New York City Independent Budget Office

Focus On:
The Preliminary Budget

March 2022

Economic and Revenue Forecast:

Recovery Continues as New Threats Emerge & Past Risks Remain

The outlook for the national and local economy remains generally in line with our outlook published in January. In terms of the U.S., after a brisk recovery from the 2020 recession in 2021, GDP growth is forecast to continue to grow, albeit at a diminishing pace through the forecast period. (Years refer to calendar years unless otherwise noted.) The effects of the 2020 recession have been deeper and longer lasting on the New York City economy than for the rest of the U.S., however. The city has recovered only about 53 percent of the jobs initially lost and is not expected to return to its pre-pandemic employment level until sometime in 2025, whereas the rest of the U.S. is expected to recover sometime this year. Outside of employment, other indicators present a more positive view of the city's recovery since the start of the pandemic, including growth in aggregate wages and personal income, near-record Wall Street profits, and rebounds in real estate activity—and to a lesser extent although nonetheless positive—tourism.

The unpredictable nature of Covid-19 continues to be a significant risk to this outlook, but for the first time since the pandemic began, other risks may pose even greater threats to continued growth—in both New York City and the U.S. as a whole. Our economic forecast is premised on monetary and fiscal policies that succeed in taming inflation while continuing the economic expansion. The most recent acceleration of inflation and Russia's invasion of Ukraine—developments not foreseen when our forecast was made—will make it more difficult to achieve policy responses that avoid either slow growth or a recession.

In this brief, IBO describes the contours of our U.S. and New York City economic forecasts and then we present our tax revenue forecast for the city.

U.S. Economy

Following the Covid-induced recession in 2020, when the U. S. economy's output shrank by 3.5 percent, the U. S. economy grew rapidly in 2021. Progress in vaccinating large numbers of Americans, an accommodative monetary policy, federal fiscal stimulus, and pent-up consumer demand all contributed to a 5.7 percent increase in real GDP last year. For 2022, IBO forecasts a more moderate though still robust 4.1 percent rate of growth (down slightly from our forecast of real GDP growth of 4.4 percent published in January). Consumer demand is expected to boost household spending, although the waning fiscal stimulus and the Federal Reserve's tighter monetary policy will have negative impacts on growth. IBO predicts that employment in the nation as a whole will exceed its pre-pandemic peak in the middle of this year. We forecast a continuation of the economic expansion during the succeeding years of the forecast period, albeit at slower rates of growth that decrease from 3.1 percent in 2023 to 2.2 percent in 2026.

There are risks to IBO's outlook for continued growth because it is premised on a number of assumptions favorable to growth. The greatest risks concern the course of the Covid-19 pandemic, monetary policy in response to inflation, and geopolitical upheaval.

The elimination of Covid-19 is not a premise of IBO's forecast. Rather, the assumption is that increased vaccination rates and better treatments will result in successive waves of Covid infections becoming less disruptive to the health care system and the economy. But the virus has already proved to be unpredictable, and there remains the risk of new outbreaks that increase caseloads,

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strain health care systems, and further disrupt global trade and supply chains.

Another premise is that as the Federal Reserve moves to a tighter monetary policy in an attempt to control inflation, it will be able to raise the federal funds rate, which is now near zero, and cut back on quantitative easing—the Fed's purchase of securities to inject liquidity into credit markets and put downward pressure on long-term interest rates—without choking off growth and pushing the economy into recession. Even before the acceleration of inflation began in the second half of 2021, the Fed had indicated it would pursue a more neutral policy stance.

