

**VIEWPOINT**  
U.S. OFFICE

**Remote Working**

# **The Potential Impact on Office Demand**

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## EXECUTIVE SUMMARY:

- The need for new safety measures and social distancing in the COVID-19 era could cause more demand for office space in order to reduce workplace density. On the other hand, with remote working expected to become more widespread and lasting, office demand could decline. Due to the counterbalancing effects of these two trends, CBRE forecasts only a modest to moderate decline in office demand in the next five years.
- The impact of remote working on office demand may be further moderated by market price. Lower rents could increase demand and bring tenants back to the market. A decline in new supply and potential conversions of obsolete office buildings to other uses are expected to limit any increase in vacancy.
- CBRE's base scenario assumes a 15% increase in working remotely and a 15% increase in office space per worker due to social distancing, leading to only a 2% decrease in overall office demand.

Assessing how much office space companies will require after the pandemic ends is difficult. The need for new safety measures and social distancing during the pandemic requires each worker to have more space, leading to lower office density. At the same time, should working remotely become a more widespread and permanent trend, the demand for office space could decline.

Many companies have adequately supported remote working during the pandemic without lowering productivity. Some have instituted policies that allow employees to work remotely until next year, and one major U.S. tech company envisions half of its staff working remotely full-time within the next 10 years. An employee survey by the same company showed that at least 20% of respondents want to continue working remotely after the pandemic ends, while 50% want to return to the office as soon as possible.

There is considerable debate over whether the remote working trend will continue after the pandemic ends. There are plenty of valid organizational, financial and psychological reasons why lower density requirements and remote working might be a lasting trend and represent a permanent shift or whether it is a temporary reaction to the pandemic.

*For the real estate professional, the questions can be grouped into two main categories: the future of office density, and the share of office workers who will work remotely, either full-time or part-time.*

Answers to density questions depend on how the pandemic evolves, when and if a vaccine will be available, the level of public response and the ability to maintain the balance between avoiding exposing society to another major wave of infection and re-opening the economy to avoid social and economic distress.

The decision to work in the virtual realm or in an office is not just about cost savings. The feasibility of remote working depends on productivity, company culture and the ability to transfer knowledge. Additional considerations include how it's affecting the physical and emotional wellbeing of employees and the collaborative relationships they had established while working together in the office. To what extent can online group video calls replace meeting in person or bonding over lunch?

There also is consideration of a hybrid approach that combines remote working with working in a satellite office. For example, some employees may transfer from an office in a dense gateway city to one in a smaller city or suburb. From the employer perspective, however, big cities will still provide the benefits of agglomeration. And for employees, the advantages of city living will not disappear just because of current social distancing practices.

CBRE Research has considered a baseline scenario of 20% of office workers working remotely full-time and the need for 50% more personal and communal space for those working in an office. The questions we considered include:

- What will be the impact on office demand?
- How will this affect rents, vacancy rates and future completions?
- What if half of office workers work remotely, but space allocated for each worker doubles?
- How will the market react to changes in office demand?
- Will changes to development activity and rents mitigate the impact of changing density patterns?

Examination of these “what ifs” is well-suited to our econometric modeling techniques, but first we must decide how to quantify each trend. While the average amount of space per worker is a fairly agreed upon measure in the real estate industry, we need to review what constitutes working remotely.

### DEFINING THE SCENARIOS

Many workers currently spend some of their time working remotely and, anecdotally, this appears to have been an increasing trend even before COVID-19. Although the long-run impact of COVID-19 might require more employees to work remotely, it's just as likely that many will want to only partially do so. A recent survey by architectural firm Gensler showed a much higher preference for working one or two days remotely (25% of respondents) and three or four days (18%) than for doing so full-time (12%).

This begs two questions: What are the current working patterns, and what might they have been had the COVID-19 crisis not happened? CBRE has concluded that the next 10 years will be characterized by increased agility and flexibility in office use, and that there would have been an increase in working remotely even without the COVID-19 crisis. We must consider how the COVID-19 experience may accelerate this trend and create an era of increased agility and working remotely much sooner than previously expected.

Figure 1 shows office space demands for employees who work remotely over various time periods. It outlines the current space requirements, our 2030 base forecast and the “new normal” forecast considering the possibility that short-term remote-work mandates today may impact long-term work patterns. The pattern is more involved than a simple “work remotely” or “work in the office” designation. Only 5.4% of employees worked remotely full-time before the crisis, while 12.5% worked remotely part-time and 68% did not at all. This is important for identifying the impact on office demand and for forecasting how the pattern might change.

**FIGURE 1: Current Working Patterns in Office Based Industries**

	2019 Pre-COVID Situation		2030 Base Case	New Normal
	% Time Working Remotely	Space Utilization %	% Time Working Remotely	
	A	B	C	D
Always in the office	68.0	100	52.0	27.7
Less than once a month	5.7	98	8.6	11.4
Once a month	3.8	95	5.7	7.6
Every 2 weeks	4.6	90	6.9	9.2
At least 1 day a week	2.7	80	4.0	8.0
1-2 days a week	5.7	70	8.5	17.1
3-4 days a week	4.1	30	6.2	8.3
5 or more days a week	5.4	0	8.0	10.7
Office Demand (relative to 100% time in office)		89	83	75.2

Source: Job Flexibilities and Work Schedules, BLS September 2019, CBRE Research 2020

Ability to efficiently translate remote work patterns into reduced office space demand measured by efficient space allocation (ESA) coefficient, by default is 1 or 100% efficient space allocation.

