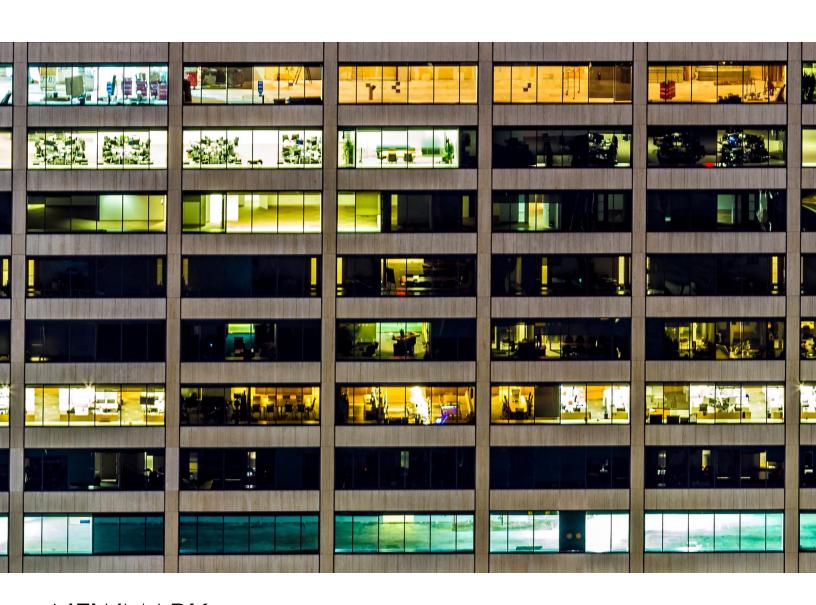


OCTOBER 2021

Growing Companies Drive a Rapidly Changing Market



NEWMARK

As the New York City office market continues to evolve in the wake of Covid-19, a different set of companies are driving absorption in this new environment. Monthly absorption improved in July, then ticked positive in August for the first time since the start of the pandemic and remained positive in September. The tenants driving this absorption are emerging and fast-growing firms, particularly those in the TAMI industry, that are increasing their New York City footprint. Large tenant relocations and expansions drove leasing in 2019, but larger, mature tenants have been more reluctant to reenter the market and finalize deals. Meanwhile, some companies in industries that were not hit by the pandemic have been incentivized by an increase in venture capital funding and advantageous real estate market financials. Since the start of the pandemic, \$660.1 billion of VC capital has been invested globally across a wide range of industries, compared to an average of \$164.1 billion annually in the prior decade.

With more emerging tenants (defined as those established less than ten years ago) signing deals, the average age of companies is down overall, to approximately 27 years. This is a 9.5% drop from 2019. TAMI companies averaged 13.2 years of age, or half the average of all tenants, and experienced a 19.1% drop in age, the greatest decline across all industries since the start of 2019. While TAMI companies are about half as old as the average tenant in New York City, law firms are on the opposite end at nearly twice as old as the average tenant. Meanwhile, among tenants that grew their footprint, the average growth rate slowed by 34.1 percentage points since the start of the pandemic. However, demand from emerging TAMI tenants has surged, growing by 315 percentage points in that same time frame. Firms such as Alloy, Freshly and DailyPay have all grown by more than 1000% from their previous locations, while Remarkable Foods, FUBO TV, Affirm and Square/Cashapp have all expanded by over 300%.



AVERAGE AGE OF TENANTS THAT GREW THEIR FOOTPRINT, BY INDUSTRY

Industry	Age of Companies that Signed in 2019 (Years)	Age of Companies that Signed During the Pandemic (Years)	Percent Change
Legal Services	56.5	61.3	8.5%
Retail/ Wholesale	28.9	30.0	3.6%
FIRE	30.1	28.5	-5.5%
Other	39.6	34.2	-13.6%
Professional Services	33.7	28.5	-15.4%
TAMI	16.4	13.2	-19.1%
Overall	29.5	26.7	-9.5%

^{*}Deals signed among tenants that grew from their prior footprint.

