

Office Cycle Trends Favoring Tenants

PwC Real Estate Investor Survey™

Second Quarter 2017



30th Anniversary

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Dear Reader:

Slow moving. Steady. Shifting. These are just a sampling of the words used by investors this quarter to describe the office sector's fundamentals. When combined with a slow-down in U.S. economic growth and an increase in new supply, it appears that the office sector is entering the next phase of its real estate cycle. Read our lead story, "Office Cycle Trends Favoring Tenants" for more insight.

Additional commentary and informative charts relating to each main property sector's cycle positions can be found in the *PwC Real Estate Barometer* section, which starts on page 5. While contraction is forecast to dominate three sectors over the near term, recession is forecast to dictate the fourth.

In this issue we debut a new quarterly feature titled *Survey Trends*, which will incorporate the long-running history of our Survey data to highlight trends in each of the four main commercial real estate property sectors – one sector per quarter. This new feature, which launches with office sector trends, starts on page 15.

If you missed our webcast on March 22, 2017, you can access it on demand by clicking: <http://event.on24.com/wcc/r/1379934/D8C7F043B05831A7BD1E7CoCFF1FFB99>

Thank you for subscribing to our quarterly publication. If you wish to receive more timely findings relating to the Survey during its three-month production process, please follow senior editor Amy Olson on Twitter @amyolsonatl.

Sincerely,

A handwritten signature in cursive script that reads "Susan M. Smith".

Susan M. Smith
Editor-in-Chief

In need of data for your commercial real estate analyses and reports?

With over 30 years of quarterly history, data from the *PwC Real Estate Investor Survey* could be just what you need.

Survey data (ranges and averages) is available for the following key stats:

Overall capitalization rates

Discount rates

Residual capitalization rates

Initial-year market rent change rates

Expense growth rates

A complete list of survey markets and their debut dates can be found by clicking [here](#).

Special packages that include the complete histories for various national markets and city-specific office markets are also available.

For more details, click www.pwc.com/us/realestatesurvey then click “Order” at the bottom and then click “Historical Data in Excel Format”

If you have questions, or to customize a package for a specific time period and/or property type, please email susan.m.smith@pwc.com.

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PwC Real Estate Investor Survey

National Highlights

OFFICE CYCLE TRENDS FAVORING TENANTS

While commercial real estate (CRE) investors noticed a lull in tenant demand across many office markets last quarter, the recent news that the U.S. economy grew at its slowest quarterly pace since the first quarter of 2016 has many of them expecting a more noticeable and profound decrease in office-space demand in the near term. “Slower economic growth does little to sustain demand for office space,” says an investor. Specifically, the revised gross domestic product (GDP) growth of 1.2% in the first quarter of 2017 represents the slowest quarterly pace since the first quarter of 2016 (0.8%), well below the pace from the third quarter of 2016 (3.5%) and the fourth quarter of 2016 (2.1%), as per the Bureau of Economic Analysis.

Even with the U.S. labor market near full employment and consumer confidence near a multiyear high, many individual office markets are already exhibiting signs of having peaked and entering the contraction phase of the real estate cycle – the phase following the market peak, characterized by softening market conditions and a shift in the supply-demand balance that leads to increasing vacancy rates, slowing rent growth, and rising overall cap rates. Compared to prior years, the pace of rent growth and the rate of absorption have slowed in the office sector on both a macro and individual-city basis. As for changes in overall cap rates, our Survey finds more office markets now reporting unchanged average cap rates compared to a year ago. Moreover, in the few office markets where cap rate compression has continued, the level of compression has declined from an average of 13 basis points a year ago to just five basis points this quarter.

To date, however, the slowdown in tenant demand has had a minimal impact on the overall vacancy rate in the office sector, as well as in many individual metros. But, investors see changes coming. “Moving off the peak can be a slow progression for certain markets since the performance of the CRE industry is a reactionary one,” remarks a participant. One concern is the amount of new space scheduled for completion in 2017. Cushman & Wakefield estimates that 103.0 million square feet of office space were under construction as of the first quarter of 2017, equivalent to 2.0% of the existing inventory. This ratio is now tied with the third quarter of 2016 for the highest level of new construction as a share of inventory in the current cycle. By comparison, in the first half of 2013 new construction totaled only 0.9% of total inventory.

Also helping to unbalance supply and demand in the office sector and swing the pendulum more in favor of tenants is the “co-working” revolution, which has grown from a niche model to an established operating concept for various mainstream businesses looking to provide flexibility and reduce operating costs. When combined with slower employment growth and higher construction levels, the reduced need for space among tenants is coming at a time when many owners in the office sector are looking to “focus on leasing” and “increase occupancy.” As one investor notes, “Our attention is now on tenant retention.” The result has been an increased need to offer tenant concessions and a drop in effective rents, especially in some leading office cities. In Midtown Manhattan, for example, effective rent grew 1.1% year over year in 2016, compared to 13.1% in 2015, according to a study by Savills Studley.

While not all cities are experiencing this degree of slippage in effective rent (or slippage at all), a growing number are expected to see fundamentals shift more in favor of tenants through 2017 and into 2018. It has been quite a while since most office tenants felt they held the upper hand during lease negotiations, and many of them are looking forward to locking in favorable terms for both new leases and renewals. ♦

Overall Cap Rate Analysis

In the second quarter of 2017, the average overall capitalization (cap) rate decreases in 13 Survey markets, increases in nine, and holds steady in 13 compared to the first quarter of 2017. As a whole, a greater number of Survey markets are now reporting either higher or stable average over-

all cap rates compared to just three months ago.

