



**Testimony  
Joint Legislative Budget Hearing on Taxes  
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**Presented by**

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The Fiscal Policy Institute would like to thank the chairs and members of the respective committees for the opportunity to testify on the 2021-2022 New York State Executive Budget. The Fiscal Policy Institute is an independent, nonpartisan, nonprofit research and education organization committed to improving public policies and private practices to better the economic and social conditions of all New Yorkers. Founded in 1991, FPI works to create a strong economy in which prosperity is broadly shared. FPI's Immigration Research Initiative looks at immigration in New York, and across the country.

## **Financial Plan: The Budget New York Has**

The budget gap this year is \$15 billion, as estimated by the Division of Budget.<sup>1</sup> It is a sum of the shortfalls in Fiscal Year 2021 (\$4.7 billion) and Fiscal Year 2022 (\$10.2 billion). The governor's Executive Budget proposes a series of measures that would close this gap.

The Executive Budget for FY 2022 proposes an increase in total state operating funds of \$1.22 billion or 1.2 percent; that is in line with the \$1.93 billion or 1.9 percent proposed increase in the budget a year ago. The current estimate of the actual increase in the FY 2021 budget is close to zero percent. The total of all government spending—which also includes capital funds and federal aid—is expected to remain roughly the same after it jumped by 11.3 percent from the year prior. The dramatic rise is largely attributable to the federally funded measures addressing the Covid-19 emergency in the state.

## Key Challenges

The state's finances have been severely impacted by the Covid-19 pandemic, and the proposed budget is highly conditional on federal aid. The "if-then" scenario featured in the budget assumes the minimum level of federal aid to be \$6 billion and addresses the remaining \$9 billion difference. At the same time, the governor has requested \$15 billion from Congress. If the entire amount is made available, then, the governor suggests, the need for the types of budget actions outlined in the financial plan is greatly reduced or eliminated altogether. The premise ignores that the state had many unmet needs prior to the Covid-19 pandemic, and the budget, therefore, must go further in raising revenue to maintain and expand vital services. New York has the resources to balance its budget and transform its fiscal policy. Additional funds from Washington should make the task easier, but, regardless, the state has a duty to advance reasonable and sufficient policy that maximally benefits its residents.

The governor proposes, as revenue actions: a temporary Personal Income Tax (PIT) surcharge on taxpayers earning over \$5 million a year, a one-year pause in middle-class PIT reduction, mobile sports betting, and a cannabis use legalization. The combined effect of the proposed measures on the total state revenue is projected to be around \$2 billion in FY 2022. On the other hand, as spending cuts, the budget suggests \$6.4 billion in combined spending reductions is appropriate. The negative spending adjustments are principally identified in school funding, Medicaid, and various local assistance programs (FY 2021: \$2.8 billion; FY 2022: \$3.6 billion).

## Funding Concerns

**Health Care.** The FY 2022 Executive Budget proposes \$188 billion for the Department of Health, including \$88.4 billion for Medicaid, \$5.5 billion for the Essential Plan, and \$12.5 billion for remaining health program spending. The proposal includes increasing the state share of Medicaid spending to \$27 billion, decreasing the federal share to \$54 billion, and decreasing the local share to \$7.2 billion.

The coronavirus pandemic has highlighted that our public health is only as good as that of the least insured person in our society. This time last year 95 percent of New Yorkers had health insurance coverage, a record high achievement for the state which was widely celebrated. Now, with millions of New Yorkers becoming unemployed due to pandemic mitigation, we are seeing uninsured rates spike in cities and towns across the state. Bolstering Medicaid is crucial to preserving health coverage for New Yorkers amid our COVID-19 public health response.

The Families First Act passed by the House of Representatives gave states a 6.2 percentage point boost in the federal matching rate (known as the federal medical assistance percentage, or FMAP). In New York State, the FMAP increase from 50 percent to 56.2 percent is helping to support our economy and residents by providing access to care for immediate public health needs. In exchange for this boost, the Families First Act required "maintenance of effort" (MOE) protections preventing New York, or any state, from imposing new Medicaid eligibility restrictions or taking away people's coverage during the public health emergency. It is critical that these protections are extended through the pandemic and recovery. Last budget cycle, the governor convened the Medicaid Redesign II team to find ways to cut Medicaid to close the budget gap. These proposals have been stalled because of the MOE protections, which worked to ensure that during the

pandemic all New Yorkers would have access to Medicaid. New York State's Medicaid global cap forces across-the-board cuts to the program. These cuts fall hardest on the safety-net hospitals that serve low-income communities. Ending the cap would protect safety-net hospitals and the Medicaid program from cuts during this public health crisis.

The Executive Budget encourages New Yorkers to access coverage through the Essential Plan by eliminating \$20 monthly copays for more than 400,000 New Yorkers earning between \$39,300 and \$52,400 for a family of four. This investment follows in the long history that New York has in expanding access to affordable and quality healthcare.

The Executive Budget health spending priorities should go further to address the systemic racial disparities in health outcomes and the disproportionate effects the coronavirus pandemic has had on people of color and immigrants. Before the pandemic and recession, five percent of New Yorkers did not have health coverage, and those without this vital resource were more likely to be Black, Hispanic, or immigrants.<sup>2</sup> The governor has already made emergency Medicaid available for undocumented immigrants who need COVID-19 testing and treatment. By passing S2549/A1585, immigrants up to 200 percent of the poverty level who have had COVID-19 and are excluded because of their lack of status would be covered by the Essential Plan. This consequential step, which is estimated to cost \$13 million. The Navigator program helps New Yorkers apply for, enroll in, and renew health coverage. This critical program also facilitates access to free-in person services throughout the state through a network of community-based organizations. In this time of exceptional need, the proposed budget should include an increase of \$5 million to the Navigator budget to avoid service reductions and support outreach to uninsured communities.<sup>3</sup> Navigators help people who are eligible but are not enrolled gain coverage and should be supported with all of the tools that they need to help New Yorkers who are losing job-based health coverage.

**Education.** The perennial elephant in the room on education funding is the glaring gap between commitment and reality regarding New York State's foundation aid formula. That formula was agreed upon by the governor and legislature in 2007 as a way to ensure that all school districts get the state funding needed to provide students, at a minimum, with a sound basic education. School districts serving students of color, rural students, and immigrants are chronically underfunded, and localities with a lower tax base simply cannot make up for the lack of state education funding, and even wealthier localities are constrained by the two percent property tax cap.

The gap between promise and reality this year is \$4 billion. On top of that, the FY2022 Executive Budget proposes a reduction of \$1.35 billion in the Local District Funding Adjustment—a cut that will not just be for this year, when it may be offset by federal funds, but also will continue into the future. The proposed consolidation of 11 areas of expense-based aid looks, as well, like a regressive cut to spending for basic needs. The total gap between meeting the state's commitment and this year's reality is well over \$5 billion.

The federal government is expected to help make up part of the gap for this year. The federal aid passed just before the end of 2020 should result in \$2.1 billion for schools in New York. But New York must go further, and at long last must get serious about meeting the obligations to which it committed itself.

In 2014 the governor committed to universal pre-K, a promise that has been only very partially realized outside of New York City. This year's executive budget includes flat funding for pre-K when it should be increased substantially. And, while the governor's proposal to create child care opportunities in child care deserts is welcome, it falls far short of the need to support working parents—and essential workers—by providing quality child care opportunities for all.

