PENN STATION REDEVELOPMENT PROPOSAL - PROJECTED PILOT REVENUES

Key Findings

Background
This report assesses the State's intention to finance the upgrade of Penn Station with commercial payments in lieu of taxes (PILOTs) paid by Vornado on future Penn area development. The authors, Bridget Fisher and Flávia Leite, are public finance experts who did the definitive analysis of Hudson Yards' tax increment financing.

Key Assumptions
- Best-case scenario considered where site development proceeds as scheduled in the General Project Plan (GPP) and growth rates remain consistent.
- New York State uses PILOT revenue to refund the value of current property tax revenue to New York City.
- Vornado (Penn GPP area commercial developers) gets the same discount on PILOTs currently available to developers at Hudson Yards.
- City commercial property tax revenues are returned to the City following completion of 20-year discounted PILOTs paid to the State – prioritizing a short timeframe.

1. Vornado Will Get Up To $1.2 Billion Tax Break In Penn Station GPP Deal

Assuming a PILOT discounted by 20% — the maximum currently available in neighboring Hudson Yards — Vornado will get a tax break worth $1.2 billion or $67/sqft if they develop all sites.

Table 1: Value of Tax Breaks Per Square Foot

	Without Tax Breaks	With 20% Tax Break	Value of Benefit
Proposed Penn Station GPP	$363	$296	$67

2. Project Revenues

Payments In Lieu of Taxes will support $4.1 Billion in bond borrowing to fund the State share of Penn Station upgrades: Commercial PILOTs paid in the General Project Plan area of Penn Station as amended will result in a financing stream that can support $4.1B in bond borrowing.

Table 2: Net Commercial Property Tax Revenues from the Proposed Penn Station Value Capture District

Proposed GPP Revenues	All development
Property taxes from GPP	$6.6 billion
Revenues lost to tax breaks	-$1.2 billion
Revenues lost to refunding city	-$1.3 billion
Remaining bond borrowing capacity	$4.1 billion

At best, PILOTs paid by Vornado will finance less than 55% of the State's share of funding for Penn Station upgrades. ESD estimates the State share of all Penn Station projects at $7.5 to $10 billion (Gateway, Penn expansion and reconstruction of Penn Station). Given $4.1 billion in commercial PILOT-supported financing, New York State needs $3.4 to $5.9 billion of funding from other sources. The FY 2023 state budget includes $1.3 billion for below-ground improvements.

Schwartz Center for
Economic Policy Analysis

PENN STATION REDEVELOPMENT PROPOSAL: PROJECTED COMMERCIAL TAX BREAKS AND REVENUES

By Bridget Fisher and Flávia Leite

INTRODUCTION

The Penn Station Area Civic and Land Use Improvement Project proposes to use value capture to help finance the state's share of infrastructure costs to improve Penn Station, estimated at $7.5-$10 billion. The proposed tool is a variant of tax increment financing (TIF) known as payments in lieu of (property) taxes, or PILOT increment financing, and is based on a structure similar to the TIF variant utilized in Hudson Yards. Also similar to Hudson Yards, the proposal is expected to include the provision of tax breaks to commercial property owners in the form of discounted PILOTs.

As noted by the city's Independent Budget Office (IBO), the state has not made public the necessary information to determine if the proposed value capture scheme can be successful, including projections of costs and revenues, discount levels for the PILOTs, and the lifespan of the PILOT increment financing value capture mechanism, among other variables.

To assist in the public debate regarding approval of this plan by the state's Empire State Development Corporation (ESD) in late July, this report models an optimistic scenario for one of the project's proposed revenue sources: PILOTs that would be paid by the seven commercial sites designated for revenue capture in the ESD's General Project Plan (GPP) as amended.[1] The study models the majority commercial scenario presented in the project's Final Environmental Impact Statement (FEIS). Because commercial properties usually pay more in property taxes than other uses, the majority commercial scenario maximizes projected PILOT revenue, whereas alternative proposed scenarios including housing and/or hotels would likely reduce revenues projected by this study.