LOOKING FORWARD

While healthy fundamentals still describe much of the commercial real estate industry, surveyed investors are mindful of the potential for addi-

tional interest rate increases and market corrections as new supply is delivered. Similar to last quarter, most surveyed investors expect overall cap rates to hold steady over the next six months (74.0%) while 21.0% foresee increases. Only 5.0% expect overall cap rates to decline.

Exhibit 1

OVERALL CAPITALIZATION RATES

Second Quarter 2017

National Markets	Average	Quarterly Change*
Warehouse	5.27%	- 10
Apartment	5.40%	7
CBD Office	5.68%	13
Regional Mall	6.20%	7
Strip Shopping Center	6.26%	- 6
Power Center	6.35%	- 4
Suburban Office	6.64%	3
MOB**	6.76%	0
Net Lease	6.88%	13
Flex/R&D	7.10%	5
Secondary Office	7.40%	5
Regional Warehouse		
Pacific Region	4.98%	- 2
ENC*** Region	5.43%	- 2
Apartment Markets		
Pacific Region	4.49%	0
Mid-Atlantic Region	5.01%	0
Southeast Region	5.10%	0
Office Markets		
Manhattan	4.98%	0
Washington, DC	5.29%	0
San Francisco	5.45%	- 1
Seattle	5.82%	- 1
Los Angeles	5.84%	0
Pacific Northwest	6.01%	- 2
Boston	6.27%	0
Dallas	6.50%	0
San Diego	6.51%	- 2
Denver	6.56%	5
Phoenix	6.62%	- 17
Northern Virginia	6.63%	- 5
Charlotte	6.90%	0
Atlanta	7.21%	3
Chicago	7.24%	- 2
Southeast Florida	7.26%	0
Houston	7.31%	0
Philadelphia	7.43%	- 10
Suburban Maryland	7.48%	0

* Basis points; ** Medical office buildings; *** East North Central

Source: PwC Real Estate Investor Survey

Exhibit 2

OVERALL CAPITALIZATION RATE FORECASTS

Second Quarter 2017

MARKET	OVERALL CAP RATE	SIX-MONTH EXPECTATIONS		
	2Q 2017	INCREASE	DECREASE	HOLD STEADY
National				
Regional Mall	6.20%	25%	0%	75%
Power Center	6.35%	17%	17%	67%
Strip Shopping Center	6.26%	33%	0%	67%
CBD Office	5.68%	14%	14%	71%
Suburban Office	6.64%	13%	0%	88%
Net Lease	6.88%	100%	0%	0%
Medical Office Buildings	6.76%	20%	0%	80%
Secondary Office	7.40%	20%	0%	80%
Industrial				
National Flex/R&D	7.10%	0%	20%	80%
National Warehouse	5.27%	0%	10%	90%
ENC Region Warehouse	5.43%	0%	0%	100%
Pacific Region Warehouse	4.98%	0%	0%	100%
Apartment				
National	5.40%	44%	0%	56%
Mid-Atlantic Region	5.01%	20%	0%	80%
Pacific Region	4.49%	20%	0%	80%
Southeast Region	5.10%	0%	0%	100%
Office				
Atlanta	7.21%	50%	0%	50%
Boston	6.27%	17%	17%	67%
Charlotte	6.90%	20%	0%	80%
Chicago	7.24%	29%	0%	71%
Dallas	6.50%	17%	0%	83%
Denver	6.56%	40%	0%	60%
Houston	7.31%	57%	14%	29%
Los Angeles	5.84%	17%	17%	67%
Manhattan	4.98%	0%	0%	100%
Northern Virginia	6.63%	0%	20%	80%
Pacific Northwest	6.01%	0%	9%	91%
Philadelphia	7.43%	40%	0%	60%
Phoenix	6.62%	20%	20%	60%
San Diego	6.51%	40%	0%	60%
San Francisco	5.45%	40%	0%	60%
Seattle	5.82%	0%	17%	83%
Southeast Florida	7.26%	20%	0%	80%
Suburban Maryland	7.48%	0%	0%	100%
Washington, DC	5.29%	0%	0%	100%

Source: PwC Real Estate Investor Survey

BREAKOUT OF KEY INDICATORS

Overall cap rates, discount rates, and residual cap rates for the CBD and suburban submarkets of each individual office market are presented in Exhibit 3.

As shown, average overall cap rates remain lower for most CBD submarkets than for their suburban counterparts since higher barriers to entry and a lack of land for new development tend to keep supply and demand a bit more balanced in a market's CBD. As a result, CBD assets

typically maintain higher rental rates and occupancy levels.

In addition, downtown cores tend to provide better forms of mass transportation and embody 18- or 24-hour, live-work lifestyles that appeal to many individuals and firms. As a result, CBD assets are generally perceived as providing less investment risk to the owner – less risk, lower overall cap rate.

This quarter, a 108-basis-point spread exists between the composite average for the overall cap rates of

the CBDs included in our table and the composite average for the suburbs.

