New York City Independent Budget Office

Fiscal Outlook

December 2016

A Forecast in Uncertain Times:

Only Modest Budget Shortfalls Ahead Despite A Slowdown in Local Economic Growth

Mayor de Blasio's latest financial plan might best be described as a placeholder. It recognizes some new spending needs, realizes additional federal and state support, and carves out some savings in city spending. The Mayor released his November 2016 Financial Plan a little more than a week after the national election and amid much uncertainty about what President-elect Trump's evolving policy agenda may mean for the U.S. economy as well as aid for the city. The Mayor's November plan also comes amid signs of slower growth in the local economy, leading the Mayor to nudge down his forecast for tax revenues this year and leave the projections for tax collections in the rest of the plan through 2020 unchanged from the estimates in June.

Based on IBO's analysis of tax revenues and spending as presented under the Mayor's plan along with our own updated economic forecast, we estimate the city will end the current fiscal year with a surplus of $801 million, which is $362 million above the de Blasio Administration's estimate. This surplus estimate does not include the $1.5 billion currently sitting in two reserves within the fiscal year 2017 budget—these reserves are counted as expenditures but do not currently support any specific spending needs. If these funds are not used to cover unexpected spending needs or revenue shortfalls, they will become part of the surplus, which would more than suffice to close the $1.9 billion budget gap (3.0 percent of city-funded expenditures) IBO forecasts for 2018. We project relatively manageable shortfalls for the last two years of the 2017-2020 financial plan period, shortfalls that could be substantially reduced by the reserves of $1.0 billion a year built

Total Revenue and Expenditure Projections
Dollars in millions

	2017	2018	2019	2020	Average Change
Total Revenue	**$83,884**	**$85,551**	**$88,916**	**$92,451**	**3.3%**
Total Taxes	54,232	57,174	60,043	63,019	5.1%
Total Expenditures	**83,522**	**87,778**	**91,468**	**93,899**	**4.0%**
IBO Surplus/(Gap) Projections	**$-**	**($1,865)**	**($2,551)**	**($1,448)**	
Adjusted for Prepayments and Debt Defeasances:					
Total Expenditures	$86,878	$88,415	$93,240	$95,678	3.3%
City-Funded Expenditures	$62,430	$65,222	$68,036	$70,002	3.9%

NOTES: IBO projects a surplus of $801 million for 2017, $362 million above the de Blasio Administration's forecast. The surplus is used to prepay some 2018 expenditures, leaving 2017 with a balanced budget. Figures may not add due to rounding.

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into the financial plan for 2019 and 2020 (assuming the reserves are not needed to fill revenue shortfalls or fund unexpected spending needs).

Our projection of surpluses and gaps is based on a forecast of modest economic growth in the city. Although IBO expects the local economy to continue to grow throughout the 2017-2020 financial plan period, the pace will slow markedly from the last seven years of expansion. Following the record increase of nearly 140,000 new jobs created in calendar year 2014, job growth slipped to 86,400 last year. The city has added 67,200 jobs through the first 10 months of this year—but with no net growth since July. We anticipate a declining number of new jobs through calendar year 2020.

U.S. and Local Economy

U.S. Economy. The nation's current economic expansion is now in its eighth year, and there are no signs that it is nearing an end. Although growth in output and employment began to moderate a year ago, real gross domestic product (GDP) growth in the latest quarter was a strong 3.2 percent on an annual basis. Increases in real wages coupled with relatively low levels of debt are among the economic conditions IBO expects to support continued growth. In the near term, these conditions are expected to remain largely unaffected by the policies of the new presidential administration. While much remains uncertain about the incoming Trump Administration's economic and fiscal plans and their fate in Congress, it is likely that their effects will not begin to be felt before the end of calendar year 2017. For now IBO forecasts an uptick in real GDP growth to 2.5 percent in 2017 and 2.7 percent in 2018, based in part on our assumption that the President-elect will follow through on his plans to cut taxes and increase spending on infrastructure. But policy uncertainties and potential missteps, such as over-heating the economy through the stimulus or large reductions in trade resulting from renouncing trade agreements, make the forecast for 2018 more tentative that usual. (All years in the U.S. and local economic sections refer to calendar years.)

Real GDP growth was weak in the first half of 2016, averaging only 1.1 percent on an annual basis. The latest government data indicate that growth accelerated in the third quarter of 2016 to 3.2 percent, its fastest rate in two years. Increases in consumer spending on durable goods and housing, exports, and business investment in nonresidential structures and inventories made the largest contributions to third-quarter growth. However, this rate of growth is not expected to be repeated in the fourth quarter; IBO forecasts 1.6 percent real GDP growth for 2016 as a whole, compared with 2.6 percent growth in 2015. With average monthly job creation running below last year's pace, we also expect employment growth to slow to 1.7 percent in 2016, down from 2.1 percent growth in 2015.

As the expansion has continued, albeit at a slower rate, the unemployment rate has continued to fall, from an average of 5.3 percent in 2015 to 4.9 percent this year, despite a rise in labor force participation. Moreover, while the number of job openings as a share of total employment—the job opening rate—trended up this year, the hiring rate trended down, indicating that employers were finding it harder to fill positions with the available labor force. The increase in real earnings of workers, which began in 2015, has continued into 2016. But wage gains have not translated into broad-based increases in prices, even though the unemployment rate has been at or below 5 percent—the threshold under which many economists project labor markets are tight enough to spur inflation.

Personal income growth—which IBO projects will be 3.3 percent for 2016—has been growing faster than wage income, and in turn this is helping to boost consumer spending, the main driver of the current expansion. Through the third quarter, consumer spending has increased by an average of 4.1 percent on an annual basis. Households are in a strong financial position to continue spending. Their debt service burden—the share of disposable income required to stay current on debt obligations—has been at its lowest level since 1980, the year the Federal Reserve began publishing the data. Although consumer debt burdens have been rising, mortgage debt service burdens have declined as households have taken advantage of continued low interest rates to refinance their homes. Low energy prices have also helped boost disposable income, and rising home prices plus record highs in stocks have created a positive wealth effect that is sustaining spending by many households.

Low energy prices and modest wage gains have kept inflation very low. We project a 1.2 percent increase in the consumer price index for 2016 and a still-low 2.2 percent rise when food and energy are excluded.

The balance sheets of financial institutions, particularly depository institutions, are now quite strong, enabling them to provide enough credit to support economic growth and to better weather the next downturn. Since the financial crisis, regulators have forced banks to raise additional capital, tighten lending standards, and increase the liquidity of their assets. Credit available to households and businesses has expanded at a moderate pace, in line with potential economic growth, but not so fast as to cause sharp spikes in debt and unsustainable increases in asset prices. The market for single-family housing is a credit-constrained exception, as tighter lending standards for mortgages have greatly limited demand from first-time homebuyers.

The balance sheets of other, nonfinancial businesses have also strengthened. Due in in part to low interest rates, the ratio of debt payments to cash flow for these firms has been falling, while the ratio of short-term assets to liabilities is well above historical averages. Business investment hit a post-recession peak in the middle of 2015 and has been declining through the first half of 2016, in large part because of swings in inventories, which had accumulated to unusually high levels last year. Corporate profits have also fluctuated over the last year, declining in the last quarter of 2015 and the second quarter of 2016, but increasing in the first and third quarters of this year.

Though uneven business investment and profits are causes for concern, in the short-run they are not expected to derail the current expansion, now in its eighth year. IBO's economic outlook for 2017 is for the most part unaffected by policy changes that the Trump Administration will likely pursue, for it assumes that it will take a while for policies to be implemented and have a major impact on the economy. The outcome of the presidential election and uncertainties about future economic policies have not rattled financial markets nor shaken consumer confidence, which in November reached its highest level since July 2007, as measured by the Conference Board's Consumer Confidence Index. Less clear is the longer-term effect of the President-elect's policies, creating many uncertainties about future economic growth after 2017 and making our forecast for the later years of the financial plan more tentative than usual.

Outlook for 2017. The economic outlook for the coming year is promising. Consumer spending will continue to fuel economic growth and the demand for labor. As labor markets tighten, wage growth should accelerate, reinforcing consumer spending. IBO forecasts the pace of real GDP growth to quicken in 2017, rising 2.5 percent on an average annual basis. Because labor markets are so tight, only a slight fall in the unemployment rate is expected. Personal income from both wage and nonwage sources is projected to rise by 4.6 percent, up from an average of 3.3 percent in 2016. Real wage increases are expected to help boost inflation to 2.5 percent. With the rate of inflation approaching the Federal Reserve's target rate of 2 percent, the Fed can be expected to resume gradually tightening monetary policy, with the first rate increase since December 2015 likely to occur as this report is being issued. IBO projects a rise in the federal funds rate—the interest rate the Federal Reserve charges on overnight loans between banks—from an average of 0.4 percent in 2016 to 1.0 percent next year. Interest rates on 10-year Treasury notes are projected to increase to 2.5 percent in 2017, up from 1.8 percent this year.

Since the election, financial markets have reacted in a way that could ease the Federal Reserve's task of raising rates to more normal historical levels. Prospects of fiscal stimulus from the spending and tax policies of the new Trump Administration have financial markets anticipating greater inflation and, in turn, boosting long-term interest rates to compensate for increased risk. Yields on 10-year Treasury notes and longer-term bonds have risen and if financial markets sustain the higher rates, the Federal Reserve will have more leeway to raise short-term rates while maintaining a healthy spread between short- and long-term rates that compensates long-term investors for increased risk.

With tax cuts and increased infrastructure spending on the President-elect's agenda, some degree of fiscal stimulus is very likely. However, the amount, timing, and financing of possible infrastructure spending and tax cuts are among the many policy unknowns at this point in time. Policy proposals presented during the campaign generally lacked details, and it is not clear that they are politically viable or feasible in practice, making it difficult to factor in their future macroeconomic effects.

Uncertainties Beyond 2017. As a result, IBO's forecast for 2018 and beyond has far more uncertainties than usual. For now it is premised on Congress agreeing to infrastructure spending and tax cuts, generating considerable fiscal stimulus in 2018. We project real GDP growth to accelerate to 2.7 percent in 2018 while the unemployment rate inches down to average 4.7 percent. With little slack in labor markets, real wage growth will accelerate and fuel a rise in inflation, to a projected 2.7 percent. Continued gradual increases in the federal funds rate will push long-term interest rates higher, with the 10-year Treasury note rate reaching 3.5 percent in 2018. In the final years of the forecast period, growth will be constrained by higher interest rates and by the availability of labor. IBO projects that real GDP growth will average 2.0 percent in 2019 and 2020.