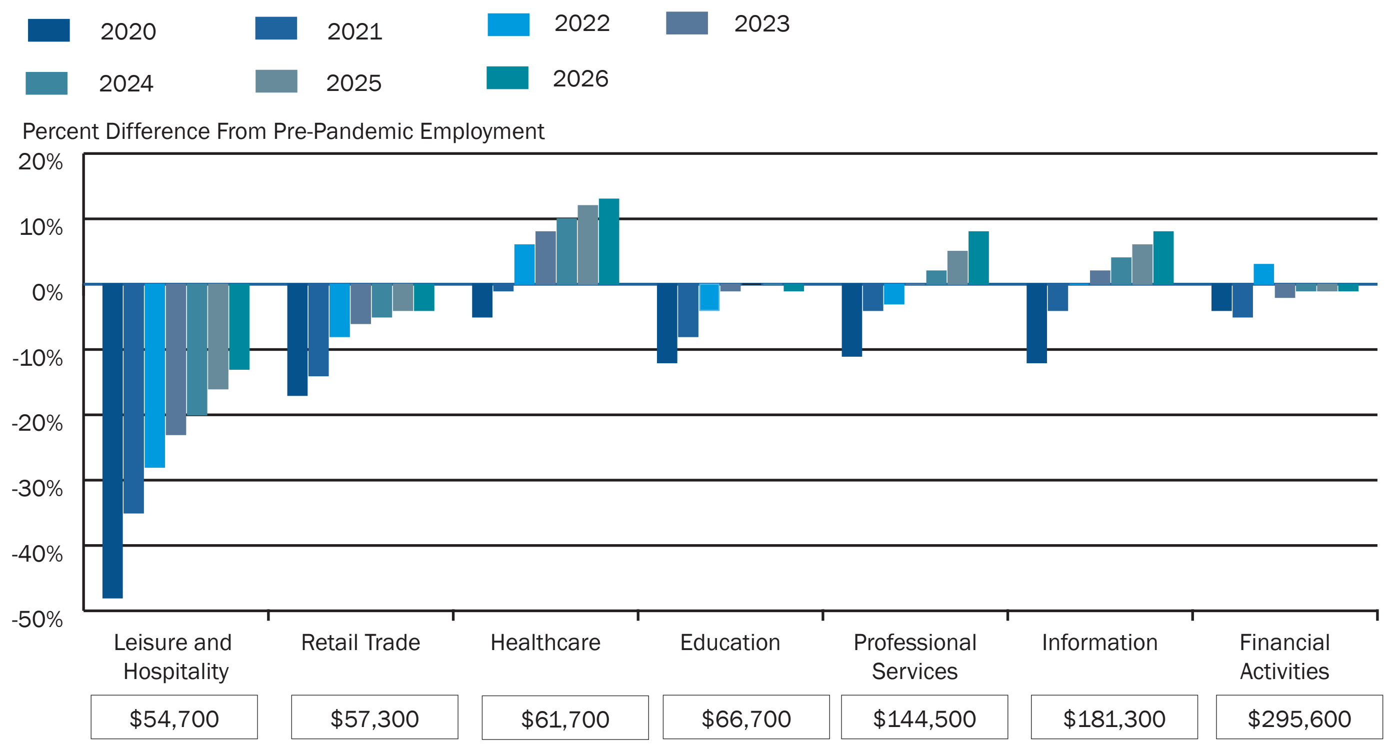
The combination of strong consumer demand fueled by federal transfer payments during 2021 and rising wages, plus Covid's disruption of global supply chains caused inflation to accelerate in the second half of 2021. As measured by the Bureau of Labor Statistic's consumer price index, inflation rose at an annual rate of 7.5 percent in January, the highest rate in 40 years, and higher than the rate of inflation anticipated in IBO's forecast. The degree to which the sharp rise in prices is temporary or longer lasting is subject to debate, though disruptions of supply chains trade have persisted longer than expected, causing sharp rises in the price of energy and other commodities. The longer inflation remains elevated, however, the more likely that people will begin to incorporate higher prices into their expectations and the more difficult it will be for the Fed to return to a more neutral monetary stance without putting an end to the expansion.

Finally, Russia's invasion of Ukraine also brings the risk of worsening supply chain issues for some critical commodities as well as further raising energy costs. Our forecast was premised on there being no major geopolitical uncertainties and disruption of global trade. The extent to which the conflict between Ukraine and Russia continues and the degree to which it harms the global economy remains to be seen.

New York City Economy

As the Omicron variant loosens its grip on New York City, and as the negative impacts of the Covid-19 pandemic continue to wane—at least for now—the city remains on a slow but sustained pathway toward economic recovery. The more gradual pace of the city's recovery is driven by the fact that the local employment outlook is somewhat subdued; IBO predicts that the city will not reach its pre-pandemic employment level until late 2025. This is three years after national employment is expected to fully recover

Lower-Wage Industries Hit Hardest by Pandemic While Facing Slowest Recovery



NOTE: Boxes indicate average wages (total wages/total employment) by sector in 2021.

New York City Independent Budget Office and is a reflection of the much deeper impact the pandemic had on employment losses in New York City compared with the rest of the country.

Despite slower employment gains, there are other indicators of a more robust local recovery. These include strength in wages, gains in personal income, recent growth in real estate sales, and record Wall Street profits. Barring major changes in the trajectory of the pandemic, the city's economy should continue to strengthen throughout the forecast period. Nevertheless, the unpredictability of the virus, combined with recent geopolitical instability, result in an economic forecast that is characterized by a disproportionate share of downside risks.

Employment. Between the first and second quarters of 2020, the city lost a total of 886,600 jobs, before recovering 269,200 in the second half of the year. Preliminary employment data through the end of 2021 indicate that the city gained an additional 199,000 jobs for the year (unless otherwise noted, year-over-year employment change is measured on a Q4-to-Q4 basis from this point forward). This is slightly below IBO's December 2021 estimate of 212,600 jobs, and is significantly below our projections of last spring, which were made before the rise of new Covid-19 variants later in the year. Our employment forecast for the next few years is similar to our December projections (released in early January), with the city gaining 179,600 jobs in 2022, 99,800 jobs in 2023, and an average of 68,400 jobs each year from 2024 through 2026. While annual job growth is projected to decline each year, these are still very strong years by historical standards. They follow, however, the unprecedented job losses of 2020 and, as a result, full pre-pandemic employment will not be reached until late in 2025. In contrast, the national economy, which has been recovering faster than the city's economy, we project will reach its pre-pandemic employment level by the middle of this year.

The projected employment recovery is quite uneven, however, when individual industries in the city are considered. Some sectors are projected to remain below their pre-pandemic levels for the entirety of the forecast period (through city fiscal year 2026). These include the financial activities, education, leisure and hospitality, and retail trade sectors. Of these, the most pronounced lag occurs in the leisure and hospitality sector, where we project employment at the end of 2026 to reach 401,800 jobs—still 12.7 percent below its pre-pandemic level of 460,500 in the first quarter of 2020. We expect other sectors to grow much faster: including healthcare, which we estimate to have already regained whatever jobs were lost; information, set to regain pre-pandemic employment by early 2023; and professional services, which is on path to reach pre-pandemic employment by the beginning of 2024.