Funding for higher education is always critical, and it is particularly important as students and colleges are struggling through the COVID-19 crisis. Rather than increasing spending to address the pandemic, the governor's executive budget includes a series of spending reductions. The proposed allocations for the CUNY and SUNY community colleges are the lowest in over a decade. There are proposed reductions in SUNY and CUNY child care centers. The budget suggests a five percent reduction in state operating aid for four-year colleges. The very least the governor and legislature should do is avoid these cuts, and a far better idea would be to expand funding to these critical institutions as a way to help right now and to invest in our state's future.

**Human Services.** Human services providers throughout New York State have been severely financially impacted by the coronavirus pandemic. While direct care staff are deemed essential workers, the start of the pandemic saw them without enough access to personal protective equipment (PPE) and bearing the brunt of spending actions put in place by the state budget director for FY 2021. All state contracts were subject to a 20 percent withholding, so providers were only reimbursed for 80 percent of what they spent on a state contract. This made budget planning extremely difficult for providers, many of whom had to utilize Paycheck Protection Program (PPP) loans from the federal government and cash reserve accounts to cover their payroll costs. Many human service providers were forced to lay off staff, particularly administrative staff. For FY 2022, the executive budget proposes to reduce human services local assistance payments by five percent, pending federal aid. If aid is not received, a spending cut will be made permanent in the FY 2022 budget. To protect vulnerable residents and communities, it is critical that human services funding be increased rather than cut as services providers are essential to protecting public health. Further workforce reductions will have immediate and lasting harmful impacts on community health and wellness and state and local economies.

**Local Government.** The Executive Budget for FY 2022 proposes making a downward adjustment to Aid and Incentives for Municipalities base-level grants. The budget proposes \$617 million in AIM payments to cities, down from \$656 million in FY 2021. This downward adjustment results from modifications to how base-level grants are calculated, with cities receiving between 80 and 97.5 percent of their FY 2021 AIM payment, as determined by their level of reliance on AIM funding. This adjustment comes at a difficult time for New York State's cities, as sales tax revenues have declined and property tax revenues have been held flat due to the property tax cap. Declining sales tax revenues are of particular concern for municipalities receiving AIM-related payments, as those payments are now made by counties using a portion of their sales tax revenues. Also reduced by nearly \$2 million was funding for the citizens re-organization empowerment grants, which provide technical assistance and funding to local governments to increase government efficiency and effectiveness. As fiscal pressure on local governments across the state increases and technical support decreases, there is a very real danger that municipalities may turn to fines and fees to raise revenue, a harmful practice that deepens existing inequities. As the state works to balance its budget with assistance from the federal government, enhanced AIM payments are needed to ensure municipalities can balance their budgets and protect residents.

**Immigration.** The pandemic is testing our support systems and exposes existing vulnerabilities and shortcomings. New York State government should go beyond the federal expansion of unemployment benefits to create a system that takes account of excluded workers, those who are left behind even in the federal COVID-related expansion of the unemployment system. The executive budget does not address this issue. An FPI estimate shows we could provide meaningful weekly economic assistance to 120,000 excluded workers who are unemployed: 80,000 undocumented immigrants who lost their jobs and 40,000 people released from incarceration, who have little prospect of getting one in this economic climate.<sup>4</sup> Senator Jessica Ramos and Assemblymember Carmen De La Rosa have introduced salutary legislation to create such a fund and finance it with new taxes on wealthy New Yorkers.

Governor Cuomo is rightly proud of New York State's Liberty Defense Project, which is intended to ensure that immigrants, regardless of status, do not have to face federal immigration courts without legal representation. Once again, however, the governor does not allocate funds for the project in the proposed budget, leaving it to the legislature to add funds to support the program. Last year the Liberty Defense Project got just \$10 million, far less than what's needed. This year it should get \$25 million.

Helping immigrants learn to speak English—through New York's Adult Literacy Education program—is of obvious benefit to both immigrants and the communities where they live. Rather than a paltry \$6.29 million, as is in the executive budget, New York State should commit \$25 million as advocates are urging.

Finally, the New York State Enhanced Services for Refugees Program is a nation-leading initiative that helps refugees living in New York to thrive, supports upstate economic revitalization, and keeps on track resettlement agencies that are anchor institutions in their communities, serving both refugees and asylees. In prior years funding for NYSESRP has been \$2 million (last year in the COVID budget, it was cut in half to \$1 million). Funding for this program that benefits refugees, asylees, and the communities where they live should be expanded to \$5 million.

**Steps in the Right Direction Housing.** The proposed Executive Budget for FY 2022 includes some welcome relief for struggling renters. The executive budget proposal for FY 2022 utilizes \$1.2 billion in remaining Coronavirus Relief Funds (CRF) to provide emergency rental assistance. The coronavirus pandemic resulted in millions of workers in New York State experiencing layoffs and suffering reduced hours, which resulted in losses of income. Despite unemployment insurance enhancements enacted through the CARES Act and two economic impact payments (EIP), nearly 1 million renters currently report being in arrears, in part because of excluded workers and residents who did not get these benefits, and in part because the added aid was still not sufficient to meet New York's needs.<sup>5</sup> Those most impacted by income loss were hourly workers and workers with low wages, who already struggled to make ends meet in their household budgets before the pandemic. State orders and legislation provided protections and modest relief, but without funds targeted to arrears, New Yorkers would eventually face expired protections, potentially resulting in widespread homelessness. Particularly at risk were undocumented workers, who had been excluded from CARES Act stimulus programs and faced severe economic uncertainty as a result.

The proposed emergency rental assistance program would provide welcome relief to New York’s struggling renters. Program provisions prioritize people who have been unemployed for more than 90 days and who earn less than 50 percent of the area median income (AMI). Bill language also allows for funds to be used to establish “hardships funds to support undocumented workers.” With the Biden Administration now in charge of the Treasury Department, there is hope that the \$25 billion in emergency rental assistance funding included in the December 2020 federal COVID relief package will have non-restrictive and clear guidance, so further assistance can be provided to pandemic-impacted renters. As we continue to navigate the pandemic, it will be important for policymakers to continue to center programs and program spending on those with the greatest need.

**Cannabis Market.** The governor’s executive budget proposes the creation of a regulated cannabis market, a positive measure. An important aspect of the bill long championed by state legislators and advocates has been included in this year’s proposal: a social equity cannabis fund. The governor’s proposal seeds the fund with \$10 million in FY 2022, then deposits \$20 million in FY 2023, \$30 million in FY 2024, \$40 million in FY 2025, and \$50 million annually thereafter. New York State Division of the Budget is estimating that adult-use cannabis will produce \$130 million in revenue from marijuana taxation over the next two years. Even if those estimates are low (or high), it is worth considering that a percentage of the revenue be dedicated to the social equity fund, rather than a flat amount. The initial legislation, sponsored by Senator Krueger and Assembly Majority Leader Peoples-Stokes, established a Community Grants Reinvestment Fund that received 50 percent of the marijuana tax revenues. That fund would have been responsible for making grants in communities that were previously harmed by federal and state drug laws.