There are 4.3% more emerging tenants in the market now than in 2019 and 18.8% more emerging TAMI tenants in the market. These younger firms are predominantly located in Midtown South, which is home to more emerging tenants in the market than Midtown and Downtown combined. In addition, the average age of Midtown South tenants, approximately 25 years old, remains well below the average ages of those in Midtown and Downtown. The overall TAMI sector has recorded the greatest spike in the number of tenants in the market of all industries, up from 107 in 2019 to 132 as of September 2021. Given the increase in requirements, the trend of emerging tenants signing leases is expected to continue.

Among these emerging firms propelling absorption, several are growing out of previous co-working spaces. Some of the largest companies to do so included TikTok, Remarkable Foods, Square/Cashapp, Splice and Twitch. TikTok, formerly ByteDance/Musical.ly, occupied space in a WeWork location at 1460

Broadway and has since relocated and expanded into 232,138 square feet. Tenants growing out of coworking spaces accounted for 9.3% of positive absorption over the past 18 months, as compared to 0.9% in 2019. These tenants signed a total of 567,000 square feet in 2021, more than three times the space leased from the same type of tenant in 2019. Simultaneously, co-working is taking less space, accounting for just 3.8% of absorption since the pandemic began, versus 21.8% of positive absorption in 2019.

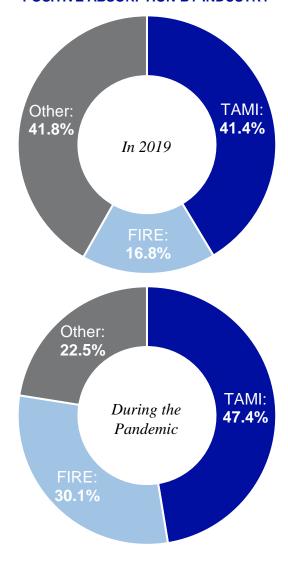
Tenant expansions continued to account for the largest share of growth at 47.5%, but significantly declined from the 69.9% average recorded in 2019. Prepandemic expansions were not only driven by rapidly growing co-working firms, such as WeWork, but large tech firms, such as Facebook, Amazon, Google and Netflix expanding for a total of 3.4 million square feet.



TAMI companies have accounted for 47.4% of positive absorption since the start of the pandemic, up from 41.4% pre-Covid-19. Emerging TAMI firms remain a large portion of the post-pandemic marketplace, and big TAMI firms are still an integral part of New York City's future. Since the onset of the pandemic, Facebook has expanded by 730,000 square feet, Apple has expanded by 116,526 square feet and Google has expanded by 58,981 square feet. Google also recently purchased 550 Washington Street, which they previously leased, for \$2.1 billion, showing confidence among big TAMI companies in the future of the NYC workplace. Facebook, Apple and Amazon are also currently in the market for expansion space along with other big TAMI firms, signaling that these tenants will continue to drive growth.

In 2021, the pace of growth among mature TAMI companies slowed, while growth of emerging companies sped up. In fact, these growing firms accounted for 59.2% of TAMI absorption, up from 24.3% pre-Covid-19. Notable examples included TikTok at 151 West 42nd Street, DailyPay at 55 Water Street and Noom at 5 Manhattan West. Each of these companies signed for at least 100,000 square feet. Not only did these firms grow their footprint, but they also represent a continued flight to quality that has been present across the market.

POSITIVE ABSORPTION BY INDUSTRY



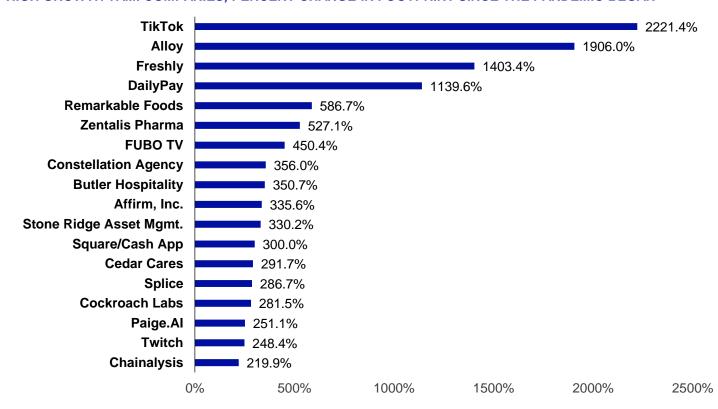
^{*}Deals signed among tenants that grew from their prior footprint Source: Newmark Research