Wages and Personal Income. The city's recovery in terms of aggregate wages and salaries has been much more robust than its recovery in total employment. This is due to the uneven gains in employment across the city's various employment sectors described above. The sectors experiencing the slowest recovery, and for which IBO projects employment will not have recovered by the end of 2026, have some of the city's lowest average wages, while the sectors that are projected to recover the most rapidly have some of the highest average wages.

The leisure and hospitality sector and retail trade sector, for example—which lost the most jobs and are projected to have the slowest expected recovery—have average annual salaries of $54,700 and $57,300 respectively. Conversely, the information and professional services sectors, which have recovered much more quickly, have some of the city's highest average annual wages, $144,500 and $181,300, respectively.

After a modest decline of 1.3 percent from $449.3 billion in 2019 to $443.4 billion in 2020, aggregate wages and salaries grew by 9.3 percent to reach $484.4 billion in 2021. We project continued strength in wage and salary growth, averaging 6.0 percent per year from 2022 through 2026 and ending the forecast period at $649.7 billion.

Wages and salaries are the largest single component of personal income in the city, meaning that the personal income outlook is also relatively strong. In fact, personal income never experienced an annual decline, even at the height of the pandemic and despite the modest decline in wages and salaries in 2020. This is entirely thanks to a large increase in government transfer payments. Transfer payments are another component of personal income, that include items such as unemployment payments, stimulus checks, refundable tax credits, and public assistance. Transfer payments grew during the pandemic from $106.9 billion in 2019 to $152.6 billion in 2020. Transfers continued to rise in 2021, but IBO projects they will return to lower levels in the coming years, as wages and other income categories continue to recover and sustain the upward trajectory of total personal income.

Overall, IBO forecasts total personal income at $719.5 billion for 2021, which will grow somewhat more slowly by

IBO versus Mayor's Office of Management and Budget Economic Forecasts						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
National Economy						
Real GDP Growth						
IBO	5.7	4.1	3.1	2.9	2.5	2.2
OMB	5.7	4.1	2.5	2.5	2.4	2.4
Inflation Rate						
IBO	4.7	4.8	3.4	3.5	3.8	4.0
OMB	4.7	4.2	2.2	2.1	2.1	2.2
Personal Income Growth						
IBO	7.2	1.3	5.0	5.0	4.7	4.4
OMB	7.2	1.3	4.8	5.1	5.1	5.1
Unemployment Rate						
IBO	5.4	3.6	3.4	3.5	3.8	4.0
OMB	5.4	3.7	3.6	3.8	4.0	4.0
10-Year Treasury Note Rate						
IBO	1.4	2.1	2.8	3.4	3.7	4.0
OMB	1.4	1.8	2.4	2.7	2.9	3.0
Federal Funds Rate						
IBO	0.1	0.4	1.4	2.3	2.5	2.5
OMB	0.1	0.4	1.2	1.8	2.1	2.4
New York City Economy						
Nonfarm New Jobs (thousands)						
IBO (Q4 to Q4)	199.0	179.6	99.8	78.7	67.7	58.6
OMB (Q4 to Q4)	202.1	164.1	127.1	116.0	92.8	50.4
Nonfarm Employment Growth						
IBO (Q4 to Q4)	4.9	4.2	2.2	1.7	1.5	1.3
OMB (Q4 to Q4)	5.0	3.9	2.9	2.6	2.0	1.1
Inflation Rate (CPI-U-NY)						
IBO	3.3	3.8	2.5	2.5	2.5	2.5
OMB	3.5	3.4	2.0	2.1	2.1	2.2
Personal Income ($ billions)						
IBO	719.5	741.7	779.9	822.5	863.8	905.0
OMB	708.2	713.9	746.0	782.5	818.8	856.2
Personal Income Growth						
IBO	6.2	3.1	5.2	5.5	5.0	4.8
OMB	4.5	0.8	4.5	4.9	4.6	4.6
Manhattan Office Rents ($/sq.ft)						
IBO	76.2	74.7	75.8	76.9	77.7	78.6
OMB	76.0	72.0	72.0	73.0	74.0	76.0

SOURCE: Mayor's Office of Management and Budget
NOTES: Rates reflect year-over-year percentage changes except for unemployment, 10-Year Treasury Note Rate, 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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3.1 percent in 2022, before picking back up to an annual average growth rate of 5.1 percent from 2023 through 2026 and ending at $905.0 billion.

Tourism. Beginning in March 2020, the pandemic devastated tourism and business travel. The number of visitors to the city fell by two-thirds in calendar year 2020. By early 2021, however, leisure travel to the city began to increase. As the Covid-19 vaccines became widely available, domestic tourism grew more quickly, particularly in August and September 2021, when Broadway shows and other tourist attractions re-opened. The number of hotel stays continually increased in the latter half of 2021 until mid-December, when the arrival of the virus's Omicron variant resulted in many cancellations of planned visits.

The number of recent hotel bookings for future visits indicates that Omicron's setback to the revival of tourism was temporary. IBO's outlook is for the recovery of tourism to continue throughout the forecast period, with particularly strong growth in 2022 and 2023. Currently, most visitors to the city are domestic tourists, and it will take longer for large numbers of visitors from other countries to return. These tourists are particularly important to the local economy because on average they stay longer and spend more money in the city than their domestic counterparts.

