Key office trends and metrics for U.S. occupiers
In the face of the tightest labor market in approximately 18 years, corporate occupiers are highly focused on talent acquisition and retention. Results of a recent research survey conducted by Cushman & Wakefield and CoreNet Global, entitled *What Occupiers Want*, reveal that finding and keeping top talent is the number one challenge for global organizations.

Corporate real estate is increasingly becoming a significant tool to attract high-quality talent. This alignment of real estate and business strategy is driving several critical trends, influenced by technology, that impact how space is designed and utilized.
DENSITY  
Less focus on decreasing square footage per employee:  
Occupiers have reduced the allocation of square footage per employee by 8.3% since 2009. Square footage per worker varies across markets: in some markets it is less than 135 square feet (sf) per employee (e.g., Seattle and Washington, DC) while in others it is in the mid or high 200’s (e.g., San Mateo County and Northern New Jersey). More expensive markets tend to have less space per employee, but the rate of densification is more dependent on the amount of new office supply. Some markets with strong job growth have not had the required new office space to meet demand so companies have been densifying their space at a faster pace. We expect that more densification will occur, but at a lower rate as companies supplement most private space reductions with increases in communal space. This balancing act will result in less attention on reducing square footage per employee and more emphasis on flexibility of space usage.  

AMENITIES  
A critical component of real estate as a service:  
In the wake of such densification, occupiers are looking for improved amenities in and around their offices in order to attract talent. Millennials are now the largest generation in the workforce, and their job satisfaction is driven less by large, personal offices in their workplace and more by flexibility, work/life benefits, and amenities. These amenities can take the form of physical amenities, on-site services, or technology offerings. While tenants and landlords cite traditional amenities as most important, there are significant opportunities for occupiers and landlords to differentiate themselves by offering new technology solutions. The cost of implementing technology amenities is declining as more third-party companies create real estate-focused applications. Additionally, technology solutions can be implemented in any building, regardless of class; thus occupiers can upgrade the ever-important employee experience in a building of any quality.

PARKING  
High relevance even in a changing landscape:  
A growing number of dense submarkets are facing an undersupply of parking. There is significant discussion about how autonomous vehicles will change the demand for parking, and real estate investors are beginning to find ways to make parking structures reconfigurable by increasing ceiling heights, flattening floor plates, and putting ramps on the exterior of the structures. However, for the foreseeable future parking supply is going to be a challenge for many landlords and occupiers. Currently, office leases average one parking spot for every 345 sf of leased space. With office densities at 194 sf per each employee, the average lease provides just over one-half a parking spot for each employee. Such tight supply has led to parking costs increasing 6.3% over the past year. The largest increases were in the South (19.7%), with the second largest increase in the Northeast (17%), where parking costs are the most expensive in the U.S. About half of all markets are forecasted to experience increased parking costs in 2018.

CONCESSIONS  
Increases are on the horizon:  
All of these trends are coming to a head as certain markets experience softening real estate fundamentals. Increases in tenant improvement (TI) allowances and/or free rent allocations have already been growing in large markets to help prop up rental rates. In fact, TI allowances increased in the six gateway markets by 21.7% in 2017. Total concessions were highest in Midtown New York ($167 per sf), followed by Washington, DC ($154 per sf). The largest increases were in the three Manhattan markets, followed by San Francisco (27%) and Boston (19%). The occupier-friendly trend of increased concessions will spread as demand slows in certain parts of the country. Free rent is expected to remain stable in two-thirds of markets, but half of U.S. markets are forecasted to see TI allowances increase in 2018. As tenants’ flight to quality continues, occupiers will have even greater opportunity for advantageous deals with Class B assets in attractive submarkets.
The trend in office space since the Great Recession has been towards greater employee density, i.e., companies allocating less square footage per employee. Nationally, square footage per employee has decreased from 211.4 sf in 2009 to 193.8 sf at the end of 2017—a decline of 17.6 sf or 8.3%. The rate of densification was fastest in the first few years of the current economic expansion. Square footage per employee shrunk 5.8% in the four years after its 2009 peak (an average of 1.4% per year). Over the next four years—through the end of 2017—the rate of densification was less than half as severe at 2.5% (0.6% per year).

The rapid expansion of the modern coworking model with tight densities in the 65-100 sf-per-employee range (half the space historically allocated in traditional offices) is also influencing density planning. We expect further densification over the next 18 months, particularly as the lease accounting rules (mandated by the Financial Accounting Standards Board) that are scheduled to go into effect in 2019 will require public companies to add real estate lease obligations as a liability on their books. However, densification should progress at a slower pace than in the past eight years as occupiers strike a balance between individual space usage and the communal, conference, and focus-room space required for workers to be effective.