While 67.5% of absorption was recorded in Class A buildings in 2019, that number has surged to 76.1% since last March. Growing firms are using discounted rental conditions in the post-Covid-19 marketplace to expand into higher-quality space. Many of these discounted rents are a result of subleases, which have increased by 8.9 percentage points since 2019. Emerging companies are also subleasing space at a higher rate than the overall marketplace. These emerging tenants have been significant drivers of sublease absorption as they search for more inexpensive space to facilitate their growth. In 2019, 23.9% of deals signed by emerging, growing companies were subleases, as compared to 31.7% since the start of the pandemic. These emerging tenants continue to prefer Midtown South. That market has been supply-constrained for several years, but an uptick in sublease availability offered more options

during the pandemic. Consistent with 2019, emerging companies absorb more space on a percentage basis in Midtown South, despite significantly less inventory than Midtown and Downtown. TAMI tenants are also absorbing more space in Midtown South since the start of the pandemic than in 2019.

TAMI industries both large and small continue to be an integral component of the New York City economy, but emerging companies are growing at a faster rate, building momentum especially in recent months. Monthly absorption improved in July, then ticked positive in August for the first time since the onset of the pandemic and remained positive in September. Current tenant requirements indicate that the growth trend among emerging tenants, particularly in the TAMI industries, will continue.

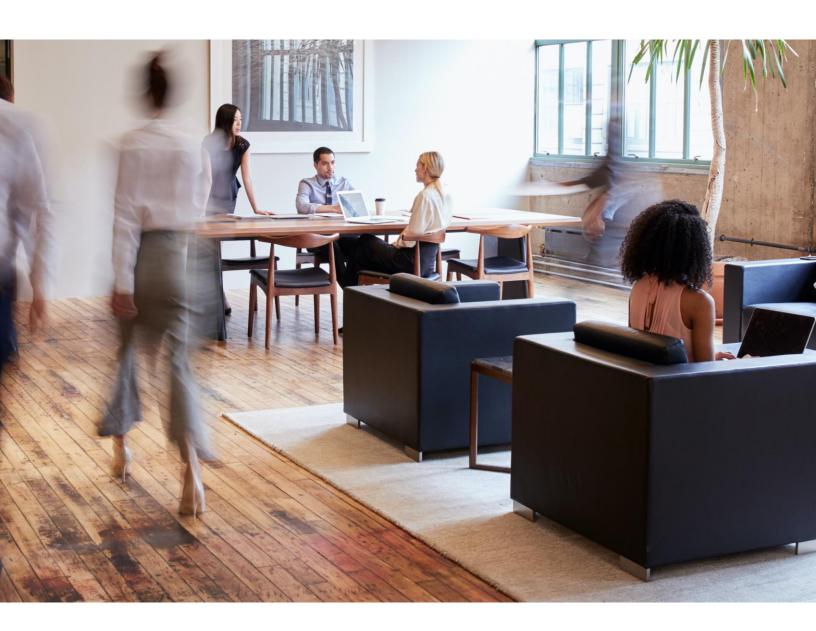
HIGH GROWTH TAMI COMPANIES, PERCENT CHANGE IN FOOTPRINT SINCE THE PANDEMIC BEGAN



^{*}Assumed 10,000 SF previous occupancy for tenants growing out of co-working space Source: Newmark Research