The use of marijuana taxation revenues has been a sticking point between the governor and the legislature in prior negotiations. So, while the governor’s proposed social equity fund is a step in the right direction, achieving equity requires an examination of the structures that perpetuate inequities and specific interventions to address them. The entirety of the program must therefore focus on issues of social and economic equity. Doing so extends beyond the use of the revenue and into who can participate in the industry, where they can participate, and how. A regulated cannabis market is a historic opportunity for New York State government to address past harms relating to enforcement and to create a market that prioritizes shared prosperity.

## Path to Recovery: Budget Policy Fit for New York

New York’s fiscal distress requires an appropriate combination of simultaneous solutions. The first task is now to address the immediate shortfall along with the unmet funding needs across multiple domains of state and local services. This requires decisive leadership and clear focus of the objective to maintain and advance, not curtail and diminish, state services and funding. The second, longer-term, job should be to recalibrate the state’s tax system to improve its progressivity and sustainability. There is ample room to work on policy reimagining and innovation. No single measure or vision will be sufficient for solving all of New York’s budget issues. A composite approach would more effective.

## Enhance the Millionaires Tax and Make it Permanent

Prior to the enactment of New York State's Personal Income Tax reforms in 2012, the highest tax rate was 8.97 percent. It was levied on all taxpayers, irrespective of tax filing status, if their annual incomes exceeded \$500,000. Under current law, the top bracket of 8.82 percent begins at \$1,077,550 for single filers, \$1,616,450 for head of household filers, and \$2,155,350 for married taxpayers filing jointly. Additionally, the current tax law, in the section 601(d-1), subjects incomes above a specified level to a supplemental tax, via a recapture provision, thereby converting applicable marginal tax rates to flat tax rates. It is assumed that this section of the law will be updated to reflect changes under the Ultra-Millionaires' tax proposals.

Figure 1. The Enhanced Millionaires' Tax Can Generate Significant Additional Revenue

Proposed PIT Brackets for All Filing Statuses	Current Law Tax Rates	Millionaires Tax Proposals Additional Versions				
		Mayer	May	Sanders	I	II
\$500k to \$1 million	6.85	-	-	-	9.32	8.82
\$1 million to \$5 million	6.85/8.82	-	8.82	9.62	10.32	10.32
\$5 million to \$10 million	8.82	10.9	9.32	10.32	10.82	11.82
\$10 million to \$100 million	8.82	10.9	9.82	11.32	11.32	12.32
Above \$100 million	8.82	10.9	10.32	11.82	11.82	12.82
<b>Expected Additional Revenue (billions)</b>		<b>\$2.50</b>	<b>\$2.04</b>	<b>\$4.53</b>	<b>\$7.18</b>	<b>\$8.02</b>

Source: New York State Department of Taxation and Finance: Personal Income Tax Filers Summary Datasets through tax year 2016, Table 3; New York State Division of the Budget: FY 2022 Economic and Revenue, February 2021.

There are currently several different Ultra-Millionaires' Tax bills. The bills set brackets at amounts previously discussed and proposed by the legislative majority: S.917 (May), S.1513 (Sanders) and S.3215 (Mayer), which sets levels in between the two other proposals and allocates funds for public schools, SUNY, and CUNY. Additionally, it may be useful to consider both increasing the rates and broadening the tax base by adding a lower bracket at the income level of \$500,000 and up. Version I, shown in Figure 1, has the same top rate and bracket as S.1513, if implemented, can be expected to yield \$7.18 billion. Version II yields under the same set of conditions just over \$8 billion. In the mix, there are also other, perhaps more ambitious, bills, e.g. S.2622 (Jackson) that pursues a more largescale vision of a tax system overhaul with broadening the tax base at much lower brackets and a top tax rate of 15 percent in what could arguably be a welcome, though sudden, departure toward a more progressive tax structure.

The Fiscal Policy Institute does not anticipate significant distortions from such taxes, especially in light of the recent tax reform in New Jersey, where the state will increase its tax rate for those earning \$1 to \$5 million a year from 8.97 percent to 10.75 percent. Taxpayers earning over \$5 million have already been taxed at that rate.

The Enhanced Millionaires' Tax can do enough to close a major portion of the projected budget gap as well as provide additional funding where needed. It is, however, not in itself a sufficient lone solution to the state's fiscal challenges. It cannot and does not go far enough, under any of the scenarios highlighted here, to fundamentally transform the state's tax code as a true comprehensive reform would. Still, as a partial solution, it works.

Considering the possible flexibility and usefulness of this measure, the governor’s proposal may appear to be falling short of its potential. Moreover, the governor’s proposal is for a temporary change, and features a subsequent refund option for those who voluntarily prepay for the Fiscal Years 2022 and 2023.

**Figure 2: Governor’s Proposed High-Income PIT**

Proposed PIT Brackets for All Filing Statuses	Current Law Tax Rates	Increase/ Surcharge	Proposed Rates
\$5 million to \$10 million	8.82	0.50	9.32
\$10 million to \$25 million	8.82	1.00	9.82
\$25 million to \$50 million	8.82	1.50	10.32
\$50 million to \$100 million	8.82	1.75	10.57
Above \$100 million	8.82	2.00	10.82

*Source: New York State Division of the Budget: FY 2022 Financial Plan, January 2021.*

The governor’s budget forecast reveals the expectation of under \$2 billion in additional revenue from this measure in Fiscal Year 2022. The Fiscal Policy Institute estimates the measure has a potential to yield as much as \$2.7 billion if section 601(d-1) is updated to reflect the new rates. The gap in estimates most likely results from the difference in the underlying assumptions made about the economy and various dynamic adjustments in taxpayers’ behavior such as, but not limited to, increased mobility, among other factors.

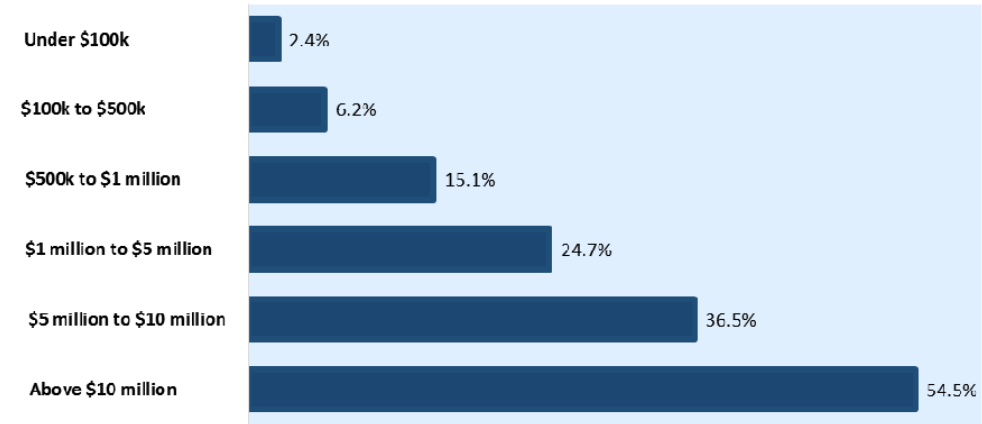
When the millionaire’s tax was first implemented, critics claimed millionaires would flee the state. However, the number of resident millionaire tax returns in fact grew from 28,000 in 2009 to 57,000 in 2018. Their total income grew from \$104 billion in 2009 to \$221 billion in 2018.