Although IBO projects that leisure travel to the city will recover over the next few years, we expect the pandemic will have a long-lasting impact on business travel. During the pandemic businesses and individuals gained experience using telecommunications technology and improving their ability to facilitate meetings and otherwise operate remotely. Many businesses will decide to continue using this technology, allowing them to avoid more costly travel. Reflecting the continued weakness of business travel, mid-week occupancy has lagged behind weekend stays.

Real Estate. After a sharp decline in 2020 in the wake of the onset of the pandemic, real estate sales in New York City rebounded strongly in 2021. The total value of taxable sales rose 81.5 percent to $111.3 billion compared with 2020, with residential sales up 88.7 percent, and commercial sales increasing 71.2 percent. Residential sales were $68.1 billion, far exceeding the previous record of $55.4 billion set in 2017. Commercial sales, aided by a December surge in transactions, were $43.2 billion, well above the level of $35.4 billion that IBO estimated in January our report, published before final data were available.

In December 2021 there were 22 commercial sales valued at over $100 million, the highest monthly number since December 2013. Despite the strong December sales, the future of the commercial real estate market remains uncertain. While many observers expect an increase in the number of workers returning to the office as 2022 progresses, the total demand for office space, particularly in "non-trophy" buildings, is likely to remain soft, and the continuing shift to online shopping will weaken the market for retail space.

IBO projects that real estate sales in 2022 will total $104.8 billion, a decline of $6.5 billion (5.8 percent) compared with 2021. The decline in total real estate sales forecast for 2022 is the net result of a $10.5 billion increase in commercial sales, more than offset by a drop of $17.0 billion in residential sales. Rising interest rates will have a negative effect on sales, particularly of residential properties. While the rise in the value of commercial transactions is substantial, it comes after two years of very low sales.

Annual commercial sales are projected to remain at a relatively constant level from 2023 through 2026, while residential sales are forecast to increase slightly. By 2026, we forecast the total value of taxable property sales to reach $110.9 billion, similar to the level when the pandemic began.

Wall Street. Even at the height of the pandemic, when other economic indicators were particularly weak or uncertain, Wall Street performance has remained a bright spot for the city's economy. IBO now estimates that 2021 profits will total $60.9 billion, a level that has only barely been surpassed once before — in 2009, when federal support bailed out large banks following the financial crisis. These profits are possible in large part due to extremely low interest costs, as rates were slashed in response to the Covid-19 crisis. As interest rates begin to rise, and we expect they will continue to rise in the coming years, we forecast more typical profits, at $26.6 billion in 2022 and averaging $30.9 billion from 2023 through 2026.

Tax Revenue Forecast

IBO forecasts $64.5 billion in total tax collections in 2022, slightly under last year's receipts ($903 million or 1.4 percent less than 2021). (From this point on years refer to city fiscal years unless otherwise noted.) The largest decline in 2022 is for the city's property tax, which we forecast to fall by 6.0 percent ($1.9 billion)—the first year-over-year decline since at least 2001. This is primarily a reflection of the Department of Finance's (DOF) action to reduce estimated market values in anticipation of the effects of Covid-19 on the rents of commercial and rental properties last year. This reduction, however, turned out to be an overestimate of the impact of the pandemic on these properties. On the 2023 tentative assessment roll, the city reverses much of the reduction attributable to this action, and IBO projects a $2.4 billion increase in property tax

IBO Tax Revenue Projections
Dollars in millions

Tax	Actuals 2021	Plan 2022	2023	2024	2025	2026	Average Change 2021-2026
Property	$31,311	$29,423	$31,783	$32,051	$32,478	$32,973	1.0%
Personal Income	15,101	14,216	14,927	15,590	16,215	16,651	2.0%
General Sales	6,553	7,774	8,327	8,854	9,452	9,655	8.1%
Corporate Taxes	5,019	4,797	4,559	4,828	4,996	5,290	1.1%
Unincorporated Business	2,077	2,267	2,342	2,464	2,565	2,678	5.2%
Real Property Transfer	1,045	1,573	1,446	1,485	1,519	1,529	7.9%
Mortgage Recording	896	1,098	1,022	1,007	1,041	1,063	3.5%
Commercial Rent	869	903	937	966	989	1,012	3.1%
Utility	356	376	379	388	394	402	2.4%
Hotel Occupancy	85	267	414	525	600	625	49.2%
Cigarette	22	20	18	17	16	16	-5.9%
Other Taxes and Audits	2,046	1,763	1,554	1,554	1,554	1,554	-5.4%
Total	**$65,380**	**$64,477**	**$67,709**	**$69,730**	**$71,820**	**$73,448**	**2.4%**

NOTES: Corporate taxes comprise three separate taxes: the business corporation tax for C corporations, the general corporation tax, and the banking corporation tax for S corporations. Figures may not add due to rounding.

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revenue in 2023 compared with 2022.

For 2023, IBO's latest forecast calls for total tax revenue to grow to $67.7 billion, a 5.0 percent increase over our forecast for 2022. In addition to the property tax growth, we project growth in the city's sales, personal income, unincorporated business, commercial rent, and hotel occupancy taxes. We forecast hotel tax receipts to increase 55.0 percent compared with 2022 to $414 million (in percentage terms, the largest tax revenue increase in 2023) about two-thirds of the pre-pandemic level the city collected in 2019. We forecast the corporate tax and the city's real estate-related taxes—the real property transfer tax and the mortgage recoding tax—to decline somewhat in 2023, falling by 4.9 percent, 8.1 percent and 6.9 percent, respectively. This decline follows strong growth for all three taxes in 2022. For the real estate-related taxes, the decline comes as higher mortgage rates impact sales, especially of residential properties. Overall, we expect the city's total tax revenues to continue to grow during the forecast period by an average of 3.3 percent annually in 2023 through 2026.

