Adaptive Spaces

Office Buildings Hardest Hit by Pandemic Share Common Characteristics

VIEWPOINT

Action Needed to Remove, Revive or Repurpose Buildings With Most Vacancy Post Pandemic

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Executive Summary

- This CBRE Viewpoint identifies common characteristics of buildings that have added the most vacant space since the pandemic, or the "hardest-hit buildings" (HHBs).
- While HHBs average only 10% of all office buildings in each market tracked by CBRE, they accounted for 80% of total occupancy loss by square footage between Q1 2020 and Q4 2022.
- Age is not a distinguishing characteristic of HHBs. Like most of the country's total office inventory, the majority of HHBs were built between 1980 and 2009.
- Downtown markets, especially in the Pacific and Northeast regions, have a higher share of HHBs.
- HHBs generally are located in areas with higher crime rates and fewer external amenities like nearby restaurants.
- Buildings between 100,000 and 300,000 sq. ft. had a higher share of HHBs.
- CBRE estimates that if no widespread action is taken to remove, revive or repurpose existing HHBs, they will push the long-term U.S. structural vacancy rate to 14.5% from 12%, creating an additional 103 million sq. ft. of vacant space.

Hardest-Hit Office Buildings Share Common Characteristics

Widespread adoption of hybrid work has created a structural shift in the office market, reducing demand for space and propelling the overall vacancy rate to a 30-year high of 17.3% as of Q4 2022. Amid a flight to quality under these tenant-favorable market conditions, there is a common perception that newer space has benefited while older space has suffered. But CBRE's analysis of U.S. office markets shows a more nuanced impact.

Our analysis ranked all 100,000-sq.-ft. or greater office buildings in 64 U.S. markets by each building's change in vacant space from Q1 2020 to Q4 2022. The 10% of office buildings in each market that had the largest increase in vacant space over that period were deemed the "hardest-hit buildings" (HHBs). Together, they accounted for 80% of the vacant space added to the U.S. office market during the pandemic (Q1 2020 to Q4 2022), despite making up only 17% of total office inventory by square footage. HHBs had an average vacancy rate of 38% at year-end 2022. If all these HHBs were removed from the country's total office inventory, the overall vacancy rate of 100,000-sq.-ft.+ buildings would have been 14.9% instead of 18.9% at the end of Q4 2022.

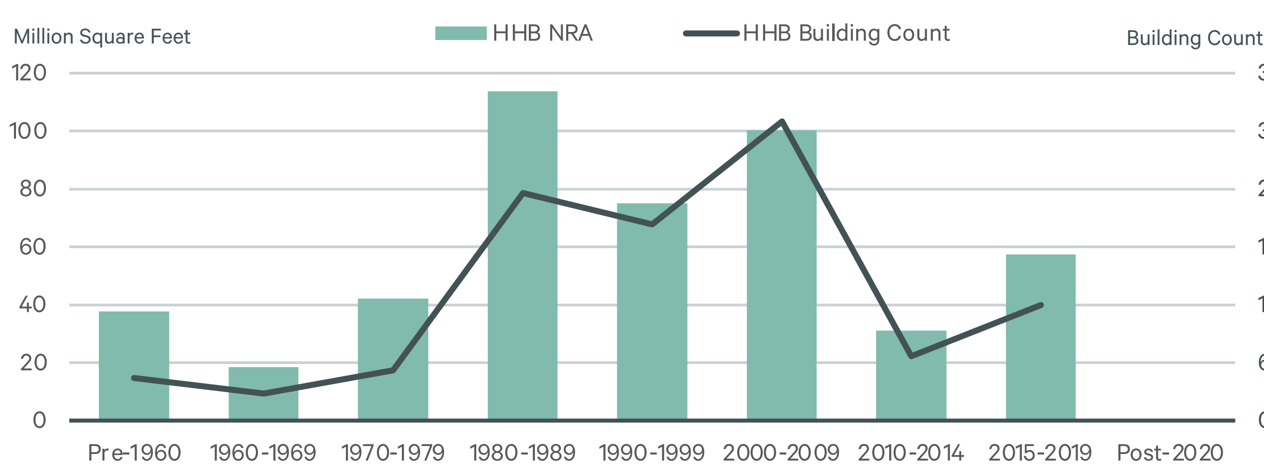
Most buildings that were highly vacant (50% or more) before the pandemic aren't classified as HHBs because the bulk of their occupancy loss did not occur during the Q1 2020 to Q4 2022 pandemic period. Such buildings account for just 2% of U.S. net rentable area and 8% of total vacant square footage.