### Enact a Surcharge on Unearned Income

Income on wealth, or unearned personal income, in the form of capital gains and dividends, occupies a significant share of rich taxpayers’ income. While short-term capital gains are taxed as regular income at both state and federal levels, long-term capital gains that are taxed as regular income at the state level are treated preferentially at the federal level. To achieve a more equitable tax liability, the capital gains preference should be eliminated at the federal level. Instead, the Tax Cut and Jobs Act (TCJA) lowered the long-term capital gains rate from above 35 percent to 20 percent. This provided a significant tax cut for the wealthiest taxpayers. The richest one percent of Americans account for the dominant share of the qualifying dividends and capital gains as they reported 52 percent of qualified dividend and the richest 0.1 percent reported 31 percent of qualified dividends.<sup>6</sup> At the same time, income from wealth comprises the dominant share of income of these taxpayers, with those earning above \$10 million a year being taxed at preferential rates on 54 percent of their total income.<sup>7</sup>



**Figure 3: Preferential Rates for Capital Gains and Dividends Disproportionately Benefit the Wealthy**



Source: FPI analysis of tax liability at preferential rates for capital gains and dividends in 2018, by income level. U.S. Internal Revenue Service, "SOI Tax Stats - Individual Income Tax Returns Publication 1304. Table 3.5" (2018) Washington, DC; <https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-returns-publication-1304-complete-report>.

Although New York State’s tax code does not differentiate between earned and unearned incomes, and taxes them at the same rate, it must be clear that on the whole, at higher income levels income tax liability is relatively much lighter due to the preferential rates at the federal level. Therefore, and in particular following the TCJA, there is ample space to recapture some or all of the tax breaks on incomes from wealth. The Fiscal Policy Institute estimates that, at the current top state personal income tax rate of 8.82, a surcharge on capital gains on those earning \$5 million or more per year, would yield almost \$600 million in additional revenue for every incremental percentage point of the tax.

**Figure 4: Unearned Income Surcharge Can Generate Significant Additional Revenue**

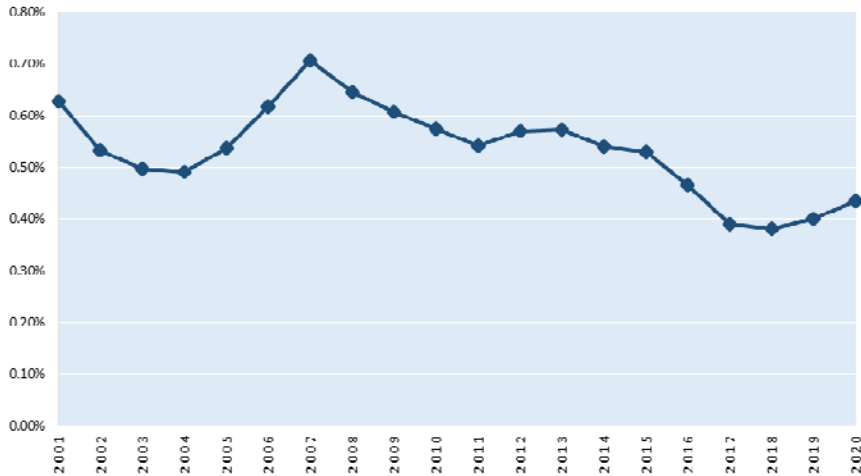
Unearned Income Surcharge (percent)	Total Additional Revenue (billions)
1	\$0.60
2	\$1.20
3	\$1.80
4	\$2.40
5	\$3.00

Source: New York State Department of Taxation and Finance: Personal Income Tax Filers Summary Datasets through tax year 2016, Table 3; New York State Division of the Budget: FY 2022 Economic and Revenue, February 2021. FPI analysis of tax liability at preferential rates for capital gains and dividends in 2018, by income level. US Internal Revenue Service, "SOI Tax Stats - Individual Income Tax Returns Publication 1304. Table 3.5" (2018) Washington, DC; <https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-returns-publication-1304-complete-report>.

This revenue source is likely to grow sustainably in the continued environment of increasing asset values. The size of the surcharge, however, is not only limited by the combined differential between the earned and unearned income taxes at the state and federal level, but also likely to lead to revenue tapering as the surcharge rate goes up due to perceived gradual incentive strengthening towards

considering geography for realization events on the part of the taxpayer. With that considered, literature on the matter suggests<sup>8</sup> the effect on revenue generation can be reasonably expected to be negligible, especially at lower tax rates.<sup>9</sup>

Figure 5: Corporation and Business Taxes Decline as a Share of New York's Economy



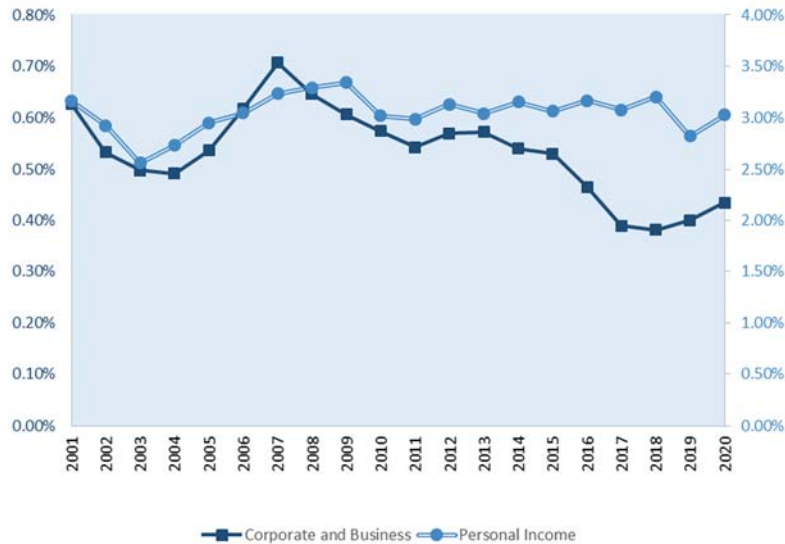
Source: FPI analysis. NYS Department of Taxation and Finance, Annual statistical report of New York State tax collections statistical summaries and historical tables fiscal year 2019-2020. Table 1. [https://www.tax.ny.gov/pdf/2019-20\\_Collections/FY19\\_20%20Tables.xls](https://www.tax.ny.gov/pdf/2019-20_Collections/FY19_20%20Tables.xls). U.S. Bureau of Economic Analysis, Total Gross Domestic Product for New York [NYNGSP], <https://fred.stlouisfed.org/series/NYNGSP>.

### Enact a Corporate Tax Surcharge

Corporate and business taxes have been on a steady decline for a long time in New York, and as a share of the state's aggregate product, they stood in Fiscal Year 2020 at 4.4 percent, less than half of the level they were at a local peak in 1994. Much of the deliberate economic policy has been aimed at lowering business tax burden, a trend decisively furthered by New York's corporate tax laws overhaul of 2015 as part of FY 2015 state budget.

The long-term trend of a consistently declining proportion of business taxes in the GDP may indicate that, as an amalgam, the private sector is enjoys now a more favorable tax regime than it did previously. This offers an opportunity to consider restoring the corporate and business taxes share and make sure it keeps up with the economy. The Fiscal Policy Institute estimates that an incremental surcharge of four percent (applying the same structure as the MTA surcharge) or effective tax of 0.26 percent added to the state's 6.5 percent corporate franchise tax would generate almost \$20 million in revenue. An effective four percentage point tax increase would generate over \$300 million in additional revenue.

