CBRE

Pulse of U.S. Office Demand

The CBRE Pulse of U.S. Office Demand showed modest improvement in October with a notable uptick in new leasing requirements, while leasing activity and sublease availability held relatively steady.

What is the CBRE Pulse Report?

To gauge the pace of recovery, CBRE has created three indices for the 12 largest U.S. office markets—Atlanta, Boston, Chicago, Dallas/Fort Worth, Denver, Houston, Los Angeles, Manhattan, Philadelphia, San Francisco City, Seattle and Washington, D.C. Using CBRE data, these indices measure office market activity each month and provide early indications of when and where momentum in office demand may be shifting. These metrics space requirements of active tenants in the market (TIM), leasing activity and sublease availability—provide a clear picture of office demand amid the COVID-19 pandemic.

Methodology Note

There is one significant change to the Pulse this month: the San Francisco geographic area has been revised from previous reports. From this month on, San Francisco covers only the city itself and no longer includes the peninsula.

The Pulse historical trend for San Francisco has been amended accordingly and this October issue supersedes any data presented in prior Pulse reports. Office demand in the city of San Francisco has made less progress toward recovery than in the peninsula, so this current assessment of San Francisco's market recovery has been downgraded from prior reports.

October Findings

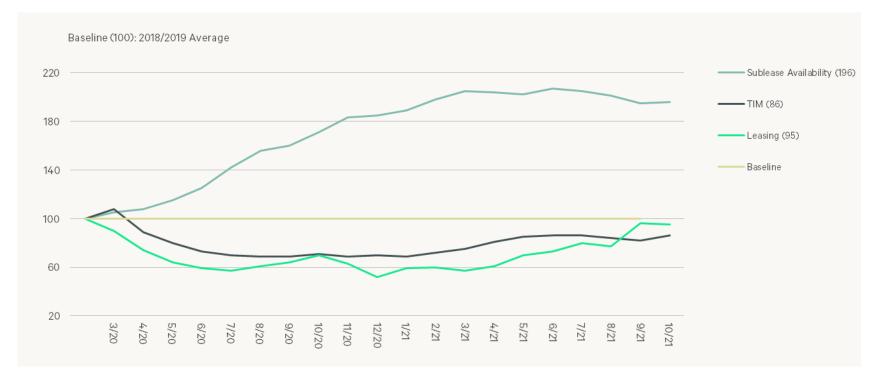
The U.S. Tenants in the Market (TIM) Index increased by 4 points in October to a level of 86, erasing its drop this summer from the resurgence in COVID infections. The U.S. Leasing Activity Index fell by 1 point to a level of 95. Six markets saw improvement month over month, while the other six had either no change or a decrease.

The biggest challenge remains the surplus of sublease space, with the U.S. Sublease Availability Index increasing by 1 point to a level of 195 – a modest reversal after a slow but steady improvement since the index peaked at 207 in June.

Note: All market data is for the metropolitan area with the exception of Manhattan and also San Francisco, which only includes the downtown market. Note (2): Prior month data has been revised from previous reports to reflect new information. Numbers presented in this report supersede figures presented in previous editions of the Pulse of U.S. Office Demand.

U.S. Average Performance Index

FIGURE 1: Indexed Average Performance of Sublease Availability, TIM, and Leasing for the Top 12 U.S. Markets



October Demand Recovery by Market

Atlanta's market recovery is gaining momentum, closing rank with Boston—the perennial leader in COVID recovery. Houston, Manhattan, Washington, D.C., Seattle and Denver all improved their rankings, while Los Angeles, which had been an early bright spot in the recovery continued to struggle in October, along with Philadelphia and San Francisco.