Building Age

Age was not a significant factor in determining HHBs; the distribution of age among HHBs mirrored the makeup of the overall U.S. inventory. But because the largest number of office buildings was built between 1980 and 2009, 70% of HHB buildings are in this age range.

By individual market, the age range with the most supply generally has the most HHBs. Less mature markets like Austin and Phoenix have a higher share of HHBs in newer inventory (buildings built after 2000), while HHBs in more mature markets like Chicago are predominantly in older age ranges.

FIGURE 1: Count & Net Rentable Area of Hardest-Hit Buildings by Vintage

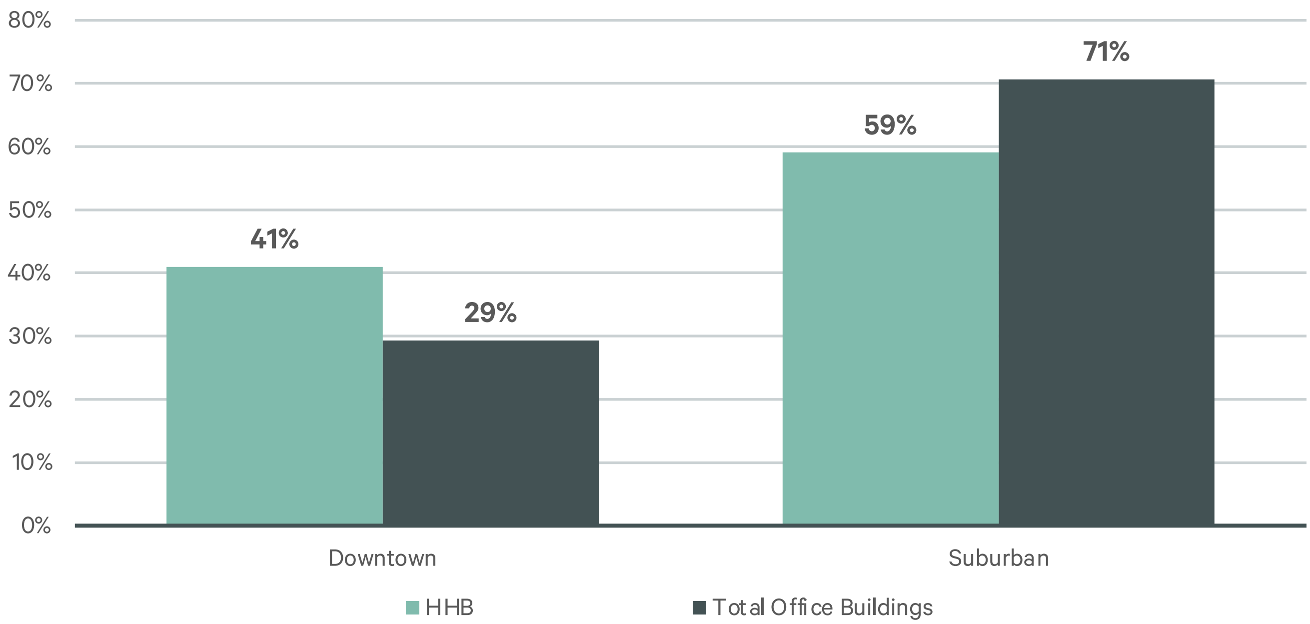


Source: CBRE Econometric Advisors, Q4 2022.
*Building vintage denotes year-built or year renovated. Buildings renovated after 2020 default to the original year-built date.

