# MOODY'S

# Building Blocks for High-Resolution Forecasts: A Case Study on Office-to-Residential Conversions in NYC

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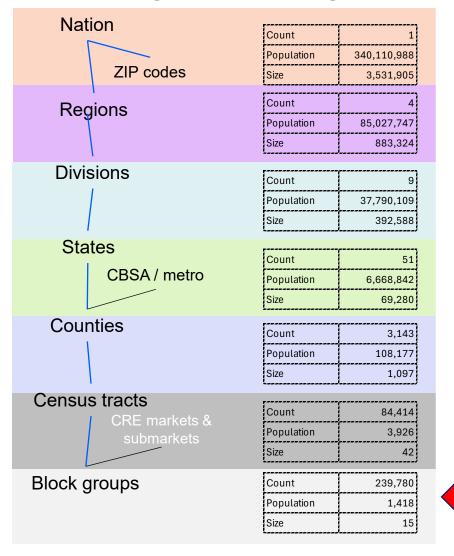
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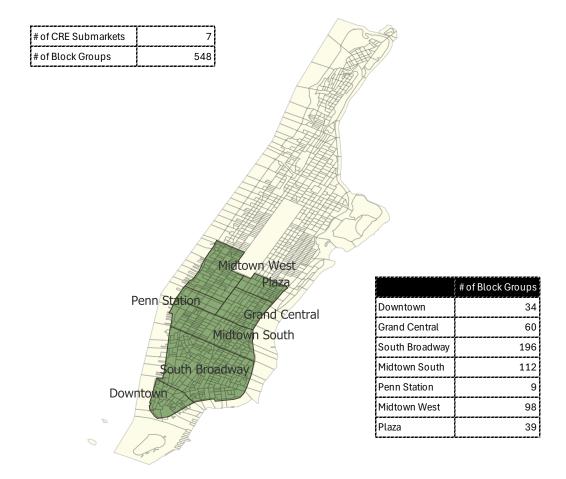
- Laying the Foundation: Building a Smarter Database
- The Evolving Office Market
- Putting It Together: Office-to-Residential Conversions in Manhattan



# Greater Insight With Higher Resolution



### Office Market by Block Group



### HOW-TO: A High-Resolution Database and Forecast



### **Foundation Database**

Start with Moody's **best-in-class U.S. regional** historical and forecast database at metropolitan area and county level



### **Multi-Source Data Collection**

Collect the highest-quality, highestfrequency block group data from Census, BEA, BLS, Equifax, Dodge, CoreLogic and First American. Supplement with alternative data and socioeconomic metrics



### **Historical Enhancement**

Create estimates that adjust for geographical, industrial and methodological breaks, increase frequency (annual to quarterly), and reduce lags for more current data by anchoring to Moody's proprietary metro/county forecasts



### **Regular Updates**

Update dataset regularly to ensure fresh, current data while enabling continuous improvement of methodologies



### **Geographic Aggregations**

Aggregate block groups to custom geographic definitions for meaningful economic analysis



### Forecasting

Create forecasts anchored to our worldclass proprietary metro and county forecasts using AI technologies to improve forecast quality and accuracy