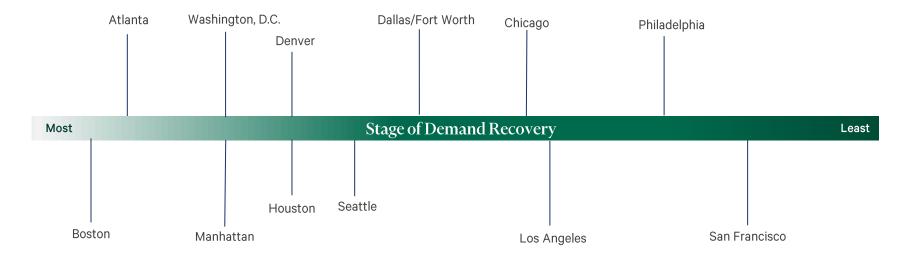
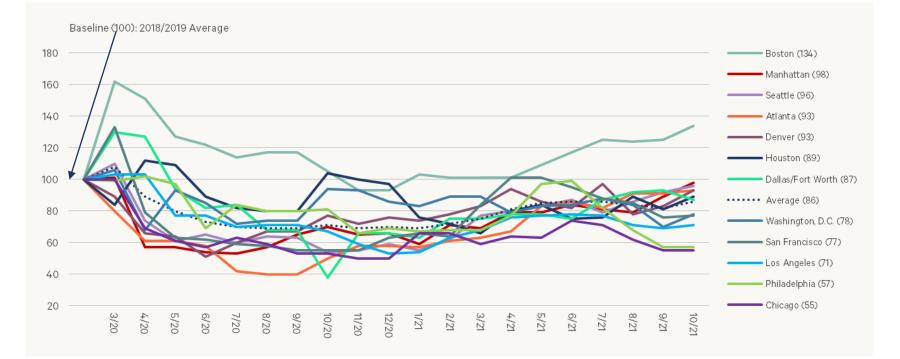


FIGURE 2: October Office Market Recovery Scale, Top U.S. Markets

Tenants in the Market Index

FIGURE 3: Indexed Square Footage of Tenant Requirements Compared with 2018/2019 Average



Source: CBRE Research, October 2021.

Tenants in the Market Index

The U.S. TIM Index increased by 4 points in October to a level of 86, returning to the positive momentum in tenant requirements that had been building before the COVID delta surge sent occupiers back to the sidelines. The index is back on par with its peak from June and July. It is especially notable that the TIM index is rising after several months of improved leasing activity, suggesting that more occupiers are entering the market and offsetting the conversion of previous TIMs to signed leases

TIM recovery looked good across nearly all markets in the study, with nine of the 12 seeing growth in October. Boston (134) remained well ahead of the pack, buoyed by strong demand from life sciences tenants and increasing demand from office users in the technology and finance sectors.

Manhattan (98), Denver (93), Houston (89) and Washington D.C. (78) all had notable monthly gains of between 8 and 10 points, while Seattle (96), Atlanta (93) and Los Angeles (71) had more modest gains of between 2 and 4 points. The TIM Indices for Philadelphia (57) and Chicago (55) – the two cities where TIM recovery has been the slowest – were both flat, while Dallas/Fort Worth (87) saw a modest decline but maintained a relatively healthy level. Nine of the 12 Pulse markets have reached TIM levels that are more than 75% of their prepandemic baseline, demonstrating improving market demand across much of the U.S. FIGURE 4: October 2021 TIM Index– Top 12 U.S. Markets