IBO's latest forecast for total tax revenue is higher in all years than in our previous forecast published in early January, although the increase is small—an average of 1.1 percent a year for 2022 through 2025. (We did not forecast 2026 revenues two months ago.) IBO's tax forecast exceeds OMB's by $593 million in 2022, $1.7 billion for 2023, and growing to $2.5 billion in 2026. For most taxes, the differences between the two forecasts are not large in percentage terms. In the current year, the greatest differences where IBO's forecast exceeds OMB's are for the mortgage recording tax (9.8 percent), the real property transfer tax (5.7 percent), and the hotel occupancy tax (4.8 percent). The differences between IBO's and OMB's forecasts for 2023 are similar to the differences in 2022, with the exception of the hotel tax, where the IBO revenue forecast is 18.3 percent greater than OMB's.

Real Property Tax. IBO's forecast of real property tax (RPT) revenue for 2022 is $29.4 billion, a decrease of 6.0 percent from 2021. Based on the Department of Finance's tentative 2023 assessment roll released in January 2022, IBO forecasts $31.8 billion in RPT revenue for 2023, an increase of $2.4 billion or 8.0 percent. This revenue forecast does not account for the $25.0 million estimated cost of the Childcare Center property tax abatement outlined in the Mayor's February 2022 plan. If this forecast proves correct, it would be the largest percentage increase in five years.

This faster growth in property tax revenues projected for 2023 is primarily the result of an increase in values of Class 2 (apartment and condo/coop buildings) and Class 4 (commercial) properties. The city lowered the values of these properties by a total of 12.7 percent on the 2022 final roll in anticipation of the impact of the Covid-19 pandemic on rental income. These reductions, however, turned out to be an overestimate and the much less severe impact on rental income is reflected in the 2023 projected growth. IBO forecasts that the market values of Class 2 and Class 4 properties will increase by 8.8 percent on the 2023 final roll compared with the 2022 final roll. After the bounce-back in 2023, IBO forecasts revenue growth over the rest of the forecast period averaging 1.2 percent a year, reaching $33.0 billion in 2026.

Background. The amount of tax owed on real property in New York City depends on the type of property, its value for tax purposes, 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 properties.

The assessed value of a property for tax purposes (taxable assessed value) is established by the Department of Finance. The Department estimates each property's fair market value and then applies an assessment rate or percentage that reduces the amount of the property's value subject to the tax. For Class 1 property, no more than 6.0 percent of fair market value is taxable, while 45.0 percent of fair market value is taxable in Classes 2, 3, and 4. A property's resulting assessed value is then further reduced by any property tax exemptions in order to reach taxable assessed value.

Tentative Assessment Roll for 2023. Based on the Department of Finance's tentative assessment roll for 2023, IBO estimates that total market value of taxable properties will increased by 7.4 percent from 2022 to total $1.4 trillion, with Class 2 and Class 4 having the biggest increases in market value at 8.2 percent and 9.5 percent, respectively, and Class 1 value growing by 6.0 percent. As described above, total taxable assessed values for Class 2 and Class 4 properties increased the most— by 6.3 percent and 7.8 percent, respectively. Class 1 total assessed value increased by 3.7 percent.

After a period for appeals and review, a final roll for 2023 will be released in May 2022. Based on historical trends, IBO anticipates the final roll will show $275.8 billion in total taxable value. Class 4 properties would account for 44.6 percent of the total taxable value and Class 2 properties would account for 39.1 percent. Class 1 properties, despite being nearly half of the city's total market value, are anticipated to only account for 8.8 percent of total assessed value for tax purposes.

IBO's RPT forecast of $29.4 billion for the current year is 0.1 percent greater than OMB's. However, the differences between the forecasts grows in 2023 and subsequent years. OMB's forecast for 2023 revenue is $892.7 million less than IBO's, about 2.9 percent. With OMB expecting revenue growth to slow over the rest of the forecast period, IBO's forecast exceeds OMB's by $1.6 billion by 2026, about 5.1 percent.

Particularly in the near term, much of the difference between the two forecasts stems from factors other than estimates of property values (described below). Differences in assessed value for tax purposes, particularly for Class 2 and Class 4 properties, account for much of the divergence between IBO's and OMB's forecasts of property tax revenue beginning in 2023 and the remainder of the forecast period.

The amount of property tax revenue the city collects in any fiscal year is determined not just by the assessment roll, which at this point in the current fiscal year is set, but also by the delinquency rate for current year tax bills, abatements granted, refunds for disputed assessments, and other property tax debits and credits. Collectively these elements of RPT revenue are known as the property tax reserve. 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. As a result property tax revenue—and our forecasts of it—are almost always less than the actual property tax levy. At this point for the current year, the entire gap between IBO and OMB's forecasts is due to differences in the projections in the property tax reserves.

For 2023, the reserve accounts for less of the divergence in IBO and OMB's estimates of property tax revenue, which are instead caused more by differences in our forecasts of the final roll and levy. In subsequent years, the share of the revenue difference attributable to the reserve declines further as differences in the levy forecasts become more significant. For the 2026 forecasts, when OMB is projecting levy growth of 0.5 percent in contrast to IBO's forecast of 1.6 percent, the four reserve components account for just under 16 percent of the difference between the two forecasts.