50+ economic and demographic variables @ block group

Industry employment, median HH income, income by cohort, housing stock

2025Q4

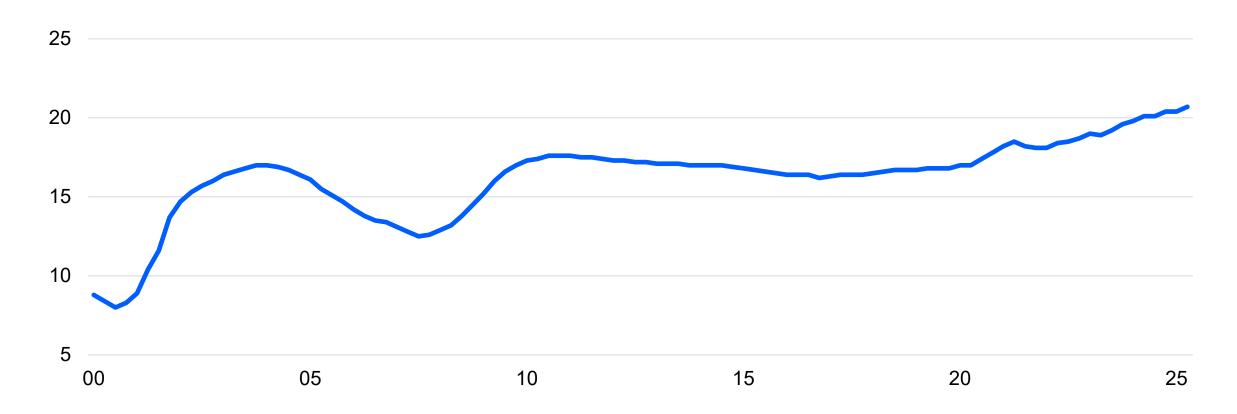
Block group forecasts



# The Evolving Office Market

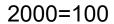
# Office Vacancy Rate at Record High

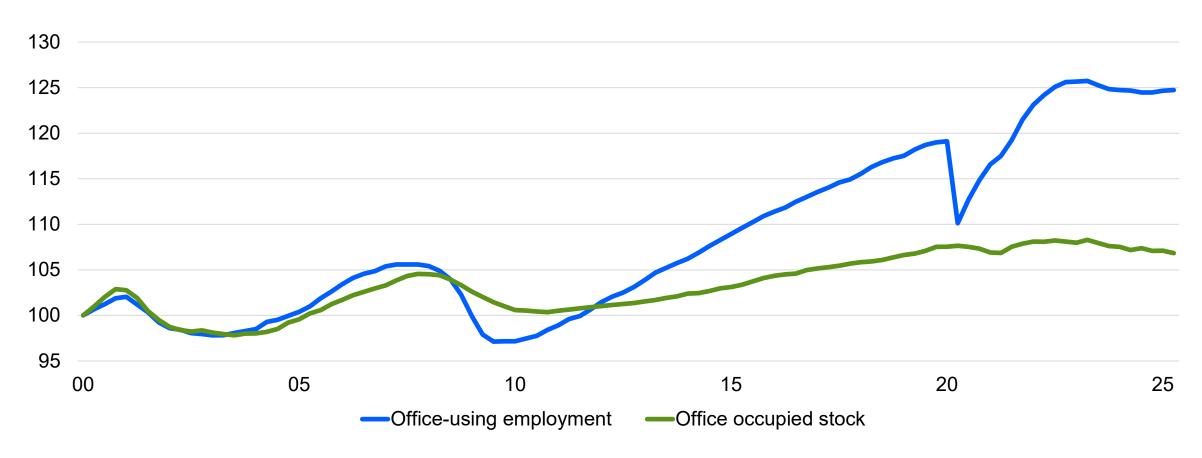
U.S. office vacancy rate, %



Source: Moody's Analytics

# Office Struggles Are Nothing New





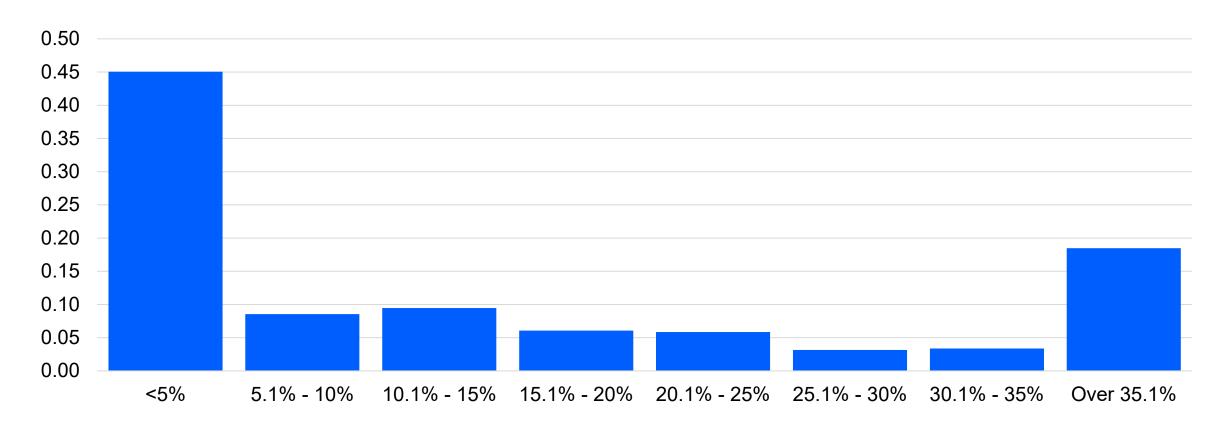