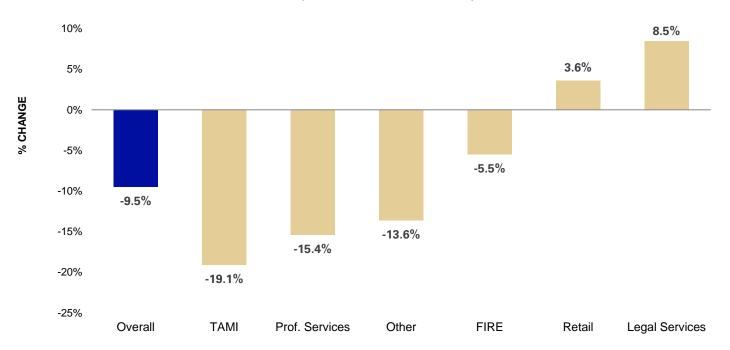
Trends, Highlights and Additional Information



Age of Companies that Signed Deals During the Pandemic

The average age of companies that signed deals since the start of Covid is 9.5% younger than that of 2019. TAMI tenants drove this change, with a 19.1% drop. At an average of 13.2 years old, that industry is now half the age of all tenants that signed deals during the same time (26.7 years old). On the other end of the spectrum, law firms average 61.3 years old.

CHANGE IN AVERAGE AGE OF COMPANIES (2019 v. PANDEMIC DEALS)



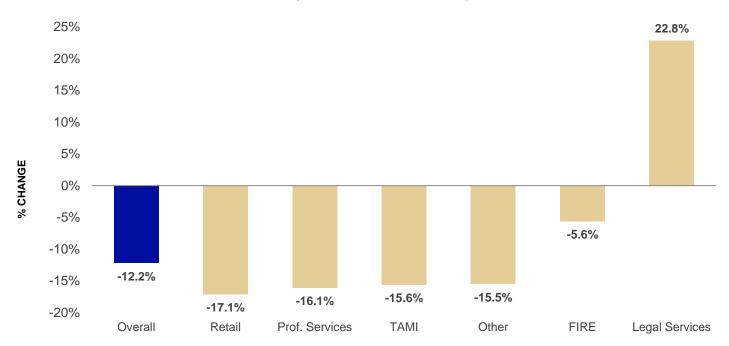
AVERAGE AGE OF GROWING COMPANIES

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Age of Companies in the Market

The average age of companies in the market dropped from 2019, by 12.2%. TAMI tenants also account for the youngest age of any industry in the market at 19.0 years old.

CHANGE IN AVERAGE AGE OF COMPANIES (2019 v. PANDEMIC DEALS)

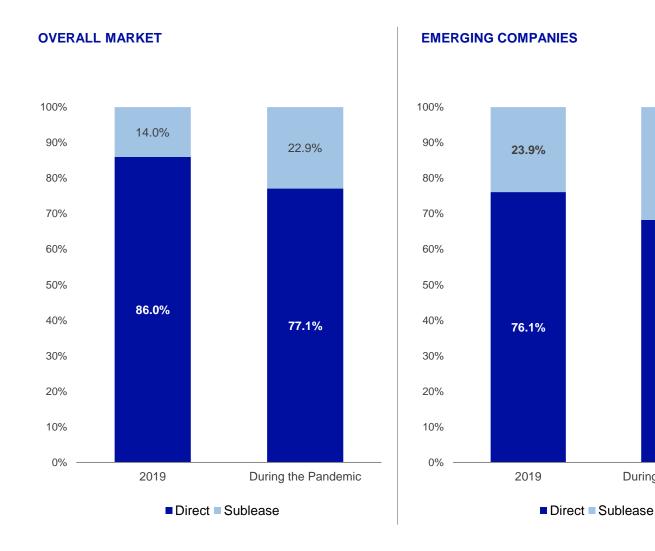


AVERAGE AGE OF COMPANIES IN THE MARKET

Industry	Age of Companies that Signed in 2019 (Years)	Age of Companies in the Market During the Pandemic (Years)	Percent Change
Legal Services	71.7	88.1	22.8%
FIRE	46.0	43.4	-5.6%
Other	56.1	47.4	-15.5%
TAMI	22.5	19.0	-15.6%
Professional Services	46.3	38.8	-16.1%
Retail/Wholesale	69.7	57.8	-17.1%
Overall	44.1	38.7	-12.2%

Sublease versus Direct | Pandemic Deals

Since the onset of Covid-19, sublease space has risen dramatically, and growing tenants have taken advantage with subleases accounting for 22.9% of deals. Companies younger than 10 years old, have subleased space at a higher rate, taking advantage of the discounted space that has recently been added to the market.