Changes in density were driven more by supply than by cost. Certainly, markets in which square footage per employee actually increased over the past four years registered smaller gains in rents than did markets where companies were tightening space allocation per worker. In addition, the markets in which space per employee declined the most were also markets where rent growth was faster. But while companies are certainly making decisions to optimize space and costs, it is market-level job growth and the availability of space (or lack thereof) that have been greater indicators of densification than rental rate increases. Over the past four years, the markets in which square footage per worker decreased the most are mid-sized cities with 25-50 million square feet (msf) of office space. The steepest declines have been in Sunbelt cities such as Las Vegas, Tampa/St. Petersburg, Miami, and Nashville, all of which have densified by 18-19% since 2013. These are also the markets that have experienced the largest job growth over that same time period (+12%). With the addition of over half a million non-farm jobs in four years, these markets have been forced to densify as newly developed office
Experience per SFTM analysis consistently has found that ensuring minimal distractions in the workplace is the top driver of employees’ ability to focus on their work.

DENSIFICATION IN THE LEGAL SECTOR

One-third of all legal sector leases that were signed in 2017 represented reductions in total square footage. Law firms that did downsize averaged a reduction in total square footage of 33.3%. Across all law firms signing leases in 2017 the total square footage declined 7.3%. At the same time legal employment has been increasing at an average annual rate of 1.8%. On average, law firms decreased square footage per employee by roughly 9% in 2017.

This lease data correspond with what law firm tenants indicate about their space usage. Cushman & Wakefield’s 2017 National Legal Sector Benchmark Survey allocations of square footage per attorney have been steadily declining since the inaugural survey in 2013. Over the past five years, the percentage of firms allocating more than 900 sf per attorney has declined from 46.1% to 37%.

Atlanta is an example of this trend. Based on an analysis of 70 current law firm leases, allocations per attorney have been declining as firms move or renew. Atlanta law firms that have moved into their space over the past four years have allocated 885 sf per attorney, down 4.8% from the four years before the Great Recession (2006-2009). As is the case for other industries, the pace of densification is decelerating. The square footage per attorney decreased 0.9% per year right after the Recession (2010-2013), but the annual declines have averaged only 0.2% since 2014.

DENSITY AND EMPLOYEE EFFECTIVENESS

The main concern with office densification is, of course, the potential downsides for employees when personal work space is reduced. Cushman & Wakefield’s Experience per SFTM consulting program measures employees’ current work experience in their office space and identifies the biggest levers for optimizing the employee experience.

Experience per SFTM analysis consistently has found that ensuring minimal distractions in the workplace is the top driver of employees’ ability to focus on their work. Other common drivers include availability and access to data and information, privacy, and having the types of space needed for various tasks. Three of these four top levers point to the need to approach densification efforts with a focus on employees’ day-to-day effectiveness and not just on cost savings. This requires a variety of space types throughout the office. Companies that have done this well have increased the right types of communal spaces in the right quantities, including any or all of the following: focus rooms for individual work, conference rooms of varying sizes and layouts, hospitality-styled meeting space for casual conversations, and areas for social breaks.

AVERAGE REDUCTION IN LEGAL SPACE LEASED YOY

-7.3%

AVERAGE INCREASE IN LEGAL EMPLOYMENT YOY

+1.8%
OFFERING REAL ESTATE AS A SERVICE

In light of increasing densities, office occupiers are focusing more on the amenities they can offer to attract, retain, and delight employees. Millennials are now the largest generation in the workforce, and surveys indicate they are less interested in office size and more attracted by additional time off or other benefits. In addition, according to The 2017 National Legal Sector Benchmark Survey conducted by Cushman & Wakefield’s Legal Sector Advisory Group, associates at law firms—overwhelmingly Millennials—rank work/life balance as the #1 most important factor in their job satisfaction; having a private office is #9 on the list.

The concept of “real estate as a service” is gaining traction as occupiers focus on employee needs and landlords look for competitive advantages in the pursuit of tenants. Within the hospitality industry, hotels have long focused on three types of amenities that serve their guests: on-site services, physical amenities, and technology. Offices have been good at addressing the first two buckets. Technology on the other hand, remains an area of opportunity and improvement.

TENANT FOCUSED ON-SITE SERVICES

- Concierge services
- Dry cleaning
- Car washes
- Day care

PHYSICAL AMENITIES

- Fitness centers
- Conference facilities
- Restaurants (in or around the building)
- Tenant-only spaces / clubs
- Differentiated offerings (e.g., bowling alleys, golf simulators, etc.)