Source: Moody's Analytics

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# Even Nashville Has Problem Spots

Vacancy rate histogram, % of properties in each vacancy rate bin



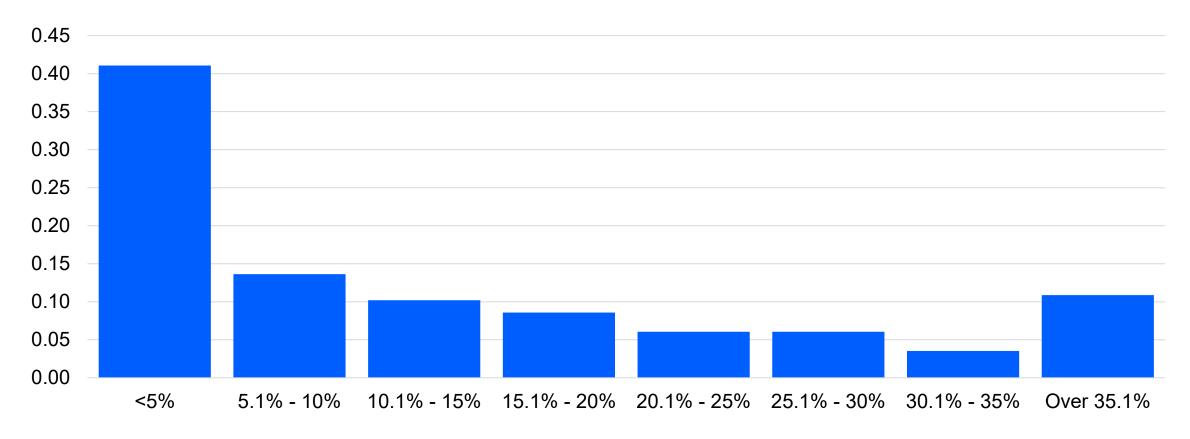
Source: Moody's Analytics

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### New York Has Faced/Faces Similar Challenges

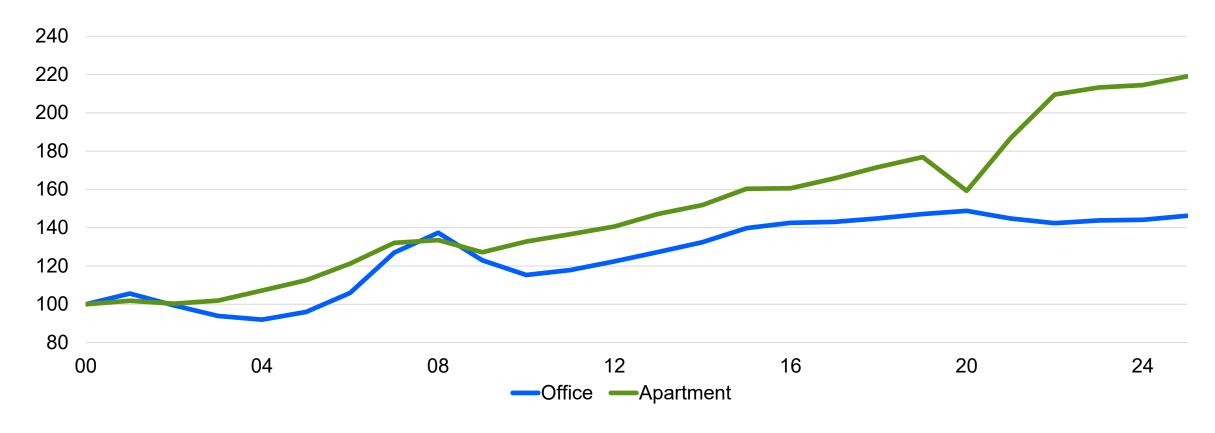
Vacancy rate histogram, % of properties in each vacancy rate bin