RESULTS

1. Commercial Tax Breaks/Discounted PILOTs

ESD has stated the GPP will include PILOT abatements similar to those currently available to developers in Midtown West, home to Hudson Yards. Hudson Yards' commercial tax breaks

[1] The GPP states that the designated revenue streams will also include an unspecified combination of payment in lieu of sales tax (PILOST) and/or payments in lieu of the mortgage recording tax (PILOMRT) and possibly the proceeds of land sales, ground payments or sales of development rights.

range from 15% to 40%.[2] The maximum tax break currently available for development sites in the financing district is 20%. Applying a 20% tax break to future PILOTs paid by developers of the seven commercial sites in the GPP over the proposed lifespan of the value capture mechanism results in:

- **$1.2 Billion in Tax Breaks:** Penn Station commercial developers would pay $1.2 billion less in property taxes. This amount represents foregone revenue that would otherwise be captured by the PILOT increment financing district and support additional bond capacity. Specifically, developers would pay $6.6 billion without the discount and $5.4 billion with the discount.

- **$67/sqft Tax Break:** The tax break would decrease the PILOT cost/sqft for Penn Station commercial developers by $67/sqft over the 20-year discounted PILOT program. This is the difference between $363/sqft without the tax break and $296/sqft with the tax break.[3]

Table 1: Penn Station GPP Commercial Property Taxes Per Square Foot

Without Tax Breaks	20% Tax Break	Value of Benefit
$363	$296	$67

Source: Authors' estimates

2. Commercial PILOT Revenues

This report models an optimistic scenario for projected PILOT revenues paid by the seven commercial sites designated for revenue capture in the Penn Station proposal. ESD's GPP states that *ad valorem* property taxes will be a source of recurring revenue to support the state's bond financing. Since the GPP was published, ESD made two additional statements that affect the potential revenues captured by the proposed PILOT increment financing mechanism: 1) it will include a "hold harmless" provision which commits the state to refund revenues to the city they would otherwise receive over the lifespan of the value capture mechanism,[4] and 2) the plan will include PILOT abatements similar to those currently available to developers in Midtown West, which includes Hudson Yards.[5]

---

[2] The range was designed to provide higher incentives for earlier development and development of sites located farther west. In 2022, sites that receive the highest discount have been developed or are under construction.

[3] This includes a phase out of the tax break during years 16-19 with a return to PILOT payments equivalent to full property taxes in year 20, which follows the discounted PILOT structure received in Hudson Yards.

[4] The FEIS states, "ESD has proposed that the City would continue to receive current property tax revenues, adjusted annually, on all sites in the Project Area, so the City would not lose tax revenue" (Executive Summary, p. S-40). This study assumes revenues captured by the state's proposed Penn Station value capture mechanism will be used to fulfill this commitment.

[5] New York State Senate joint hearing of the committees on Corporations, Authorities & Commissions, Finance, and Cities 1 to receive an update on the Penn Station Revitalization Plan held on June 24, 2022.

$4.1 Billion in Net PILOT Revenues
PILOT revenue from commercial property taxes in the GPP is projected to support $4.1 billion in bonds over the life of the study's defined value capture district to fund the state's share of Penn Station upgrades. This optimistic projection relies on three assumptions: 1) development proceeds as planned and growth rates for the commercial office market remain consistent,[6] 2) the state uses PILOT revenue to refund the value of current commercial property taxes to the city, and 3) commercial developers in relevant GPP sites receive a 20% tax break, the maximum discount on PILOT payments currently available in the Hudson Yards Financing District.

Methodology - This analysis projects values for commercial tax breaks, net and gross commercial PILOT revenues, and commercial property tax refunds to the city over the lifetime of a limited hypothetical timeline. Given the absence of information from ESD on the financing of the Penn Station proposal, this study used the Hudson Yards Financing District as a blueprint where possible to reduce assumptions regarding the structure Penn Station's proposed value capture district.

To project future commercial PILOT revenues, the model applies a similar methodology used by Cushman & Wakefield in 2021 to project revenues for future buildings in the Hudson Yards Financing District. To determine the value of a potential commercial tax break, the study assumes the state creates a PILOT program similar to that available in the Hudson Yards Financing District. This includes the maximum tax break/discount level currently available (20%). The structure of the proposed value capture mechanism captures projected commercial PILOT revenue for each of the seven relevant sites in the GPP during building construction and a 20-year discounted PILOT program post-construction. The limited timeframe reduces the uncertainty of predicting revenues long into the future and prioritizes a short timeframe for the capture of city revenue. See Study Limitations and Methodology for more information.