IBO's forecast through 2020 is premised on there being no major policy missteps in the coming years. The forecast is consistent with the Federal Reserve succeeding in constraining inflation, and with a fiscal stimulus that neither overheats the economy nor rattles financial markets over increasing budget deficits. It also is premised on there being no shocks to financial markets and institutions, no major downturns in the global economy, and no significant disruptions of economic activity from fewer immigrants working in the U. S.

There are a large number of risks to the forecast given the many uncertainties about public policy in the coming years—which policies will be implemented and when, their scope and specific features, and the degree to which they will have both desired effects and adverse consequences. Uncertainty about public policy itself poses a risk to the economy through its potential to undermine business and consumer confidence. Not having developed or firmed up specific features of various broad policy pronouncements made during the campaign, it will likely be a year or more before we know the full extent of the Trump Administration's proposals and how they will be received by Congress. Uncertainty about potential changes in regulation, trade, health insurance, and other policies could cause some businesses to delay major investments and hiring decisions until new policies are formulated and implemented.

IBO's forecast assumes that even if an infrastructure program is adopted soon after the inauguration, the biggest boost to economic activity would not come until the first half of 2018 or beyond, depending on the timing of spending, the types of projects that would be financed, and the mix of public- and private-sector funding. The experience of implementing stimulus spending early in the Obama Administration suggests it could take longer than expected for even "shovel-ready" projects to get underway. Similarly, tax cuts will not immediately increase paychecks, and it will take time before there is enough of a boost to consumer spending to have a substantial impact on economic output.

Specific Policy Risks. The combination of proposed deep tax cuts and sharp increases in infrastructure and military spending could lead to rapid increases in the federal deficit and/or a sharp acceleration of inflation. Either outcome could unnerve financial markets, pushing up long-term interest rates as investors demand larger risk premiums. Even without a substantial increase in the deficit, there would still be concerns about inflation. Because any fiscal stimulus would take effect with the economy approaching what economists consider full employment, its multiplier effects will be smaller and its inflationary impact greater than they would be if the economy was still coping with high unemployment. Higher interest rates would dampen business investment and likely cause the dollar to appreciate, reducing U.S. exports.

Possible changes in the regulation of financial markets and institutions create their own set of uncertainties and risks for the nation's economy as well as for the financial industry. The Trump campaign and Congressional Republicans have indicated a desire to eliminate some or all of the provisions of the Dodd-Frank financial reform package enacted in 2010. But it is not clear which provisions would be targeted for elimination and whether efforts to dismantle Dodd-Frank will be successful; for now IBO's forecast does not factor in the potential economic effects of any regulatory change. While reducing capital requirements and instituting less stringent stress testing of banks has the potential to increase profitability of financial institutions, it could also undermine the strengthening of banks' balance sheets that has occurred since 2010 as banks responded to Dodd-Frank regulations.

The Trump Administration's plans for international trade are also unclear. With the fate of existing trade agreements uncertain as well as the extent to which the U.S. will impose tariffs and/or take other trade actions against individual countries unknown, for now IBO assumes that the outlook for U.S. exports and imports and the pace of global economic growth has not changed since the election.

The extent to which the President-elect will be able to decrease foreign immigration and remove noncitizens from the U.S. is also uncertain, though it also is likely to be large enough to slow economic growth by reducing the number of workers and consumers. Immigration from many countries, particularly countries in the Middle East that the President-elect has labeled sources of terrorism, would likely be curtailed. Increased deportation efforts, beefed up border patrols, and programs to force employers to verify work permits would also presumably reduce the number of undocumented workers in the U.S.

A final area of uncertainty concerns energy policy. A stated goal of the President-elect is to ease what he considers costly environmental and other regulations on energy producers in order to increase production. The extent to which this will reduce the price of energy is unclear, as is the impact of lower energy prices. While consumers have enjoyed lower prices at the gas pump and in heating their

IBO versus Mayor's Office of Management and Budget Economic Forecasts						
	2015	**2016**	**2017**	**2018**	**2019**	**2020**
National Economy						
Real GDP Growth						
IBO	2.6	1.6	2.5	2.7	2.2	1.9
OMB	2.6	1.5	2.4	2.4	2.2	2.2
Inflation Rate						
IBO	0.1	1.2	2.5	2.7	2.8	2.5
OMB	0.1	1.3	2.3	2.1	2.6	2.5
Personal Income Growth						
IBO	4.4	3.3	4.6	5.4	5.1	4.3
OMB	4.4	3.4	4.5	4.9	4.9	4.9
Unemployment Rate						
IBO	5.3	4.9	4.8	4.7	4.6	4.6
OMB	5.3	4.9	4.8	4.8	4.9	5.0
10-Year Treasury Note Rate						
IBO	2.1	1.8	2.5	3.5	3.9	3.8
OMB	2.1	1.7	2.3	2.9	3.5	3.8
Federal Funds Rate						
IBO	0.1	0.4	1.0	1.8	3.0	3.3
OMB	0.1	0.4	1.0	1.7	2.7	3.0
New York City Economy						
Nonfarm New Jobs (thousands)						
IBO (cumulative)	86.4	86.0	67.6	54.5	49.4	49.0
IBO (annual average)	118.0	94.9	66.7	62.0	50.5	48.5
OMB (annual average)	119.0	85.0	62.0	42.0	37.0	34.0
Nonfarm Employment Growth						
IBO (cumulative)	2.1	2.0	1.6	1.2	1.1	1.1
IBO (annual average)	2.9	2.2	1.5	1.4	1.1	1.1
OMB (annual average)	2.9	2.0	1.4	1.0	0.8	0.8
Inflation Rate (CPI-U-NY)						
IBO	0.1	1.0	2.3	3.0	2.9	2.7
OMB	0.1	1.2	2.3	2.2	2.6	2.5
Personal Income ($ billions)						
IBO	545.9	557.8	580.6	608.5	633.1	656.0
OMB	525.9	542.6	563.1	585.5	609.8	635.7
Personal Income Growth						
IBO	5.5	2.2	4.1	4.8	4.0	3.6
OMB	3.7	3.2	3.8	4.0	4.1	4.2
Manhattan Office Rents ($/sq.ft)						
IBO	76.1	78.8	81.1	83.2	85.0	86.2
OMB	76.8	80.1	84.6	85.3	87.6	89.1

SOURCE: Mayor's Office of Management and Budget
NOTES: Rates reflect year-over-year percentage changes except for unemployment, 10-Year Treasury Note, Federal Funds Rate, and Manhattan Office Rents. The local price index for urban consumers (CPI-U-NY) covers the New York/Northern New Jersey region. Personal income is nominal.

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homes, low prices also have made it unprofitable for many producers to continue production. Unlike other industries, the energy sector's employment and production has contracted in recent years. IBO's forecast incorporates a gradual rise in oil prices starting in 2017. Further declines in energy costs could exacerbate the contraction of energy production, hastening the decline of the coal industry in particular.

New York City Economy. In a forecast largely completed before the presidential election, IBO expects New York City's economy to extend its long expansion through the financial plan period, but at an attenuated pace. The election itself has introduced the prospect of far-reaching changes in federal policy that may impact the city in a variety of ways, some positive, some negative, but at this point all remain highly uncertain. Individual and corporate tax cuts could boost the city economy, but if federal rate cuts are paid for in part by curbing state and local tax deductibility, that would work against the city, which disproportionately benefits from that deduction. And insofar as federal tax cuts are not paid for, it is difficult to say how a rapid escalation of debt will effect expectations of both national and local growth. The city economy might also be adversely affected by uncertainty about the future status of its large immigrant population. There is anecdotal evidence that this is already prompting a slowdown in nonessential spending in some city neighborhoods with heavy concentrations of undocumented residents. Potential positive and negative impacts on the city's financial sector, discussed below, are also possible.

Employment. As New York City's record-setting economic expansion enters its eighth year, the boom is showing signs of wear. Cumulative payroll employment growth slipped from a record 139,700 in 2014 to 86,400 in 2015 and 67,200 through the first 10 months of 2016, with no net job growth since July.

As the table on page 7 shows, there have been particularly steep drop-offs in the pace of job creation in construction, transportation, finance, professional services, employment services, and social assistance. Partially offsetting these declines, there has been a surge of hiring this year in wholesale trade and a notable bounce in arts and entertainment. Retail has been flat in 2016, but this actually constitutes a significant improvement over 2015, when retail payrolls declined sharply.

IBO anticipates a continued downward drift in the pace of employment growth over the next four years, with cumulative growth weakening to 67,600 in 2017 and slowing to 49,000 by 2020. The projected slowdown is broadly spread among many of the economy's sectors, but is especially marked in the leisure and hospitality industries. This is in keeping with recent indications of weakening international tourism due to the strong U.S. dollar.

Labor Force. From 2008 through 2015, the city economy provided work for nearly 80 percent of the adults added (on net) to its civilian population, while in the rest of the United States barely 20 percent of the adults added found work—with almost all the rest counted as not in the labor force, the category for those who are neither employed nor seeking work.

But in 2016 the city's labor force data have been extremely erratic, swept by unprecedented fluctuations in the numbers of residents employed, unemployed, and not in the labor force. The upshot of all this is that the city approaches the end of 2016 with a considerably lower labor force participation rate (59.7 percent of adults employed or looking for work as of October, a drop of 1.4 percentage points since the start of the year), a lower employment-population ratio (56.2 percent, down 1.8 percentage points), and a notably higher unemployment rate (5.9 percent of the labor force, up 0.7 points) than we enjoyed when the year began.

Our forecast calls for gentle declines over the next four years in the rates of both labor force participation (to 59.1 percent by the end of 2020) and unemployment (5.3 percent as of the end of 2020). The employment-population ratio will be almost unchanged. This is consistent with a moderately expanding economy against the backdrop of an aging population.

Wages. IBO expects the citywide average wage to decline by 2.6 percent in 2016 after adjusting for inflation, making this the fourth year out of the last five of falling wages. This will leave real wages 10.9 percent below their 2007 peak; indeed, the estimated average real wage in 2016 is below the level of 2001.

Both before and during the last recession, wages in the securities industry were much more volatile than in the rest of the economy and were responsible for much of the volatility in the overall wage series. In recent years, however, real wage declines have occurred across a broad swath of industries in the city, including the medium- and higher-wage industries that have accounted for an increasing share of job growth as the expansion has matured.