For the Survey's individual office markets that have both a CBD and suburban component, the Chicago office market reports the largest gap between its CBD and suburban average overall cap rates this quarter – a difference of 259 basis points. The next highest is Boston with a gap of 171 basis points followed closely by Denver and Southeast Florida with spreads of 138 and 128 basis points, respectively. ♦

Exhibit 3 BREAKOUT OF KEY INDICATORS Second Quarter 2017						
CBD OF:	DISCOUNT RATE		OVERALL CAPITALIZATION RATE		RESIDUAL CAPITALIZATION RATE	
	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE
Atlanta	6.00% – 9.25%	8.03%	5.25% – 8.50%	6.75%	6.00% – 8.50%	7.13%
Boston	5.75% – 8.00%	6.77%	4.00% – 8.50%	5.42%	5.00% – 8.50%	6.15%
Charlotte	6.50% – 9.00%	8.00%	5.00% – 7.25%	6.50%	5.50% – 7.75%	6.78%
Chicago	5.75% – 10.00%	7.52%	4.50% – 8.00%	5.95%	5.50% – 9.00%	6.54%
Dallas	6.00% – 11.00%	7.58%	5.00% – 8.50%	6.25%	6.00% – 8.00%	6.90%
Denver	6.75% – 10.00%	7.72%	5.00% – 7.00%	5.88%	5.75% – 8.50%	6.78%
Houston	6.50% – 12.00%	8.68%	5.00% – 8.00%	6.77%	5.75% – 9.50%	7.20%
Los Angeles	5.50% – 9.00%	7.13%	4.25% – 7.00%	5.58%	5.00% – 8.00%	6.38%
Manhattan	5.75% – 9.00%	6.85%	3.50% – 8.50%	4.98%	3.50% – 8.50%	5.65%
Pacific Northwest	5.25% – 9.00%	6.90%	4.25% – 8.00%	5.58%	5.00% – 9.00%	6.17%
Philadelphia	7.00% – 10.00%	7.93%	6.00% – 8.00%	6.80%	6.00% – 9.00%	7.38%
Phoenix	7.00% – 10.00%	8.44%	5.00% – 8.00%	6.47%	6.00% – 8.00%	6.97%
San Diego	6.50% – 10.50%	7.92%	5.50% – 8.50%	6.50%	5.50% – 8.75%	6.78%
San Francisco	5.00% – 8.00%	6.45%	3.50% – 7.00%	5.00%	5.00% – 8.00%	5.78%
Seattle	5.25% – 9.00%	6.85%	4.25% – 8.00%	5.46%	5.00% – 9.00%	6.13%
Southeast Florida	6.00% – 10.00%	7.88%	5.00% – 9.50%	6.63%	5.00% – 10.50%	6.88%
Washington, DC	5.00% – 8.00%	6.48%	4.25% – 6.50%	5.29%	5.00% – 6.50%	5.69%
Secondary Office	6.50% – 11.00%	8.59%	4.50% – 9.50%	7.06%	6.00% – 9.00%	7.40%
SUBURBS OF:	DISCOUNT RATE		OVERALL CAPITALIZATION RATE		RESIDUAL CAPITALIZATION RATE	
	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE
Atlanta	7.00% – 10.25%	8.63%	6.00% – 9.00%	7.67%	6.50% – 9.00%	7.83%
Boston	6.75% – 10.00%	8.08%	5.25% – 10.00%	7.13%	6.50% – 10.50%	7.50%
Charlotte	7.00% – 10.00%	8.73%	6.00% – 8.75%	7.30%	6.50% – 8.50%	7.58%
Chicago	8.00% – 12.00%	9.77%	7.00% – 10.00%	8.54%	7.50% – 11.00%	8.96%
Dallas	6.75% – 9.00%	8.15%	5.50% – 8.50%	6.75%	5.50% – 9.00%	7.40%
Denver	7.00% – 11.00%	8.25%	6.00% – 9.00%	7.25%	6.50% – 9.50%	7.85%
Houston	7.50% – 14.00%	9.71%	6.50% – 10.00%	7.85%	6.50% – 10.00%	7.85%
Los Angeles	5.00% – 10.00%	7.29%	4.25% – 8.00%	6.10%	5.00% – 8.00%	6.71%
Northern Virginia	6.00% – 9.50%	7.55%	5.00% – 8.50%	6.63%	5.75% – 8.50%	6.85%
Pacific Northwest	5.50% – 10.00%	7.75%	5.00% – 7.75%	6.44%	5.00% – 8.00%	6.67%
Philadelphia	8.00% – 11.00%	9.10%	7.00% – 9.50%	8.05%	7.50% – 10.00%	8.63%
Phoenix	7.00% – 10.00%	8.23%	5.50% – 8.00%	6.78%	6.25% – 8.00%	7.20%
San Diego	6.50% – 10.50%	7.75%	5.25% – 8.50%	6.53%	5.75% – 8.75%	6.85%
San Francisco	6.00% – 9.50%	7.33%	5.00% – 8.00%	5.91%	5.00% – 9.00%	6.73%
Seattle	5.50% – 10.00%	7.53%	5.00% – 7.00%	6.19%	5.00% – 7.50%	6.41%
Southeast Florida	7.00% – 10.50%	8.75%	6.50% – 10.00%	7.90%	6.50% – 10.50%	8.10%
Suburban Maryland	7.00% – 10.00%	8.65%	5.50% – 9.00%	7.48%	6.50% – 9.50%	7.73%
Secondary Office	6.50% – 13.00%	9.31%	5.50% – 9.50%	7.74%	6.50% – 10.00%	8.04%

Source: PwC Real Estate Investor Survey

PwC Real Estate Barometer

Real estate cycles vary across markets and geographic areas, as well as within markets and geographic locations based on property type – office, retail, industrial, and multifamily. This observation means that national cycles differ for the same property type across individual markets. It also means that within a specific location, the cycle for each property type can be in a different phase at any given time.

Real estate markets are dynamic over time and influenced by a host of factors. An in-depth analysis of historical and forecast stock data provided by CBRE Economic Advisors and Reis allows us to gauge each sector's likely shifts over the near term. The results of our PwC real estate barometer research are shown in Chart REB-1 through Chart REB-4.