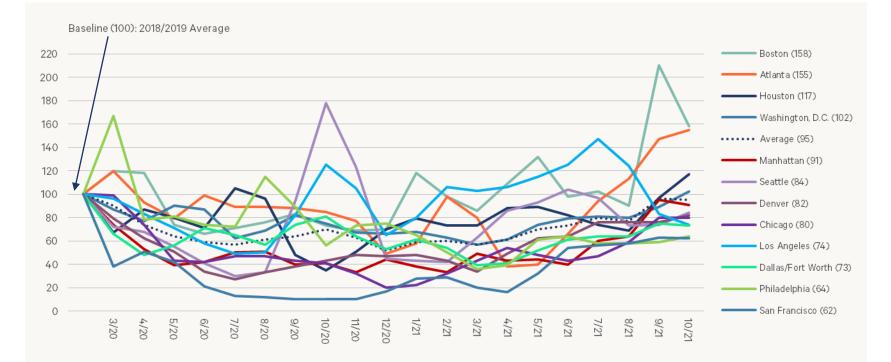
Rank	Market	Score	MoM Up/Down
1	Boston	134	Up
2	Manhattan	98	Up
3	Seattle	96	Up
4	Atlanta	93	Up
4	Denver	93	Up
6	Houston	89	Up
7	Dallas/Fort Worth	87	Down
8	Washington, D.C.	78	Up
9	San Francisco	77	Up
10	Los Angeles	71	Up
11	Philadelphia	57	Flat
12	Chicago	55	Flat
	U.S. Average	86	Up

Source: CBRE Research, October 2021.

TIM Index methodology note: CBRE tracks the total square footage of requirements from active tenants in the market, with minimum requirements of 10,000 sq. ft. The TIM Index compares the total monthly TIM requirements to a pre-pandemic baseline, which is the average of TIM requirements recorded by CBRE in 2018 and 2019. The index level for the baseline is 100. In most cases, when tenant requirements are given as a range, the index uses the minimum square footage. However, Seattle records TIM using the average requirement within the tenants' size range, while Philadelphia uses the maximum square footage.

Leasing Activity Index

FIGURE 5: Indexed Monthly Leasing by Market Compared with 2018/2019 Average



Source: CBRE Research, October 2021.

Leasing Activity Index

CBRE's U.S. Leasing Activity Index fell by 1 point in October to a level of 95. The performance of the Boston market was a significant factor in this slight decline, obscuring the improved leasing activity in many of the other Pulse markets. Boston's Leasing Index had shot up to 210 in September on the back of two very large leasing transactions but fell by 52 points in October to a level of 158 – still the highest level of any market in our study. Excluding Boston, the U.S. Leasing Index would have increased by 5 points in October.

Six markets saw improved leasing indices in October. Atlanta (155) had another strong month, ranking second with a gain of 8 points. Atlanta's Leasing Index has improved dramatically over the past six months after bottoming out at 38 in April. Houston (117) and Washington, D.C. (102) also improved in October, with both of their leasing indices surpassing pre-pandemic levels for the first time. Leasing indices also improved in Seattle (84), Denver (82) and Philadelphia (64).

Chicago's Leasing Index (80) held steady, while Manhattan (91), Dallas/Fort Worth (73) and San Francisco (62) all had modest monthly declines ranging from 1 to 4 points. The Los Angeles Leasing Index (74) fell by 9 points in October to half of its peak level of 147 in June. As of October, four markets – Boston, Atlanta, Houston and Washington D.C. – have exceeded their pre-pandemic leasing levels, while four others – Manhattan, Seattle, Denver and Chicago – are at least within 75% of their pre-pandemic baselines.

Two markets – Los Angeles and Dallas/Fort Worth – have fallen back below the 75% mark, while the remaining two markets – San Francisco and Philadelphia – have yet to recover to 75%.

FIGURE 6: October 2021 Leasing Activity Index – Top12 U.S. Markets

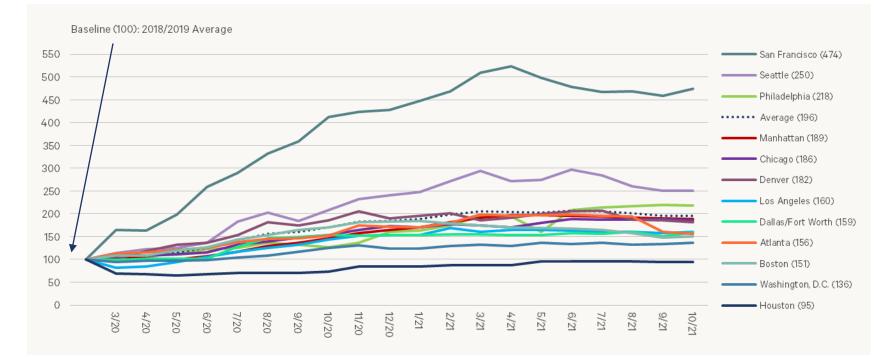
Rank	Market	Score	MoM Up/Down
1	Boston	158	Down
2	Atlanta	155	Up
3	Houston	117	Up
4	Washington, D.C.	102	Up
5	Manhattan	91	Down
6	Seattle	84	Up
7	Denver	82	Up
8	Chicago	80	Flat
9	Los Angeles	74	Down
10	Dallas/Fort Worth	73	Down
11	Philadelphia	64	Up
12	San Francisco	62	Down
	U.S. Average	95	Down