Below is a breakdown of this total:

Table 2: Commercial Property Tax Revenues from the Proposed Penn Station Value Capture District

GPP Revenues	Amount ($ billion)
Property taxes from GPP	$6.6
Revenues lost to tax breaks	-$1.2
Revenues lost to refunding city	-$1.3
Remaining bond borrowing capacity	$4.1

Source: Authors' estimates

---

https://www.nysenate.gov/calendar/public-hearings/june-24-2022/joint-public-hearing-receive-update-penn-station

[6] The project's FEIS states that the redevelopment of sites 1, 2, and 3 are dependent on the "future selection and approval of a Penn Station expansion at these locations." Site 1A is proposed to be redeveloped as a residential, not commercial, building. As such it is not included in this analysis, which is based on the FEIS's majority-commercial development scenario. However, if commercial sites 1B, 2A, 2B, and 3 are not developed and continue to pay city taxes rather than contribute to the value capture mechanism, this would represent a significant decrease in the projected revenue stream presented here (FEIS, Executive Summary, pg S-28)

- **$6.6 Billion in Gross PILOT Revenues:** Total property tax revenue from the seven commercial sites in the GPP is projected to be $6.6 billion over the life of the defined value capture mechanism. This projection is a best-case scenario, assuming development proceeds as planned and growth rates for the commercial office market remain consistent.

- **$1.2 Billion in Tax Breaks:** Applying the 20% commercial tax break currently available in Hudson Yards to the future PILOTs paid by the seven commercial sites in the GPP over time, the Penn Station proposal would bring in $1.2 billion less than if these commercial sites paid PILOTs equivalent to full taxes.[7]

- **$1.3 Billion to Refund Current City Taxes:** Without the Penn Station redevelopment, current property owners on lots that make up the seven commercial GPP sites would pay $1.3 billion in property taxes to the city during the timeframe of this analysis. This translates to a $1.3 billion loss to ESD's value capture district to fulfill their commitment to "hold the city harmless."

- **$3.4 to $5.9 Billion Funding Gap:** While PILOTs from commercial property taxes are not the GPP's only source of revenue, these large, recurring revenues will likely be a significant source of the value capture revenues in the proposed plan. ESD estimates the state's share of all Penn Station projects at $7.5 to $10 billion (Gateway, Penn expansion and reconstruction of Penn Station). With $4.1 billion in net commercial PILOT revenues under an optimistic scenario, this would leave a shortfall between $3.4 to $5.9 billion to be filled by other revenue streams (not including potential debt financing costs in the form of state interest support payments). The FY 2023 state budget includes $1.3 billion for below-ground improvements.

STUDY LIMITATIONS

The model used in this analysis is limited as a result of a lack of information from ESD regarding the proposed project's overall financing and expected timeframe.

1. Commercial PILOT Revenues Only

This report analyzes only projected revenue that can be captured from property tax-based commercial PILOTs in the GPP. The study is limited to commercial sites in the proposal due to the application of the discounted PILOT program used in the Hudson Yards Financing District, which is only available to developers of new commercial properties. The results are based on potential revenues from the seven sites included under a majority commercial scenario as proposed in the Final Environmental Impact Statement (FEIS), which excludes the proposed residential development on site 1A.

---

[7] This projected revenue loss is higher than the $1.1 billion executive budget for the Department of Housing Preservation and Development (HPD) in FY 2022.

The GPP proposes to capture other revenues from developers, including payments in lieu of mortgage recording taxes, payments in lieu of sales taxes for construction materials, the sale of additional development rights and/or transfer fees. In testimony provided to the State Senate Finance Committee, the ESD also stated that debt support service payments by the state would serve as additional revenue to pay financing costs on the bonds. However, neither the GPP nor ESD describe what portion of the total revenues each source will contribute or projections of how much revenue these streams would provide to the PILOT increment financing district for the Penn Station project. Without these details, the study cannot estimate the project's overall revenues.