TECHNOLOGY

- High-speed internet (and WiFi)
- Cellular service
- Maintenance work order systems
- Common & conference space reservations

Physical amenities are the most costly to provide due to the construction costs for developing such spaces and, in many cases, the lost revenue from this alternative use. Adding services has the lowest barrier to entry, and either landlords and/ or occupiers can provide them to make office workers’ lives easier. Technology has historically not been as high a priority, but the shrinking costs of technology development, the growth in real-estate-focused technology investment, and the growing demand from employees for custom workplace experiences are creating a tremendous opportunity.

IN-DEMAND AMENITIES

Cushman & Wakefield surveyed brokers across the country representing tenants and landlords. The two groups had similar perspectives on the most in-demand amenities currently. While the order was somewhat different, the four most commonly cited amenities by both the tenant and landlord brokerage communities were the same.

1 Millennials are typically defined as anyone born between 1980 and 2000.

2 The Gallup 2017 State of the American Workplace indicates that Millennials are most likely to change jobs for a position that offers benefits and perks that support family life and flexibility, like paid maternity/paternity leave, childcare reimbursement, and flexible working options. The 2017 Deloitte Millennial Survey indicates that young workers with location and time flexibility have considerably higher perceptions of their company, their colleagues, and their own work productivity and engagement.

10 11
COWORKING TAKES AMENITIES TO A NEW LEVEL

The high-quality finishes and amenities offered by coworking providers—along with the flexibility coworking offers big and small companies—are strong draws for members. As with traditional office product, many of these amenities can be categorized as services, physical amenities, and technology. However, coworking providers have been creative in finding new amenities that offer their members value.

COMMUNITY: Many coworking providers are highly focused on creating communities. One specific way this is offered is through events that connect members, but also provide opportunities to learn from diverse leaders in a local market.

PARTNERSHIPS: By utilizing economies of scale, providers have developed partnerships with third-parties to allow members—be they freelancers or corporate employees—to access cost savings and unique benefits (e.g., back-office services, technology, travel, ride sharing, etc.).

TECHNOLOGY & DATA: Applications have been developed that allow users to find locations, book space, and connect with other members. Additionally, technology provides a growing repository of data on when, where, and how people work; that means each new location is informed by data from prior offices. Some buildings are being retrofitted with HVAC systems that automatically respond to high CO2 and pollutant levels in the air, preventing employees from becoming drowsy.²

Increasingly occupiers will be investing in technology that benefits their employees and strengthens their businesses:

• **Space usage:** Technologies that allow occupants to quickly and easily reserve space and then connect their devices with a room’s technology will increase efficiency and productivity, allowing for greater worker mobility within the office.

• **Sensors:** Data collection that assists occupiers in tracking how and when space is used in order to structure space for maximum benefit, comfort and cost savings. Sensor technology will also start to offer health and wellness benefits to individual employees just as tech “wearables” have driven personal health and activity tracking.

• **Support:** Communication technology that allows employees to seamlessly connect with maintenance, cleaning, facilities management, and even IT personnel. This will allow office workers to solve technology problems quickly, alert the appropriate people of maintenance and cleanliness issues, and even provide feedback on facilities management services.

• **Services:** Occupiers will aggregate and curate a list of third-party applications that provide services to its employees (potentially at reduced costs or even for free). This may include apps designed for parking concierge, food delivery, and coordinating personal errands (e.g., dry cleaning, car washing, pet care, etc.).

• **Analytics:** As data collection improves, technologies will provide in-depth, simplified analysis of key trends and meaningful insights. These findings will help occupiers predict the maintenance lifecycle, manage costs, and optimize maintenance staff needs. The mixture of business data companies are collecting with usage information and real estate market data can be a powerful combination to provide portfolio, market, and building-level insight to drive decision making, lower costs, and forecast trends.

• **Automation:** Offices will increasingly utilize robotics and automation to execute necessary functions including security, cleaning, and mail delivery. Additionally, occupiers will be able to leverage voice-recognition software and optical character recognition which allows machines to read and convert typed or hand-written text.

² CB Insights 2018
However, most companies can’t or don’t want to create their own mass transit system, and instead will incentivize employees to take advantage of existing public transportation options. Occupiers have subsidized public transportation or even shared-ride services for their employees. In fact, the predominant reason people utilize shared-ride services, such as Uber and Lyft, is to avoid parking. Among urban respondents to a University of California/Davis ride-sharing survey, 37% cited parking-related concerns as a reason to substitute ride sharing for personal driving.