Source: CBRE Research, October 2021.

Leasing Index methodology note: Leasing activity includes all new leases, expansions and renewals of 10,000 sq. ft. or more that close each month. The Leasing Activity Index uses a rolling three-month average of leasing activity. Most markets the weighted 20% for the current month, 50% for the previous month and 30% for two months prior. For New York and Boston, where more accurate leasing data is available by the end of each month, the weights are 50% for the current month, 30% for the previous month and 20% for two months prior. The monthly rolling average is compared with a pre-pandemic baseline, which is the average monthly leasing activity between 2018 and 2019. The index level for the baseline is 100.

Sublease Availability Index

FIGURE 7: Indexed Sublease Availability by Market Compared with 2018/2019 Average



Source: CBRE Research, October 2021.

Sublease Availability Index

The overhang of sublease inventory remains the biggest challenge in most U.S. markets. The U.S. Sublease Index increased by 1 point in October to a level of 196 after declining in each of the three previous months from its peak of 207 in June.

After a surge in September, subleasing activity slowed in October, particularly in five markets where the sublease index ticked up each month. San Francisco had the highest increase in its sublease index (15 points) to a level of 474 and has the country's largest glut of sublease space. Dallas/Fort Worth (159) saw an 8-point increase, while Washington, D.C. (136), Boston (151) and Los Angeles (160) had modest increases of between 2 and 3 points.

Atlanta improved the most, down by 8 points to a level of 156. Chicago (186), Manhattan (189), Philadelphia (218) and Seattle (250) all saw modest improvement of 1 or 2 points. Atlanta, Denver, Manhattan and Seattle have all seen consistent improvement over the past three months, with Seattle and Atlanta seeing the biggest drops of 47 and 43 points, respectively. FIGURE 8: October 2021 Sublease Availability Index – Top 12 U.S. Markets

Rank	Market	Score	MoM Up/Down
1	Houston	95	Flat
2	Washington, D.C.	136	Up
3	Boston	151	Up
4	Atlanta	156	Down
5	Dallas/Fort Worth	159	Up
6	Los Angeles	160	Up
7	Denver	182	Down
8	Chicago	186	Down
9	Manhattan	189	Down
10	Philadelphia	218	Down
11	Seattle	250	Down
12	San Francisco	474	Up
	U.S. Average	196	Up

Source: CBRE Research, October 2021.

Sublease Index methodology note: Sublease availability measures the total square footage of sublease space available for occupancy. The Sublease Availability Index compares monthly sublease availability totals with a pre-pandemic baseline, which is the average amount of sublease space available in 2018 and 2019. The index level for the baseline is 100.

Note: In contrast to the Leasing and TIM Indices, a higher score on the Sublease Index is considered undesirable as it reflects an increase in available sublease space.

Office Demand Likely Will Improve

Office-using employment growth is traditionally a harbinger of future leasing activity. Recent strong job growth suggests future momentum for the office market, particularly as consumer and business confidence increases. Barring another COVID resurgence, the office market appears on increasingly firmer footing heading into 2022.

Atlanta Market Insights

MARKET GAINS MOMENTUM WITH IMPROVEMENT ON ALL FRONTS

TIM Index: 93

Space requirements for tenants in the market are at 93% of the prepandemic baseline. Atlanta ranks fourth and is 7 points above the U.S. average of 86.