Employment Growth From Beginning of Year
Cumulative monthly growth in thousands, seasonally adjusted by IBO

	January-December 2014	January-December 2015	January-October 2016
Total Nonfarm	**139.7**	**86.4**	**67.2**
Total Private	**135.5**	**82.7**	**63.9**
Mining, Logging, and Construction	**10.0**	**8.4**	**2.0**
Specialty Trade Contractors	6.1	4.6	0.6
Manufacturing	**0.3**	**1.4**	**0.4**
Wholesale Trade	**2.2**	**(0.8)**	**8.4**
Retail Trade	**10.1**	**(11.8)**	**0.3**
Food and Beverage Stores	3.1	(2.9)	3.2
Clothing and Clothing Accessories Stores	(1.6)	(2.7)	(3.0)
General Merchandise Stores	2.2	0.3	(0.6)
Utilities	**0.5**	**0.4**	**(0.2)**
Transportation and Warehousing	**4.1**	**5.6**	**0.3**
Information	**4.5**	**3.0**	**2.7**
Finance and Insurance	**7.8**	**5.8**	**(1.4)**
Securities and Related Financial Activities	3.5	3.7	0.1
Real Estate and Rental and Leasing	**3.4**	**1.9**	**(1.1)**
Professional, Scientific, and Technical Services	**16.0**	**18.9**	**3.6**
Legal Services	0.1	0.8	(0.9)
Computer Systems Design and Related Services	3.6	2.8	(2.8)
Management, Scientific, and Technical Consulting Services	3.1	1.4	4.7
Scientific Research and Development Services	0.2	1.9	(0.3)
Management of Companies and Enterprises	**2.4**	**0.2**	**1.2**
Administrative and Waste Management	**11.0**	**9.8**	**7.5**
Employment Services	6.9	4.4	(0.7)
Educational Services	**11.9**	**7.5**	**8.1**
Health Care and Social Assistance	**24.4**	**18.0**	**12.7**
Health Care Services	18.7	13.7	15.8
Social Assistance	5.7	4.3	(3.1)
Leisure and Hospitality	**20.3**	**11.4**	**14.9**
Arts, Entertainment, and Recreation	3.0	(0.2)	4.5
Accommodation and Food Services	17.4	11.6	10.4
Other Services	**6.7**	**3.2**	**4.6**
Government	**4.2**	**3.6**	**3.3**

SOURCE: Bureau of Labor Statistics

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Our forecast projects a return to positive wage growth in 2017, with real average wages growing 1.3 percent per year through 2020.

Personal Income. Growth in aggregate personal income is expected to dip from 5.5 percent in 2015 to 2.2 percent in 2016 and then average 4.1 percent per year over 2017 through 2020. Adjusted for inflation, growth will be 0.5 percent in 2016 and average 1.9 percent over the next four years. The main component and determinant of trends in overall personal income is wages, but projected slower growth in proprietors' income and asset income (dividends, interest, and rents) also pull down the trend in overall income.

Wall Street. The table on page 8 shows that securities industry wages fell for the second straight year (and for the seventh time in the last nine years) in 2016, and preliminary indications are for another drop in 2017. But New York Stock Exchange member firm broker-dealer profits have rebounded this year, reaching $15.0 billion

Average Wages in New York City *In 2016 dollars*						
Year	**All Jobs**		**Securities**		**All Other**	
2007	$96, 022		$470,479		$76.183	
2008	94,399	-1.7%	451,861	-4.0%	75,793	-0.5%
2009	86,856	-8.0%	360,285	-20.3%	73,741	-2.7%
2010	90,432	4.1%	410,180	13.8%	75,478	2.4%
2011	91,208	0.9%	407,027	-0.8%	76,266	1.0%
2012	89,576	-1.8%	393,811	-3.2%	75,747	-0.7%
2013	87,182	-2.7%	377,884	-4.0%	74,554	-1.6%
2014	89,293	2.4%	417,835	10.6%	75,278	1.0%
2015	87,882	-1.6%	397,431	-4.9%	74,705	-0.8%
2016	85,574	-2.6%	381,049	-4.1%	73,149	-2.1%
2007-2010	(5,590)	-5.8%	(60,299)	-12.8%	(706)	-0.9%
2010-2016	(4,858)	-5.4%	(29,131)	-7.1%	(2,329)	-3.1%
2007-2016	(10,448)	-10.9%	(89,430)	-19.0%	(3,034)	-4.0%

SOURCE: Moody's Analytics
NOTE: 2016 is an estimate.

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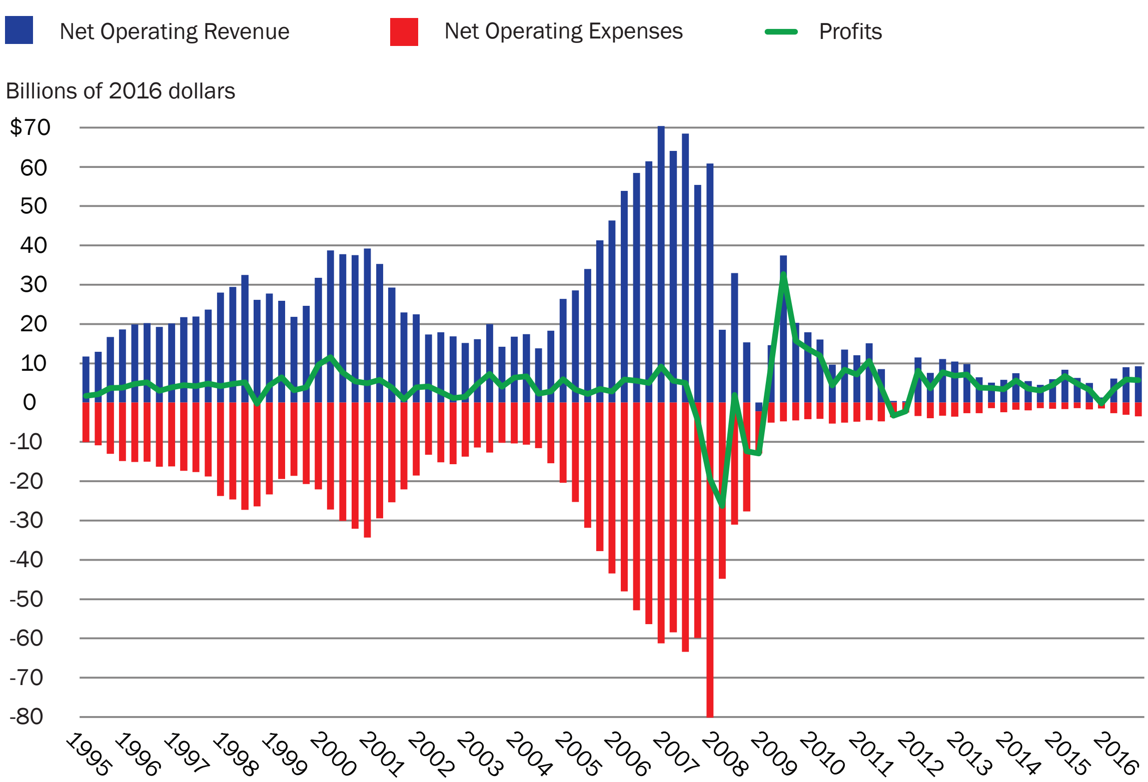
through the first three quarters; this already exceeds the $14.3 billion in profits for all of 2015. For 2016 as a whole, we expect member-firm profits to total $18.7 billion. Our forecast calls for profits slipping to $16.0 billion in 2017 and then rising gradually to $18.6 billion by 2020.

But this projection was generated before the November presidential election, and developments since then have considerably increased the uncertainty of the forecast. On the one hand, the Trump Administration has raised the prospect of rolling back some banking regulations, which

Quarterly Net Operating Revenues, Net Interest Expenses & Profits of New York Stock Exchange Member Firms



SOURCE: Intercontinental Exchange

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may enable broker-dealers to reverse some of the steep post-crisis decline in net operating revenue that can be seen in the chart on page 8. On the other hand, interest rates have jumped since the election, and a significant movement of net interest expenses back towards precrisis norms would sharply lower broker-dealer profits unless net operating revenue also rebounded.

Real Estate. IBO expects that taxable real estate sales in New York City will total roughly $110 billion in 2016, short of the record-setting sales of $126.3 billion in 2015. Commercial sales will be well below the 2015 total of $78.0 billion, but residential sales are expected to slightly exceed last year's $48.3 billion total.

After dropping sharply in 2008 and 2009 in the wake of the financial crisis, real estate sales experienced double-digit increases each year from 2010 through 2015. The recovery was especially strong in the commercial sector, which had declined more sharply than the residential sector following the crash. Sales of commercial properties have exceeded those of residential properties every year since 2011, but this year the difference has narrowed considerably.

IBO expects real estate sales to fall slightly in 2017, with a relatively greater decline in the commercial sector. IBO projects that higher interest rates will contribute to a decline in overall real estate activity. The outlook for slowing employment growth in office-using industries and the availability of considerable new office space at the World Trade Center site and Hudson Yards will constrain increases in office rents, and reduce the attractiveness of buying and selling office buildings on the basis of expected future income growth. IBO projects that sales growth will resume in 2018, but total sales will continue to lag behind the record levels of 2015.

Taxes and Other Revenues

IBO's forecast of revenue from taxes and other sources including fines, fees, and state and federal aid totals $83.9 billion for this year, an increase of $3.9 billion (4.7 percent) over 2016 (all years in in the revenue and spending sections refer to city fiscal years unless otherwise noted). Much of this increase is due to a 21.1 percent jump in projected federal grants for 2017, with part of that growth resulting from the shift of $374 million in Sandy relief aid that was not spent in 2016 into 2017. Tax revenue growth from 2016 to 2017 is forecast to be a modest 2.4 percent and the city's total own source revenue—excluding state, federal, and other grants—is projected to grow by 1.4 percent. For 2018, our forecast of total revenue shows a small gain of 2.0 percent to $85.6 billion, pulled down by a 17.7 percent decline in federal aid, mostly Sandy-related aid that is not expected to be a major revenue source after 2017.

While total revenue growth is expected to be tepid from this year to next, IBO expects the tax revenue portion of that total to grow by 5.4 percent, more than twice the rate in 2017, rising by $2.9 billion to $57.2 billion in 2018. The city's own nontax revenues (primarily fees, fines, and sales) are projected to show little change from 2017 to 2018, totaling $5.2 billion. Noncity revenues in 2018 are expected to be 5.1 percent lower than in 2017 thanks largely to an anticipated drop in federal grants under the Mayor's Office of Management and Budget's (OMB) assumption that much of the remaining Sandy aid is actually spent in 2017.