Additionally, many local municipalities are investing heavily in alternative transportation such as bike infrastructure. There are also third-party technology providers trying to solve parking challenges through apps that offer valet services to park one’s car or assist in finding and booking parking nearby. While the financial models for these types of services have not yet been proven viable, there is appetite for technology solutions that reduce the parking pain points in certain submarkets.

### PARKING ALLOCATIONS CONSISTENT AS COSTS INCREASE

Nationally, parking allocations for office buildings have largely remained consistent over the past few years with an average of three spots for each 1,000 sf of office space leased. This is the equivalent of one parking spot for every 345 sf of leased space. Allocations vary by market and region. In the South, occupiers have 3.3 spots per 1,000 sf. Parking is the tightest in the Northeast with only 2.2 parking spots per 1,000 sf of leased space (or one spot per 455 sf leased).

The cost of parking varies across regions in a similar manner, with higher rates in markets where fewer spots are allocated. The national average is $183 per month per space; the average is nearly double that in the Northeast ($357 per month). Parking is least expensive in the South ($122 per month).

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**2017 REGIONAL SNAPSHOT**

<table>
<thead>
<tr>
<th>Region</th>
<th>Allocation (per 1,000 sf)</th>
<th>Cost per Parking Spot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwest</td>
<td>3.3</td>
<td>$174</td>
</tr>
<tr>
<td>Northeast</td>
<td>2.2</td>
<td>$357</td>
</tr>
<tr>
<td>South</td>
<td>3.3</td>
<td>$122</td>
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<tr>
<td>West</td>
<td>2.4</td>
<td>$227</td>
</tr>
<tr>
<td>National</td>
<td>2.9</td>
<td>$183</td>
</tr>
</tbody>
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4 "Estimating parking lot footprints in the Upper Great Lakes Region of the USA" by Amélie Y. Davis et al., identified 43 million parking spots in four states (IL, IN, MI, and WI) for an average of three spaces per vehicle.

5 "Smart Parking and the Connected Consumer," by Steven H. Bayless and Radha Neelakantan, estimated there are four to five spaces per motor vehicle across the United States.

Average parking costs increased 6.4% in 2017. Markets in the South were the prime drivers of the overall increase, including a number of Florida markets which registered double-digit increases. As a whole, the South saw parking costs increase by 9.7% from 2016 to 2017—a significantly greater increase than in any of the other regions. The Northeast experienced increases of 7%, although on a nominal basis, parking costs in the Northeast increased nearly twice as much as in any other region: $23.33. Parking costs are expected to increase in about half of U.S. markets in 2018. The South region, where costs are lowest, is expected to see increases in two-thirds of its cities.

**THE FUZZY FUTURE OF PARKING DEMAND**

Given the potential broad implementation of autonomous vehicles, the question is: will these challenges not matter in the future? Should autonomous vehicles become commonplace in the next 15-20 years, what does that mean for current parking lots and garages? Currently only a few firms are focused on how to develop parking garages whose spaces are able to be reconfigured for different usage in the future.

Key attributes of parking garages that could be repurposed in the future are flat floor plates, instead of containing the typical slant, and taller ceiling heights. These attributes would allow space in today’s parking garages to be repurposed as additional office space, retail options, or additional building amenities in the future. This trend is still in its infancy, but there are a few test cases either already built or under development. One such example is the 84.51° Centre in downtown Cincinnati.
CONCESSIONS

Tenant Improvement Allowances Have Increased and Will Continue to Climb Heading in 2019

With deliveries continuing at a strong pace and demand for office space likely to decelerate as job growth slows, some markets across the U.S. will soften over the next few years. In the softest markets, concessions will begin to increase. There is approximately 100 msf of office space under construction in the U.S., representing 2% of current inventory. Certain markets have higher shares of construction activity (as a percentage of inventory), such as San Francisco (8.3%), Washington, DC (5.3%), and Columbus, OH (5.3%).

Concessions did increase in 2017, but the increase was driven primarily by gateway markets: Boston, Chicago, Los Angeles, New York, San Francisco, and Washington, DC. Overall, tenant improvement (TI) allowances in gateway markets grew significantly—21.7%—from 2016 to 2017. Markets in both the Northeast and West experienced more modest increases in TI allowances, while TI allowances in the South and Midwest actually decreased during the same time frame.