Source: Moody's Analytics

# Diverging Performance for Office and Apartment Properties in NYC

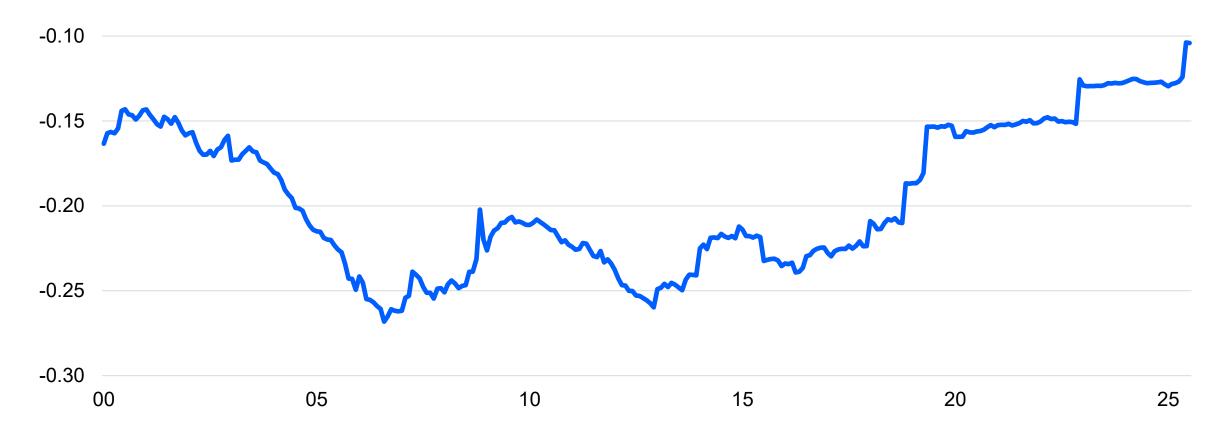
Asking Rent Index, 2000=100, New York



Source: Moody's Analytics

### Downtown Manhattan Has Been at the Forefront of the Office Stress

% diff in downtown vs. Manhattan rent



Source: Moody's Analytics

# Midtown West Is Now Facing a Similar Predicament

% diff in Midtown West vs. Manhattan rent