Following 2018, IBO projects that total revenues will grow in a more typical pattern, increasing to $88.9 billion in 2019 and $92.5 billion by 2020. Annual revenue growth will average 4.0 percent in these years, driven by city taxes, which are forecast to increase at an average annual rate of 5.0 percent. Growth in noncity revenue sources is projected to average 1.5 percent annually in 2019 and 2020.

The first part of this section presents IBO's tax revenue forecast, followed by a detailed discussion of each of the city's major tax sources. It concludes with a brief overview of the outlook for nontax revenues.

Tax Revenues. IBO's forecast for tax revenues in the current fiscal year is $54.2 billion, a gain of only 2.4 percent from 2016. This would mark the second year in a row of declining tax revenue growth. Following a 7.5 percent gain in 2015, revenue growth was less than half that pace in 2016 (3.6 percent). But after the further slowdown in tax revenue growth this year, IBO expects growth to strengthen, with taxes growing to $57.2 billion in 2018 and reaching $63.0 billion in 2020—an average growth rate of 5.1 percent annually over the final three years of the financial plan period.

The weak revenue growth this year stems from slowdowns in the city's two real estate transfer taxes, which are dependent on interest rates and the state of the local property markets, along with a more modest anticipated decline in sales tax revenue. Following very strong revenue growth in 2015, the two transfer taxes slowed in 2016 and are forecast to show negative growth this year. The real property transfer tax is expected to fall by 15.0 percent this year and the mortgage recording tax by 6.7 percent. The sales tax is expected to show a small revenue decline of 0.19 percent.

For 2018, IBO expects revenue growth to accelerate to 5.4 percent, with revenue totaling $57.2 billion. Much of the tax revenue growth for 2018 is expected to come from the property tax and the sales tax, although all of the city's major tax sources are projected to show gains. IBO expects tax revenue growth to continue in 2019 and 2020, averaging 5.0 percent annually with tax revenues forecast to reach $63.0 billion by the latter year. Property tax, personal income tax, and the general sales tax in particular are expected to experience strong growth over those two years.

IBO's forecast does not include double-digit tax revenue growth, something that did occur each of the boom years from 2004 through 2007 prior to the last recession. Nor does IBO's forecast assume an acceleration of growth over the recent past. Indeed, the average annual growth we project for 2017 through 2020—4.5 percent—is well below the 6.4 percent average that prevailed during the preceding four years (2013 through 2016).

IBO's latest tax revenue forecast is quite similar to OMB's, at least for the first two years of the financial plan period. For 2017, IBO's forecast is $270 million, or 0.5 percent, higher than forecast by OMB in the November 2016 Financial Plan; for 2018 the difference is an even-smaller $491 million, or 0.4 percent. The gap between the two forecasts grows slightly in 2019 and 2020, with a difference of $1.5 billion (0.9 percent) in 2020.

IBO's forecast of slower employment gains in the city and slow but steady growth in tax revenues results in budgets that are essentially in balance for 2017 and 2018 followed by two years of what are—by historical standards—manageable deficits. However, there is much greater uncertainty regarding the tax revenue forecast than typically prevails. This results not only from a slowing expansion, but also the many unknowns about the direction of fiscal and economic policy under the incoming Trump Administration. Some initiatives expected to be priorities for the President-elect such as financial deregulation, income tax cuts, and increased infrastructure spending could well have positive effects on the local economy and accelerate revenue growth. In contrast, risks of higher inflation, disruptions to trade, and the reduced growth that could accompany efforts to deport large numbers of undocumented immigrants could result in slower growth than we project, likely accompanied by lower tax revenues.

Real Property Tax. IBO projects property tax revenue will grow from $24.3 billion in 2017 to $25.9 billion in 2018, a 6.5 percent increase. For the four years of the financial plan period, we expect property tax revenue to grow at an average annual pace of 6.0 percent. By comparison, OMB expects increases in property tax revenue to average 5.1 percent a year through 2020.

Background. The amount of tax owed on real estate in New York City depends on the type of property, its value for tax purposes (as calculated by the city's Department of Finance based on its estimates of market value), and the applicable tax rate. Under New York State's property tax law, there are four classes of property in the city: Class 1 consists of one-, two-, and three-family homes; Class 2 comprises apartment buildings, including cooperatives and condominiums; Class 3 is exclusively real property owned by utility companies; and Class 4 consists of all other commercial and industrial property. Each class's share of the levy is determined under the state law that allows only small shifts in the share of the overall property tax borne by each class. The city then divides the apportioned citywide levy by the taxable assessed value of property for each class, resulting in a class-specific tax rate that determines how much a taxpayer in in their class owes per $100 of their property's taxable value.

The taxable assessed value of a property for tax purposes is established by the Department of Finance. The department estimates each property's fair market value and then applies an assessment percentage, which reduces the amount of the property's value subject to the property tax. For Class 1 property, no more than 6.0 percent of fair market value is taxable while for all other property 45.0 percent is taxable. These percentages are set by the Commissioner of the Department of Finance. A property's resulting assessed value is then further reduced by any property tax exemptions in order to reach taxable assessed value.

Because of differences in assessment percentages, exemptions, and assessment practices across property types, the share of taxable assessed value borne by each class is not proportional to its share of market value. Class 1 properties account for a much smaller share of total assessed value than their share of market value—8.8 percent of assessed value on the 2017 tax roll compared with 46.6 percent of the finance department's estimate of total market value in the city. The other classes, especially Classes 3 and 4, bear a disproportionately large share of the property tax burden because their shares of assessed value are much bigger than their shares of market value.

Assessment Roll for 2018. The tentative assessment roll for 2018 is scheduled for release in January, 2017. After a

IBO Revenue Projections
Dollars in millions

	2017	2018	2019	2020	Average Change
Tax Revenue					
Property	$24,267	$25,991	$27,641	$29,336	6.5%
Personal Income	11,267	11,680	12,157	12,760	4.2%
General Sales	6,900	7,266	7,584	7,901	4.6%
General Corporation	3,886	4,096	4,278	4,418	4.4%
Unincorporated Business	2,094	2,178	2,276	2,374	4.3%
Real Property Transfer	1,509	1,606	1,691	1,758	5.2%
Mortgage Recording	1,149	1,158	1,167	1,171	0.6%
Utility	385	400	412	422	3.1%
Hotel Occupancy	588	612	631	650	3.4%
Commercial Rent	814	845	868	891	3.1%
Cigarette	42	40	38	36	-5.0%
Other Taxes and Audits	1,335	1,301	1,301	1,301	-0.9%
Total Taxes	**$54,232**	**$57,174**	**$60,043**	**$63,019**	**5.1%**
Other Revenue					
STaR Reimbursement	$556	$535	$533	$531	-1.5%
Miscellaneous Revenue	6,624	6,442	6,695	6,798	0.9%
Unrestricted Intergovernmental Aid	-	-	-	-	n/a
Less: Intra-City Revenue	(1,961)	(1,778)	(1,772)	(1,779)	n/a
Disallowances	(15)	(15)	(15)	(15)	n/a
Total Other Revenue	**$5,204**	**$5,184**	**$5,441**	**$5,535**	**2.1%**
TOTAL CITY-FUNDED REVENUE	**$59,436**	**$62,358**	**$65,484**	**$68,554**	**4.9%**
State Categorical Grants	$14,088	$14,467	$14,938	$15,425	3.1%
Federal Categorical Grants	8,712	7,168	7,008	6,995	-7.1%
Other Categorical Aid	993	901	891	883	-3.8%
Interfund Revenue	655	657	595	594	-3.2%
TOTAL REVENUE	**$83,884**	**$85,551**	**$88,916**	**$92,451**	**3.3%**

NOTES: Remaining banking corporation tax revenues reported with general corporation tax. Figures may not add due to rounding

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period for appeals and review, a final roll will be released in May. IBO projects that aggregate market value on the final roll will be 5.6 percent greater than on last year's roll, while assessed value for tax purposes is forecast to grow by 6.2 percent.

Class 1. The aggregate market value of Class 1 properties on the 2018 roll is expected to be 6.0 percent higher than this year's. This increase reflects strong growth in the median sales price of single-family homes in the boroughs outside Manhattan, which through October was $480,000, a $27,000 increase over last year.

IBO projects assessed value for tax purposes in 2018 will increase by 3.9 percent over 2017. In Class 1, the assessed value of a property moves toward the target of 6.0 percent of market value, with assessment increases capped at 6.0 percent a year or 20.0 percent over five years. As long as a parcel's assessed value under the cap on annual increases is less than 6.0 percent of its market value, the ratio of assessed value to market value will trend towards 6.0 percent—even if the market value stays flat or declines compared with the prior year. If the assessed value under the cap on annual increases is greater than 6.0 percent of market value, the latter becomes the new assessed value, which is why the ratio of assessed value to market value can never exceed 6.0 percent. When the housing market is strong the median assessment ratio tends to decline and conversely when the market is soft it tends to increase—although no higher than 6.0 percent. For example, the median ratio of assessed value to market value for one-family homes outside Manhattan declined from 5.4 percent in 2004 to a low of 3.7 percent in 2008, well below the 6.0 percent target. More recently, the median assessment ratio has increased, rising from 4.0 percent in 2009 to 5.2 percent in 2017.

Differences Between IBO's and the deBlasio Administration's Property Tax Revenue Forecasts Are Generally Attributable to Differences in Forecasting the Reserve *Dollars in millions*				
	2017	**2018**	**2019**	**2020**
IBO Minus OMB Revenue Forecast Difference	$242.0	$580.9	$720.4	$1,145.3
Differences in Major Reserve Components				
Prior-Year Collections	($3.7)	$6.6	$33.7	$40.5
Refunds	$101.2	$156.4	$74.0	$18.2
Delinquencies	$101.9	$134.9	$125.9	$119.9
Cancellations	$36.7	$44.4	$36.2	$49.7
Subtotal	$236.1	$342.2	$269.8	$228.2
All Other Reserve Components	$5.9	$238.7	$450.6	$917.1
Total Reserve Components	$242.0	$580.9	$720.4	$1,145.3
Major Reserve Components as a Percent of the Total Reserve	97.6%	58.9%	37.4%	19.9%

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Class 2 and Class 4. IBO projects that on the final roll for 2018, aggregate market value for all properties in Class 2 will total $273.6 billion, a 6.6 percent increase over 2017. Aggregate market value for Class 4 property is expected to reach $296.3 billion, a 4.3 percent increase over 2017, which would be the first roll in the last six years where annual growth did not exceed 5.0 percent.

