Fund ("MMTF" Fund-S02)

The Medical Marihuana Trust Fund was established by Section 89-h of the State Finance Law. The Fund consists of all moneys from a seven percent excise tax imposed when a New York dispensary sells medical marihuana to a patient or designated caregiver, which is remitted by the dispensary.

MEDICAL MARIHUANA TRUST FUND (MMTF)						
(millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Medical Marihuana Tax	0	1	1	1	1	1
Total MMTF	0	1	1	1	1	1

Highway Use Tax Administration Account ("HUTAA" Fund S03)

The Highway Use Tax Administration Account was established by Section 99-y of the State Finance Law. This Fund consists of all monies collected from the highway use tax registration and decal fees collected pursuant to the highway use tax. Revenues generated is used for costs of the commissioner of taxation and finance in the highway use tax.

HIGHWAY USE TAX ADMINISTRATION ACCOUNT (HUTAA)						
(millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Highway Use Tax	N/A	2	1	1	1	1
Total HUTAA	N/A	2	1	1	1	1

Interactive Fantasy Sports Fund ("IFS" Fund-S04)

There is a 15 percent tax on interactive fantasy sports gross revenue generated in New York and an additional tax rate of one-half of one percent (capped at \$50,000 per taxpayer annually). Based on Section 71 of the State Finance Law, OSC will direct all revenues to the Interactive Fantasy Sports Fund instead of the State Lottery Fund for the sole purpose of providing aid to education.

INTERACTIVE FANTASY SPORTS (IFS) (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
IFS Tax	N/A	3	4	4	4	4
Total IFS	N/A	3	4	4	4	4

Debt Service Funds

General Debt Service Fund (“GDS” Fund 311)

The General Debt Service Fund includes the Revenue Bond Tax Fund and the Sales Tax Revenue Bond Fund.

The Revenue Bond Tax Fund was established by Section 92-z of the State Finance Law. The Fund receives 25 percent of the receipts from the State personal income tax imposed by Article 22 of the Tax Law. Payments from the Fund are pledged to pay the debt service on State-supported Personal Income Tax Revenue Bonds, which support a variety of capital projects. No later than the fifteenth day of each month, the Comptroller is required to pay over to the General Fund all money in the RBTF in excess of the aggregate amount required to be set aside for debt service.

The Sales Tax Revenue Bond Fund was established by Section 92-h of the State Finance Law. The Fund receives moneys collected from the imposition of the State sales and compensating use taxes in an amount attributable to a one percent rate of taxation. This will increase to a two percent rate when LGAC bonds have been retired or defeased. Payments from the Fund are dedicated to pay the debt service on State Sales Tax Revenue Bonds which, along with State PIT Revenue Bonds, are used to finance various State capital purposes. The Comptroller is required to pay over to the General Fund all money in the STBF in excess of the aggregate amount required to be set aside for debt service.

GENERAL DEBT SERVICE (GDS) (millions of dollars)						
	FY 2016 Actual	FY 2017 Estimated	FY 2018 Recommended	FY 2019 Recommended	FY 2020 Recommended	FY 2021 Recommended
Personal Income Tax	11,764	11,910	12,671	13,272	13,998	15,015
Sales and Use Tax	3,121	3,239	3,446	3,596	3,733	3,876
Total STBF	14,885	15,149	16,117	16,868	17,731	18,891

Clean Water/Clean Air Fund (“CWCAF” Fund-361)

The Clean Water Clean Air Fund was established by Section 97-bbb of the State Finance Law. The Fund receives all real estate transfer taxes in excess of the deposit to the Environmental Protection Fund. The moneys in the Fund are used to reimburse the General Fund for transfers made to the General Debt Service Fund to pay the debt service on 1996 Clean Water/Clean Air general obligation bonds. At the end of each month, the Comptroller is required to pay over to the General Fund all moneys in the CWCAF in excess of the aggregate amount required for such reimbursements.