Deal set is for transactions signed among tenants that grew from their prior footprint. Source: Newmark Research

31.7%

68.3%

During the Pandemic

High-Growth Emerging Companies Since the Pandemic Began

Emerging TAMI companies grew by 541.4% on average since the start of the pandemic. That is nearly double the rate of growth in 2019 (250.2%). Meanwhile, tenants that signed for additional space in 2019 fell from a 250.2% growth rate in 2019 to 216.1% growth during the pandemic. TikTok, Alloy, Freshly and DailyPay grew the fastest among emerging TAMI tenants since the start of Covid-19.

SIZE AND PERCENTAGE GROWTH

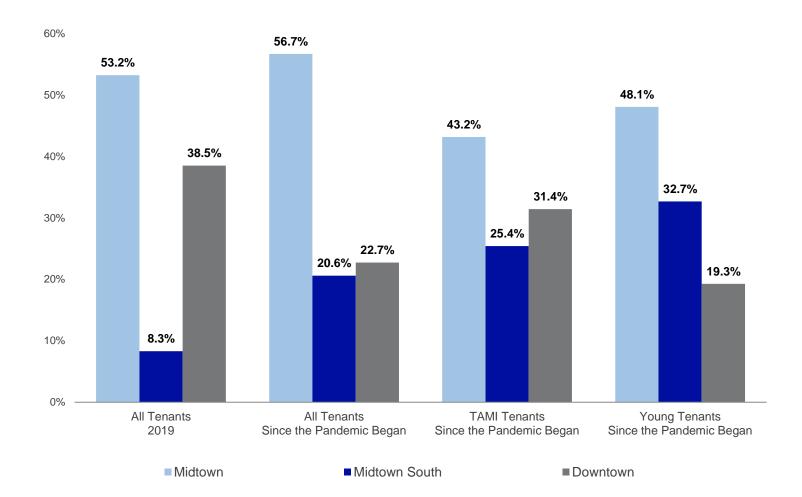
Tenant Name	SF	Percent Change
TikTok*	232,138	2221.4%
Alloy	44,333	1906.0%
Freshly	92,306	1403.4%
DailyPay	137,274	1139.6%
Remarkable Foods*	68,673	586.7%
Zentalis Pharmaceuticals	31,353	527.1%
FUBO TV	55,042	450.4%
Constellation Agency	48,000	356.0%
Butler Hospitality	27,040	350.7%
Affirm, Inc.	15,374	335.6%
Stone Ridge Asset Mgmt.	97,652	330.2%
Square/Cash App*	40,000	300.0%
Cedar Cares	66,595	291.7%
Splice*	38,672	286.7%
Cockroach Labs	64,516	281.5%
Paige.Al	17,465	251.1%
Twitch*	34,844	248.4%
Chainalysis	38,652	219.9%

^{*}Assumed 10,000 SF previous occupancy for tenants growing out of co-working space Deal set is for transactions signed among tenants that grew from their prior footprint. Source: Newmark Research