Aggregate assessed value for tax purposes for Class 2 is expected to be $77.9 billion, a 5.2 percent increase from the 2017 roll, and $110.3 billion for Class 4, an 8.1 percent change from the previous year. The increase projected for Class 2 is below the average for growth in taxable assessed value over the past five years (6.6 percent), while the forecast for Class 4 is above its five-year average of 6.2 percent.

The continued growth in Class 2 and Class 4 assessments for tax purposes is partly attributable to the city's method for translating changes in market value into assessed value. In most cases changes in parcels' market values are phased in over five years. The assessed value changes from the preceding four years that have yet to be recognized on the tax roll are called the pipeline. IBO's assessed value projections reflect a continuing strong real estate market that has allowed the pipeline to increase fourfold from $6.3 billion in 2011 to $25.7 billion in 2017.

Outlook for Market and Assessed Values in 2019 and 2020. The year-to-year increase in market value is expected to remain stable after 2018. IBO forecasts an increase in aggregate market value of 4.7 percent in 2019, with each class growing at roughly the same rate relative to 2018. Market value in 2019 is expected to rise 3.4 percent in Class 1, 6.1 percent in Class 2, and 5.8 percent in Class 4, with similar increases forecast for 2020.

IBO projects that aggregate assessed value for tax purposes will grow by 6.2 percent in 2019 and by 6.3 percent in 2020. We anticipate Class 4 experiencing the greatest annual growth, about 7.0 percent a year in both years. Class 1 and 2 taxable assessed values are expected to grow on average by 3.8 percent and 6.3 percent, respectively. As the city's real estate market continues to grow, we expect the pipeline to swell further, reaching a peak in 2019 of $27.2 billion and falling to $24.7 billion the following year.

Revenue Outlook. IBO anticipates property tax revenue will total $24.3 billion at the close of 2017 and $26.0 billion in 2018—an increase of 7.1 percent. Growth is expected to average 6.2 percent annually over the following two years, with revenue reaching $29.3 billion in 2020. In contrast, OMB forecasts 2017 revenue of $24.0 billion and average annual growth of 5.5 percent through 2020, when they project property tax revenue will total $28.2 billion.

Much of the difference between IBO's forecast and OMB's stems from a few elements of the property tax system. The amount of property tax revenue the city collects in any fiscal year is determined not just by the assessment roll, but also by the delinquency rate, abatements granted, refunds for disputed assessments, collections from prior years, and other property tax debits and credits collectively known as the property tax reserve. Most of the difference between IBO's and OMB's property tax revenue projections is attributable to differences in forecasting items included in the reserve. Some reserve components, such as delinquencies, are counted as debits, thus reducing current year tax revenue. Other components, such as payments made in a given fiscal year for prior-year liability, are counted as credits, thus increasing current year tax revenue. Because the dollar value of the debits generally exceeds the dollar value of the credits, the net value of the reserve is nearly always negative, which is why anticipated revenue is always less than the forecast for the property tax levy.

For 2017, with the assessment roll and levy finalized last spring, then by definition, the only differences between the IBO and OMB revenue forecasts will stem from the reserve. Virtually the entire difference between OMB's and IBO's revenue forecast is due to four components in the reserve: prior-year collections, refunds, delinquencies, and cancelled taxes. In later years, differences in reserve forecasts continue to account for much of the difference in the overall forecast, but the share of the difference declines over time as differences in the levy forecast also come into play. By 2020, differences between IBO's and OMB's reserve forecast for these four components account for less than a quarter of the total forecast difference.

Real Estate Transfer Taxes. The city receives revenue from two taxes related to real estate purchases or financing. The real property transfer tax (RPTT) is levied on the value of real estate sold, while the mortgage recording tax (MRT) is levied on the value of mortgages, including certain refinancing activity. Together these two taxes are referred to as the transfer taxes. Revenues from the transfer taxes are expected to total almost $2.7 billion in 2017, a decline of 11.7 percent from the 2016 total of $3.0 billion, which was the second-highest sum on record after the 2007 total of $3.3 billion. One year ago IBO projected a decline in transfer tax revenue in 2016, but the persistent strength of the real estate market, aided by continued low interest rates, led to a surge in collections toward the end of the fiscal year. This year, signs of weakness in the commercial real estate market are already apparent, and point to a decline in revenue, particularly in the RPTT.

Following the dip in the current year, IBO forecasts a modest rebound in transfer tax revenue to $2.8 billion in 2018, followed by moderate growth during the next two years. The total of the two taxes is projected to reach $2.9 billion in 2020, similar to the level of 2015. In inflation-adjusted terms, total transfer tax collections will remain well below their 2007 peak for the foreseeable future.

Real Property Transfer Tax. Revenue from the real property transfer tax reached $1.78 billion in 2016, narrowly surpassing the previous record of $1.77 billion set a year earlier. RPTT collections vary with both the level and composition of real estate sales. Commercial properties are taxed at a higher rate than residential properties, and for both commercial and residential sales, the tax rate is higher when the price exceeds $500,000. Real estate markets in New York City have undergone a changing dynamic in the last few years. After collapsing in the wake of the 2008 financial crisis and then beginning a gradual recovery, the commercial real estate sector performed very strongly in 2014 and even more strongly in 2015. In 2015 total taxable commercial sales hit a new record—$75.2 billion, 5.3 percent above the previous record of $71.4 billion set in 2007. The following year, 2016, commercial sales dipped to $69.5 billion, but residential sales reached a new high of $50.5 billion, about 4.5 percent above the previous record, set in 2007. Compared with 2007, the number of residential transactions in 2016 was 23.7 percent lower, but the average value per transaction was 41.1 percent higher ($940,000 in 2016 versus $666,000 in 2007). Somewhat surprisingly, however, the share of residential sales valued at $500,000 and under, and therefore subject to a lower RPTT rate, was not dramatically different in the two years. In 2007, 48.3 percent of residential sales were in the "low" price range, whereas in 2016 the share was 45.2 percent.

The commercial real estate sector has continued to lose ground in absolute terms and relative to residential sales during the first months of 2017. The value of commercial sales during the first five months of this fiscal year (July-November 2016) was 20.6 percent below the level of the previous year. Residential sales, on the other hand, rose 4.8 percent over the same period. Overall, from July through November of this year, residential sales comprised 52.2 percent of the total value of real estate sales, and 51.7 percent of RPTT revenue. This compares with a 45.3 percent share of sales and a 41.7 percent share of tax revenue during the same period last year.

IBO projects that RPTT revenue will drop 15.0 percent in 2017 compared with 2016, due primarily to the decline in commercial sales. Moderate growth will resume in 2018 and continue through 2020, with residential real estate accounting for nearly half of RPTT revenue. By 2020, RPTT collections are forecast to be $1.76 billion, just below the record levels of 2015 and 2016. In inflation-adjusted terms, however, collections will remain well below their 2007 peak.

Mortgage Recording Tax. Mortgage recording tax revenue fell more sharply than RPTT collections in the wake of the financial crisis, and have recovered more slowly. MRT revenue was just over $1.2 billion in 2016, about $80 million more than in 2015, but still below the 2007 peak of almost $1.6 billion.

The MRT does not track the value of real estate sales as closely as does the RPTT because not all sales involve a mortgage, and for sales with a mortgage the loan-to-value ratio varies by transaction. In addition, mortgage refinancings, which may be subject in part or in whole to the MRT, are not connected to a property sale.

Historically, high MRT collections have generally corresponded to periods of low interest rates and significant refinancing activity. Mortgage rates have continued at historic lows for most of the last year, as the Federal Reserve has held off raising its target rate. However, mortgage rates have moved steadily higher in recent weeks, and IBO projects that the increase will continue over the next few years. While higher interest rates will exert a dampening effect on real estate sales, overall sales and the value of sales-related mortgage originations are still expected to rise. Mortgage refinancing, on the other hand, will fall in the face of higher rates. After dropping 6.9 percent to $1.15 billion in 2017, MRT revenue is projected to rise only 1.9 percent, to just under $1.17 billion by 2020.

IBO's projections of transfer tax revenue follow a similar pattern to those of OMB, but are consistently higher. IBO's forecast of RPTT revenue is 1.4 percent above OMB in 2017 and 0.2 percent higher in 2018. IBO's MRT forecast is 5.9 percent higher than OMB in 2017, and 7.7 percent higher in 2018. For the entire 2017-2020 forecast period, IBO's projection of RPTT revenue is 1.7 percent higher than OMB's, while our forecast of MRT revenue is 5.7 percent higher.

Commercial Rent Tax. IBO expects commercial rent tax (CRT) revenue to total $814 million in 2017, up 4.5 percent from 2016. CRT revenue is projected to grow at an annual average rate of 3.1 percent in 2018 through 2020 and reach $891 million in 2020, a 14.4 percent increase over 2016.

The CRT is a tax imposed on tenants who rent space for business, professional, or commercial purposes in certain areas of Manhattan below 96th Street. Not-for-profit entities, subtenants, tenants located in the World Trade Center area, and tenants located in the Commercial Revitalization Program abatement zone are all exempt from the tax. Over time both the tax rate and the geographic area subject to the tax have been reduced. Currently, tenants whose annual gross rents are less than $250,000 are exempt from the tax, and a sliding tax credit is applied to tenants with annual or annualized rents between $250,000 and $300,000. For those tenants who are subject to the tax and whose annual or annualized rent is over $300,000, the effective tax rate is 3.9 percent of gross rent.

Annual CRT collections depend on the tax rate, rent levels, and the amount of rental space subject to the tax. Unlike the transfer taxes, CRT revenues are not subject to significant year-to-year fluctuations. Since the last rate reduction in 1999, CRT receipts have grown each year. IBO projects that CRT revenue will grow at roughly the same pace as average Manhattan office rents through 2020.

IBO's CRT forecast for 2017 is $6 million (less than 1.0 percent) higher than OMB's. But OMB projects slightly higher growth than does IBO in subsequent years, and by 2020, IBO's forecast is $19 million (2.1 percent) below OMB's.

Personal Income Tax. IBO forecasts $11.3 billion in personal income tax (PIT) revenue (net of refunds) in 2017, a $534 million (5.0 percent) increase over 2016 collections. Much of the 2017 increase stems from a change in how STAR benefits are distributed to PIT filers. PIT growth is projected to slow to 3.7 percent in 2018—slower growth than in all but one other year since the current economic expansion began in 2010. Projected growth averages 4.5 percent, annually, in 2019 and 2020.