Downtowns vs. Suburbs

The concentration of HHBs varies greatly between downtowns and the suburbs. Downtown buildings were overweight in their share of HHBs (41%) compared with their share of total office buildings nationally (29%). One in every seven Downtown office buildings qualified as an HHB, compared with one in every 12 suburban buildings.

FIGURE 2: HHB Distribution by Location (Downtown vs Suburban)



Source: CBRE Econometric Advisors, Q4 2022.

The switch to primarily remote working at the start of the COVID pandemic in March 2020 left downtowns largely empty. Since then, downtowns have seen a slow but steady return to the office, with average office occupancy hitting about 50% of pre-pandemic levels as of March 2023, up from less than 20% in 2020.[1] Some fast-growing downtowns in the Sun Belt like Austin and Miami have recovered faster than more expensive and tech-centric markets like Downtown San Francisco and Seattle.

The downtown and suburban office vacancy rates increased by 7 and 5 percentage points, respectively, between Q1 2020 and Q4 2022. However, if HHBs were removed from the inventory, the downtown rate would have increased by only 1.9 percentage points and the suburban rate by just 60 basis points.

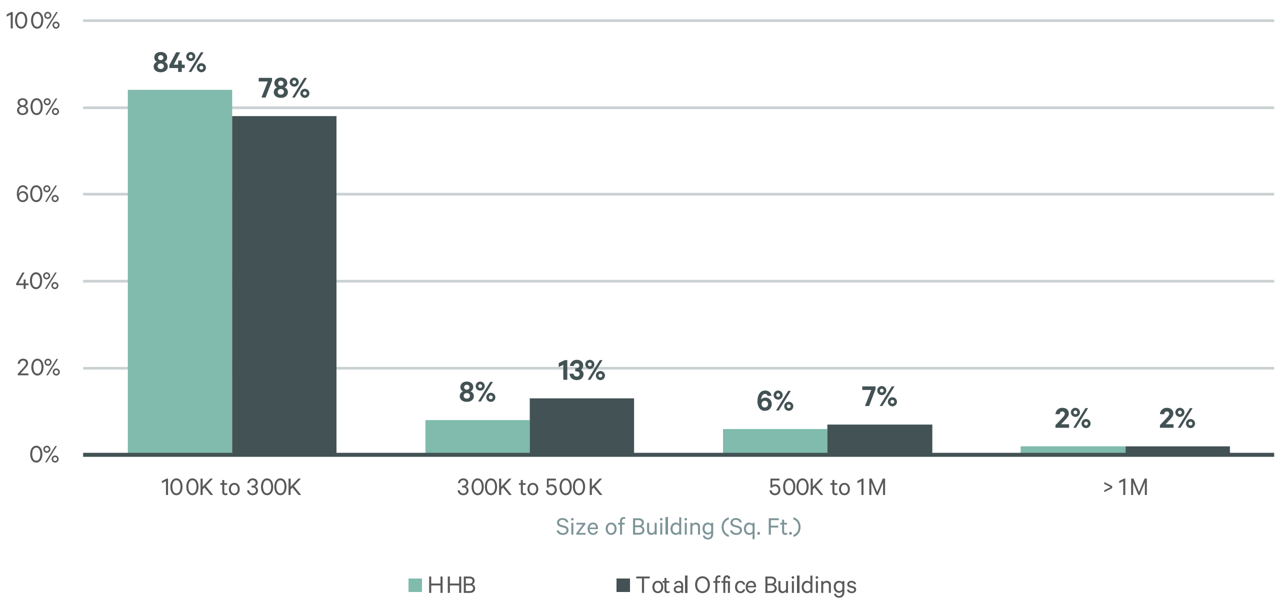
> Fast-growing downtowns in the Sun Belt have recovered faster than more expensive and tech-centric markets.