Additionally, the projected PILOT revenue stream discussed is optimistic in that it does not address potential changes in PILOT revenues due to factors that can depress values in the district. This includes recessions, changes to market demand (notably in relation to post-pandemic changes in work structures), and developers' abilities to lower their PILOT payments by challenging their tax assessments. It also does not take into account the well-documented trends that result from implementation of this type of value capture district, which include cannibalization (shifting economic activity from neighboring submarkets) and copycat behavior (demands from neighboring areas to create similar TIF-type districts to compete), which can also depress values in the district (see "Value Creation, Capture, and Destruction" by Fisher, Leite, and Weber (2022) in the Journal of the American Planning Association (JAPA)).

2. Limited Timeline

ESD has not confirmed the length of the time the value capture fund will operate except to say the PILOT increment financing fund will not exist in perpetuity. Therefore, this study is based on the assumption that the proposed value capture scheme limits the diversion of city property tax revenues to the state only through implementation of a Hudson Yards-structured tax break (see Methodology).

3. Negotiated PILOTs

The ESD states they will negotiate lease agreements with each site's property owners on a case-by-case basis. This study is unable to model the unpredictable outcome of negotiations, and therefore applies the same assumptions to each relevant commercial site in the analysis.

4. Project Costs are Not Considered

ESD has not detailed the project's expected costs or potential cost overruns. As such, the study is limited to considering commercial PILOT revenues in relation to the stated range of the state's share of overall project cost.

Authors: Bridget Fisher is a researcher with the Schwartz Center for Economic Policy Analysis (SCEPA) at The New School. Flávia Leite is a doctoral student in city and regional planning at the University of California, Berkeley. As public finance scholars, they authored the 2018 report, "The Cost of New York City's Hudson Yards Redevelopment Project."

The Schwartz Center for Economic Policy Analysis (SCEPA) is the policy research center housed within The New School's economics department. SCEPA's research provides economic insights for a more equitable society. It aims to ensure working families' security and access to equitable institutions, which will not only fuel the economy, but create the foundation for a just and sustainable world.

This report was commissioned by Reinvent Albany, a nonprofit advocacy organization working to ensure transparent and accountable New York State government and increased transparency in New York City.

APPENDIX

Background

<u>Pennsylvania Station Area Civic and Land Use Improvement Project</u>
In February 2021, former Governor Cuomo issued a General Project Plan (GPP) for the redevelopment of the infrastructure in and around New York City's Penn Station transit hub. The proposal, then titled the Empire Station Complex Civic and Land Use Improvement Project and issued by the state's Empire State Development (ESD), proposed to fund upgrades to Penn Station's entrances and platforms by creating a value capture district, among other revenues.

In November 2021, Governor Hochul revised the GPP, re-titling the project as the Pennsylvania Station Area Civic and Land Use Improvement Project. The Governor's changes did not affect the proposed financing structure, but slightly decreased the overall square footage of the surrounding development and added in a portion of residential development to the previous all-commercial usage.

The proposal has received criticism for not providing detailed projections regarding the project's costs and revenues. On May 9, the city's nonpartisan Independent Budget Office (IBO) confirmed that the state's proposal to use value capture financing to pay for the project contains too little information to evaluate its success. Subsequently, ESD committed to publicly sharing more information on the proposed financing before ESD votes on the GPP at their July 30th board meeting.

<u>Value Capture Financing</u>
Value capture schemes sound simple in theory – future revenues can pay debt issued to cover upfront costs. But in practice, these financing mechanisms are highly complex and, as a result, come with more risk due the challenge of accurately projecting future revenues. In the form of value capture proposed by the GPP – PILOT increment financing – a public authority would issue bonds to generate revenue for upfront costs for infrastructure or economic development projects. The public authority then captures designated revenue streams from a designated area (or sites). These funds are then used to pay back debt and financing costs issued for the initial investment. Should revenues not materialize according to projections, project funds will not be available to pay finance costs and debt. When revenues do not materialize, the precarious balance that is the promise of value capture is lost. The public entity that took on the project's debt will not have enough revenue to pay its financing costs. When this happens, there are two likely results – either the sponsoring entity defaults and faces a credit downgrade or the public sponsor must contribute general revenues to pay expenses.