These charts represent the cumulative number of U.S. metro areas analyzed for each property type and the aggregate positions in our barometer analysis. Individual barometer readings for U.S. regions, as well as various metro areas, are shown for each sector in Forecast-1 through Forecast-4.

OFFICE

The U.S. office sector is showing greater signs of peaking by the end of this year and certainly through 2018 and 2019 as a larger number of metros are forecast to move into contraction over this time period (see Chart REB-1). By year-end 2018, 58.0% of the metros in our forecast will be in contraction. This figure is expected to rise to 65.0% by year-end 2019 and to 67.0% by year-end 2020. At the same time, the portion of metros in recession will also be rising. For now, this sector's shift in performance appears more related to slower employment growth and reduced space-per-employee ratios than to overbuilding.

RETAIL

The uncertainty surrounding the U.S. retail sector's ongoing transformation is apparent as the bulk of the metros in our analysis are expected to be in recession each year through 2019 (see Chart REB-2). By year-end 2018, the percentage of cities in recession is forecast to surge to 61.0% with the fewest (4.0%) in expansion. Interestingly, the retail landscape varies greatly between geographies for the next four years with faster growing southern metros, like Austin and Charleston, faring better than other regions.

INDUSTRIAL

The U.S. industrial sector remains strong due to the incessant growth of e-commerce. As a result, vacancy trends favor property owners throughout much of the country. In fact, our analysis estimates only one city (Houston) will be in recession for 2017. In contrast, 15 metros are forecast to be in expansion by year-end 2017, including Los Angeles and Atlanta. One caveat for this sector could be the large amount of new supply expected for delivery over the near term, which should push the industrial portions of most cities into contraction over the next four years.

MULTIFAMILY

The U.S. multifamily sector continues to benefit from the unaffordability of single-family homes, keeping rental demand strong even in the face of rising levels of new supply. As shown in Chart REB-4, 2017 and 2018 may be a time for some cities, like Denver and Charlotte, to play "catch up" and absorb new supply. Thereafter, however, the expansion phase of the cycle returns for the highest portion of cities in our analysis (40.0%). ♦

DEFINITIONS

Contraction: The phase following the market peak, characterized by softening market conditions and a shift in the supply/demand balance leading to increasing vacancy rates, slowing rent growth, and rising overall cap rates.

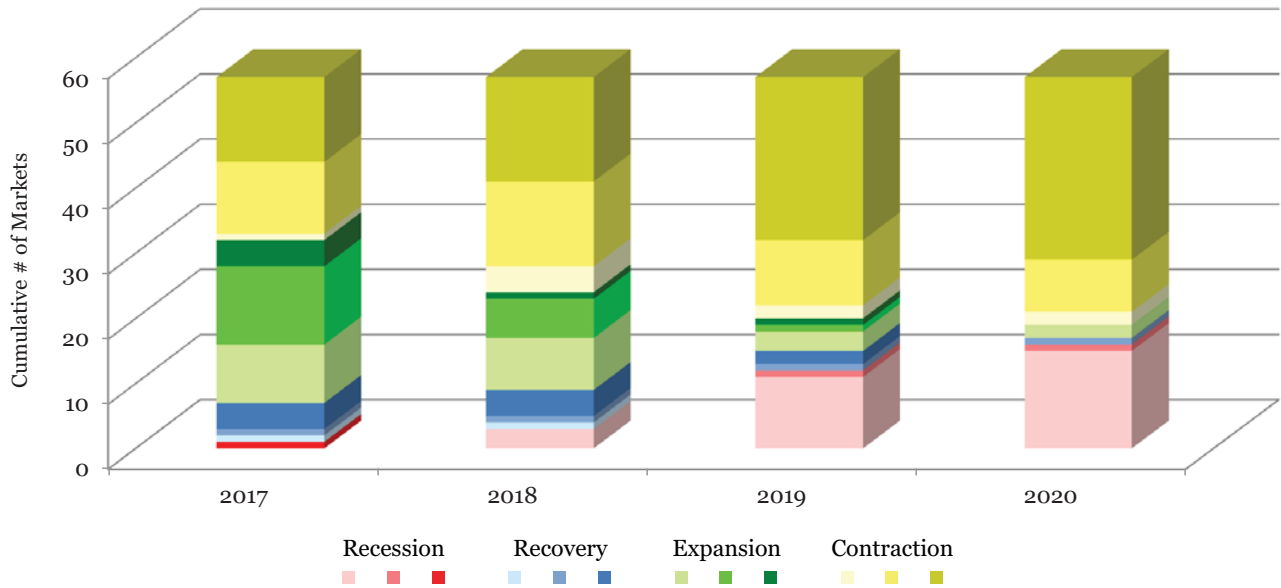
Expansion: The phase following recovery, characterized by strong demand and increasingly tight market conditions leading to low vacancy rates, robust rent growth, and decreasing overall cap rates.

Recession: The phase following contraction, characterized by very low demand and high levels of supply that were added during the previous two phases. Typically involves high vacancies, negative rent growth, and high overall cap rates.

Recovery: The phase following the market bottom, characterized by tightening market conditions and a shift in supply/demand balance leading to reduced vacancy rates, more balanced rent growth, and a stabilization of overall cap rates.