Atlanta's TIM index level increased by 2 points in October despite several strong months of TIM conversions signed to leases, suggesting that tenant inquiries are rising.

Leasing Activity Index: 155

Leasing activity is 55% above the baseline level. Atlanta ranks second in leasing recovery, 60 points ahead of the U.S. average of 95.

The index increased by 8 points in October as Atlanta records robust leasing, including a 600,000 sq.-ft. deal by e-commerce company Carvana in September.

Sublease Availability Index: 156

The volume of available sublease space is 56% above the baseline level. Atlanta ranks fourth in terms of available sublease space, 40 points below the U.S. average of 196.

The index fell by 5 points in October, the fourth consecutive monthly decline after peaking at 199 in June.



Boston Market Insights

U.S. LEADER IN PANDEMIC-ERA OFFICE MARKET PERFORMANCE

TIM Index: 134

Space requirements for tenants in the market are 34% above the baseline level. Boston ranks first in the recovery of tenant requirements, 48 points above the U.S. average of 86.

The index increased by 9 points in October and has consistently performed at or above pre-pandemic levels throughout 2020 and 2021. Demand from life sciences tenants has been a strong driver of this measure.

Leasing Activity Index: 158

Leasing activity in October was 58 points above the pre-pandemic baseline level. Boston ranked first, 63 points ahead of the U.S. average of 95. The Boston Leasing Index has consistently outperformed throughout the pandemic on the strength of a thriving life sciences market.

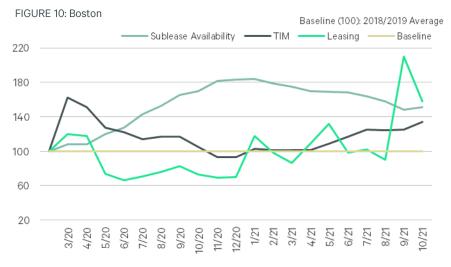
The index decreased by 52 points in October after a 120-point spike in September that was underpinned by two significant deals of roughly 500,000 sq. ft. each.

Sublease Availability Index: 151

The volume of available sublease space is 51% above the pre-pandemic baseline. Boston ranks third in terms of available sublease space, 45 points below the U.S. average of 196.

The index rose by 3 points in October but remains well below the January 2021 peak of 184.

The overall downward trend in sublease availability is attributable to an increasing volume of subleasing in addition to sublease withdrawals by tenants who plan to reoccupy their space.



Chicago Market Insights

SLOW RECOVERY AS TIM & LEASING REMAIN STABLE

TIM Index: 55

Space requirements for tenants in the market are at 55% of the prepandemic baseline level. Chicago ranks 12th and is 31 points below the U.S. average of 86.

The index remained stable in October, down from a pandemic-era peak of 74 in June.

Leasing Activity Index: 80

Leasing activity is at 80% of the pre-pandemic baseline. Chicago ranked eighth, 15 points below the U.S. average of 95.

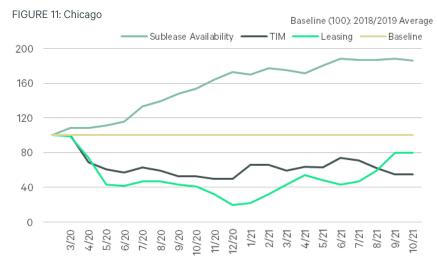
The index remained stable in October after rising for three consecutive months.

Leasing has continued at a brisk pace in Chicago's Fulton Market.

Sublease Availability Index: 186

The volume of available sublease space is 86% above the pre-pandemic baseline. Chicago ranks eighth, 10 points below the U.S. average of 196.

The index fell a modest 2 points in October, as Chicago sees gradual progress in lowering its sublease supply.