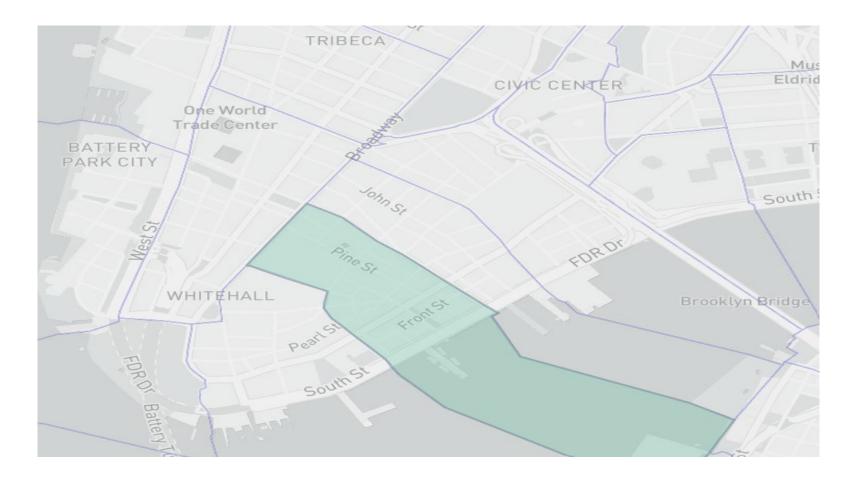
Source: Moody's Analytics



# One Block Group May Be NYC's Conversion Hotspot...



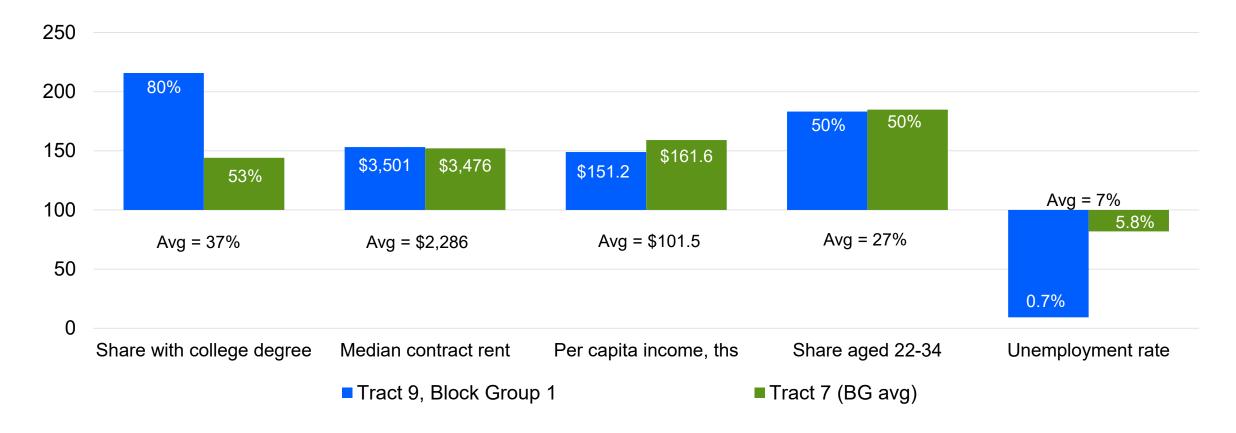
### ...And the Tract to the Northeast Is Very Popular as Well



Sources: Census Bureau, Moody's Analytics

### Conversions Are Linked in Part to Structural Advantages

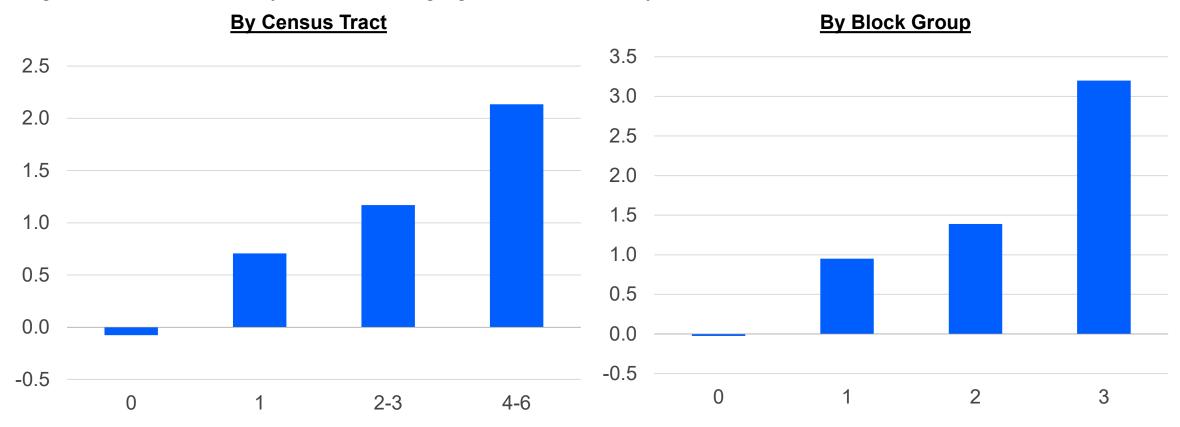
Selected block group and census tract metrics, 2019-2023 avg, Manhattan block group avg=100