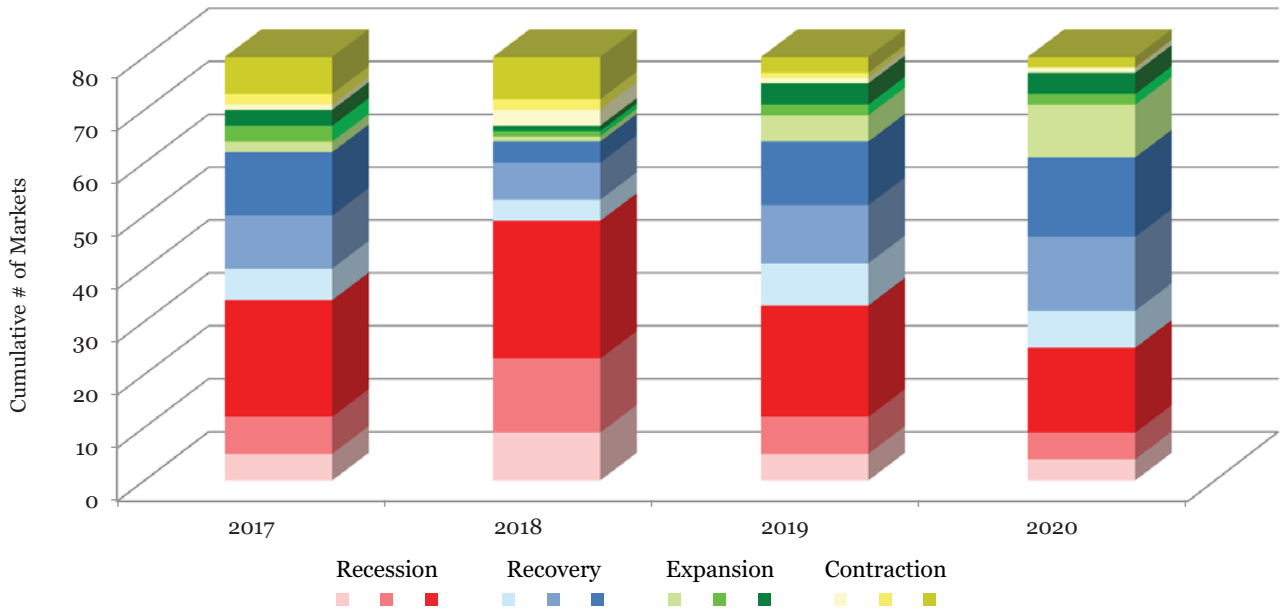
Stock: The total inventory of space, in square feet or units, in a given market.

Chart REB-1
PwC REAL ESTATE BAROMETER
 U.S. Office Markets – 2017 to 2020



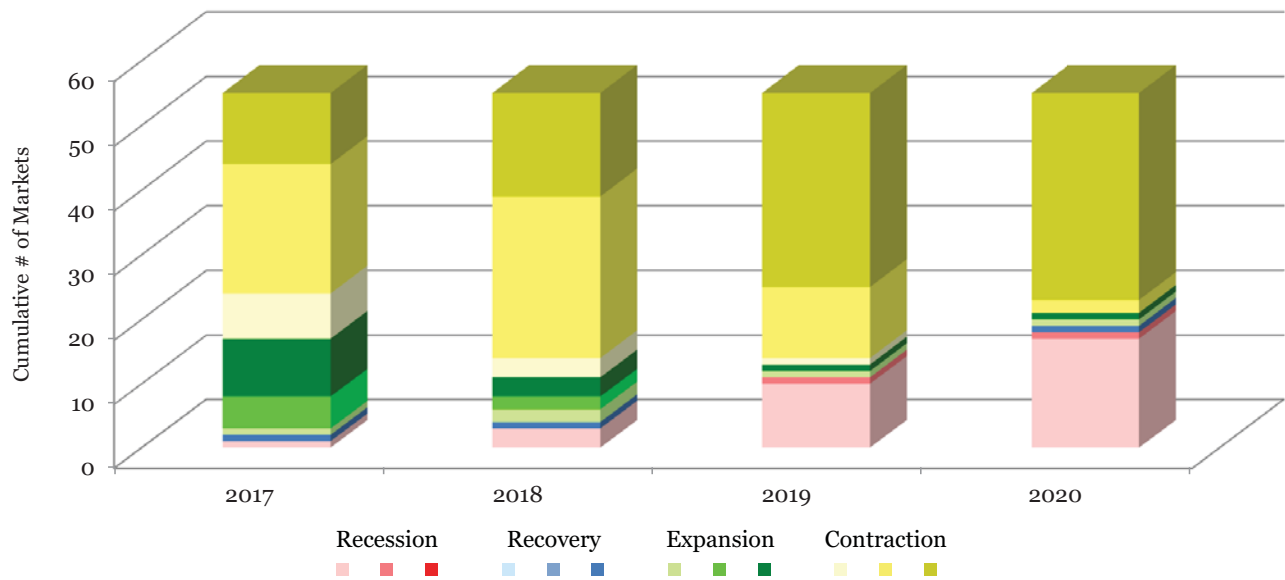
Source: Data provided by CBRE; compiled and analyzed by PwC