Dallas/Fort Worth Market Insights

MODEST SETBACK FOR A MARKET IN RECOVERY MODE

TIM Index: 87

Space requirements for tenants in the market are at 87% of the prepandemic baseline. Dallas/Fort Worth ranks seventh and is 1 point above the U.S. average of 86.

The index decreased by 6 points in October after three consecutive months of improvement.

Leasing Activity Index: 73

Leasing activity is at 73% of the pre-pandemic baseline. Dallas/Fort Worth ranks 10th and is 22 points below the U.S. average of 95.

The index fell by 2 points in October.

Sublease Availability Index: 159

The volume of available sublease space is 59% above the pre-pandemic baseline level. Dallas/Fort Worth ranks fifth and is 37 points below the U.S. average of 196.

The index increased by 8 points in October, erasing much of September's 10-point drop.



Denver Market Insights

RECOVERY ACCELERATES AS TENANTS RETURN TO MARKET

TIM Index: 93

Space requirements for tenants in the market are at 93% of the prepandemic baseline level. Denver ranks fourth and is seven points above the U.S. average of 86.

The index increased by 10 points in October, the second-largest gain among Pulse markets.

Leasing Activity Index: 82

Leasing activity is at 82% of the pre-pandemic baseline. Denver ranked seventh and is 13 points below the U.S. average of 95.

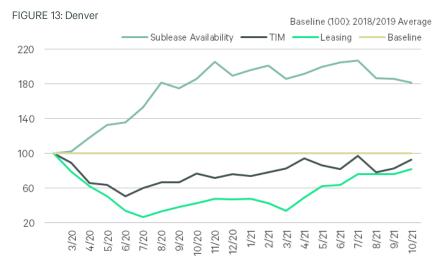
The index increased by 6 points in October and is currently at its highest level of the pandemic era after stalling at 76 for the three prior months.

Sublease Availability Index: 182

Available sublease space is 82% above the pre-pandemic baseline. Denver ranks seventh and is 14 points below the U.S. average of 196.

The index fell by 4 points in October, the third consecutive monthly drop after peaking at 207 in July.

The decline in sublease space is largely due to absorption by technology companies.



Houston Market Insights

LEASING & TENANT INQUIRIES SURGE

TIM Index: 89

Space requirements for tenants in the market are at 89% of the prepandemic baseline. Houston ranked sixth and is 3 points above the U.S. average of 86.

The index increased by 8 points in October.

Leasing Activity Index: 117

Leasing activity is 17% above the pre-pandemic baseline. Houston ranked third and is 22 points above the U.S. average of 95.

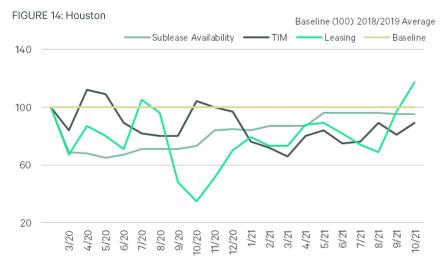
The index increased by 20 points in October.

Sublease Availability Index: 95

Available sublease space is 5% below its pre-pandemic baseline level. Houston ranks first and is 101 points below the U.S. average of 196.

While currently available sublease space is below the peak in 2016, Houston's sublease inventory remains at historically high levels.

The index has remained at 95 since May.



Los Angeles Market Insights

LEASING CONTINUES TO STALL AMID LINGERING OCCUPIER PANDEMIC CAUTION

TIM Index: 71

Space requirements for tenants in the market are at 71% of the prepandemic baseline. Los Angeles ranked 10th and is 15 points below the U.S. average of 86.

The index rose by 2 points in October, after three consecutive monthly declines as regulations to curb the spread of the delta variant limited touring activity. Submarkets with high concentrations of entertainment and production companies are faring relatively well.

Leasing Activity Index: 74

Leasing activity is at 74% of its pre-pandemic baseline. Los Angeles ranked ninth and is 21 points below the U.S. average of 95.