	Percent
New Normal Relative to Current	-15.2
New Normal Relative to 2030 Base	-9.5

**THE IMPACT ON OFFICE DENSISTY**

Any increase in working remotely is assumed to reduce the need for office space. Someone working remotely four days a week needs proportionally less space than someone doing so one day a week. This may be an exaggeration as tenants might maintain space to accommodate conflicts in employees’ schedules or the company’s requirement to have more employees in the office during particular days or seasons, meaning that there is a less than one-for-one impact on space needs.

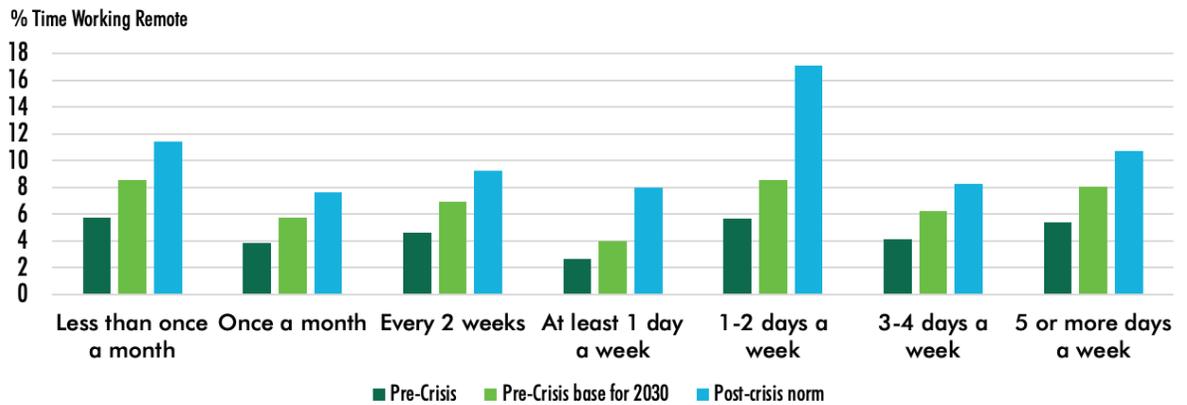
Column B in Figure 1 shows the space utilization for each group of employees. For example, if employees are working remotely less than once a month, the company would utilize 98% of its total office space. When accounting for all frequencies of working remotely, office utilization is 89% of what it would be if all employees worked exclusively in the office.

Since some employees were working remotely prior to the pandemic, we analyzed the impact on office space requirements ranging from those who work remotely full-time to those who work full-time in an office, and degrees between the two extremes. In our base forecast (assuming there was not a pandemic), 2030 would have seen a nearly 50% increase in employees working at least part-time remotely and the percentage of workers never working remotely falling to 52% from the pre-crisis level of 68%.

**THE NEW NORMAL**

The “new normal” reflects the impacts of the pandemic, which leads to an even greater adoption of working remotely than in our base scenario. This predicts a doubling of those working remotely at least part-time by 2030, except for those doing so only one or two days a week. We forecast a tripling of this group of workers, lowering the share of employees working in the office full-time to 27.7%.

**FIGURE 2: Changing Remote Work Patterns**



Source: Bureau of Labor Statistics, CBRE Research

The key short- to medium-term parameter to consider is the ratio of office demand in the “new normal” relative to the current situation. In this case, it is 15.2% less office demand. Over time, the impact relative to our base scenario lessens to 9.5% less office demand by 2030. In other words, any increase in working remotely as a result of the COVID-19 crisis reflects an escalation of the changing remote-work dynamic relative to what would have happened anyway.

Office densities have increased considerably in recent years, with declines in space per worker ranging from less than 10% to more than 30% over the past decade. The social distancing requirements needed to combat COVID-19 likely will reverse this trend—at least in the short-run. Three scenarios are for increases of 10%, 15% and 20% in space per worker, all of which are temporary and gradually erode after 2022.

Actual densities will also depend on the state of the economic and property cycle. For example, a downturn tends to push densities down in the short-term as employees are reduced before space is reduced.

**FIGURE 3: Change in Office Demand Based on Different Remote Work and Office Density Assumptions**

Working Remotely Increase Relative to Base, %		Increase in Space per Worker (relative to base)			
		Base A	10 % B	15% C	20% D
<b>Baseline</b>	<b>1</b>	1.00	1.10	1.15	1.20
<b>10% Increase</b>	<b>2</b>	0.90	0.99	1.04	1.08
<b>15% Increase</b>	<b>3</b>	0.85	0.94	0.98	1.02
<b>20% Increase</b>	<b>4</b>	0.80	0.88	0.92	0.96

Source: CBRE Research, CBRE EA

Figure 3 summarizes these scenarios. The baseline A scenario makes no assumptions about changes in remote working and densities as a result of the COVID-19 crisis and represents a forecast in which the two trends have no effect on office demand, hence it's equal to one or no change. Our preferred scenario assumes a 15% increase in working remotely and if office space per worker increases by 15% due to social distancing measures, underlying office space demand is expected to decrease by 2%.