[1]Kastle Systems, Back to Work Barometer, March 2023.

Building Size

When analyzing HHBs by building size, we looked at the change in vacancy rate from Q1 2020 to Q4 2022 rather than the change in vacant square feet, which might skew the results toward larger buildings.

FIGURE 3: HHB Distribution by Building Size



Source: CBRE Econometric Advisors, Q4 2022.

Buildings between 100,000 and 300,000 sq. ft., the smallest tranche in our analysis, accounted for 78% of total buildings nationally but 84% of HHB buildings. The average vacancy rate of these HHBs increased to 57% in Q4 2022 from 9% in Q1 2020.

All other building sizes were underweighted in the HHB category compared with their share of total buildings nationally. Underrepresentation of larger buildings could be due to their generally having many more tenants, meaning that if one leaves it does not have as big an impact as for a smaller building.

The average vacancy rate of 100,000-to-300,000-sq.-ft. HHBs increased to 57% in Q4 2022 from 9% in Q1 2020.

By Region

To determine which regions had higher concentrations of HHBs, we altered our methodology compared with the rest of the report. For the regions, we looked at the bottom 10% of all buildings nationally rather than the bottom 10% in each market. The Northeast and Pacific regions had larger concentrations of HHBs than their shares of total office buildings nationally, while the mid-Atlantic and Southeast had lower concentrations.

Throughout the pandemic, Northeast and Pacific coastal markets had a slower return to office than Southwest and Midwest markets. This corresponded with a rise in remote and hybrid working that fueled worker migration away from crowded and expensive major urban markets to less dense and more affordable secondary markets. This likely was the main reason for occupiers reducing more office space in the Northeast and Pacific regions.

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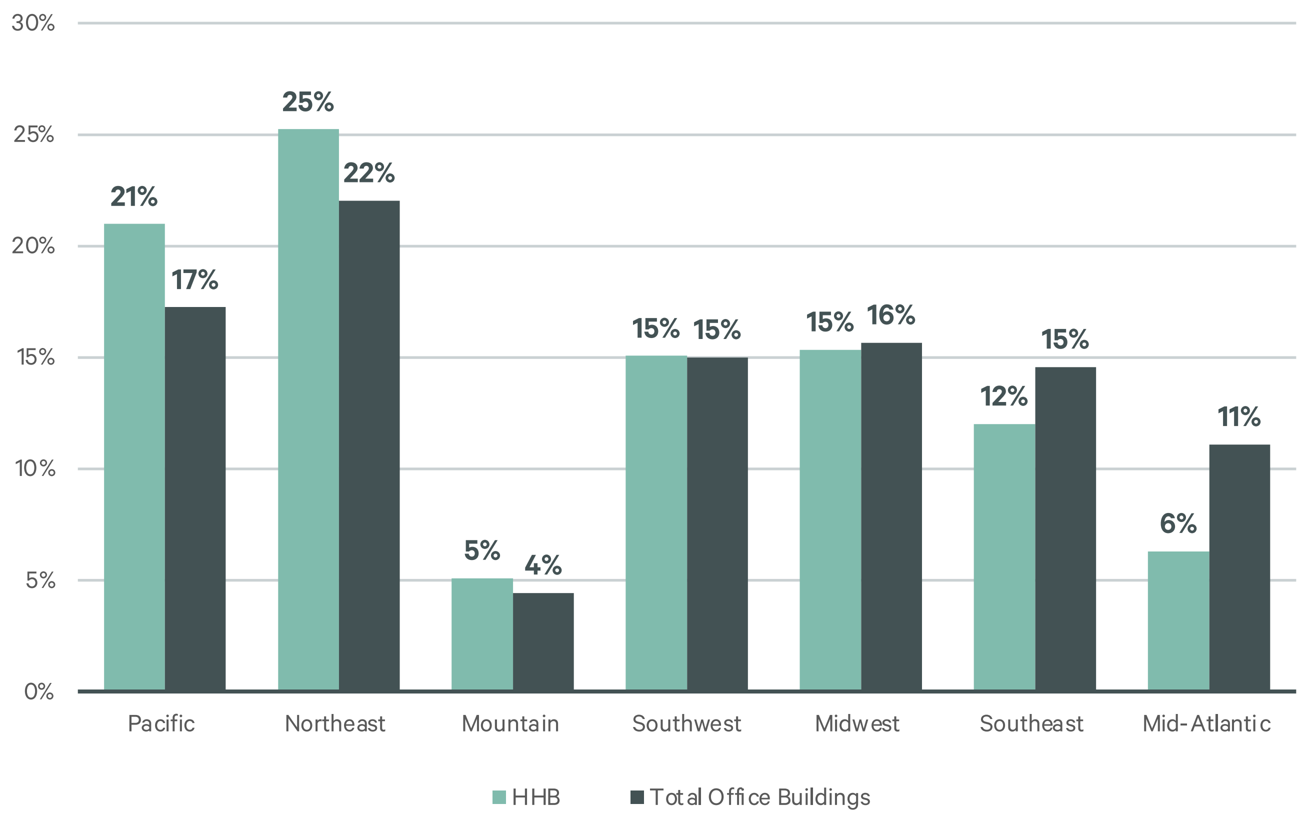
FIGURE 4: HHB Distribution by Region