Chart REB-2
PwC REAL ESTATE BAROMETER
 U.S. Retail Markets – 2017 to 2020



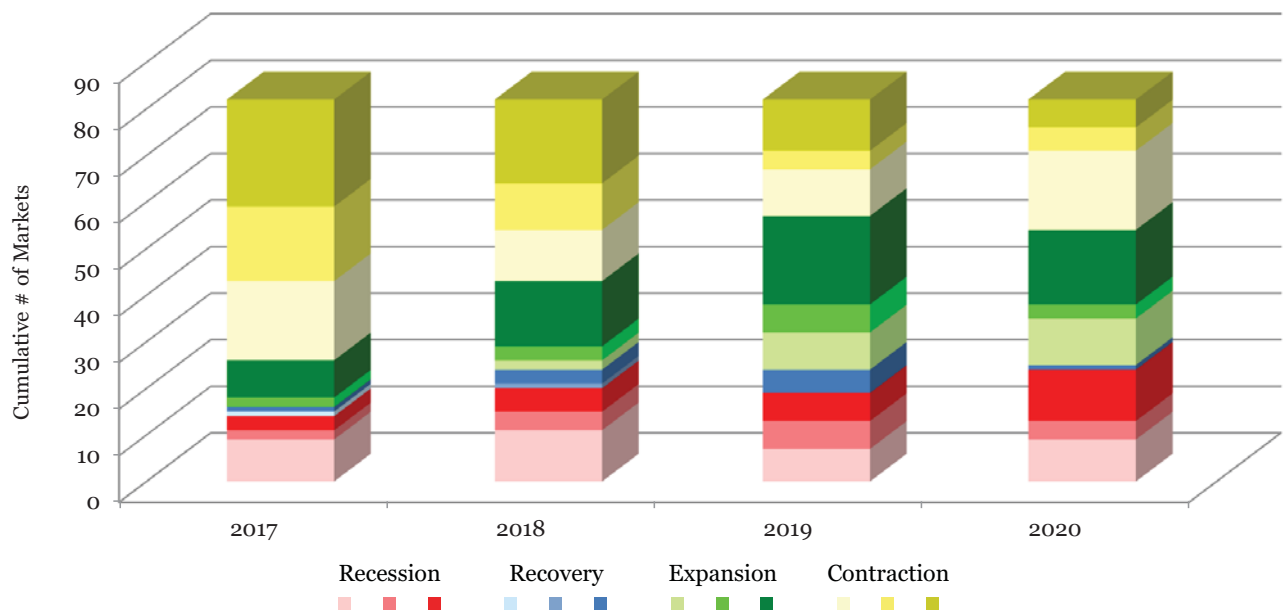
Source: Data provided by Reis; compiled and analyzed by PwC

Chart REB-3
PwC REAL ESTATE BAROMETER
 U.S. Industrial Markets – 2017 to 2020



Source: Data provided by CBRE; compiled and analyzed by PwC

Chart REB-4
PwC REAL ESTATE BAROMETER
 U.S. Multifamily Markets – 2017 to 2020



Source: Data provided by Reis; compiled and analyzed by PwC

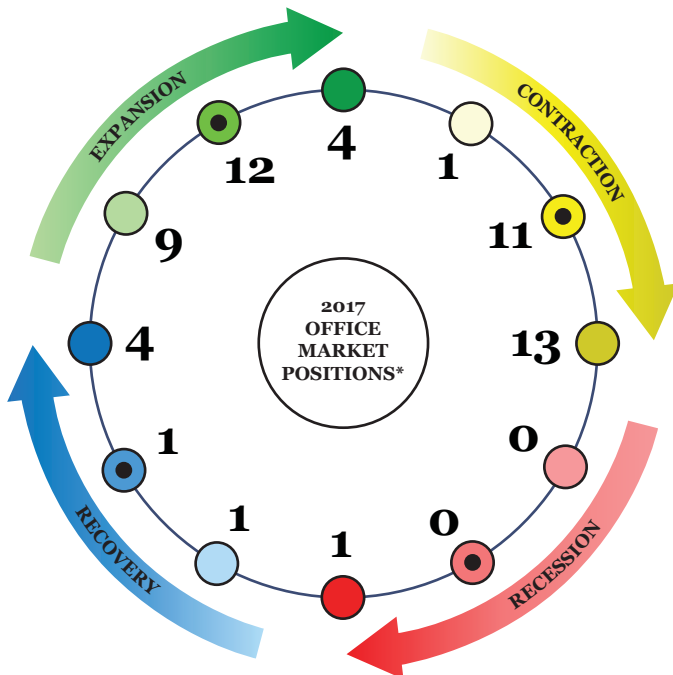
	2017	2018	2019	2020
United States	●	●	●	●

NORTHEAST REGION				
MSA Name	2017	2018	2019	2020
Boston	●	●	●	●
Hartford	●	●	●	●
Long Island	○	●	●	●
New York	●	●	●	●
Newark	●	●	●	●
Philadelphia	●	●	●	●
Pittsburgh	●	○	●	○
Stamford	●	●	●	●
Trenton	●	●	●	●

MIDWEST REGION				
MSA Name	2017	2018	2019	2020
Chicago	●	●	●	●
Cincinnati	●	●	●	●
Cleveland	●	●	●	●
Columbus	●	●	●	●
Detroit	●	●	●	●
Indianapolis	●	●	●	●
Kansas City	●	○	●	●
Minneapolis	●	●	●	●
St. Louis	●	○	●	●
Toledo	●	●	●	●

WEST REGION				
MSA Name	2017	2018	2019	2020
Albuquerque	●	●	●	●
Denver	●	●	●	●
Honolulu	●	●	●	●
Las Vegas	●	●	●	●
Los Angeles	●	●	●	●
Oakland	●	●	●	●
Orange County	●	●	●	●
Phoenix	●	●	●	●
Portland	●	●	●	●
Riverside	●	●	●	●
Sacramento	●	●	●	●
Salt Lake City	●	●	●	●
San Diego	●	●	●	●
San Francisco	●	●	●	●
San Jose	●	●	●	●
Seattle	●	●	●	●
Tucson	●	●	●	●
Ventura	●	●	●	●