A large part of the PIT revenue increase this year results from a change made to the STAR program last spring with adoption of the fiscal year 2016-2017 budget for New York State. The STAR program had provided per filer credits—$125 or $63, depending on filing status—against city PIT liability, limited in recent years to filers with incomes up to $250,000. Beginning in tax (calendar) year 2016, the credit will be provided against the state's own personal income tax, not the city PIT. This will reduce state tax liability for credit-receiving filers while increasing city PIT liability by an equal amount, leaving recipients with no change in their after tax income. The transfer of the credit from city to state will add $235 million in PIT revenue to city coffers in 2017 and $251 million annually in subsequent years. (There will be no effect on city's budget because the increase in PIT collections will be offset by an equal reduction in STAR aid the state provides to the city.)

The remainder of the PIT revenue growth forecast by IBO for the current year is expected to result from modest increases in withholdings and estimated payments, along with a decrease in refunds. Through November, withholding revenue this year is 6.3 percent greater than for the same period last year. However, IBO expects withholdings from the payment of bonuses, generally made during December through March, to be lower than last year. IBO forecasts that withholding growth will slow to 5.0 percent for fiscal year 2017 as a whole.

Anticipation that the incoming Trump Administration and

Congress will lower federal income tax rates has increased the uncertainty regarding our withholding forecast. We project that an unusually high share of cash bonuses will be deferred until calendar year 2017 in anticipation that federal income tax rates will be lower than in 2016. Similarly, we expect that many taxpayers holding deferred bonuses in the form of stock options will delay exercising their options until next year. (Withholding payments are only made when options are exercised.) If bonuses are deferred until after June 30, 2017, the withholdings generated by them would be considered 2018 rather than 2017 PIT revenue.

IBO forecasts a modest increase in estimated payments this year—$55 million (1.8 percent). Estimated payments are made by taxpayers who are self-employed or who anticipate realizing capital gains from the sale of real property and financial assets, along with those filing for extensions to delay the deadline for final returns past April 15th. In 2016, receipts from estimated payments fell by $146 million (4.6 percent), almost entirely due to a decrease in payments made by extension filers. Estimated payments so far in 2016 are running 10.1 percent lower than last year. But with stock markets having achieved new highs in recent weeks, IBO expects estimated payments to increase sharply in January, the month when the last of the quarterly payments is made against calendar year 2016 liability. We also expect a rise in extension payments, almost all of which are made in March through May.

IBO forecasts slower PIT growth in 2018—revenue is expected to be $413 million (3.7 percent) above our projection for 2017. (For now, IBO's forecast does not anticipate a boost to city PIT revenue resulting from possible changes in federal tax policy, although the timing of receipts may be altered.) Employment growth is expected to slow in calendar years 2017 and 2018 to an average annual rate of 65,800—well below the city's job gains in recent years—which will constrain wage growth. But income from capital gains, dividends, and other nonwage sources is expected to increase, resulting in a boost to personal income growth, from 2.2 percent in calendar year 2016 to 4.1 percent and 4.8 percent in 2017 and 2018, respectively. Compared with 2017, IBO projects faster growth in both withholdings (5.7 percent) and estimated payments (5.6 percent) for 2018. In anticipation of tax cuts, many taxpayers are likely to defer capital gains realizations until tax legislation is enacted in Washington. This will shift receipt of some revenue from capital gains from fiscal year 2017 to 2018. Offsetting part of the additional withholding and estimated payments revenue is a projected increase in refunds, as there will be a likely increase in the amount of overpaid liability when taxpayers file their returns in the spring of 2018. With IBO expecting personal income growth to peak early in calendar year 2018 and to start falling steadily from the middle of 2018 through the end of the forecast period, we project increases in PIT receipts to slow to an annual average rate of 4.5 percent in fiscal years 2019 and 2020. PIT revenue is forecast to reach $12.8 billion in 2020, almost 20 percent higher than in 2016.

IBO projects faster city income and employment growth than OMB during the forecast period, particularly in calendar year 2018. As a result, IBO's personal income tax forecast exceeds OMB's by a relatively modest $83 million (0.7 percent) in 2017 and by increasing amounts thereafter: $127 million (1.1 percent) in 2018, $186 million (1.6 percent) in 2019, and $324 million (2.6 percent) in 2020.

Business Income Taxes. In 2016, total revenue from the city's business incomes taxes fell by $386 million (6.4 percent) compared with 2015, when the combined revenue had exceeded $6 billion (in nominal terms) for the first time. For 2017, IBO forecasts revenue growth will resume at a stronger rate of 5.6 percent, generating an additional $317 million in additional revenue, which would once again bring total business tax revenue close to $6 billion. Revenue is expected to increase at a slightly slower rate (4.9 percent) in 2018, and then continue to rise at an average annual rate of 4.0 percent in 2019 and 2020.

In a major change to the city's business income taxes, the previously separate banking corporation tax (BCT) and general corporation tax (GCT) were overhauled and combined in a single tax, effective January 1, 2015. This means banks' tax payments for liability (calendar) year 2015 and beyond are reported as GCT revenue.

Corporate tax revenue (the sum of BCT and GCT receipts together) was $3.6 billion in 2016, about $460 million less than the collections in 2015. This decline in collections in 2016 reflects the slowdown in the pace of earnings and employment growth from calendar year 2015 to 2016 across most business sectors. IBO projects that earnings in one of the major contributors to the city's GCT revenue, the financial activities sector, are expected to fall by 4.2 percent in calendar year 2016. Earnings in information and retail trade, two other major contributors to the city's corporate tax revenue, have also contracted this calendar year by an estimated 3.9 percent and 3.2 percent, respectively. The contractions in these major sectors in calendar year 2016 continue a slowdown that had begun in the previous year. IBO expects growth in earnings to resume in all three sectors—finance, information, and retail—starting in calendar year 2017 and continuing into 2018. Increased corporate investment and higher earnings are expected to help boost fiscal year 2017 corporate tax revenue by $263 million (7.3 percent). For 2018, IBO expects corporate tax revenue to continue growing, albeit at a slower 5.4 percent rate, and to return to its 2015 level of over $4 billion. For the final two years of the financial plan, we forecast that annual growth will average 3.9 percent through 2020.

While corporate tax revenue contracted in fiscal year 2016, unincorporated business tax (UBT) revenue grew at 4.0 percent in 2016 and net collections exceeded $2 billion for the first time. Proprietorships' and partnerships' earnings rose by 1.9 percent over calendar year 2015 and are estimated to have continued growing during 2016 at about the same rate. Earnings in the professional and business services sector, historically a major contributor to the unincorporated business tax collections, expanded by 3.3 percent in calendar year 2015, but are expected to decline by 1.6 percent in calendar year 2016. For this fiscal year (2017), IBO expects unincorporated business tax revenue to grow at a relatively slower rate (of 2.7 percent), reflecting our expectation of a decline in the professional and business services sector's earnings. Starting in 2018, IBO projects UBT revenue growth to accelerate to 4.0 percent, fueled largely by a 4.5 percent expansion of earnings in the professional and business services sector. For the later years of the forecast period, IBO expects UBT collections to continue growing at an annual average rate of 4.4 percent.

IBO's revenue forecast for combined business income tax revenue is $44 million (0.7 percent) higher than OMB's in the current year, with corporate taxes accounting for $17 million of the difference. For 2018, IBO's forecast of business tax collections is $70 million less than OMB's, largely due to our expectation of higher corporate tax refunds. In 2019 and 2020, IBO's forecast is $112 million and $196 million above OMB's, respectively, with our higher forecast of corporate taxes explaining most of this difference.

General Sales Tax. IBO forecasts $6.9 billion in general sales tax revenue in 2017, virtually the same as last year's total. In 2018, collections from the sales tax are projected to resume stronger growth, increasing by 5.3 percent—the fastest rate since 2014—to reach $7.3 billion. With growth of local output and personal income both expected to peak in calendar year 2018, IBO forecasts more moderate growth in sales tax revenue in fiscal years 2019 and 2020, averaging 4.3 percent annually.

Revenue growth from the sales tax has declined steadily since 2014, when collections increased by 5.9 percent. Sales tax collections rose at an average rate of 4.6 percent in calendar years 2013 through 2015, a more modest rate of increase than might have been expected given the record number of jobs added to the city's economy and the continued growth of tourism over the period. IBO projects that this trend toward slower revenue growth will continue in the near term in light of slow collections to date in the current fiscal year and our forecast for the city economy. So far this fiscal year (July through October), sales tax revenue is 0.5 percent below the same period last year. Collections have been weakened by slower growth in city income and output. IBO projects that personal income in New York City will increase just 2.2 percent in calendar year 2016 and that nominal gross city product will grow by only 3.6 percent—the slowest growth since 2009. A decline in Manhattan retail employment suggests that tourist spending is also down, particularly the spending of foreign visitors whose home currencies have weakened against the U.S. dollar. With only a modest pick-up in collections expected for the rest of the year, we forecast that sales tax revenue this fiscal year will be 0.2 percent less than in 2016.

Personal income growth for the city is expected to rebound in the coming years, with increases of 4.1 percent and 4.8 percent in calendar years 2017 and 2018, respectively. Moreover, nominal city product is expected to follow the same pattern, reaching a peak in 2018. Based on our expectation of stronger economic growth, IBO forecasts a 5.3 percent rise in sales tax revenue in fiscal year 2018, to $7.3 billion. Sales tax collections are projected to continue to grow at a slightly slower pace in the following two years and reach $7.9 billion in 2020.

Hotel Occupancy Tax. Despite sluggish collections in the first four months of the fiscal year, IBO forecasts 4.1 percent growth in hotel occupancy tax revenue in 2017, yielding $588 million—$23 million more than collections in 2016. While the projected increase in 2017 is more than double the 1.9 percent increase of hotel tax revenue in 2016, it is far less than the 7.4 percent average annual increase in hotel tax revenue since the end of the recession. IBO forecasts a continuation of moderate revenue growth over the remainder of the financial plan period: another 4.1 percent in 2018, 3.1 percent in 2019, and 3.0 percent in 2020.

IBO expects the number of visitors to the city to continue to grow in the next couple of years, which should help to maintain hotel occupancy rates despite the pipeline of hotel rooms currently under construction. The projected acceleration of U.S. economic growth coupled with rising wages will boost domestic tourism. Despite the continued strength of the dollar, IBO projects that the number of international visitors to New York City will rise as the economic outlook improves in some of the countries that are the city's biggest sources of tourists: the United Kingdom, Canada, Brazil, China, France, Australia, and Germany.