This mirrors the trend in broader vacancy rates which have increased 54 basis points in gateway markets from 2016 to 2017. In addition, rents in gateway markets have increased, but those increases have been somewhat offset by increases in free rent and TI allowances as owners “buy” elevated rent levels in order to meet pro forma. In the six gateway markets, the average increase in concessions was $19.00 in 2017, up 21.7% from the end of 2016.

San Francisco registered the second largest increase in total concessions—behind the three Manhattan markets—up 27% year-over-year (YoY). During the same time frame, San Francisco’s asking rents increased only 1.8%. The only gateway market to see total concession levels decline was Los Angeles, which also registered the largest increase in rental rates (+9.4%). Three New York City markets experienced declines in rental rates: Brooklyn, Midtown, and Midtown South.

New construction is a factor in how much landlords are willing to offer in terms of concessions. Some markets that have seen concessions rise considerably faster than the national average—such as Manhattan, Washington, DC, and San Francisco—also have large amounts of construction ongoing in 2018, which could lead to even more generous concessions in the coming years. Nearly 60% of all construction ongoing right now is in just 15 markets.

### TI Allowance Increases by Region 2016-2017

**Gateway Markets: 21.7%**

- Boston
- Chicago
- Los Angeles
- New York City
- San Francisco
- Washington, DC

- Northeast: 2.2%
- West: 3.8%
- South: -7.3%
- Midwest: -2.2%

Click here to view concessions by market

### TI Allowance by Region

- Gateway
- Northeast
- West
- South
- Midwest

- 2016
- 2017
The trend of increasing TI allowances is likely to spread to more markets in the near future. Half of local markets are expected to see increased TI allowances in 2018. This includes a continued increase in most gateway markets, along with an expected acceleration of concessions in other large markets in different corners of the U.S.

- **Midwest**: TI allowances in all markets are expected to remain stable or increase in the near future. Both free rent and TI allowances are projected to increase in Chicago and Detroit.
- **Northeast**: Forecasts for non-gateway markets are mixed, with increases expected in New Jersey and Philadelphia, while markets just outside of New York City—Fairfield and Westchester Counties—are likely to see concessions decline.

**Gateway Markets - TI's & Free Rent**

<table>
<thead>
<tr>
<th>Gateway Market</th>
<th>Increase in Rent</th>
<th>Increase in Concessions</th>
<th>Increase in Vacancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston</td>
<td>7.9%</td>
<td>19.2%</td>
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<tr>
<td>Chicago</td>
<td>2.7%</td>
<td>6.4%</td>
<td>+200 bps</td>
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<tr>
<td>Los Angeles</td>
<td>9.4%</td>
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<td>+90 bps</td>
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<tr>
<td>NYC - Brooklyn</td>
<td>-2.3%</td>
<td>11.5%</td>
<td>-90 bps</td>
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<tr>
<td>NYC - Downtown</td>
<td>16%</td>
<td>22.2%</td>
<td>-150 bps</td>
</tr>
<tr>
<td>NYC - Midtown</td>
<td>-1.8%</td>
<td>12.7%</td>
<td>-30 bps</td>
</tr>
<tr>
<td>NYC - Midtown South</td>
<td>-2.8%</td>
<td>31.6%</td>
<td>+20 bps</td>
</tr>
<tr>
<td>San Francisco</td>
<td>1.8%</td>
<td>27.0%</td>
<td>+60 bps</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>3.8%</td>
<td>8.1%</td>
<td>+30 bps</td>
</tr>
</tbody>
</table>

*Increases are from year-end 2016 to year-end 2017

**Concessions**

- **South**: TI allowances are expected to increase in Atlanta, Raleigh/Durham, and Louisville. Most Florida markets are expecting landlords to lower TI allowances.
- **West**: Half of markets are expected to experience increases in TI allowances, including Santa Clara and San Mateo in the Bay Area, San Diego and Inland Empire in Southern California, and non-California markets such as Phoenix and Salt Lake City.

At the same time, landlords are likely to be less generous with free rent. Only a handful of markets are expecting the number of months of free rent to increase in the near future. Again, those markets are mostly in or near gateway markets: Chicago, New York, San Mateo County, and Washington, DC. In most markets free rent is expected to remain where it has been over the past few years, and there are several markets that are expecting the amount of free rent offered on average to decline.

**Q1 2018 Construction**

- **New York City**: 9.6 MSF
- **Chicago**: 2.4 MSF

**2017 Months of Free Rent**

- **NYC-Midtown**: 13.4 MSF
- **Northern VA**: 7.8 MSF
- **Atlanta**: 5.2 MSF
- **San Jose/Silicon Valley**: 3.0 MSF
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