CLEAN WATER/CLEAN AIR FUND (CWCAF)						
(millions of dollars)						
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Actual	Estimated	Recommended	Recommended	Recommended	Recommended
Real Estate Transfer Tax	1,044	1,019	1,091	1,146	1,196	1,248
Total CWCAF	1,044	1,019	1,091	1,146	1,196	1,248

Local Government Assistance Tax Fund (“LGATF” Fund-364)

The Local Government Assistance Tax Fund was established by Section 92-r of the State Finance Law. The Fund receives moneys collected from the imposition of the State sales and compensating use taxes in an amount attributable to a 1 percent rate of taxation. Payments from the Fund are dedicated to pay the debt service on State-supported Local Government Assistance Corporation Bonds originally issued in the early 1990s to finance payments to local governments previously financed by the State. The Comptroller is required to pay over to the General Fund all money in the LGATF in excess of the aggregate amount required to be set aside for debt service. In addition, local aid payments due to New York City and assigned by the City to the Sales Tax Asset Receivable Corporation (STARC) are appropriated from the LGATF.

LOCAL GOVERNMENT ASSISTANCE TAX FUND (LGATF)						
(millions of dollars)						
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Actual	Estimated	Recommended	Recommended	Recommended	Recommended
Sales and Use Tax	3,121	3,239	3,446	3,596	3,733	3,876
Total LGATF	3,121	3,239	3,446	3,596	3,733	3,876

The Revenue Bond Tax Fund was established by Section 92-z of the State Finance Law. The Fund receives 25 percent of the receipts from the State personal income tax imposed by Article 22 of the Tax Law. Payments from the Fund are pledged to pay the debt service on State-supported Personal Income Tax Revenue Bonds, which support a variety of capital projects. No later than the fifteenth day of each month, the Comptroller is required to pay over to the General Fund all money in the RBTF in excess of the aggregate amount required to be set aside for debt service.

REVENUE BOND TAX FUND (RBTF)						
(millions of dollars)						
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Actual	Estimated	Recommended	Recommended	Recommended	Recommended
Personal Income Tax	11,764	11,873	12,452	12,633	13,320	14,050
Total RBTF	11,764	11,873	12,452	12,633	13,320	14,050

Capital Projects Funds

Dedicated Highway and Bridge Trust Fund (“DHBTF” Fund-072)

The Dedicated Highway and Bridge Trust Fund was established by Section 89-b of the State Finance Law. The DHBTF receives moneys from the motor fuel tax, motor vehicle fees, highway use tax, auto rental tax, petroleum business tax, and a portion of the taxes on transportation and

Dedicated Fund Tax Receipts



transmission companies and telecommunication services. The moneys of the Fund, pursuant to an appropriation, are used to support transportation, including the reconstruction, replacement, reconditioning, restoration, rehabilitation and preservation of State, county, town, city and village roads, aviation projects, matching Federal highway grants, snow and ice removal, acquisition of real property, bus safety inspection, rail freight facilities, intercity rail passenger facilities, state, municipal and private ports, ferry lines, and certain DMV expenses. Payments from the Fund are also pledged to support the debt service on State-supported Dedicated Highway and Bridge Trust Fund Bonds. Revenue listed below does not include an annual General Fund transfer of \$62.7 million, effective FY 2015. Legislation in the FY 2017 Enacted Budget created an Aviation Purpose Account within the Fund to be used to support aviation and airport programs and projects (effective April 1, 2017), and redirected four motor vehicle fee funds from SRFO to the DHBTF.

DEDICATED HIGHWAY AND BRIDGE TRUST FUND (DHBTF)						
(millions of dollars)						
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Actual	Estimated	Recommended	Recommended	Recommended	Recommended
Petroleum Business Tax	625	608	597	618	612	609
Motor Fuel Tax	398	400	399	396	392	389
Highway Use Tax	159	138	86	141	141	143
Transmission Tax	15	14	14	14	14	14
Auto Rental Tax	79	78	82	86	90	94
Total DHBTF	1,275	1,239	1,179	1,255	1,250	1,250

Environmental Protection Fund (“EPF” Fund-078)