Absorption by Market

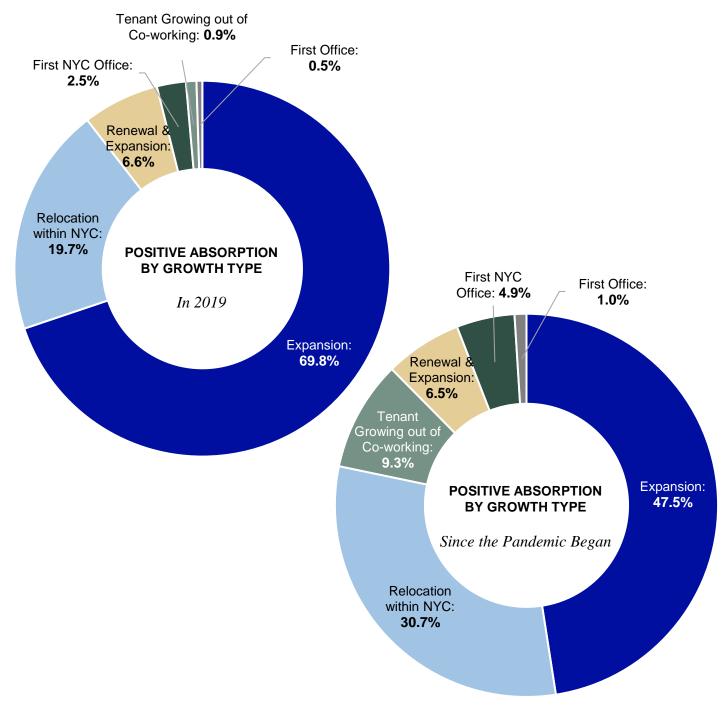
As availability increased in Midtown South, tenants have been able to absorb more space in that market during the pandemic than in 2019. TAMI companies and emerging tenants drove that absorption.

PERCENTAGE OF POSITIVE ABSORPTION BY MARKET



Positive Absorption by Growth Type

Expansions and relocations within the market have accounted for more than two-thirds of the positive absorption in 2019 and since the onset of Covid-19, but the major difference between the time frames is firms expanding out of co-working space. In 2019, firms growing out of co-working locations accounted for just 0.9% of positive absorption, but since early 2020, this number has spiked to 9.3%.

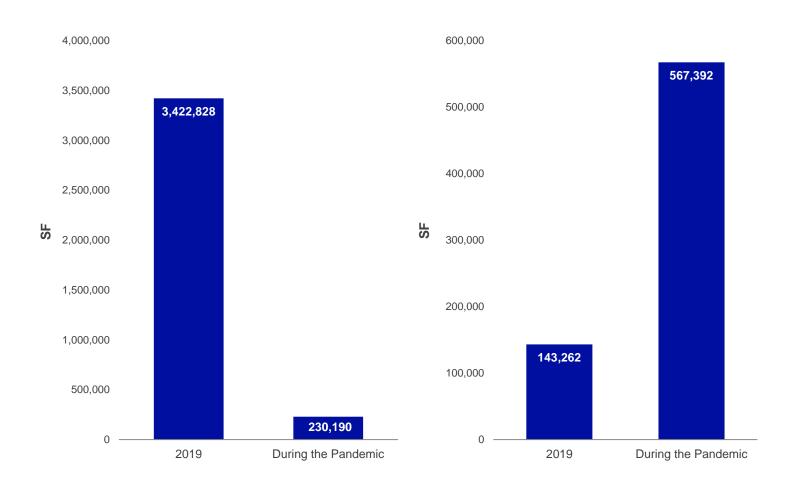


Co-working Providers versus Tenants Growing out of Co-working

In 2019, co-working firms were expanding at a rapid pace, accounting for 3.4 MSF of positive absorption, which has fallen to 230,190 SF since the onset of Covid-19. However, tenants growing out of coworking occupancy have accounted for three times the absorption during the pandemic compared to 2019.

LEASING AMONG CO-WORKING PROVIDERS (SF)