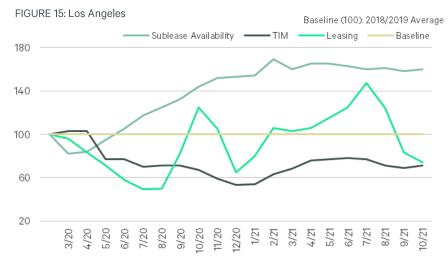
The index fell by 9 points in October, the third consecutive monthly decline after peaking at 147 in July.

However, what leasing did take place largely consisted of new leases and expansions, a marked change from the short-term renewals that dominated earlier in the pandemic period. Several large deals remain in the region's leasing pipeline and demand in West LA remains strong.

Sublease Availability Index: 160

Available sublease space is 60% above its pre-pandemic baseline level. Los Angeles ranks sixth and is 36 points below the U.S. average of 196.

The index increased by 2 points in October but remains below the February 2021 peak of 169.



Manhattan Market Insights

NOTABLE UPTICK IN TENANT INQUIRIES PORTENDS FURTHER MARKET IMPROVEMENT

TIM Index: 98

Space requirements for tenants in the market are at 98% of the prepandemic baseline. Manhattan ranked second and is 12 points above the U.S. average of 86.

The index rose by 9 points in October, the second consecutive monthly increase, propelling Manhattan to a pandemic-era high.

Leasing Activity Index: 91

Leasing activity is at 91% of the pre-pandemic baseline. Manhattan ranked fifth and is 4 points below the U.S. average of 95.

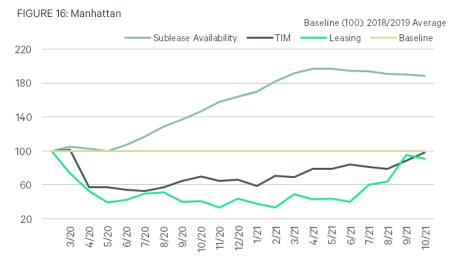
The index decreased by 4 points in October, a modest decline after three consecutive months of substantial improvement.

Sublease Availability Index: 189

Available sublease space is 89% above its pre-pandemic baseline level. Manhattan ranks ninth and is 7 points below the U.S. average of 196.

The index fell by 1 point in October, the fifth consecutive monthly reduction in sublease availability.

Q3 saw a substantial increase in sublease absorption by occupiers, as well as a withdrawals of sublease space from the market. These two factors outweighed a spike in new sublease additions in September, which was a departure from the declining volume of new sublease additions in the three prior months.



Philadelphia Market Insights

MARKET STRUGGLES TO REGAIN FOOTING

TIM Index: 57

Space requirements for tenants in the market are at 57% of the prepandemic baseline. Philadelphia ranked 11th and is 29 points below the U.S. average of 86.

The index remained unchanged in October after peaking at 99 in June.

While the TIM Index remains below pre-pandemic levels, some of this is due to the conversion of TIMs to signed leases.

Leasing Activity Index: 64

Leasing activity is at 64% of the pre-pandemic baseline. Philadelphia ranked 11th and is 31 points below the U.S. average of 95.

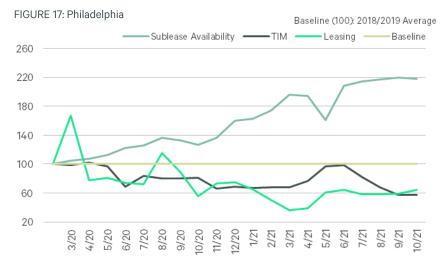
The index rose by 5 points in October with uneven performance across the metro. Downtown Philadelphia saw strong leasing in Q3, while suburban markets underperformed.

Sublease Availability Index: 218

Available sublease space is 118% above the pre-pandemic baseline level. Philadelphia ranks 10th and is 22 points above the U.S. average of 196.

The index fell by 2 points in October, as Philadelphia struggles to reduce the record-high level of sublease space seen in September.

Philadelphia's sublease growth appears to have peaked, as monthly increases since July have been modest and October marked the first pullback since May 2021.