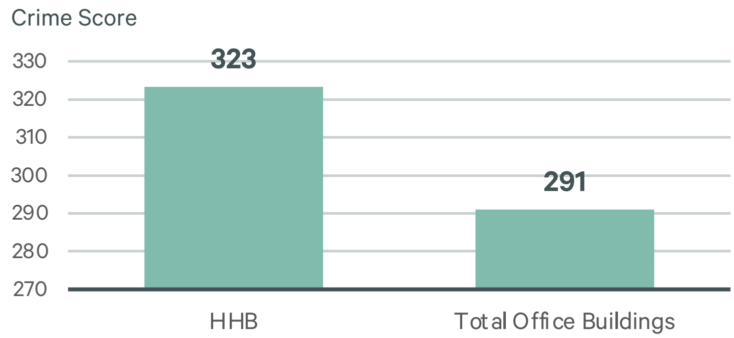


Source: CBRE Econometric Advisors, Q4 2022.

Crime Risk & Amenities

To determine certain external factors' influence on HHBs, such as crime rates and nearby restaurants, we created a crime risk index and an amenity index for every building of 100,000 sq. ft. or more. While there was considerable variability across markets, on average we found that the crime score was the biggest external driver of what makes an HHB. Nationwide, HHBs had an average crime score 11% higher than the average score for all buildings in their local market. Some of this difference is due to downtowns being overweight in both the HHB list and the crime risk index. However, even when isolating downtown and suburban areas, HHBs had a higher average crime risk score across the board.