Both the city and state have recently taken several affirmative steps to enforce the tax code with respect to online platforms for short-term rentals. One major enforcement step is a new state law that establishes a fine of up to $7,500 for online advertising of certain short-term rentals that violate New York City law. This and other efforts should force black-market hosts to start operating legally or stop operating at all. As more hosts start paying the hotel tax, IBO expects tax revenue to increase. Moreover, to the extent that some of these accommodations cease to exist, hotel room rates—along with hotel tax collections—will tend to rise.

Other Revenues. The city's revenues from sources other than taxes combine a variety of fees, fines, charges, asset sales, interest income, and other miscellaneous revenue, which are expected to total $5.2 billion this year, a drop of $490 million from 2016. The $258 million reduction in the state's STAR aid for this year, which exactly offsets the increase in city PIT revenue as a result of the change by the state in how the STAR tax benefit is delivered, accounts for much of the change. The Mayor's November financial plan anticipates little change in the total from these revenue sources for 2018.

State, federal, and other categorical aid and interfund revenue are the remaining sources among nontax revenues. They are expected to total $24.4 billion this year, which includes $1.4 billion in anticipated Hurricane Sandy assistance from the federal government. The bulk of that money has been allocated through the federal government's Community Development Block Grant process to help in the recovery and is scheduled to be spent this year, which largely accounts for the decline in this revenue category to $158 million in 2018. After 2018, state, federal, other categorical, and interfund revenues are expected to resume growing, but at a very slow pace; annual growth is expected to average 1.5 percent in 2019 and 2020. By the last year of the financial plan, these grants are expected to total $23.9 billion.

Spending

IBO estimates that under the policies and programs articulated in the Mayor's latest financial plan, total city spending, including state and federal aid, will grow from $83.5 billion this fiscal year to $87.8 billion next year. We project that through the financial plan period total spending will grow at an average rate of 4.0 percent and reach $93.9 billion in 2020. Looking just at city-funded expenditures and adjusting for the use of the 2016 surplus to prepay some of this year's expenses, we estimate spending will

IBO Expenditure Projections
Dollars in millions

	2017	2018	2019	2020	Average Change
Agency Expenditures	**$64,702**	**$64,381**	**$65,270**	**$66,020**	**0.7%**
Fringe Benefits (excluding education)	5,716	6,140	6,623	7,110	7.5%
Labor Reserve	343	1,030	1,999	2,358	n/a
Total Agency Expenditures	**$70,761**	**$71,551**	**$73,892**	**$75,488**	**2.2%**
Other Expenditures					
Debt Service	$3,124	$6,402	$7,309	$7,957	6.6%*
Pensions	9,422	9,830	10,110	10,161	2.5%
Judgments and Claims	676	692	707	725	2.4%
General Reserve	1,000	1,000	1,000	1,000	n/a
Capital Stabilization Reserve	500	-	-	-	n/a
Expenditure Adjustments	-	81	222	347	n/a
Subtotal	**$85,483**	**$89,556**	**$93,240**	**$95,678**	**3.2%**
Less: Intra-City Expenditures	$(1,961)	$(1,778)	$(1,772)	$(1,779)	n/a
TOTAL EXPENDITURES	**$83,522**	**$87,778**	**$91,468**	**$93,899**	**4.0%**

NOTES: *Represents the annual average change after adjusting for prepayments and debt defeasances. Expenditure adjustments include energy, lease, and non-labor inflation adjustments. Expenditure totals are inclusive of intra-city expenses. Figures may not add due to rounding.

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Pricing Differences Between IBO and the de Blasio Administration
Items that Affect the Gap
Dollars in millions

	2017	2018	2019	2020
Gaps as Estimated by the Mayor	**$-**	**($2,241)**	**($2,889)**	**($2,376)**
Revenue				
Taxes				
Property	$242	$581	$720	$1,145
Personal Income	83	127	186	324
General Sales	(235)	(291)	(296)	(315)
General Corporation	17	(98)	82	176
Unincorporated Business	28	28	30	20
Real Property Transfer	21	3	35	53
Mortgage Recording	64	83	63	40
Utility	6	6	5	3
Hotel Occupancy	41	49	44	37
Commercial Rent	6	5	(7)	(19)
Cigarette	(2)	(2)	(3)	(4)
Other Taxes and Audits	-	-	-	-
Total Taxes	**$270**	**$491**	**$859**	**$1,461**
STaR Reimbursement	-	-	-	-
TOTAL REVENUE	**$270**	**$491**	**$859**	**$1,461**
Expenditures				
Debt Service	$151	$75	$75	$75
Miscellaneous	(29)	(39)	(50)	(60)
Education	(6)	(114)	(140)	(160)
Homeless Services	(14)	(231)	(241)	(222)
Social Services	35	35	35	35
Police	(50)	(50)	(50)	(50)
Fire	(25)	(50)	(50)	(50)
Correction	(5)	(10)	(10)	(10)
Board of Elections	-	(25)	(25)	(25)
Housing	52	8	(30)	(30)
Parks	(3)	(10)	(10)	(10)
Small Business Services	(14)	(26)	(26)	(26)
Campaign Finance Board	-	(40)	-	-
TOTAL EXPENDITURES	**$92**	**($477)**	**($521)**	**($533)**
TOTAL IBO PRICING DIFFERENCES	**$362**	**$14**	**$338**	**$928**
IBO Prepayment Adjustment 2017/2018	$(362)	$362	-	-
IBO SURPLUS / (GAP) PROJECTIONS	**$-**	**($1,865)**	**($2,551)**	**($1,448)**

NOTES: Negative pricing differences (in parentheses) widen the gaps, while positive pricing differences narrow the gaps. Figures may not add due to rounding.
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grow from $62.4 billion in 2017 to $65.2 billion next year and reach just over $70.0 billion in 2020, an annual average increase of 3.9 percent.

Some of the initial comments about the Mayor's November financial plan focused on the more than $1 billion rise in total 2017 spending since the adoption of the budget in June. This increase is driven by the recognition of $861 million in additional federal aid and $467 million in new state aid. Of this increase, much of the growth in federal aid is related to Hurricane Sandy relief ($374 million added to the 2017 budget, bringing this year's total to $1.4 billion) and homeland security and other public safety initiatives ($156.7 million added for a total of $185.4 million in 2017). The budget also recognizes $24 million in new state assistance for the cost of special education paraprofessionals and the reimbursement of nearly $19 million for prior Safety Net public assistance expenditures by the city.

Looking ahead to 2018, IBO estimates that city-funded spending will climb by about $2.8 billion, adjusted for the use of the projected 2017 surplus to prepay some of the next year's expenses. Among the factors driving this growth in city-funded spending is a combined $1.0 billion increase in the expected cost of pensions, health insurance, and other benefits for city employees; other spending increases include roughly $500 million apiece on debt service and on the Department of Education. City spending on the public hospitals is projected to rise by about $470 million next year, although this increase is largely the after-effect of the $400 million prepayment of some of this year's support in 2016, which artificially lowers reported 2017 spending.

Sources of New Spending. The November financial plan adds a relatively modest $129 million to city-funded spending above the level set for 2017 in the budget adopted in June. The largest single programmatic increase to the budget adopted for the current year is $52 million for homeless shelters as the city contends with the rising number of people in the shelter system. There is also an additional $14 million in new spending by the Department of Correction, including $10 million in consultant fees for McKinsey & Company to continue its work on the Mayor's 14-point plan to reduce violence in the city's jails.

But it is other areas of the budget that are largely responsible for the overall growth in city spending in the years ahead. Due to lower-than-expected returns on investments last year, the city must increase its contribution to the municipal pension funds. While no additional money must be spent this year, the November financial plan adds $120 million in 2018, with the amount of additional funding growing to $378 million in 2020. With these new increases taken into account, pension spending by the city is now expected to rise by nearly $740 million over the financial plan period, from $9.4 billion in 2017 to nearly $10.2 billion in 2020, an average annual growth rate of 2.5 percent.

Spending on health insurance and other fringe benefits for city employees is growing at an even faster rate. These costs (excluding the education department and city university) are projected to rise from $5.7 billion this year to $7.1 billion in 2020, an increase of $1.4 billion, and an annual growth rate averaging 7.5 percent. Projected health and related benefits spending would be rising even faster if not for the agreement between the de Blasio Administration and the unions as part of the last round of labor settlements. The de Blasio Administration saved a total of $1.1 billion over 2015 and 2016, which has in part included substantially higher copayments from city employees, and expects to save an additional $1.0 billion in 2017, according to the latest quarterly report on the Mayor's Office of Labor Relations website.

Although debt service on the money the city borrows for capital projects such as building schools or buying sanitation trucks is now slated to be lower than estimated when the budget for 2017 was adopted in June, over the course of the financial plan debt service expenditures will grow substantially. After adjusting for the use of the 2016 surplus to prepay a portion of 2017 debt service, interest and principal payments are expected to grow at an average annual rate of 6.6 percent, from $6.6 billion this year to just under $8 billion in 2020, an increase of $1.4 billion.

Sources of Savings. The Mayor's budget includes $691 million in new savings on city-funded spending this year, and more than $300 million in each of the ensuing years through 2020. The contours of these savings initiatives are much the same as seen in prior plans: savings from funding swaps, lower than budgeted interest costs, delayed hiring, and program spending re-estimates. There are no layoffs or service cutbacks under the savings plan.

The largest single component of the savings plan comes somewhat indirectly from the state. New York State is now recognizing that tax revenue dedicated to the Statewide Mass Transportation Operating Assistance fund was higher than previously allocated in recent years. With more of these funds going to MTA Bus, the city will be able to lower its subsidy payments to the Metropolitan Transportation Authority for the agency's takeover of the formerly private bus lines in the five boroughs. This will save the city $164 million this year and just over $23 million in each year through 2020.

The de Blasio Administration anticipates saving roughly $150 million on debt service expenses in 2017. Part of the savings derives from long-term interest rates that have remained substantially lower than initially projected in the budget, a pattern that has continued from the Bloomberg Administration. Likewise, the adopted plan for 2017 budgeted nearly $75 million in debt service expenses for short-term borrowing, something the city has not done for more than a decade. The November plan now assumes that there will not be any short-term borrowing in 2017.

Additionally, the plan recognizes $40 million in savings this year—growing to $50 million by 2020—due to a re-estimate of the cost of Medicare Part B reimbursements for retired city workers. The cost of Part B coverage has grown at a slower rate than expected and there are fewer eligible retirees than projected.