Figure 6: Corporation and Business Taxes Decline as a Share of New York's Economy while PIT's Share of Gross State Product Remains Steady



Source: FPI analysis. NYS Department of Taxation and Finance, Annual statistical report of New York State tax collections statistical summaries and historical tables fiscal year 2019-2020. Table 1. [https://www.tax.ny.gov/pdf/2019-20\\_Collections/FY19\\_20%20Tables.xls](https://www.tax.ny.gov/pdf/2019-20_Collections/FY19_20%20Tables.xls). U.S. Bureau of Economic Analysis, Total Gross Domestic Product for New York [NYNGSP], <https://fred.stlouisfed.org/series/NYNGSP>.

## Implement the Billionaires Mark-to-Market Tax

Currently, wealthy taxpayers who mostly receive income through ownership of assets are taxed only on their realized gains upon the sale of their assets. This offers them an incentive to time their realization of gains or losses through sale with a purpose to minimize their tax exposure. Additionally, it allows them to move to a lower tax jurisdiction in anticipation of a realization event, and avoid paying taxes on the income accumulated over time at their previous location. Moreover, more than half of the economic income of the super-rich effectively escapes income taxation as they typically choose to not realize half of their gains over their lifetimes.<sup>10</sup> This doesn't mean they do not access them, however. In fact, they have access to practically costless unlimited borrowing and use such lines of credit as cash. Therefore, it makes sense to mark assets to market on a regular basis and tax gains as they accrue in each measurement interval. The Billionaire Mark-to-Market Tax (MtM) as proposed would do just that. Its revenue potential is around \$67 billion over the first ten years.<sup>11</sup>

## Mandate GILTI Compliance

The TCJA adopted a system to catch corporations hiding U.S. profits in tax shelters. Since then, many states and even New York City have complied with the Global Intangible Low-Tax Income (GILTI) regime, but New York State has not, and therefore fails to tax money U.S. multinationals earn in New York but hide in tax shelters overseas. The GILTI tax compliance is an attractive, fair, and quick way to raise sustainable new revenue.<sup>12,13</sup> The revenue potential is substantial. The Wharton research group has generated preliminary GILTI estimates for the United States of \$429 billion in 2020, growing to \$683 billion by 2030.<sup>14</sup> Apportioned by the state domestic product's

share in the national GDP, New York’ additional revenue due to GILTI (if taxed at the state corporate tax rate of 6.5 percent) is expected be in the range between \$1.8 billion and \$2.2 billion in 2021.

The way GILTI works is that the IRS checks foreign subsidiaries of each U.S. multinational company to see where they are making “supernormal” returns—basically, whether their return on foreign assets is over 10 percent a year. The assumption is that supernormal, above 10 percent, returns are likely to be sheltered gains. The IRS then takes that figure and arbitrarily assigns 50 percent of those sheltered gains to U.S. earnings.<sup>15</sup> This amount is considered Global Intangible Low-Tax Income and is taxed at corporate tax rates.

The federal government gives an 80 percent foreign tax credit on the full amount of sheltered income—that is, if a multinational pays 13.25 percent taxes or higher on the sheltered income in the tax shelter, they pay no GILTI tax.<sup>16</sup> Importantly, New York State does not have to follow the federal rule on this tax credit, and some other states do not. New York should join other states in breaking with the federal practice. If multinational corporations shelter U.S.-source income overseas, there is no reason to give them credit for taxes paid to the countries in which they are hiding their U.S.-source income.<sup>17</sup>

### **Enact a Pied-à-Terre Tax**

The Fiscal Policy Institute estimates that a pied-à-terre tax on vacant second homes with market value at \$5 million and above (or assessed value of \$300,000 or more for cooperatives and condominiums) can be expected to yield approximately half a billion dollars in new revenue. This is roughly in line with other recent projections.<sup>18</sup> Recent data from the New York City Housing and Vacancy Survey shows the number of residences held vacant by their owners has increased by 16 percent in the last three years reported. In 2017, almost 75,000 units were held vacant for occasional, seasonal, or recreational use. This represents 2.2 percent of the total number of housing units in New York City. It is likely that in the aftermath of the Covid-19 pandemic, the count of such properties will increase as some residential transition is taking place.

### **Collect and Modernize the Stock Transfer Tax**

New York State already has a stock transfer tax (STT), specified in Secs. 270-281-a of the state tax law. Since the 1980s, however, that tax has been rebated instantly and completely to the stockbrokers who pay it. It would make a lot of sense in New York’s current economic situation to at least partially reinstate the tax, even if temporarily, rather than fully rebate it. While the total amount rebated and state revenue forgone varies year to year, it usually amounts to at least several billion dollars. In fact, New York could perhaps go a step further and modernize the tax to expand its application to other financial instruments that are bought and sold by NYS residents.

### **Reduce the Burden of Tax Expenditures**

Tax expenditures are costs to New York’s taxpayers but are a kind of off-budget spending where instead of direct fund outlays, the state, alternatively, provides funding by letting both individuals and businesses claim tax benefits for certain types of specified activities. New York State’s 2020

Personal Income Tax expenditure estimates—which represent credits, deductions, and exemptions—were forecast to be \$11.2 billion.<sup>19</sup>

- **Reform Mortgage Interest Deduction**

For 2020, the Mortgage Interest Deduction (MID) was forecast to cost New York State \$705 million. The MID is a deduction that can be claimed on state and federal tax returns for those filers who itemize their deductions.<sup>20</sup> The justification for subsidizing homeownership via a deduction is that it would encourage homeownership and its myriad associated benefits, among them community stabilization and improvement and individual wealth-building and financial security. However, the proclaimed benefits do not stand up to the evidence on the MID. As a deduction, it is worth more to those tax filers who earn more and have larger mortgages, particularly after TCJA increased the amount of the standard deduction for all filing groups. The 2018 IRS data shows that 82,000 filers with adjusted gross incomes (AGI) over \$500,000 annually claimed deductions of over \$1.8 billion through the MID on their federal returns. Conversely, 96,000 filers with AGIs under \$50,000 claimed deductions of \$930 million.

Inequitable distribution of benefit is not the only drawback to the MID: research reveals linkages to sprawl, resulting from incentivizing larger home sizes. Perhaps counterintuitively, the deduction also results in a *reduction* in the homeownership rate: because the MID works through capitalization of tax benefits, home prices increase, pricing out many low- and moderate-income homebuyers.<sup>21</sup> New York State does have two state programs to help low-income buyers purchase affordable homes, but the state only spends \$31 million dollars annually on those two programs combined. One, the Affordable Housing Corporation, has its \$26 million allocation split between construction, acquisition and rehabilitation (includes down payment assistance), and home improvement. The other, the Mobile and Manufactured Homes Program, receives \$5 million. Affordable financing is offered by SONYMA, but no purchase assistance is offered through that program. COVID-19 worsened New York's housing crisis, which was already among the worst in the country. If affordable housing development is a priority for the state, it is time to rethink the MID.