FIGURE 5: Average Crime Score – HHB vs. Overall Market



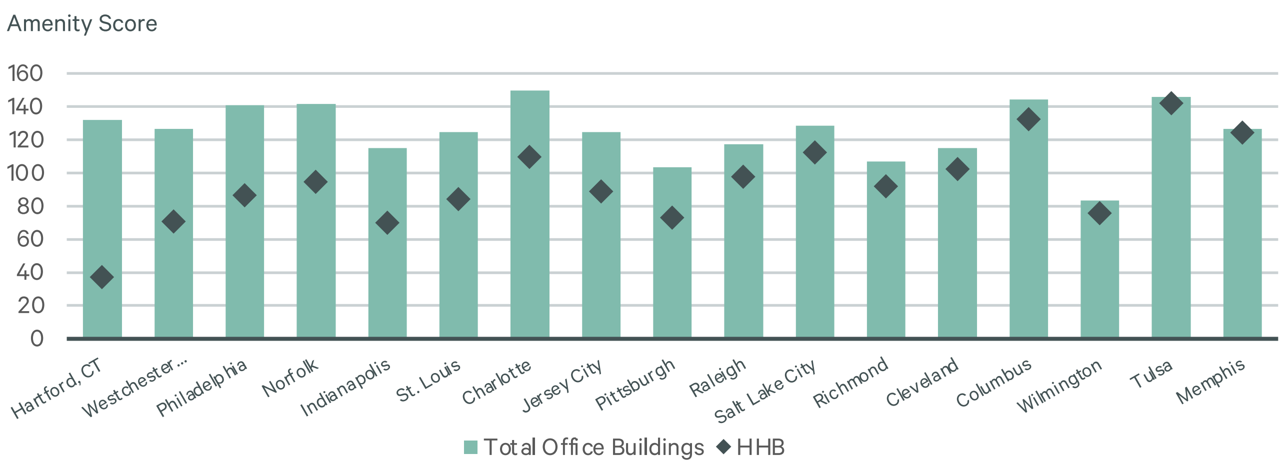
Crime score was the biggest external driver of what makes an HHB.

Source: CBRE Econometric Advisors, Applied Geographic Solutions, Q1 2023.

The amenity score, measured by the number of nearby restaurants, also was a key determinant of HHBs, albeit only in markets with lower amenity scores more broadly. Suburban markets generally had lower amenity scores than downtown markets, which usually have more nearby restaurants. In markets with fewer restaurants, like Westchester County, NY compared with Manhattan, the amenity score was considerably more important in predicting HHBs.

Of the 20 suburban markets with the lowest amenity scores, 17 had 25% fewer restaurants within a two-mile radius than the average of all buildings in those same markets.

FIGURE 6: Suburban Amenity Scores - HHB vs. Overall



Source: CBRE Econometric Advisors, Applied Geographic Solutions, Q1 2023.

Future of HHBs & Their Impact on Office Markets

In the most extreme case, our analysis determined that 100,000-to-300,000-sq.-ft. downtown office buildings built between 1980 and 2009 in a high-crime area with few nearby restaurants suffered the greatest occupancy loss since the start of the pandemic.

Since HHBs represent those buildings that are generally undesirable to today's tenants, owners must improve these properties or continue to lose tenants to better quality buildings and potentially risk defaulting on their loans. Lenders who assume control may merely reduce rents enough to attract tenants from other lesser-quality buildings. This will ultimately keep office vacancy rates elevated.

Cities contending with less tax revenue from falling property values and fewer downtown office workers are looking for solutions. While some are urging employers to require that workers return to the office, others plan to transform their traditional business districts into attractive mixed-use centers by offering incentives to convert poorly performing office buildings to other uses, such as apartments. Although conversion activity has accelerated since the pandemic, project completions since 2016 account for less than 2% of the total U.S. office inventory.[2] The high cost of both acquiring and converting a building has limited the viability of such projects.

Beyond cost, the general size of office building floorplates may not be conducive to apartment conversion—the ideal floorplate for which is less than 15,000 sq. ft.[3] Less than 23% of HHBs have floorplates of that size. It becomes more difficult and cost-prohibitive to convert office buildings with larger floorplates to residential ones.

HHBs will likely increase the long-term structural vacancy rate to 14.5% from its pre-pandemic rate of about 12%. Over the next few years, public-private partnerships will help transform cities and real estate to accommodate changes in how people live and work. The more efficient use of real estate and removal of poorly performing office buildings, combined with a muted development pipeline, may leave the office market stronger than before the pandemic. But how long the market takes to rebalance could well depend on what happens to the hardest-hit buildings.

[2]"Office Conversions: A Second Chance for Underutilized Space," CBRE Research, December 2022.
[3]"The Rise and Fall of Office to Multifamily Conversions: A Real Estate Investigation", CBRE Econometric Advisors, March 2022.

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