Real Property Transfer Tax. The Real Property Transfer Tax (RPTT) is imposed on sales of residential and commercial property in New York City. RPTT revenue fell sharply in the wake of the Covid-19 pandemic, with a decline of $412 million (26.7 percent) in 2020, and an additional decline of $90 million (7.9 percent) in 2021. Tax receipts from sales of commercial properties—primarily office buildings, retail space, and rental apartments—were especially hard-hit, a pattern typical of economic downturns. However, RPTT collections rebounded strongly in the first half of 2022, with residential receipts up 121 percent, and receipts from commercial sales up 142 percent, compared with the same period a year earlier.

IBO projects that while growth in RPTT revenues will slow in the second half of 2022, receipts for the entire year will reach $1.6 billion, an increase of $528 million (50.5 percent) over 2021. The slowdown in RPTT revenue that begins in the latter half of 2022 is projected to extend into 2023, leading to a drop of $127 million (8.1 percent) in revenues in that year. The decline will be driven by higher mortgage rates, especially on the residential side; and on the commercial side, by the increased adoption of hybrid work schedules and full-time remote work, together with continued growth in online shopping.

IBO projects that RPTT revenues will begin a slow recovery in 2024, continuing through 2026. The interest rate on a 30-year residential mortgage is forecast to exceed 5.0 percent by the end of this period— high compared to the levels of recent years, but still relatively low by historical standards. By 2026 RPTT revenues are projected to reach $1.5 billion, slightly below our forecast for 2022.

Compared with IBO's November 2021 projections, our latest forecasts are higher by $235 million (17.6 percent) in 2022, $44 million (3.1 percent) in 2023, $26 million (1.8 percent) in 2024, and $56 million (3.8 percent) in 2025. A significant portion of the increase for 2022 is due to the strong performance of the commercial real estate market in December 2021.

Mortgage Recording Tax. The Mortgage Recording Tax (MRT) is imposed on the value of commercial and residential mortgages issued, including in some cases mortgage refinancings. The link between the value of properties sold and the amount of tax collected is less direct than in the case of RPTT, because the share of the purchase price financed by borrowing varies between transactions, and mortgage refinancings are not connected to a property sale.

Low interest rates, such as those of recent years, are often associated with greater mortgage activity and higher MRT revenue. However, low interest rates can also occur when housing demand is weak and aggregate borrowing is lower. The pandemic-induced decline in real estate activity during the latter part of 2020 and early part of 2021 led to a significant drop in MRT collections—a decline of $122 million (11.1 percent) in 2020 with an additional drop of $78 million (8.0 percent) in 2021. These declines occurred despite historically low mortgage rates. Toward the end of 2021 and continuing into the first quarter of 2022 mortgage rates dropped even lower, stimulating both borrowing for property purchases, as well as the refinancing of existing mortgages. In the second quarter of 2022 mortgage rates began to rise, and IBO projects that MRT revenue for the second half of the fiscal year will be significantly less than for the first half. IBO forecasts MRT collections of just under $1.1 billion for 2022, an increase of $201.5 million (22.5 percent) over 2021.

MRT revenues are projected to decline slightly in 2023 and 2024, followed by a modest recovery in 2025 and 2026, due largely to our expectation of higher mortgage rates. IBO projects that mortgage rates will continue a slow rise throughout this period, reaching a level of around 5.0 percent for a fixed-rate, 30-year residential loan by the middle of 2025. We expect improving economic conditions to partially mitigate the higher interest rates, leading to increased real estate sales and moderate growth in MRT revenue. For 2026, IBO projects that MRT collections will return to a level close to $1.1 billion, similar to the levels of 2019 and 2022.

Compared with IBO's November 2021 projections, our latest forecast of MRT revenues follows a similar pattern, but is lower by a total of $78 million (1.8 percent) over the period 2022 through 2025. IBO's RPTT and MRT forecasts are higher than OMB's in each year from 2022 through 2026 although the annual average growth rates are very similar over the five-year period for the two taxes.

Commercial Rent Tax. The Commercial Rent Tax (CRT) is a surcharge on the value of commercial rents paid in certain parts of Manhattan below 96th Street. CRT collections declined by $43 million (4.7 percent) in 2020 due to the recession brought on by the pandemic, as well as a reduction in the scope of the tax. Revenues rose by just $4.8 million (less than one percent) in 2021. From a base of $869 million in 2021, IBO projects that revenues will grow at an average annual rate of 3.1 percent over the next five years, reaching a level of just over $1 billion in 2026.

IBO's latest CRT forecasts are slightly higher than our December 2021 forecasts—an increase of $65 million, or 1.7 percent, over the entire 2021 through 2025 period. The forecast is subject to greater than usual uncertainty, however, due to the possibility of major structural changes in Manhattan's markets for office and retail space.

IBO's CRT forecasts are slightly higher than those of OMB each year from 2022 through 2026. The difference over the entire period is $49 million, just over 1.0 percent.

Personal Income Tax. IBO's forecast of personal income tax (PIT) revenue for 2022 is $14.2 billion—$885 million (5.9 percent) less than receipts in 2021. The projected decline for this year, however, is less steep than our December forecast—published in early January—which showed a 6.7 percent decline for the year compared with the last fiscal year. This is largely due to higher than anticipated revenues at the end of calendar year 2021, as described in detail below. IBO forecasts continued growth in PIT revenue to $14.9 billion in 2023 and after that we expect that annual PIT revenue will grow by an average of 3.7 percent each year of the forecast period, reaching $16.7 billion in 2026. Unlike our estimate for the current year, our projections for 2023 and future years are somewhat lower than what we projected in December, in part the reflection of prior income tax policy actions made at the state level.