- **Modify Excelsior Jobs Program Credit**

The Executive Budget proposes modifications to the Excelsior Jobs Program Credit to allow child-care projects to receive an Excelsior Investment Tax Credit of five percent of the cost of child-care services. It further allows that new participants in the jobs program are eligible to claim a six percent credit on their net new child-care services expenditures. Child-care costs can account for a significant portion of family household budgets, particularly for families with low and moderate wages. Expanding access to child-care services is vital to the economic well-being of our state's families, but also to economic development itself, as many families who cannot find or afford child care are unable to reliably participate in the workforce and lose income and opportunity as a result. However, before lawmakers enact these changes, the structure of the entire credit program should be examined.

The Excelsior Jobs Program utilizes approximately \$170 million of tax revenue annually, \$70 million of which flows to the Regional Economic Development Councils (REDCs). A 2016 audit

of the program, covering 2010-2015, by the New York State Office of the State Comptroller raised concerns about its administration by Empire State Development (ESD).<sup>22</sup> While internal controls at ESD seem to have improved, the program lacks a social and economic equity component. Performance reports, which are filed by credit claimants with ESD, do not contain information about the race, ethnicity, or gender of job holders.<sup>23</sup> As the jobs are concentrated in new and emerging fields and industries, it is important that the state enact an equity component beyond MWBE contracting requirements. Expenditures which provide incentives to business to promote hiring should provide a benefit to all New Yorkers.

- **Address the Costly Empire Film Production Credit**

The proposed Fiscal Year 2022 Executive Budget makes a few technical changes to the Empire State Film and Commercial Production Credit (Empire Film). Changes include extending the credit through 2026 (previously 2025) and adding several counties to the list of the post-production credit's qualifying jurisdictions eligible to receive a supplemental tax credit. The Empire Film credit annually reduces Personal Income Tax (PIT) and Corporate Franchise Tax (CFT) revenues by approximately \$400 million annually.<sup>24</sup> The FY 2021 enacted budget reduced the amount of the credit, which is fully refundable, from 30 percent to 25 percent. The credit applies to qualifying production and post-production costs incurred in New York State. Empire State Development (ESD), which administers the credit program, does not publish any regular reporting about the effectiveness or distribution of the credit to its website, nor has the state Department of Taxation and Finance (DTF) produced any reporting about the credit since 2011.<sup>25</sup>

An independent audit of the credit for years 2017 and 2018 found that the state offered \$1.8 billion in production and post-production incentives in the audited years and that for every \$1 paid by the incentive, the production credit returns \$1.08 in tax revenues. However, the post-production credit returned only \$0.86 in tax revenues on the dollar.<sup>26</sup> While the audit attempts to quantify associated economic activity through earnings and spending, New Yorkers need and deserve to know a lot more about how their tax revenues are expended through this credit program before again extending it and expanding the terms. ESD and DTF should produce reporting that details the credit's utilization by geography, size and type of production, amount of the credit per production, and tax revenue returned. New Yorkers deserve to know specifics about how many jobs the credit creates versus maintains, who is filling them, and how they are filled. Such reporting would create accountability toward racial, ethnic, and gender equity.

### Other Ideas Worth Discussing

*Stock buyback tax*

A tax on stock buybacks at the rate of 0.5 percent of the value of open market share repurchases.

*Carried interest fee*

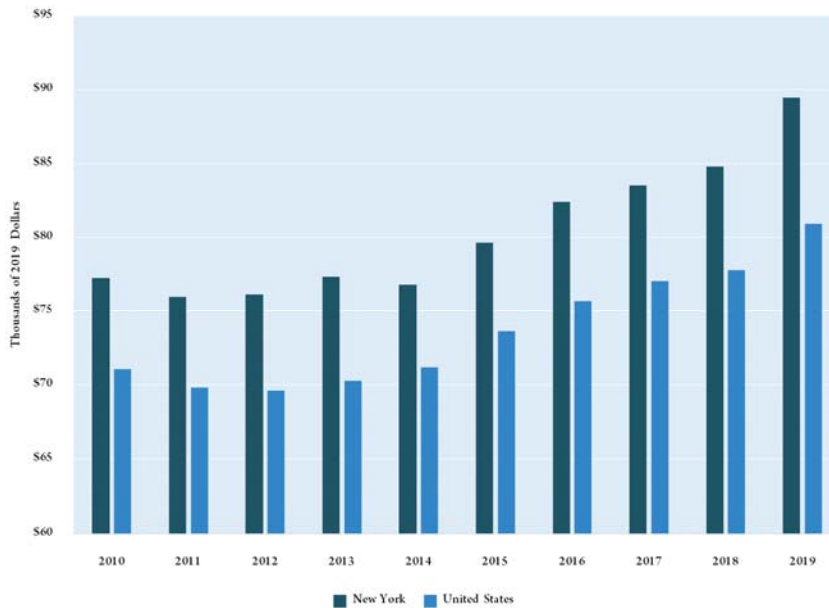
State-level surcharge on carried interest that addresses the carried interest loophole and makes private equity and hedge fund managers pay the same tax rate on their incomes as everyone else.

<i>Mezzanine debt tax</i>	Apply a mortgage recording fee to mezzanine debt used financing of residential real estate purchases.
<i>Bank tax</i>	Reinstate bank tax.
<i>Data Tax</i>	Institute a data tax.
<i>Unincorporated Business Income Tax</i>	Institute a state tax on passthrough income.
<i>Nonessential deliveries fee</i>	Tax nonessential product deliveries.
<i>Digital goods tax</i>	Tax digital goods and services, such as streaming.
<i>Decouple from Opportunity Zones</i>	The state and the city will save tens of millions of dollars a year combined by eliminating the tax break.
<i>Boost Enforcement</i>	Fund a comprehensive study to determine the size of the revenue gap and what types of investments are required to close it.

## Economic Outlook and Fiscal Environment

In 2020 the economic trend took a sharp recessionary turn. The longest recovery on record was slowly running out of steam and was mostly sustained by extraordinary levels of consumer confidence in its latter years due to massive fiscal and monetary stimuli at the federal level. As expected, recessionary trends steadily accumulated and only needed a trigger to come fully into play. The disruptive emergence of Covid-19 and the measures aimed at containing the pandemic became a trigger, as well as a recessionary force of their own. By the end of 2019, household incomes had largely recovered in real terms since the Great Recession.

Figure 7. Median Real Family Incomes in NYS, 2010-2019



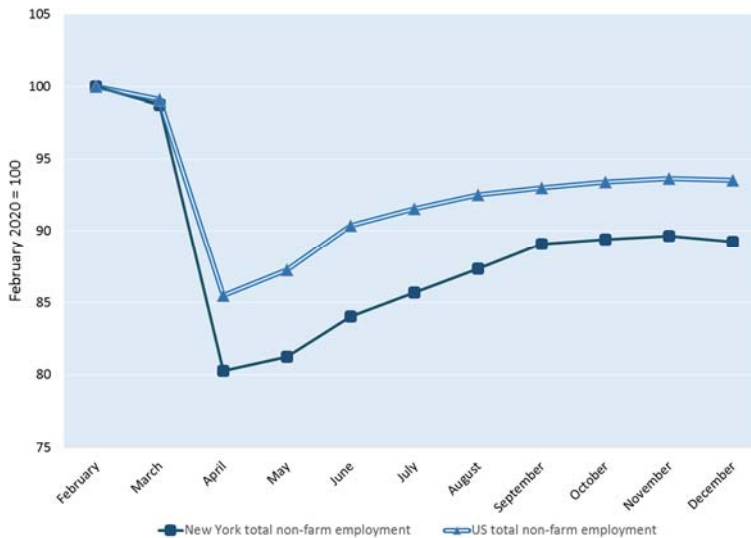
Source: Fiscal Policy Institute presentation of American Community Survey data.