Since neither of the two trends will result in immediate changes in office demand, we assume the impact will be gradual as tenants adjust to the new environment. The full impact will not be reached until 2025.

After 2025, the impact will gradually fade as COVID-19 density requirements are phased out and working remotely approaches a long-term trend. Our forecasts use a dynamic model that will adjust new supply based on changes in demand and accounts for conversions from office to other property types. Overall, we produced 16 scenarios, each with its own unique impact on office demand.

**SCENARIO RESULTS**

The CBRE EA office model looks at the interactions between market variables. A change in demand will affect vacancy and rent. These, in turn, will eventually affect development, usage, rent, occupancy and more.

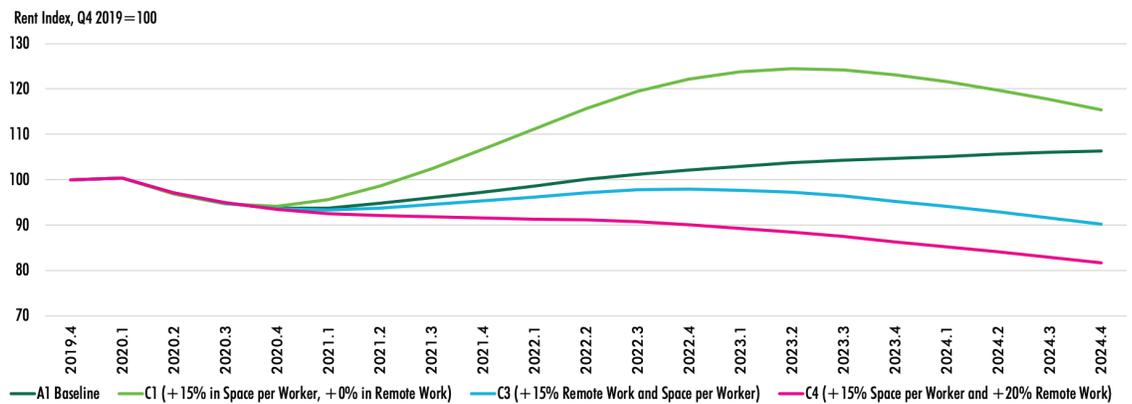
Figure 4 forecasts annual average rent growth for the next five years. The results are dependent on two assumptions—space needs per worker and share of employees working remotely.

**Figure 4: Annualized 5-year Nominal Rent Growth by Scenario, %**

Working Remotely Increase from Pre-pandemic, %		Increase in Space per Worker (relative to base)			
		Base A	10 % B	15% C	20% D
<b>Baseline</b>	<b>1</b>	1.2	2.4	2.9	4.3
<b>10% Increase</b>	<b>2</b>	-1.8	-0.7	-0.2	1.1
<b>15% Increase</b>	<b>3</b>	-3.6	-2.6	-2.0	-0.7
<b>20% Increase</b>	<b>4</b>	-5.5	-4.5	-3.9	-2.7

Source: CBRE Research, CBRE EA

**Figure 5: U.S. National Office Rent Forecast by Scenario**



Source: CBRE Research, CBRE EA

Since most of the impact on vacancy is expected to occur within the next three years, Figure 6 shows how vacancy may be impacted by each scenario. The increase in space per worker may lead to a decrease in vacancy, while working remotely may push vacancy rates higher.

**Figure 6: Change in Vacancy Rate by Scenario in the Next 3 Years**

	Working Remotely Increase from Pre-pandemic, %	Increase in Space per Worker (relative to base)			
		Base A	10 % B	15% C	20% D
Baseline	1	1.1	-1.2	-2.4	-3.6
10% Increase	2	3.7	1.5	0.4	-0.8
15% Increase	3	5.0	2.9	1.8	0.7
20% Increase	4	6.4	4.4	3.3	2.2

**CONCLUSIONS**

- The concept of working remotely is not an either/or proposition. There already is an established pattern of many employees working remotely at least part-time. We think these groups could potentially see the biggest increases as a result of the COVID-19 crisis.
- The expansion of current remote-work policies can be partially offset by social distancing requirements. There are scenarios in which an increase in working remotely can result in a modest to moderate decline in rents over the next five years, in contrast to the base scenario that forecasts a modest increase. Vacancy by scenario follows the same trend in the next three years. When tenants reevaluate how much office space they need to stay productive, some decline in aggregate demand can be expected, at least for some scenarios.
- The impact of working remotely will also be cushioned by market reactions. CBRE EA’s dynamic office forecast model takes these considerations into account. Lower rents and higher vacancy should bring tenants back into the market. Falling development levels and potential change in use through conversions to other uses can be expected to limit the increase in office vacancy and decline in rents.



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