Higher than Previously Projected Revenues Expected for 2022. The increase in IBO's estimate of PIT revenues for the current year stems from upward adjustments to our forecasts of withholdings and installment payments—these are the two largest components PIT revenue. Our outlook for 2022 withholdings is now $230 million (2.2 percent) higher than it was in December. Two factors largely account for this change: December and January collections were quite strong, fueled in part by the near record profits of Wall Street firms in the last two quarters of calendar year 2021. Some of those profits were awarded to their employees in the form of bonuses, which boosted withholdings. Also, the Omicron variant, which emerged in early December, was not as disruptive for the city's economy as initially feared. With Covid-19 infection rates rapidly waning in New York, we expect employment and wages to continue to grow and in turn boost withholdings for the remainder of the fiscal year. We also increased our 2022 forecast of quarterly installment payments—those made by taxpayers who were self-employed or realized capital gains—by $253 million (11.9 percent). The upward adjustment is mainly to account for strong receipts in January—the month in which the final quarterly payment towards estimated liability is due.

Growth Continues in Future Years But Is Less than Prior Forecast. We anticipate PIT revenue to grow in tandem with the projected growth in employment and wages over the next few years. For the 2023 through 2025 period, IBO projects PIT revenue to grow by 4.5 percent on average each year (2026 is excluded because it was outside the forecast period in December). This growth rate, however, is lower than the 5.5 percent annual growth we projected for the same period back in December; on average, our forecast for the 2023 through 2025 period is $333 million (2.1 percent) lower each year than in our last forecast. This lower growth rate is despite the upward adjustments we have made to our withholdings and installment payments' forecasts.

The primary reason our growth forecast is now lower than what we forecast in December is a lower projection of the state-city offset payments, for which we rely on OMB's forecast rather than generating our own. Offset payments are distributed daily by New York State to the city based on the estimated state/city share of income tax receipts. Until tax year 2020, OMB estimated share at a 60/40 split. This is based on the top brackets' tax rates at the state and city levels. The state's top bracket rate, however, was raised from 8.82 to 9.65 percent in tax year 2021 and then to 10.3 for subsequent years. Because of the growth in state income rate, while the city's held constant, the state/city shares are now roughly estimated at 66/33. Unlike for our previous forecast, the city's now lower share of offset payments is reflected in our (OMB's) projection of those receipts for the forecast period.. On average, offset payments are projected to be lower than last forecast in December by $323 million (31.5 percent) each year, which is about the size of the downward adjustment to our net PIT forecast for the 2023-2025 period.

IBO's forecast is higher than OMB for every year of the forecast period, with annual differences ranging from $39 million (0.2 percent) in 2022 to $386 million (2.4 percent) in 2026.

Corporate Taxes. Since 2015, the bulk of the city's corporate tax revenue has been collected under the Business Corporation Tax, although Subchapter S corporations continue to be taxed under the pre-2015 General Corporation Tax or Banking Corporation Tax. In this report, corporate taxes are the total of all three of those taxes.

Despite initial concern about the immediate erosion of the tax base during the early phases of the Covid-19 crisis, corporate tax revenue continued to grow: net collections (gross collections minus refunds) were $4.2 billion in 2019, grew to $4.5 billion in 2020 (increase of 7.4 percent), and then to a record-breaking $5.0 billion in 2021 (growth of 11.3 percent). This is due, in part, to the ability for businesses to shift tax liability between years, which means that the city's current collections can be a function of previous years' profits or losses. (Given the anticipation about and eventual passage of corporate tax reform in 2017, the city is likely still seeing the benefits of previously realized profits. That said, national corporate profit estimates have remained higher than anticipated throughout the pandemic.) We project that corporate taxes will take a delayed, if smaller than previously anticipated, hit from the pandemic in the coming years.

IBO projects that corporate tax revenue will decline by $222.8 million (4.4 percent) in 2022 and an additional $237.2 million (5.0 percent) in 2023, before resuming growth averaging $243.5 million per year (5.0 percent) in 2024 through 2026 reaching $5.3 billion. IBO has increased our forecast since last December for 2022 due to stronger than anticipated collections thus far, and slightly reduced our projections for future years, when we expect the full effects of the pandemic on taxable profits to be felt.

This pattern diverges somewhat from OMB's forecast, which projects a larger decline of $410.4 million (8.1 percent) in 2022, followed by smaller drops of $57.0 million (1.2 percent) in 2023 and $26.0 million (0.6 percent) in 2024, before returning to growth averaging $186.0 million (4.0 percent) in 2025 and 2026. IBO's forecast is $391.9 million (8.0 percent) higher than OMB's by 2026, the end of the forecast period.

Unincorporated Business Tax. The unincorporated business tax (UBT) is levied on the profits of firms that are not incorporated, such as LLCs, partnerships, and sole proprietorships. After a modest decline in net collections of $89.7 million (4.4 percent) in 2020, revenue recovered and grew by $137.7 million (7.1 percent) in 2021, to reach $2.1 billion. With no sign of weakening collections so far in the fiscal year, IBO projects continued revenue growth of $189.7 million (9.1 percent) in 2022, slowing to $75.5 million (3.3 percent) in 2023 and averaging $111.9 (4.6 percent) from 2024 through 2026; in the last year of the forecast period UBT revenue is expected to total $2.7 billion.