<u>Tax Increment Financing vs. PILOT Increment Financing</u>
Value capture comes in many forms, but the Penn Station GPP proposes a value capture mechanism that is a variant of tax increment financing (TIF) known as PILOT increment financing.

TIF and PILOT financing share the same basic structure. Under both mechanisms, a local government, through a redevelopment agency, issues bonds and uses the proceeds to finance public improvements intended to increase property values. Their similar structure allows us to apply the lessons learned from TIF to PILOT financing.

While similar, there are key differences between the two mechanisms. Under TIF, landowners are charged property taxes according to the locality's assessment rules. The base continues to go to the original taxing authority while the increment is used to pay off debt issued to cover upfront costs such as development costs and debt.

In contrast, under PILOT financing, local officials have the discretion to negotiate or discount PILOTs that substitute for property taxes, designated or created fees, and sales tax, among others. PILOT financing is also not subject to the constraints of the TIF enabling law, such as district size and length and the revenues that can be used. Additionally, all properties inside a TIF district contribute to generating the increment, while under PILOT financing, a municipality can specify which properties share revenues with the district.

Hudson Yards' Tax Breaks

Tax breaks are available to developers building new (post 2005) commercial office buildings in the Hudson Yards Financing District through discounted payments in lieu of taxes, or PILOTs. The amount of discounted PILOTs paid by new developers was established by the New York City Industrial Development Agency (IDA) through the Uniform Tax Exemption Policy (UTEP) in 2006, one year after the city approved the Hudson Yards project and its use of value capture in the form of PILOT increment financing, a variant of TIF.

Hudson Yards' tax breaks are applied over a 20-year period post construction, vary by abatement zone, and decrease in years 16-19 before returning to an amount equivalent to full property taxes in year 20. The UTEP set a formula for three abatement zones with seven subcategories that provide higher PILOT discounts for early development and development of lots farther west. Discounted PILOTs range from 40% to 15% based on abatement zone. Currently, sites with higher tax breaks have been developed, leaving sites open for development only in abatement zones offering tax breaks of either 20% or 15%.

The city justified tax breaks as a strategy to reduce development risk. A 2006 Cushman & Wakefield analysis concluded that Hudson Yards developers needed tax breaks to overcome a locational disadvantage that would earn them lower rents than their Midtown competitors. Yet, in 2020, one year after opening, Hudson Yards was and still is commanding higher rents than its neighbors.[8]

[8] According to JLL's New York Office Insight, Hudson Yards' average asking rent in 2Q 2020 was higher than all of Midtown subdistricts surrounding it, including Penn Plaza, Midtown West and prestigious locations such as the Central Park subdistrict.

Data Sources

- Property data and tax information for the seven commercial sites within the Penn Station GPP were extracted from the New York City Department of Finance's database for property taxes.
- The scope and details of the proposed project were determined by materials issued by the ESD, including:
  - General Project Plan adopted February 18, 2021
  - Governor Hochul's revisions issued November 10, 2021
  - Final Environmental Impact Statement (FEIS) issued June 2022

METHODOLOGY

Below is a description of the methodology used to estimate the property taxes, payments in lieu of taxes (PILOTs), and tax breaks of commercial developments in the General Project Plan (GPP) for Penn Station. The study is limited to commercial sites in the proposal due to the application of the discounted PILOT program used in the Hudson Yards Financing District, which is only available to developers of new commercial properties.

Timeframe of the Study

As noted above, ESD has not provided specifics regarding the lifespan and structure of its proposed value capture mechanism. This includes 1) the lifespan of the proposed PILOT financing mechanism, 2) how long individual buildings will pay PILOTs into the value capture mechanism, and 3) how long included commercial developments will receive tax breaks through a discounted PILOT program.