The Environmental Protection Fund was established by Section 92-s of the State Finance Law. The Fund currently receives real estate transfer taxes in the amount of \$119 million. Moneys in the Fund are deposited to the following accounts:

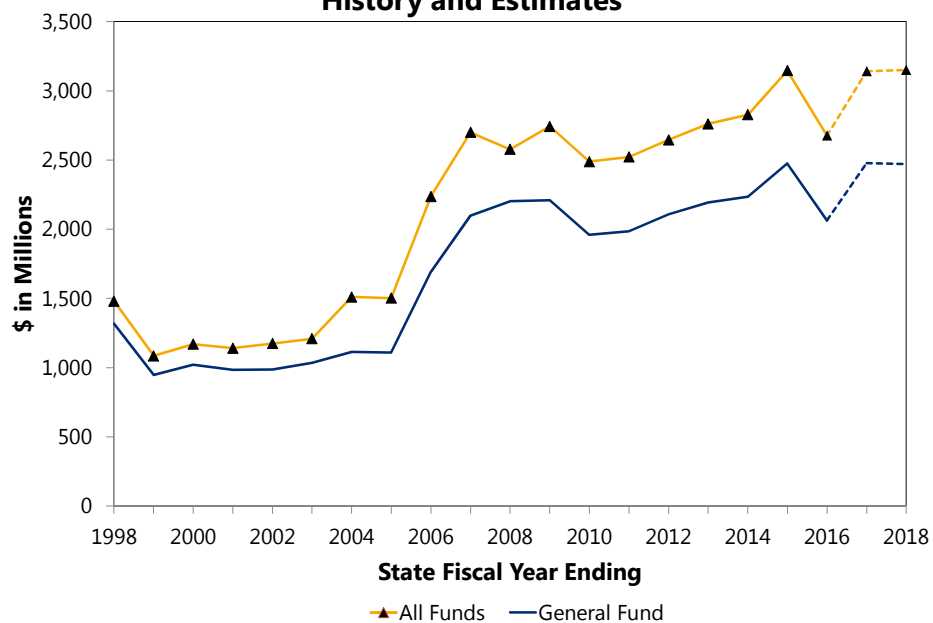
- The Solid Waste Account for any non-hazardous municipal landfill closure project, municipal waste reduction or recycling project, or local solid waste management plans.
- The Parks, Recreation and Historic Preservation Account for any municipal park project, historic preservation project, urban cultural park project, waterfront revitalization program, or coastal rehabilitation project.
- The Open Space Account for any open space land conservation project, bio-diversity stewardship and research, non-point source abatement and control projects, upon the request of the Director of the Division of the Budget.

ENVIRONMENTAL PROTECTION FUND (EPF)						
(millions of dollars)						
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Actual	Estimated	Recommended	Recommended	Recommended	Recommended
Real Estate Transfer Tax	119	119	119	119	119	119
Total EPF	119	119	119	119	119	119

AUDIT AND COMPLIANCE RECEIPTS (millions of dollars)							
	FY2016 Actual	FY2017 Estimated	Change	Percent Change	FY2018 Projected	Change	Percent Change
General Fund	2,062.7	2,477	414.3	20.1	2,471	(6.0)	(0.2)
Other Funds	614.0	667	53.4	8.7	680	13.0	1.9
All Funds	2,676.7	3,144	467.7	17.5	3,151	7.0	0.2

Note: Totals may differ due to rounding.

Audit and Compliance Receipts History and Estimates



Estimated Receipts for FY 2017

TABLE 1 ALL FUNDS AUDIT AND COMPLIANCE COLLECTIONS BY TAX TYPE (millions of dollars)				
	FY2016	FY2017	Change from Prior Year	Percent Change from Prior Year
Personal Income Tax	1,195	1,231	36	3.0
User Taxes and Fees	407	397	(10)	(2.5)
Business Taxes	1,029	1,472	443	43.1
Corporation and Utilities Taxes	82	44	(38)	(46.3)
Corporate Franchise Tax	652	926	274	42.0
Bank Tax	267	464	197	73.8
Insurance Tax	24	31	7	29.2
Petroleum Business Taxes	4	7	3	75.0
Other Taxes	46	44	(2)	(3.5)
Total	2,677	3,144	467	17.5