OMB also forecasts continued growth in UBT revenue over the coming years, albeit slower than IBO's projections. They predict growth of $96.8 million (4.7 percent) in 2022, $46.0 million (2.1 percent) in 2023, and an average of $73.3 million (3.2 percent) from 2024 through 2026. By the end of the forecast period, IBO's projection of UBT revenue is $238.0 million (9.8 percent) higher than OMB.

A particular downside risk to UBT revenue is that collections are heavily concentrated in the financial activities and professional services sectors. Given the large-scale shift to remote work that occurred during the pandemic and the suitability of these particular industries to such work arrangements, the extent to which firms can relocate operations to other jurisdictions (which generally do not have any equivalent to the UBT) may pose a threat to revenue in the coming years. However, this remains to be seen and will almost certainly be the subject of future court cases regarding nexus and local tax liability.

Sales Tax. Recent collections of the city's sales tax have been stronger than previously anticipated, prompting IBO to slightly raise its forecast of 2022 sales tax revenue to $7.8 billion, 18.6 percent greater than 2021 collections. Sales tax collections are forecast to continue growing briskly next year, although not at this year's torrid pace. We forecast 7.1 percent growth of sales tax receipts in 2023, to $8.3 billion. In 2024 through 2026, revenue increases are projected to average 5.1 percent annual, yielding $9.7 billion in sales tax revenue at the end of the forecast period.

The brief but deep Covid-induced recession that began in March 2020 had a larger impact on city sales tax collections than any previous recession in the last 40 years, and collections declined by a total of nearly $1.3 billion in 2020 and 2021. The availability of extremely effective the Covid-19 vaccines, growth in local employment, the return of some commuters, the revival of domestic tourism, and rapid expansion of the U. S. economy that have fueled a surge in sales tax revenue in 2022 are expected to continue. This will generate a strong increase in collections next year, although we have reduced our forecast of the extent of the increase by $228 million from in our December forecast, reflecting a somewhat diminished lower projection of real U.S. GDP growth and the effect of the Omicron variant on tourism. Still our current 7.1 percent projected growth of collections in 2023 exceeds the average annual rate of growth—5.5 percent—during the ten years of the previous economic expansion (2010 through 2019).

IBO projects further revenue increases in each of the following years of the forecast period, the result of sustained economic growth, continued recovery of local employment, and increasing numbers of international visitors, who on average spend more money in the city than do domestic tourists. The average growth rate of revenue in 2024 through 2026 is 5.1 percent, slightly less than the 2010 to 2019 average.

Covid-19 remains a major risk to IBO's sales tax forecast. A worsening of the pandemic could lead to renewed limits on economic activity, shake consumer confidence, and reduce consumption spending. It would also interrupt the revival of tourism in the city (as did the Omicron variant), reducing visitor spending, which accounts for a large portion of taxable sales in the city. Slower U.S. economic growth would have similar effects on consumer and visitor spending. Geopolitical conflicts and their effect on the global economy also pose a risk, particularly if the number of tourists from other countries is greatly reduced.

IBO's sales tax forecasts exceed OMB's by $59 million (0.8 percent) and $184 million (2.3 percent) in 2022 and 2023, respectively. Differences in the forecasts are smaller after 2023, with the IBO projection for 2026 $45 million less than OMB's prediction.

Hotel Occupancy Tax. Prompted by stronger-than-expected recent collections, IBO has raised its forecast of 2022 hotel tax revenue by $21 million, to $267 million—over three times the amount collected in 2021. Our forecast of 2023 receipts, $414 million, is virtually the same as our December forecast.

After the Covid-19 pandemic devastated tourism and business travel in the city and hotel occupancy rates and room rates plunged, over a two-year period revenue from the hotel tax collapsed, from $625 million in 2019 to $85 million in 2021. As the Covid-19 vaccines became widely available in calendar year 2021, domestic tourists started returning the city. The return of tourism has fueled the surge of hotel tax collections this year, to $267 million.

For 2023, we expect the steady growth in the number of visitors to the city to generate $414 million in hotel tax revenue, 55.0 percent greater than projected collections this year. Under the assumptions that U.S. economic growth will remain solid in the coming years and that Covid will have less of an effect on growth and consumer confidence in the future, IBO's outlook is for the recovery of tourism to continue throughout the forecast period, though business travel is expected to be far lower than before the pandemic. After 2023, hotel tax receipts are expected to increase at lower but still brisk rates: by 26.9 percent in 2024, to yield $525 million, and by an average of 9.1 percent in the next two years, to generate $625 million by 2026.

Like the sales tax, the major risk to the hotel tax forecast is the possibility that the Covid-19 pandemic will worsen, reducing the desire and ability of potential visitors to travel, which would in turn reduce the number of hotel stays and lower occupancy tax revenues. Slower-than-expected economic growth in the U.S. and abroad would have similar effects, as would geopolitical events that dampen the number of international tourists.

Both IBO and OMB predict large increases in hotel tax revenue through 2026. IBO's forecast for 2023 is substantially higher than OMB's— by $64 million (18.3 percent). Starting in 2024, our projected revenue growth is slower than what OMB predicts, and in the last two years of the financial plan, our revenue forecast is lower, by $30 million (4.8 percent) and $25 million (3.8 percent) in 2025 and 2026, respectively.