The state's fiscal situation benefited from a protracted period of income growth. Every year or the post-Great Recession recovery, PIT collections were increasing and the Division of Budget routinely assumed in its forecasts strong performance even in the obviously late stages of the business cycle (like in 2019), as such projections grew progressively more speculative. Unfortunately, the state failed to anticipate that eventually the change in its economic fortunes and did little to boost its "rainy day fund." With that said, the intensity of the pandemic-induced economic shock of calendar year 2020 was greater than the ability of the state to withstand. Nonetheless, it is clear that in many respects, New York was caught off guard by both the pandemic and the recession that followed.

New York became the pandemic hotspot early on and was forced to respond aggressively with mitigation measures. The mandatory pause of most business activity led to a sharp increase in unemployment. In the nine months since the pandemic took effect in New York, the state has lost 1.2 million jobs, one job in every eight, compared to the same nine months in 2019.



Figure 8. New York's Total Employment Fell Faster than the National Average Early in the Pandemic, and is Still Far Behind in Recovery



Source: Current Employment Statistics Survey, U.S. Bureau of Labor Statistics.

The state is lagging behind the rest of the country in employment recovery. It is worth noting here that the employment and income recovery has been occurring at different paces for different categories of workers. Thus, by the fourth quarter of 2020, low-wage private sector jobs have recovered slightly after a sharp 38-percent drop in March-April of 2020 and are now 22 percent lower than in January of 2020. Nationally, higher-wage jobs not only fully recovered after their trough of about 13 percent reduction in April of 2020, but in fact, grew by the fourth quarter by over two percent as compared to the start of the year. New York data shows a similar contrast: low wage jobs are down 22 percent while high paying jobs are down only .02 percent.<sup>27</sup>

The largest proportional losses have been in arts and entertainment (43 percent) and accommodation and food services (42 percent), reflecting the effects of lost tourism and the closing of theaters and restaurants. Together, these two sectors are responsible for one-third of the total losses. The 120,000 loss in retail employment also reflects losses in tourism, as well as the switch by many New Yorkers, fearful of exposure, to buying on-line.

The difficulties of having workers meet in person and the dangers faced by customers of other enterprises have had effects on all sectors. There is no obvious explanation for the precipitous drop in health care employment (over 100,000 jobs), but some of the nearly 150,000 losses in business services may reflect the shrinking market for temporary workers as the whole economy slowed.

Figure 9: Employment by Industry Group, New York State

(Thousands of employees)				
	2019	2020	Change	
<b>Total*</b>	9,800.8	8,594.3	-1,206.4	-12.3%
Recreation	179.5	102.7	-76.8	-42.8%
Accommodation and Food	781.6	455.1	-326.5	-41.8%
Transportation, Warehousing and Utilities	310.3	256.9	-53.4	-17.2%
Other Services	415.7	345.6	-70.1	-16.9%
Construction	405.6	345.7	-59.9	-14.8%
Natural Resources & Mining	5.3	4.5	-0.8	-14.3%
Retail Trade	916.0	793.4	-122.6	-13.4%
Wholesale Trade	326.5	291.1	-35.5	-10.9%
Professional and Business Services	1,377.8	1,230.2	-147.6	-10.7%
Manufacturing	439.3	392.4	-46.9	-10.7%
Educational Services (private)	512.0	466.1	-45.9	-9.0%
Health Care and Social Assistance	1,633.4	1,529.0	-104.4	-6.4%
Financial Activities ("FIRE")	729.1	690.1	-38.9	-5.3%
Information	279.6	265.9	-13.7	-4.9%
Government	1,489.0	1,425.5	-63.4	-4.3%

Source: New York Department of Labor, Current Employment Statistics Survey, Seasonally Adjusted

\*Excludes farming.

The character of recessionary hardship is highly unequal, and we expect that the coming economic recovery is likely to increase the state's already high degree of economic inequality.

Figure 10: The Coronavirus Effect on Employment in New York

	Employed	Unemployed	Labor force participation	Unemployment rate (U-3)	Expanded* Unemployment rate (U-6)	Unemployed for over 6 months**
<b>Statewide</b>						
March - November 2019	9,129,100	375,100	60.7%	3.9%	5.5%	100,100
March - November 2020	8,181,500	1,081,800	59.3%	11.7%	15.1%	162,100
Change	-10%	188%	-1.4 ppts	+7.7 ppts	+9.6 ppts	62%
<b>Males</b>						
March - November 2019	4,772,200	205,000	66.6%	4.1%	5.8%	57,900
March - November 2020	4,273,300	569,800	64.9%	11.8%	15.6%	85,700
Change	-10%	178%	-1.7 ppts.	+7.7 ppts.	+9.8 ppts.	48%
<b>Females</b>						
March - November 2019	4,356,900	170,100	55.4%	3.8%	5.1%	42,200
March - November 2020	3,908,200	512,000	54.2%	11.6%	14.5%	76,300
Change	-10%	201%	-1.2 ppts.	+7.8 ppts.	+9.4 ppts.	81%
<b>Whites, non-Hispanic</b>						
March - November 2019	5,368,400	192,800	61.3%	3.5%	4.6%	38,600
March - November 2020	4,923,000	503,400	60.2%	9.3%	12.4%	60,500
Change	-8%	161%	-1.1 ppts.	+5.8 ppts.	+7.8 ppts.	57%
<b>Blacks, non-Hispanic</b>						
March - November 2019	1,160,900	85,500	57.7%	6.9%	9.7%	32,600
March - November 2020	1,033,700	161,000	54.1%	13.5%	16.8%	36,000
Change	-11%	88%	-3.6 ppts.	+6.6 ppts.	+7.1 ppts.	10%
<b>Hispanic/Latinx</b>						
March - November 2019	1,595,400	78,100	61.9%	4.7%	6.5%	23,700
March - November 2020	1,346,600	275,700	60.7%	17.0%	21.4%	45,400
Change	-16%	253%	-1.1 ppts.	+12.3 ppts.	+14.9 ppts.	92%
<b>Asians and all others***</b>						
March - November 2019	1,004,500	18,600	59.4%	1.8%	3.0%	5,200
March - November 2020	878,200	141,600	59.0%	13.9%	16.8%	20,000
Change	-13%	661%	-0.4 ppts.	+12.1 ppts.	+13.8 ppts.	285%

Note: Totals may not agree due to rounding

\*In addition to those officially unemployed, the U-6 factors in those who would take a job if they could find one, plus those who are working part-time because they could not find full-time work.

\*\*Research has shown that unemployment over 6 months significantly decreases peoples' chance of finding work in the future.

\*\*\*As the smallest group, and thus the smallest sample, these data are the least reliable.

Source: Fiscal Policy Institute analysis of Current Population Survey microdata provided by IPUMS (IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org)), adjusted to seasonally adjusted Local Area Unemployment Statistics.