SOUTH REGION				
MSA Name	2017	2018	2019	2020
Atlanta	●	●	●	●
Austin	●	●	●	●
Baltimore	●	●	●	●
Charlotte	●	●	●	●
Dallas	●	●	●	●
Fort Lauderdale	●	●	●	●
Fort Worth	●	●	●	●
Houston	●	●	●	●
Jacksonville	●	●	●	●
Memphis	●	●	●	●
Miami	●	●	●	●
Nashville	●	●	●	●
Orlando	●	●	●	●
Raleigh	●	○	○	○
Richmond	●	●	●	●
San Antonio	●	●	●	●
Tampa	●	●	○	●
Washington, DC	●	●	●	●
West Palm Beach	●	●	●	●
Wilmington	●	●	●	●



*=Number of MSAs in position in 2017

	2017	2018	2019	2020
United States	●	●	●	●

NORTHEAST REGION				
MSA Name	2017	2018	2019	2020
Boston	●	●	●	●
Buffalo	●	●	●	●
Central New Jersey	●	●	●	●
Fairfield County	●	●	●	●
Hartford	●	●	●	●
Long Island	●	●	●	●
New Haven	●	●	●	●
Northern New Jersey	●	●	●	●
Philadelphia	●	●	●	●
Pittsburgh	●	●	●	●
Rochester	●	●	●	●
Syracuse	●	●	●	●
Westchester	●	●	●	●

MIDWEST REGION				
MSA Name	2017	2018	2019	2020
Chicago	●	●	●	●
Cincinnati	●	●	●	●
Cleveland	●	●	●	●
Columbus	●	●	●	●
Dayton	●	●	●	●
Detroit	●	●	●	●
Indianapolis	●	●	●	●
Kansas City	●	●	●	●
Milwaukee	●	●	●	●
Minneapolis	●	●	●	●
Omaha	●	●	●	●
St. Louis	●	●	●	●
Wichita	●	●	●	●

WEST REGION				
MSA Name	2017	2018	2019	2020
Albuquerque	●	●	●	●
Colorado Springs	●	●	●	●
Denver	●	●	●	●
Las Vegas	●	●	●	●
Los Angeles	●	●	●	●
Oakland-East Bay	●	●	●	●
Orange County	●	●	●	●
Phoenix	●	●	●	●
Portland	●	●	●	●
Sacramento	●	●	●	●
Salt Lake City	●	●	●	●
San Bernardino	●	●	●	●
San Diego	●	●	●	●
San Francisco	●	●	●	●
San Jose	●	●	●	●
Seattle	●	●	●	●
Tacoma	●	●	●	●
Tucson	●	●	●	●
Ventura	●	●	●	●

SOUTH REGION				
MSA Name	2017	2018	2019	2020
Atlanta	●	●	●	●
Austin	●	●	●	●
Baltimore	●	●	●	●
Birmingham	●	●	●	●
Charleston	●	●	●	●
Charlotte	●	●	●	●
Chattanooga	●	●	●	●
Columbia	●	●	●	●
Dallas	●	●	●	●
Fort Lauderdale	●	●	●	●
Fort Worth	●	●	●	●
Greensboro/Winston-Salem	●	●	●	●
Greenville	●	●	●	●
Houston	●	●	●	●
Jacksonville	●	●	●	●
Knoxville	●	●	●	●
Lexington	●	●	●	●
Little Rock	●	●	●	●
Louisville	●	●	●	●
Memphis	●	●	●	●
Miami	●	●	●	●
Nashville	●	●	●	●
New Orleans	●	●	●	●
Norfolk	●	●	●	●
Oklahoma City	●	●	●	●
Orlando	●	●	●	●
Palm Beach County	●	●	●	●
Providence	●	●	●	●
Raleigh	●	●	●	●
Richmond	●	●	●	●
San Antonio	●	●	●	●
Suburban Maryland	●	●	●	●
Suburban Virginia	●	●	●	●
Tampa	●	●	●	●
Tulsa	●	●	●	●



*=Number of MSAs in position in 2017

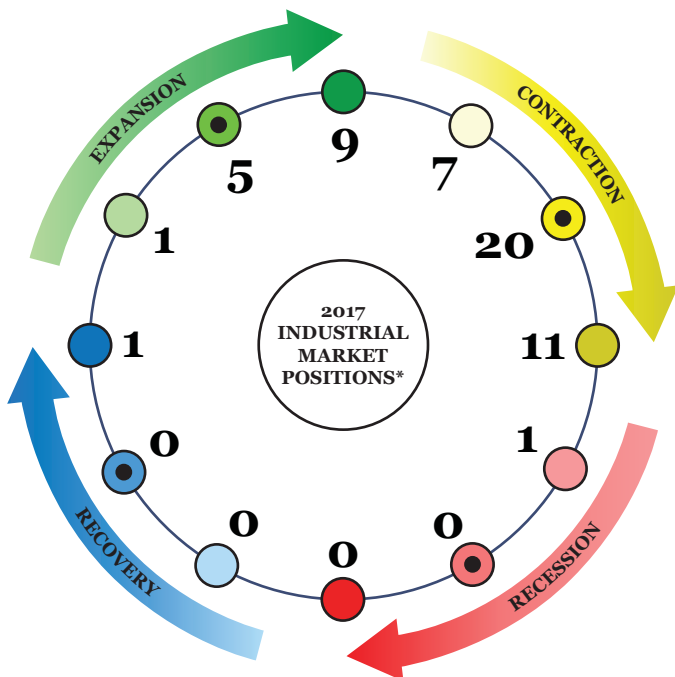
	2017	2018	2019	2020
United States	○	●	●	●

NORTHEAST REGION				
MSA Name	2017	2018	2019	2020
Allentown	●	●	●	●
Boston	●	●	●	●
Hartford	●	●	●	●
Long Island	○	●	●	●
New York	●	●	●	●
Newark	●	●	●	●
Philadelphia	●	●	●	●
Pittsburgh	●	●	●	●
Stamford	●	●	●	●
Trenton	●	●	●	●