San Francisco Market Insights

SAN FRANCISCO STRUGGLES TO BUILD MOMENTUM AS SUBLEASE CHALLENGES PERSIST

TIM Index: 77

Space requirements for tenants in the market are at 77% of the prepandemic baseline. San Francisco ranked ninth and is 9 points below the U.S. average of 86.

The index rose by 1 point in October but remains well below the pandemicera peak of 101 in April 2021.

Leasing Activity Index: 62

Leasing activity is at 62% of the pre-pandemic baseline. San Francisco ranked $12^{\rm th}$ and is 33 points below the U.S. average of 95.

The index decreased by 1 point in October.

Sublease Availability Index: 474

Available sublease space is 374% above the pre-pandemic baseline level. San Francisco ranks 12th and is 278 points above the U.S. average of 196.

The index rose by 15 points in October.

San Francisco's high index level reflects the low base of available sublease space that existed during the 2018-19 baseline period.



Seattle Market Insights

LEASING PICKS UP AS SUBLEASE SPACE DECLINES

TIM Index: 96

Space requirements for tenants in the market are at 96% of the prepandemic baseline. Seattle ranked third and is 10 points above the U.S. average of 86.

The index increased by 4 points in October.

Leasing Activity Index: 84

Leasing activity is at 84% of the pre-pandemic baseline. Seattle ranked sixth and is 11 points below the U.S. average of 95.

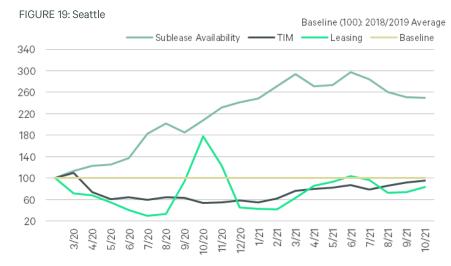
The index rose by 10 points in October as tech companies remained active.

Sublease Availability Index: 250

Available sublease space is 150% above the pre-pandemic baseline level. Seattle ranks 11th and is 54 points above the U.S. average of 196.

The index fell by 1 point in October, the fourth consecutive monthly decline after peaking at 297 in June.

Seattle's recent sublease contraction has been fueled by tech companies taking large blocks of sublease space in the region's urban submarkets, notably Downtown Seattle and Bellevue.



Washington, D.C. Market Insights

CAUTIOUS OPTIMISM AS RECOVERY CONTINUES

TIM Index: 78

Space requirements for tenants in the market are at 78% of the prepandemic baseline. Washington, D.C. ranked eighth and is 8 points below the U.S. average of 86.

The index increased by 8 points in October.

Leasing Activity Index: 102

Leasing activity is 2% above the pre-pandemic baseline. Washington, D.C. ranked fourth and is 7 points above the U.S. average of 95.

The index increased by 13 points in October and has made steady gains since April 2021.

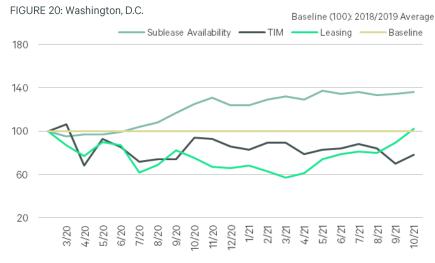
Washington, D.C.'s leasing activity has been propelled by a 1.2 million-sq.-ft. deal signed by a federal agency at the end of September.

Sublease Availability Index: 136

Available sublease space is 36% above the pre-pandemic baseline level. Washington, D.C. ranks second and is 60 points below the U.S. average of 196.

The index increased by 2 points in October. Washington, D.C. has a relatively small amount of sublease space compared with other Pulse markets; however, there has been little progress in reducing it from the peak level of 137 in May.

Washington, D.C.'s sublease availability has been uneven across the region, with Downtown availability 15% below its peak, Northern Virginia relatively unchanged and suburban Maryland reaching a new high in October.



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