<sup>1</sup> A budget gap is a dynamic measure of a difference between the projected levels of expenditures and means and, as such, reflects a set of relevant assumptions and conditional reasoning based on a variety of information types. In this sense, a budget planner might render the gap either existing or addressed by adopting requisite assumptions. This makes it important to critically assess their quality with respect to long-term fiscal sustainability.

<sup>2</sup> Shamier Settle and Jonas Shaende, 2020. “Strengthen Medicaid and Protect Health Coverage for New Yorkers”. Fiscal Policy Institute: New York, NY. <https://fiscalpolicy.org/wp-content/uploads/2020/05/Medicaid-Final-Draft-5.19.pdf>

<sup>3</sup> Karen Pollitz and Jennifer Tolbert, 2020. “Opportunities and Resources to Expand Enrollment During the Pandemic and Beyond”, Kaiser Family Foundation, <https://www.kff.org/health-reform/issue-brief/opportunities-and-resources-to-expand-enrollment-during-the-pandemic-and-beyond/> and Health Care 4 All New York Campaign, <https://hcfany.org/action-steps-and-resources/>

<sup>4</sup> David Dyssegaard Kallick, Cyierra Roldan, and Jonas Shaende, 2020. “Unemployment Compensation for Excluded Workers: Helping New Yorkers, Boosting the Local Economy,” Fiscal Policy Institute: New York, NY. <https://fiscalpolicy.org/wp-content/uploads/2020/07/FPI-Excluded-Workers-Regional-Impact-2.pdf>

<sup>5</sup> FPI analysis of Household Pulse Survey data.

<sup>6</sup> Tax Policy Center, 2019. “T20-0152—Distribution of Long-Term Capital Gains and Qualified Dividends by Expanded Cash Income Percentile, 2019,” <https://www.taxpolicycenter.org/model-estimates/distribution-individual-income-tax-long-term-capital-gains-and-qualified-44>

<sup>7</sup> U.S. Internal Revenue Service, 2018. “SOI Tax Stats - Individual Income Tax Returns Publication 1304. Table 3.5” Washington, DC; <https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-returns-publication-1304-complete-report>

<sup>8</sup> Michael Mazerov, 2014. “State Taxes Have a Negligible Impact on Americans’ Interstate Moves,” Center on Budget and Policy Priorities: Washington, DC. <https://www.cbpp.org/sites/default/files/atoms/files/5-8-14sfp.pdf>

<sup>9</sup> Cristobal Young, 2018. *The Myth of Millionaire Tax Flight: How Place Still Matters for the Rich*. Cornell University Stanford, CA: Stanford University Press.

<sup>10</sup> Jenny Bourne, Eugene Steuerle, Brian Raub, Joseph Newcomb, & Ellen Steele, “More Than They REALIZE: The Income of the Wealthy,” 71 NAT TAX J. 335 (2018).

<sup>11</sup> Jonas Shaende and David Dyssegaard Kallick, 2020. “The Billionaire Mark-to-Market Tax: \$5.5 Billion or More for the NYS Budget.” Fiscal Policy Institute: New York, NY. <https://fiscalpolicy.org/wp-content/uploads/2020/08/Billionaire-Mark-to-Market-Tax-FPI-1.pdf>

<sup>12</sup> Darien Shanske and David Gamage, 2019. “Why States Should Tax the GILTI,” *State Tax Notes*, p. 751.

<sup>13</sup> Darien Shanske and David Gamage, 2019. “Why States Can Tax the GILTI,” *State Tax Notes*, p. 967.

<sup>14</sup> Penn Wharton Budget Model, 2020. *Global Intangible Low-Taxed Income, 2020-2030: Estimates for the U.S. and Massachusetts*. University of Pennsylvania: PA. <https://budgetmodel.wharton.upenn.edu/estimates/2020/2/25/gilti-2020-2030-us-ma>

<sup>15</sup> For a New York State version of this tax, to find how much is assumed to be earned in NY, allocate the U.S. income based on revenue across states, as with any corporate tax.

<sup>16</sup> Eighty percent of 13.25 percent is 10.6 percent, but since this is done off the full income in that foreign country, not just the 50 percent assumed to be US-source, two times 10.6 percent equals 21.2 percent. That is close to the U.S. corporate tax rate. However, depending on the tax rate in the tax shelter—often lower than 13.25 percent—the U.S. picks up the rest.

<sup>17</sup> Furthermore, the federal government examines only U.S. multinationals for hidden U.S. profits. It may be possible, and perhaps desirable, to create a similar tax to cover foreign multinationals’ foreign subsidiaries to see if those subsidiaries have sheltered any U.S. gains. For U.S. multinationals, we assume 50 percent of supernormal returns are U.S.-based. For foreign multinationals, we would need to determine a different formula.

<sup>18</sup> Jonas Shaende, 2019. “The Pied-à-Terre Tax: An International Review and Evaluation for New York.” Fiscal Policy Institute: New York, NY. <http://fiscalpolicy.org/wp-content/uploads/2019/03/Pied-a-Terre-FPI.pdf>

<sup>19</sup> NYS Division of Budget, 2020 *Annual report on New York State Expenditures*, FY 2021  
<https://www.budget.ny.gov/pubs/archive/fy21/exec/ter/fy21ter.pdf>

<sup>20</sup> In response to the federal Tax Cuts and Jobs Act (TCJA), New York State changed its Tax Law in 2018 to allow filers to itemize their state returns even if they did not do so on their federal returns.

<sup>21</sup> Sommers & Sullivan. “Implications of U.S. Tax Policy for House Prices, Rents, and Homeownership,” *American Economic Review*, VOL. 108, NO. 2, February 2018.

<sup>22</sup> New York State Office of the State Comptroller, 2016. *Performance of the Excelsior Jobs Program*.  
<https://www.osc.state.ny.us/files/audits/2018-01/sga-2016-15s15.pdf>

<sup>23</sup> Empire State Development, 2020. *Excelsior Performance Report Workbook*. <https://esd.ny.gov/file/excelsior-performance-report-workbook-revmay2020xlsx>

<sup>24</sup> The credit has an annual cap of \$420 million.

<sup>25</sup> <https://esd.ny.gov/new-york-state-film-tax-credit-program-production> & <https://esd.ny.gov/industries/tv-and-film> & [https://www.tax.ny.gov/research/stats/statistics/special\\_interest\\_reports/film\\_credit/film\\_production\\_tax\\_credit\\_reports.htm](https://www.tax.ny.gov/research/stats/statistics/special_interest_reports/film_credit/film_production_tax_credit_reports.htm)

<sup>26</sup> [https://esd.ny.gov/sites/default/files/Camoin\\_NYS-FilmReport-2017-18.pdf](https://esd.ny.gov/sites/default/files/Camoin_NYS-FilmReport-2017-18.pdf)

<sup>27</sup> Raj Chetty, John N. Friedman, Nathaniel Hendren, Michael Stepner, and the Opportunity Insights Team, 2020. “The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data.” [https://opportunityinsights.org/wp-content/uploads/2020/05/tracker\\_paper.pdf](https://opportunityinsights.org/wp-content/uploads/2020/05/tracker_paper.pdf) the tracker is available here: <https://tracktherecovery.org/>