Sources: Census Bureau, Moody's Analytics

### Pattern Is Also Clear When Zooming Out Across Manhattan

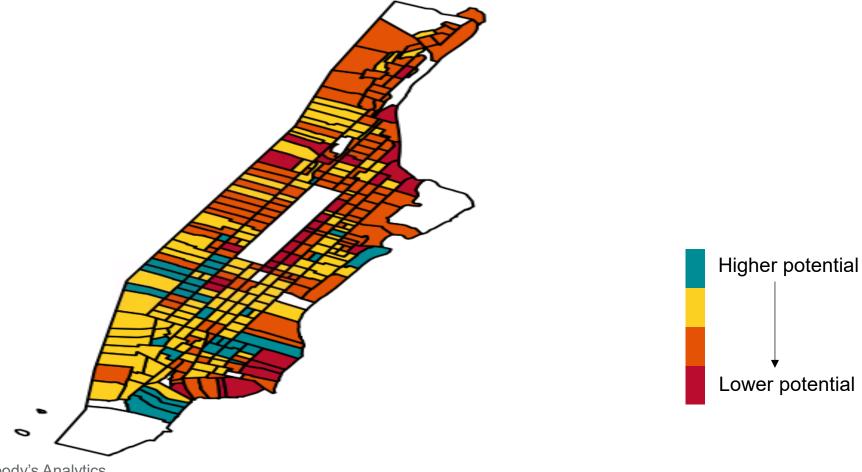
Avg z-score for 22- to 34-yr-old and college graduate shares, by number of conversions



Sources: New York City Comptroller, Census Bureau, Moody's Analytics

### Tracts With Favorable Demand Conditions Tend to Cluster Together...

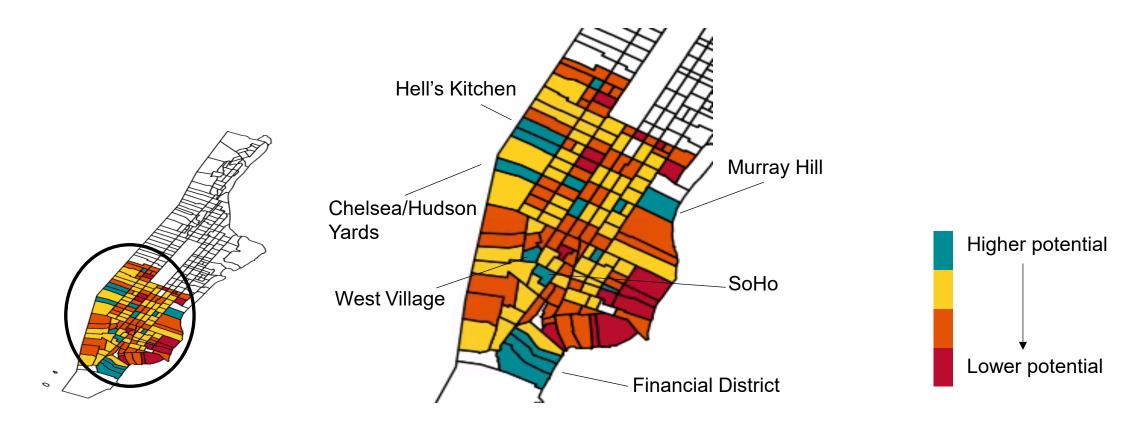
Z-score, educational attainment and 22-34 share, avg across block groups by tract