Audit and compliance receipts for FY 2017 are estimated to be \$3.1 billion, an increase of \$467 million (17.4 percent) from FY 2016. The increase is driven primarily by a business tax receipts increase of \$443 million (43.1 percent). This is due to an unusually reduced business tax base in FY 2016 caused by the timing and magnitude of large case audits. The other tax areas (personal income tax, user taxes and fees and other taxes) are expected to increase a total of \$24 million (1.5 percent).

Estimated Receipts for FY 2018

	FY2017	FY2018	Change from Prior Year	Percent Change from Prior Year
Personal Income Tax	1,231	1,285	54	4.4
User Taxes and Fees	397	419	22	5.5
Business Taxes	1,472	1,406	(66)	(4.5)
Corporation and Utilities Taxes	44	44	0	0.0
Corporate Franchise Tax	926	1,107	181	19.5
Bank Tax	464	213	(251)	(54.1)
Insurance Tax	31	31	0	0.0
Petroleum Business Taxes	7	11	4	57.1
Other Taxes	44	41	(3)	(6.8)
Total	3,144	3,151	7	0.2

Audit and compliance receipts for FY 2018 are projected to be \$3.2 billion, an increase of \$7 million (0.2 percent) from FY 2017. Increases in personal income tax and user tax and fee receipts are offset by lower business tax receipts.

Proposed Legislation

Legislation proposed with this Budget would:

- Require New State Employees to be Compliant with State Tax Obligations;
- Require Practitioners to be Compliant with State Tax Obligations before Receiving Excess Medical Malpractice Coverage;
- Clarify the amount of untaxed cigarettes required to seize a vehicle;
- Permanently extend warrantless wage garnishment;
- Close sales tax related entities loophole;
- Allow warrantless bank account data matching; and
- Expand jeopardy assessments to the cigarette and tobacco tax.

Description

This section summarizes the cash collected by the Department of Taxation and Finance related to its audit and compliance activities. The amounts reported are already reflected in the estimates of individual tax receipts contained in this volume.

The Department of Taxation and Finance's Office of Tax Enforcement (OTE) is composed of the Audit Division, the Division of Collections and Civil Enforcement ("Collections") and the Criminal Division. The Audit Division is responsible for verifying that the correct tax has been paid and the Compliance Division is responsible for collecting the correct tax.

The collections base of OTE activities is the correct amount of taxes legally required to be paid, which is verified through the audit process. Receipts from enforcement activities are the result of incorrect tax payments, including filing returns with math errors; filing past due returns or the incorrect return; the improper interpretation of Tax Law, regulations or instructions; and tax evasion that results in a gap between the amount that is legally due and required to be paid and the amount that was voluntarily paid. In certain instances, taxpayers may also be subject to penalties and interest.

Growth in Recent Collections

TABLE 3 GROWTH ALL FUNDS AUDIT AND COMPLIANCE COLLECTIONS (millions of dollars)			
	All Funds Audit and Compliance Collections	Change from Prior Year	Percent Change from Prior Year
FY 2000	1,141	(28)	(2.4)
FY 2001	1,174	33	2.9
FY 2002	1,209	35	3.0
FY 2003	1,510	301	24.9
FY 2004	1,232	(278)	(18.4)
FY 2005	1,503	271	22.0
FY 2006	2,237	734	48.8
FY 2007	2,705	468	20.9
FY 2008	2,585	(120)	(4.4)
FY 2009	2,743	158	6.1
FY 2010	2,489	(254)	(9.3)
FY 2011	2,522	33	1.3
FY 2012	2,646	124	4.9
FY 2013	2,759	113	4.3
FY 2014	2,827	68	2.5
FY 2015	3,146	319	11.3
FY 2016	2,677	(469)	(14.9)
Estimated			
FY 2017	3,144	467	17.5
FY 2018	3,151	7	0.2
All amounts after FY 2009 include Metropolitan Commuter Transportation Mobility Tax and Taxicab surcharge receipts.			