Savings also accrue from delays in hiring. For example, the city will save nearly $11 million in staffing costs this year because of delays in hiring civilian employees at the Department of Correction. The Department of Sanitation will save $4.0 million this year and $3.3 million next year because the completion of marine waste transfer stations remains behind schedule, delaying the need to hire nearly 90 new employees.

Costs & Savings Adjustments. IBO differs on the expected costs of some elements of the Mayor's November plan. Overall, we estimate city-funded spending will be about $92 million less this year than projected by the Mayor. Conversely, we expect city-funded spending will be $477 million more in 2018 than projected by the Mayor.

The biggest difference in spending estimates for this year is for the cost of debt service. Despite the reductions contained in the Mayor's savings plan, we estimate debt service will cost $151 million less than projected by the Mayor's budget office. Although the de Blasio Administration reduced its interest rate assumptions from the 4.25 percent for tax-exempt bonds and 6.0 percent for taxable bonds used in the adopted budget for 2017, the rates assumed in the November plan remain well above current levels. IBO derived its savings projection while still prudently assuming that interest rates will continue to rise above current levels. We also expect that in 2018 and beyond the city will save $75 million annually on debt service budgeted for short-term borrowing. While the Mayor's savings plan eliminates this cost for 2017, it remains in the budget for future years even though the city has not done any short-term borrowing since 2004.

IBO also expects the Department of Housing Preservation and Development will spend $52 million less than budgeted this year on funding for façade repairs in the city's public housing developments. The savings result from the slow pace of repairs, although IBO anticipates that over the coming years all of the funds allocated will be spent. The savings falls to $8 million in 2018 and then reverses to $30 million more than currently budgeted for each of the next two years.

We also expect that spending on cash assistance for the poor will be about $35 million less in 2017 than projected by the de Blasio Administration. Although the latest caseload numbers show that the number of Safety Net Assistance recipients has leveled off, the Mayor's office has relied on caseload numbers from March for its projections. Using the more current data from September, IBO estimates that there will be about 13,000 fewer cash-assistance recipients than projected in each year of the financial plan, reducing the city's cost by roughly $35 million annually.

There are a number of areas in which IBO expects the city will spend more than budgeted. The cost of homeless services presents the most notable difference. With the addition of $52 million in city funds for the current year, there is relatively little difference—just $14 million more in city funds for homeless families (matched by and an additional $9.3 million in funds from Albany and Washington) to our spending estimate for this year. But the difference multiplies next year when we expect the city will need to spend $231 million more than currently budgeted and similar additional amounts over what is assumed in the subsequent years of the financial plan. Driving the additional cost is our projections for the number of families and single adults that will be in the shelter system next year. While the de Blasio Administration has recognized that the shelter census has been higher this year than anticipated, it has not changed its expectations for the years ahead. As a result, we project the city will need to spend nearly $171 million more than planned to provide shelter for homeless single adults next year and nearly $60 million more for families, which will be matched by $89 million from Washington and $18 million from Albany.

IBO has also added $114 million to its expected spending by the Department of Education next year, an amount that grows to nearly $160 million by 2020. The reasons for our higher estimates are the same as they have been in the recent past: The Mayor's budget office continues to delay budgeting for the planned expansion of grades by already operating charter schools to later in the budget process and we expect that Medicaid reimbursement for certain special education services will remain below projected levels. We estimate that the additional costs for planned charter school expansions will be nearly $58 million next year and grow to $103 million in 2020. And although the Mayor has invested $6.3 million over five years in the upgrade of the problem-plagued Special Education Information System, we do not anticipate it will result in the quick increases in reimbursements the de Blasio Administration projects. As a result, we estimate the city will need to spend nearly $57 million more a year in 2018 through 2020 for special education services that the city cannot claim Medicaid reimbursements for due to ongoing problems in the data system.

As in past years, we expect overtime costs for the police, fire, and correction departments will be higher than estimated in the Mayor's plan. Based upon past patterns, we anticipate that overtime costs for the three agencies will together be $80 million more than budgeted for 2017. Similarly, IBO estimates that overtime costs for these three agencies will be $110 million more than budgeted each year through the remainder of the financial plan.

Additionally, IBO estimates that city spending for legal defense for the poor will cost $29 million more than budgeted for this year. Although the cost of indigent defense has increased by more than 3 percent a year since 2010, the budget for this year—and for each of the subsequent years in the financial plan—is $20 million less than the city spent in 2016. By bringing the expected expenditure up to the 2016 level and then accounting for the recent year-to-year growth, we estimate that providing legal defense for the poor will cost $39 million more than currently planned in 2018 and $60 million more by 2020.

After the release of the November plan, the Governor vetoed a bill that that the de Blasio Administration had expected would provide state funds to cover a portion of the cost of a salary increase the city recently granted to school bus drivers. Based on IBO's expectation that the city will now have to cover the full cost of the salary increase, we added nearly $14 million to the budget for this year and $26 million in each of the remaining years of the financial plan.

Pressure Points. While the Mayor's financial plan holds new city-funded expenditures in the current year to a relatively small $129 million—small compared with the overall size of the budget and considerably less than the savings for 2017 identified in the plan—it may be increasingly difficult to maintain that prudence next fiscal year and the years beyond. With municipal elections occurring in November 2017, pressure to support new or supplement existing programs is likely to grow. A campaign is already underway to subsidize transit fares for low income New Yorkers, which advocates have estimated will cost $200 million annually. Nonprofit service providers are also ratcheting up their efforts to get the city to increase its support for rising rent and administrative costs and are seeking $50 million in additional funding.

But the costliest expenditure on the near-term horizon could be the coming expiration of contracts with the municipal labor unions. Contracts with 13 unions are due to expire in calendar year 2017. Among those approaching the end of their agreements is District Council 37, the city's largest union representing roughly 125,000 current public employees and the Uniformed Firefighters Association. An additional 15 contracts expire in calendar year 2018, the largest of which is the United Federation of Teachers.

When Mayor de Blasio took office in January 2014 every city labor contract had expired, and some of the contracts with city's largest union were several years past their end date. Besides leaving the city without agreements with its municipal labor unions, the Bloomberg Administration also drained most of the funding from the city's labor reserve—funds set aside in anticipation of future labor settlements. Mayor de Blasio has replenished the labor reserve, adding funds to cover 1.25 percent annual raises for city workers, the same rate at which Mayor Bloomberg had added funds to the reserve in the early years of his administration. The labor reserve now contains $343 million for the current year and grows to nearly $2.4 billion in 2020. Whether this is sufficient to cover future settlements will depend on the agreements reached with the labor unions in the coming years. If the costs of settlements exceed what is included in the labor reserve funds will need to be either drawn from other areas of the budget—potentially crowding out other budget needs—or new or growing revenue sources tapped.

Albany and Washington could also be the sources of pressure on the local budget. Mayor de Blasio and President-elect Trump have already drawn battle lines over the city's commitment to remaining a "sanctuary city" for undocumented immigrants. The President-elect has threatened to cut off the city's federal aid—about $8.5 billion this year—though that is likely to be easier said than done for legislative and political reasons. The President-elect's policy agenda could have other consequences for the city. One example is the fiscally troubled NYC Health + Hospitals system, which the de Blasio Administration supported by boosting the city's unrestricted subsidy to about $260 million in 2017 and 2018 compared with just over $100 million in 2015. The city's public hospitals could be further weakened depending upon what actions Washington takes to reverse the Affordable Care Act and alter the allocation of Medicaid.

Pressure on city spending could also come from Albany. Last year, Governor Cuomo directed several fiscal change-ups at the city: among these pitches was a proposal to lift the cap on the city's share of increased Medicaid spending, which would have cost the city about $300 million this year, and shift nearly $500 million in support for the city university system from Albany to the city. These or other proposals may well surface in the Governor's upcoming budget given the apparent weakening in the state's fiscal condition—a November report by State Comptroller Thomas P. DiNapoli found that over the first six months of the state fiscal year tax collections were down $1.3 billion compared with the same period last year.

The Mayor's financial plan also still includes more than $700 million in revenue from the sale of taxi medallions in 2018 through 2020. Given the growing presence of Uber and other app-based car-hire services in recent years along with the addition of green cabs, the expected revenue from new taxi medallions is likely overstated. Next year's budget counts on a little over $100 million of this revenue, which is highly unlikely to materialize. The same could be said for the even higher amounts of medallion-sale revenue projected for 2019 and 2020.

In Reserve. Part of the de Blasio Administration's approach to the budget has been to maintain a relatively large amount of funds in reserve to help the city weather any sharp drops in revenue or the need for unexpected spending. The budget for 2017 still retains $1.5 billion in reserve—funds sitting in the plan and counted as part of the budget's total even though there are no specific plans for their use. If the funds go unused, as they have in the Mayor's prior budget plans, they then become part of the surplus and would be used to offset the shortfall projected for 2018. The financial plan also contains a reserve of $1.0 billion in each year from 2018 through 2020.

In addition to these budgeted reserves, the de Blasio Administration has put aside more than $4 billion in the Retiree Health Benefits Trust, including $500 million added in 2016. No new funding is budgeted for the trust this year. While funds in the trust can only be used to pay all or part of the cost of retiree benefits in a given year, that is a sizable amount—$2.3 billion in 2017 and $2.5 billion in 2018. Retiree health costs paid with funds from the trust frees up an equal amount of city funds in the budget for other needs.

A Budget for Uncertain Times

Any fiscal outlook that projects months or years into the future will be based on some amount of conjecture. But this latest fiscal outlook report is clouded by more uncertainties than any we have produced since our outlook report in the wake of September 11 and the onset of the 2001-2002 recession. Signs of a slowdown in local job growth and lackluster growth in tax revenues were apparent even before the presidential election. With President-elect Donald Trump set to take office in January, substantial changes in economic, tax, and other policy areas may lie ahead. As a candidate, he called for overhauling federal taxes, terminating or revising international trade deals, ending the Affordable Care Act, eliminating many business regulations, halting federal aid to localities that remain sanctuary cities, initiating large-scale infrastructure investment, and other far-reaching changes. What characterized many of these proposals was their lack of specificity and sometimes contradictory economic or fiscal implications.

While the scope of public policy changes coming from Washington is large and casts a similarly large shadow over our economic and revenue forecast for the city, one thing remains clear: the changes will not occur overnight. Many of the broad policy announcements will require time to be developed into full-scale proposals, and then Congress must act. So these changes are not likely to begin to affect the city immediately after the President-elect's inauguration. In the interim, the Mayor and City Council will have to continue to address local needs while monitoring the impending changes from Washington and what those changes imply for the city's future budget balance.