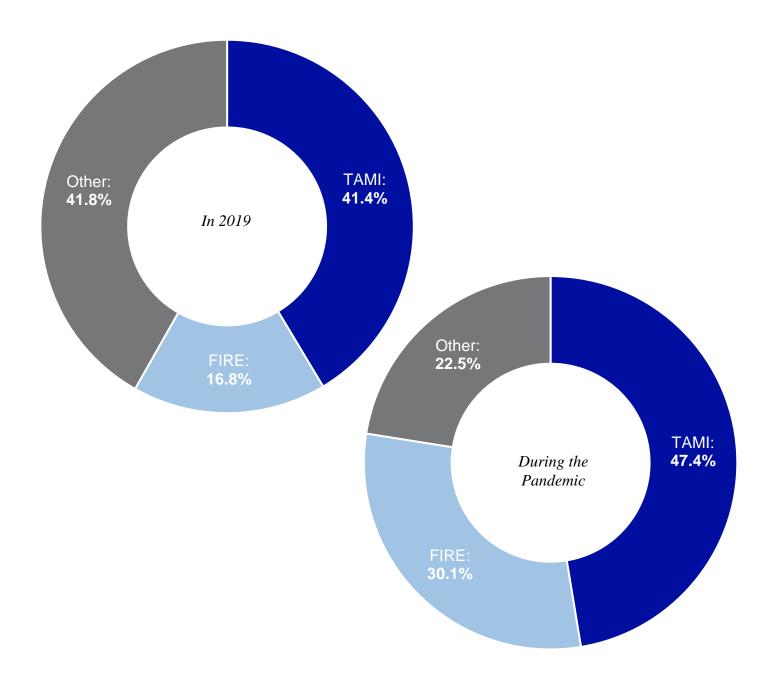
LEASING AMONG TENANTS GROWING OUT OF CO-WORKING SPACE (SF)



Source: Newmark Research

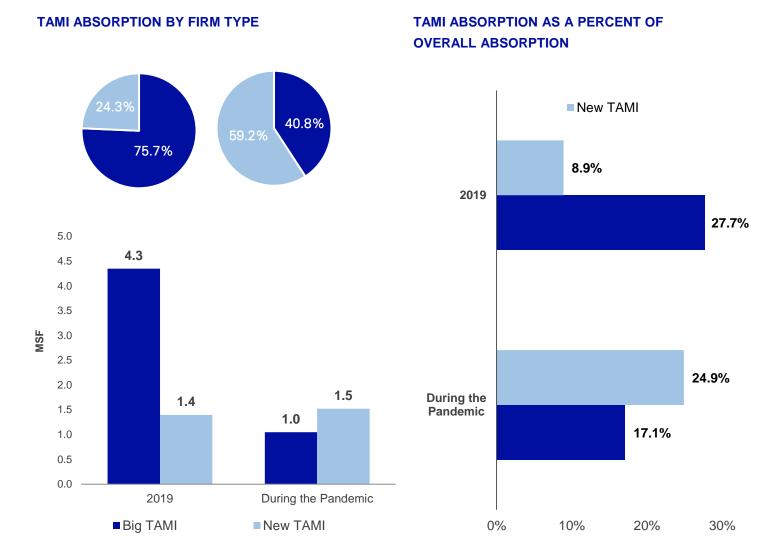
Positive Absorption by Industry

TAMI and FIRE tenants accounted for over half of all positive absorption at 58.2% in 2019. That number grew to 77.5% of positive absorption since the start of the pandemic. TAMI market share grew from 41.4% to 47.4%, while FIRE increased from 16.8% to 30.1%.



Large TAMI Companies versus New TAMI Companies

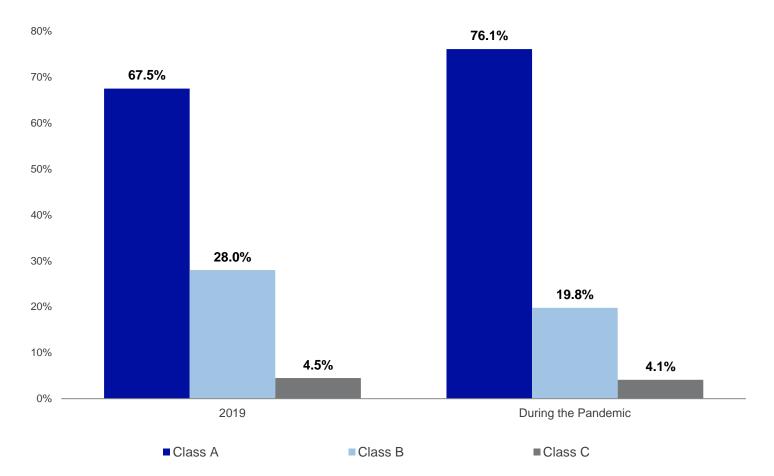
In 2019, big TAMI firms such as Google, Facebook, Apple and Amazon accounted for 4.3 MSF of positive absorption, or 75.7% of TAMI absorption. New TAMI firms (10 years or younger) have become more prevalent since the onset of Covid-19, accounting for 59.2% of TAMI absorption compared to 24.3% in 2019. Since the start of the pandemic, big TAMI firms in 2019 and new TAMI firms account for around 25.0% of total positive absorption.