As such, this study assumes the proposed value capture scheme diverts city property tax revenues to the state during a limited time frame. The study defines a value capture lifespan that projects commercial PILOT revenue for each of the seven relevant sites in the GPP during building construction and a 20-year discounted PILOT program post-construction. After this time, individual buildings exit the value capture scheme (see Table 3). The limited timeframe also reduces the model's exposure to the uncertainty of predicting revenues long into the future.

The applied PILOT structure is analogous to that of the Hudson Yards Financing District in terms of the entry into the value capture scheme at construction and the application of the tax break/discounted PILOT over the following 20 years. However, in Hudson Yards after this time period, relevant commercial buildings continue paying PILOTs equivalent to full property taxes into the PILOT financing mechanism managed by HYIC. This HYIC-managed value capture fund will continue to capture designated city revenues until the city's outstanding project debt is paid.

Expanding the lifespan of the proposed Penn Station value capture mechanism would increase revenues to support the state's bond financing. However, this expansion runs the risk of

potentially establishing a precedent for the state to capture billions in city revenues for multiple decades.

Table 3: The Study's Timeframe for Penn Station's Value Capture Mechanism for Commercial Office Buildings

Time Period	Stage of a Building's Participation in the Value Capture Mechanism
Construction period	Entry into value capture scheme; PILOTs paid are based on assessed value of land only
Years 1-15 after construction	Discounted PILOT program/tax break begins: -Year 1-4: 20% discount of that year's property tax (assessed value of land and building) -Year 5-15: 103% of the previous year's PILOT payment
Years 16-19 after construction	Tax break phases out: year 16 (16%), year 17 (12%), year 18 (8%), year 19 (4%)
Year 20 after construction	PILOT payment is equivalent of full property taxes
Year 21 after construction	Exits value capture scheme: -no longer pays PILOTs (discounted or otherwise) -returns to paying full property taxes to the city

Source: Based on Hudson Yards' UTEP schedule for discounted PILOT program

Property Taxes for GPP Sites: No Development Scenario

The GPP identifies eight sites for proposed redevelopment around Penn Station. These sites are currently represented by 55 parcels, two of which are condominium buildings.[9] We used New York City's Department of Finance (DOF)'s property tax database for FY2022 to identify and filter the tax parcels covered by the GPP to determine property taxes paid by each lot in FY2022, the total lot size of each site, and the floor area ratio (FAR) allowed under current zoning.[10] Aggregating this data to conform to the GPP's proposed development sites allowed us to determine the amount of property taxes paid by the designated sites in FY2022.

[9] Individual units in a condominium have unique borough-block-lot (BBLs) or parcel numbers. In the case of the two condominiums that are part of the GPP, they total 32 units, each with their own BBL. As a result, the project area includes 53 fiscal lots associated with non-condominium buildings and 32 fiscal lots associated with condominium units, totaling 85 fiscal lots or BBLs. It is also worth noting that Sites 4 and 5 of the GPP as proposed would partially use the area of lot 70 (BBL 1007830070), but this fiscal lot was not included in our analysis due to a lack of information regarding the square footage that would be transferred from lot 70 to Sites 4 and 5, respectively. The IBO analysis of the Penn Station financing plans also did not include the proposed use of lot 70.

[10] Property taxes are the result of the multiplication of final taxable total values (excluding exemptions) times the tax rate for FY2022 (depending on building class).

To determine the value of the state's "hold harmless" commitment to refund the city's loss of revenues over the life of the Penn Station value capture mechanism, commercial property taxes from Fiscal Year 2022 property taxes were grown by 3.5% each year and totaled (assumptions detailed below). To note, this includes the full value of property taxes (land and buildings) even in years where sites would be under construction and therefore paying property taxes on the value of land only. Because this study only measures revenues for the seven commercial sites included as part of the FEIS' majority commercial scenario, current property tax revenues from the parcels that make up site 1A, proposed to be residential, are not included (see Table 4).

Table 4: Estimate of Property Taxes Paid by Commercial GPP Sites Over Time.