Sources: Census Bureau, Moody's Analytics

## ...But Much of Manhattan Faces Supply Constraints

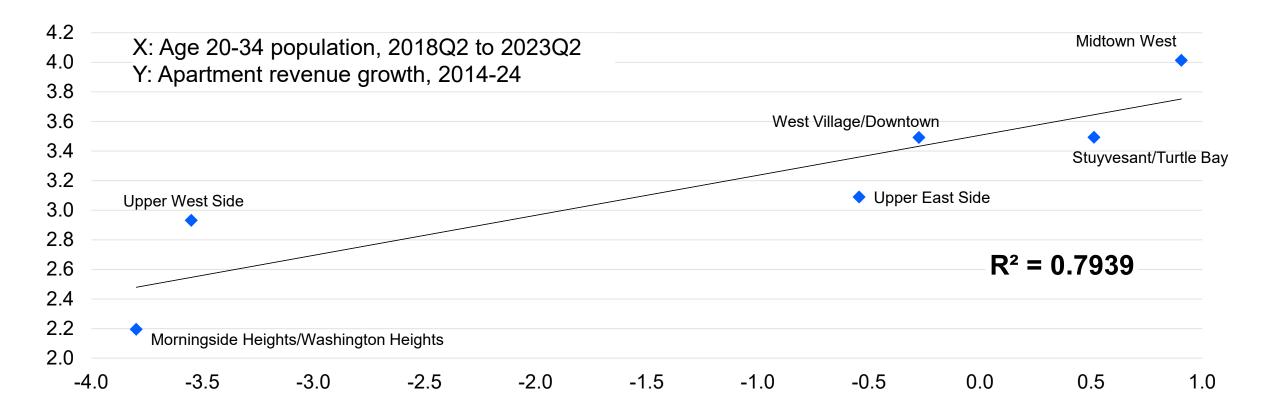
Z-score, educational attainment, 22-34 share, and change in office vacancies, avg across block groups by tract



Sources: Census Bureau, Moody's Analytics

# Adding Young Adults Is Secret Sauce for Manhattan Apartment Submarkets

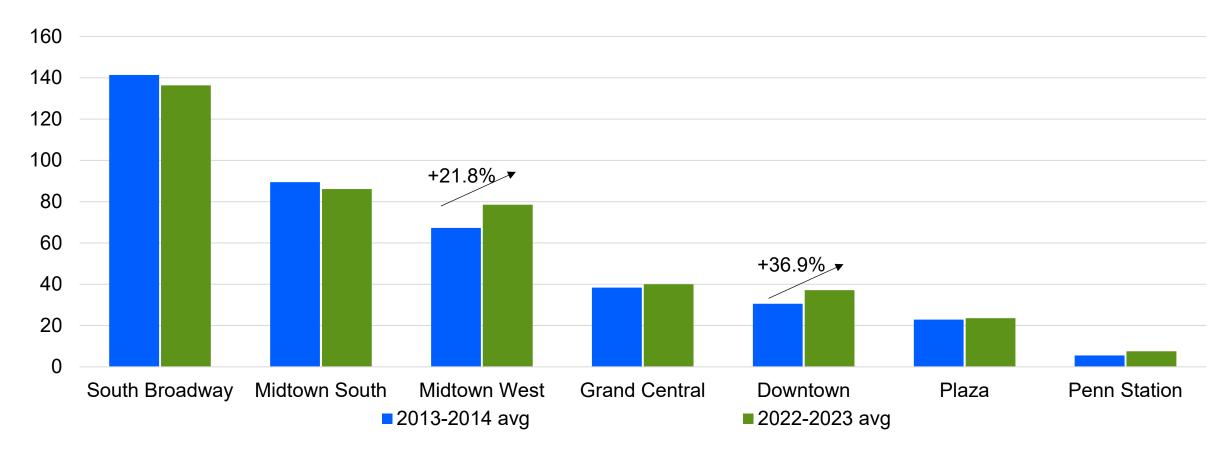
### Annualized % change



Sources: Census Bureau, Moody's Analytics

# Rising Number of Employed Residents Presents Opportunity

### Employment by office submarket, ths



Sources: BLS, Census Bureau, Moody's Analytics

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