Collectively, it is estimated that the portion of All Funds receipts attributable to enforcement activities and reflected in the estimates and projections of the individual taxes will be roughly \$3.1 billion in FY 2017 and \$3.2 billion in FY 2018. The dramatic rise to current collection levels, which began in FY 2006, can be attributed to a combination of policy actions and improved performance by the Department of Taxation and Finance in identifying and concluding productive audits. These factors have included: (1) the Voluntary Compliance Initiative (VCI) enacted in 2005, which provided for reduced penalties for the voluntary reporting of tax shelter activities, (2) several audits involving back years that were closed following a favorable Tax Tribunal decision, (3) the settlement of audit issues with a significant number of financial service and other large multi-state taxpayers, (4) the Voluntary Disclosure Program enacted in 2008, and (5) improved data matching with data from the IRS and other sources.

Trends in All Funds Audit and Tax Receipts

Table 4 below reports All Funds audit and compliance collections, All Funds tax receipts, and All Funds audit and compliance collections as a percent of All Funds tax receipts. Although All Funds audit and compliance receipts have fluctuated over time, they have consistently comprised roughly 3 percent to 5 percent of total All Funds tax receipts. This pattern is expected to continue in both FY 2017 and FY 2018.

TABLE 4 All FUNDS AUDIT AND COMPLIANCE COLLECTIONS As A Percent of All Funds Tax Receipts (millions of dollars)			
	All Funds Audit and Compliance Collections	All Funds Tax Receipts	Audit and Compliance As a Percent of All Funds
FY 2000	1,141	41,389	2.8
FY 2001	1,174	44,658	2.6
FY 2002	1,209	42,475	2.8
FY 2003	1,510	39,626	3.8
FY 2004	1,232	42,851	2.9
FY 2005	1,503	48,598	3.1
FY 2006	2,237	53,578	4.2
FY 2007	2,705	58,740	4.6
FY 2008	2,585	60,871	4.2
FY 2009	2,743	60,338	4.5
FY 2010	2,489	57,668	4.3
FY 2011	2,522	60,871	4.1
FY 2012	2,646	64,299	4.1
FY 2013	2,761	66,300	4.2
FY 2014	2,827	69,690	4.1
FY 2015	3,146	71,034	4.4
FY 2016	2,677	74,673	3.6
Estimated			
FY 2017	3,144	75,302	4.2
FY 2018	3,151	79,526	4.0
All amounts after FY 2009 include Metropolitan Commuter Transportation Mobility Tax and Taxicab surcharge receipts.			

As shown in Table 5 below, the historical distribution of audit and compliance receipts by broad tax categories (i.e., personal income tax, business taxes, user taxes and fees, and miscellaneous/other taxes) differs significantly from the distribution of total receipts by tax category. As a result of significant audit collections, the share of audit receipts derived from business taxes is much greater than the share of All Funds tax receipts derived from business taxes. Over the past several years the business tax share of audit receipts has been mostly between 40 and 50 percent compared to roughly 12 percent of All Funds tax receipts. In contrast, the share of All Funds revenue derived from the personal income tax has been greater (over 60 percent) than its share of audit receipts (45 percent or less). The share of audit receipts derived from user taxes and fees has averaged 14 percent over the past several years compared to roughly 22 percent for its share of All Funds revenue.

In FY 2017 and FY 2018, the share of audit receipts from the business taxes category is expected to remain below the FY 2006 to FY 2009 levels, at 47 and 45 percent, respectively. This percentage share reduction is mainly due to a decline in large case settlements and an increase in the personal income tax share. The FY 2017 and FY 2018 audit and compliance share for the personal income tax is expected to remain above FY 2006 through FY 2009 levels. The share of audit receipts from user taxes and fees is expected to remain at recent historical levels in FY 2017 and FY 2018.