Sites	Property Taxes
1B	13,725,031
2A	91,750,159
2B	154,209,528
3	146,369,414
4	8,731,972
5	51,090,403
6	209,974,529
7	219,139,871
8	381,463,382
TOTAL	**1,276,454,290**

Source: Authors' estimate

Projected Property Taxes: FEIS' Majority Commercial Development Scenario

To estimate property taxes for future commercial GPP sites under the maximum density (FAR) allowed by the GPP, the model assumes each proposed commercial building will pay $23/sqft in property taxes, subject to an annual growth rate of 3.5%. Both assumptions come from a study by Cushman & Wakefield issued in 2021 to project revenues for future buildings in the Hudson Yards Financing District and represent an optimistic scenario where commercial office market

values remain consistent.[11] The FEIS provided for each site, among other things, the proposed gross square footage, maximum FAR, and proposed use. The table below presents information under the FEIS' majority commercial scenario.

Table 5 – Selected Information for GPP Commercial Sites

Site	Max FAR	Maximum Buildable Area (sqft)	Construction period	20-year discounted PILOT program ends
1B	21	731,911	2028-2032	2052
2A	26	2,495,471	2040-2044	2064
2B	30	2,867,235	2034-2041	2061
3	30	1,612,820	2039-2044	2064
4	25	1,100,000	2024-2028	2048
5	30	1,739,510	2029-2033	2053
6	30	2,079,849	2031-2037	2057
7	26	2,600,000	2022-2028	2048
8	26	2,600,000	2033-2038	2048

Source: IBO 2022, FEIS 2022 and authors' estimate

The IBO's May 2022 Fiscal Brief analyzing the state's Penn Station proposal presented expected completion dates of all major developments in the GPP. During the construction period, property owners pay property taxes only on the assessed value of the land. As such, we only used the assessed value of a lot's land when considering a building's PILOT payment during construction years. The forecast period of each building comprised the construction period (as reported by the IBO) and 20 years after construction (a structure that applies the discounted commercial PILOTs used in the Hudson Yards Financing District). A discount rate of 4.5% was used to determine the present value of each building's revenue stream. The discount rate is based on the interest rate of the latest bond offer of the Hudson Yards Infrastructure

[11] Cushman& Wakefield's 2021 study assumes a 3.5% annual growth rate in billable assessed value for Class 4 properties, based on an analysis of historical rate for these properties in New York City between 1985 and 2022. The study assumes tax rates would be constant over time. Their study also estimates real estate tax of $23 per square foot for new class A office buildings in 2021 based on 10 comparable developments constructed between 2002 and 2016. To note, C&W's 2021 analysis of future revenue streams in Hudson Yards did not present a net present value (NPV) of projected revenue streams, which can misrepresent the value of future property taxes. This study includes a NPV analysis to present a more realistic and conservative understanding of projected future revenues.

Corporation (HYIC) (Fiscal 2022 Series A), which varies from 4-5% over a 19-year period. FY2022 is used as the base year in all present value calculations.

Projected Value of Tax Breaks

The applied discounted PILOT structure is analogous to the UTEP-based PILOT program used in the Hudson Yards Financing District. The analysis uses a 20% tax break, or a PILOT payment discounted by 20%, because that is the maximum tax break available in the Hudson Yards today (see Hudson Yards Tax Breaks section for more information).

The analysis discounts the projected property taxes for each of the seven commercial sites in the GPP for years 1 through 4 after construction by 20%. From years 5 to 15 after construction PILOTs are equivalent to 103% of the PILOTs for the previous year. In years 16 through 19 post-construction, the analysis uses the same phase out of the discount as used in Hudson Yards' UTEP zones that come with a 20% discounted PILOT. The phase out schedule decreases the discount according to the following schedule: year 16 (16%), year 17 (12%), year 18 (8%), and year 19 (4%). In the 20th year, the building's PILOT payment reverts back to an amount equivalent to the sites' full property taxes. The NPV of the total revenue stream resulting from each building' discounted PILOTs over the post-construction 20-year application of the Hudson Yards-structured tax break are then divided by the total square feet of development in the seven sites to get the present value/sqft.

While participating commercial buildings pay PILOTs into the value capture mechanism during construction, they do not receive PILOT discounts/tax breaks during construction years. Therefore, PILOT payments during construction years are not included in the calculation of total property taxes paid under a 20-year discounted PILOT program following construction, nor are they included in the value of the tax break per square foot that would be paid without the tax break.