Absorption by Building Class

There has been a noticeable flight-to-quality since the start of the pandemic, with 76.1% of positive absorption occurring in Class A product compared to 67.1% in 2019.

POSITIVE ABSORPTION BY BUILDING CLASS



FAANG Activity During the Pandemic

Despite an uptick in positive absorption from young TAMI tenants, big TAMI firms continue to be an integral part of the New York economy. All FAANG tenants have embarked on growth plans during the pandemic. Some finalized deals and others entered the market with plans to expand.

Activity Since the Start of the Pandemic

Facebook

- Leased 730K SF of expansion space at the Farley Post Office for a 15-year term
- Currently in the market to relocate and expand one of their locations from 300K SF to 500K SF

Apple

- Expanded at 11 Penn Plaza by 116K SF for a 5-year term
- Observing the market for a potential long-term requirement

Amazon

- Currently in the market for multiple, long-term 100K SF requirements in NYC
- Additional requirement in Jersey City for 420K SF
- Announced an additional 2,000 new jobs in NYC
- Closed on purchase of 424
 Fifth Avenue for \$978 million

Netflix

- Opened a new, 170K SF studio in Bushwick, Brooklyn
- Plans to create jobs and spend over \$100 million in NYC
- Signed multiple extensions on existing Manhattan locations

Google

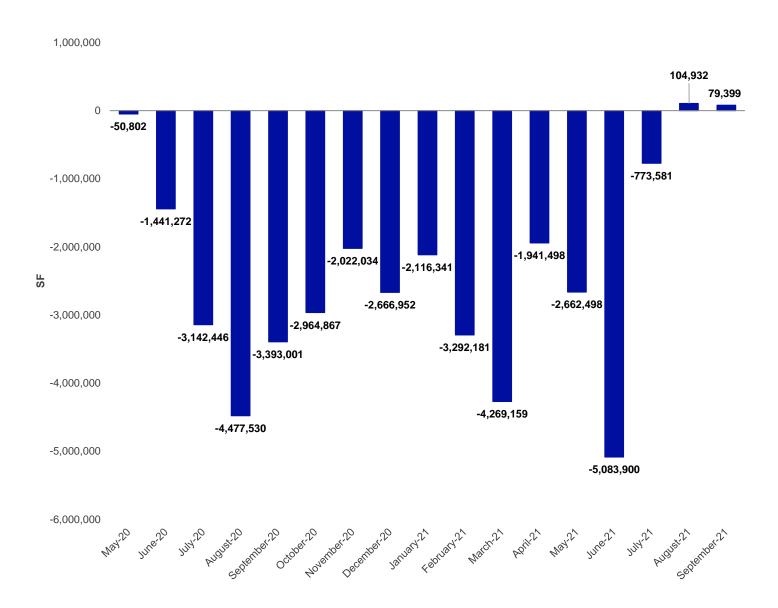
- Purchased 550 Washington St., which they had fully leased in 2019 on a 15-year term, for \$2.1 billion
- Announced plans to spend \$250 million in NYC to increase employees from 11,000 to 14,000
- Expanded by 60K SF at 85 Tenth Avenue

Source: Newmark Research

Pandemic Absorption

TAMI and emerging companies have been growing for several months amidst otherwise negative market conditions. That trend gained momentum in recent months and pushed absorption positive in August and September for the first time since the start of the pandemic.

MONTHLY ABSORPTION DURING THE PANDEMIC



Source: Newmark Research

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