Table 5									
PERCENT OF ALL FUNDS AUDIT AND COMPLIANCE Collections By Tax Category					PERCENT OF ALL FUNDS Collections By Tax Category				
	Business Taxes	Other Taxes and Fees	User Taxes and Fees	Personal Income Tax		Business Taxes	Other Taxes and Fees	User Taxes and Fees	Personal Income Tax
FY 1999	40	5	19	36		17	10	20	53
FY 2000	34	6	20	40		15	10	20	55
FY 2001	31	4	22	43		13	8	19	60
FY 2002	32	5	20	43		12	8	19	61
FY 2003	31	4	20	45		13	8	22	57
FY 2004	27	4	23	46		12	8	23	57
FY 2005	34	3	21	42		12	8	23	57
FY 2006	51	3	15	31		12	8	21	59
FY 2007	57	3	13	27		15	3	23	59
FY 2008	53	1	14	32		14	3	23	60
FY 2009	53	2	14	31		13	3	23	61
FY 2010	44	2	15	39		13	5	22	60
FY 2011	44	2	17	37		12	5	23	60
FY 2012	48	2	15	36		12	5	23	60
FY 2013	47	2	14	37		12	5	22	61
FY 2014	48	1	13	38		12	5	22	61
FY 2015	47	1	12	40		12	5	22	61
FY 2016	38	2	15	45		11	5	21	63
Estimated									
FY 2017	47	1	13	39		10	5	21	63
FY 2018	45	1	13	41		10	5	21	64
All amounts after FY 2009 include Metropolitan Commuter Transportation Mobility Tax and Taxicab Surcharge receipts.									

All amounts after FY 2009 include Metropolitan Commuter Transportation Mobility Tax and Taxicab Surcharge receipts.

Significant Legislation

Significant statutory changes that have had an impact on audit and compliance activities since 2011 are summarized below.

Subject	Description	Effective Date
Legislation Enacted in 2011		
Extend Tax Shelter Reporting Provisions	Extended the sunset date for the current tax shelter disclosure and reporting provisions in the Tax Law to July 1, 2015.	July 2, 2011
Offset Lottery Winnings with Outstanding Tax Debts	Permits the crediting of lottery prizes exceeding \$600 against prize winner's liabilities for taxes owed to New York.	August 1, 2011
Legislation Enacted in 2013		
Suspension of Driver's Licenses of Persons Delinquent in the Payment of Past-Due Tax Liabilities	Allows for suspending the New York State drivers' licenses of certain taxpayers who owe past-due tax liabilities equal to or in excess of \$10,000 and fail to pay the past due amount or enter into a payment agreement with the Department of Taxation and Finance.	March 28, 2013
Warrantless Wage Garnishment	Authorized the Department of Taxation and Finance (DTF) to serve income executions (wage garnishments) on individual tax debtors if the taxpayer fails to pay within 21 calendar days after a notice and demand is issued. These provisions expire April 1, 2015.	March 28, 2013
Legislation Enacted in 2015		
Warrantless Wage Garnishment Extension	Extended the sunset date to April 2017 for allowing the Tax Department to serve an income execution (wage garnishments) to individual tax debtors.	April 13, 2015
Legislation Enacted in 2016		
Extend Tax Shelter Reporting Provisions	Extended the sunset date for the current tax shelter disclosure and reporting provisions in the Tax Law to July 1, 2019.	July 2, 2015

Risk to the Forecast

The audit and compliance plan in the forecast period contains risk. Even though the share of audit and compliance receipts received from business taxes is expected to remain below the high levels of FY 2006 through FY 2009, these taxes still represent nearly 50 percent of total expected audit and compliance receipts. Audit and compliance receipts for the FY 2006 through FY 2009 period were driven by voluntary compliance programs and the settlement of several large financial services and multi-state taxpayer cases. Corporate tax reform legislation enacted in the FY 2015 Budget is expected to improve voluntary tax compliance which would, in the long run, reduce audit collections from the corporation franchise tax. Quantifying the impact of this shift will be difficult until tax returns beginning with tax year 2015 are audited.