MIDWEST REGION				
MSA Name	2017	2018	2019	2020
Chicago	●	●	●	●
Cincinnati	●	●	●	●
Cleveland	●	●	●	●
Columbus	●	●	●	●
Detroit	●	○	●	●
Indianapolis	●	●	●	●
Kansas City	●	●	●	●
Minneapolis	●	●	●	●
St. Louis	●	●	●	●

WEST REGION				
MSA Name	2017	2018	2019	2020
Albuquerque	●	●	●	●
Denver	●	●	●	●
Las Vegas	●	●	●	●
Los Angeles	●	○	●	●
Oakland	○	●	●	●
Orange County	●	○	●	●
Phoenix	●	●	●	●
Portland	○	●	●	●
Riverside	●	●	●	●
Sacramento	○	●	●	●
Salt Lake City	●	●	●	●
San Diego	●	●	●	●
San Francisco	●	●	●	●
San Jose	●	●	●	●
Seattle	●	●	○	●
Tucson	●	●	●	●
Vallejo	●	●	●	●
Ventura	○	●	●	●

SOUTH REGION				
MSA Name	2017	2018	2019	2020
Atlanta	●	●	●	●
Austin	●	●	●	●
Baltimore	○	●	●	●
Charlotte	●	●	●	●
Dallas	○	●	●	●
Fort Lauderdale	●	●	●	●
Fort Worth	●	●	●	●
Houston	●	●	●	●
Jacksonville	●	●	●	●
Memphis	●	●	●	●
Miami	●	●	●	●
Nashville	●	●	●	●
Orlando	●	●	●	●
Raleigh	●	●	●	●
Tampa	●	●	●	●
Washington, DC	●	●	●	●
West Palm Beach	●	●	●	●
Wilmington	●	●	●	●



*=Number of MSAs in position in 2017

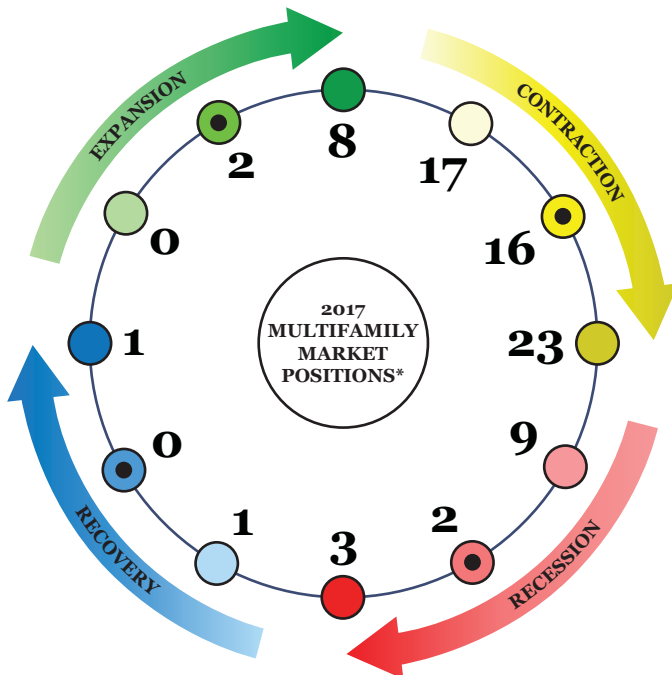
	2017	2018	2019	2020
United States	●	●	●	●

NORTHEAST REGION				
MSA Name	2017	2018	2019	2020
Boston	●	●	●	●
Buffalo	●	●	●	●
Central New Jersey	●	●	●	●
Fairfield County	●	●	●	●
Hartford	●	●	●	●
Long Island	●	●	●	●
New Haven	●	●	●	●
New York	●	●	●	●
Northern New Jersey	●	●	●	●
Philadelphia	●	●	●	●
Pittsburgh	●	●	●	●
Providence	●	●	●	●
Rochester	●	●	●	●
Syracuse	●	●	●	●
Westchester	●	●	●	●

MIDWEST REGION				
MSA Name	2017	2018	2019	2020
Chicago	●	●	●	●
Cincinnati	●	●	●	●
Cleveland	●	●	●	●
Columbus	●	●	●	●
Dayton	●	●	●	●
Detroit	●	●	●	●
Indianapolis	●	●	●	●
Kansas City	●	●	●	●
Milwaukee	●	●	●	●
Minneapolis	●	●	●	●
Omaha	●	●	●	●
St. Louis	●	●	●	●
Wichita	●	●	●	●

WEST REGION				
MSA Name	2017	2018	2019	2020
Albuquerque	●	●	●	●
Colorado Springs	●	●	●	●
Denver	●	●	●	●
Las Vegas	●	●	●	●
Los Angeles	●	●	●	●
Oakland-East Bay	●	●	●	●
Orange County	●	●	●	●
Phoenix	●	●	●	●
Portland	●	●	●	●
Sacramento	●	●	●	●
Salt Lake City	●	●	●	●
San Bernardino	●	●	●	●
San Diego	●	●	●	●
San Francisco	●	●	●	●
San Jose	●	●	●	●
Seattle	●	●	●	●
Tacoma	●	●	●	●
Tucson	●	●	●	●
Ventura County	●	●	●	●

SOUTH REGION				
MSA Name	2017	2018	2019	2020
Atlanta	●	●	●	●
Austin	●	●	●	●
Baltimore	●	●	●	●
Birmingham	●	●	●	●
Charleston	●	●	●	●
Charlotte	●	●	●	●
Chattanooga	●	●	●	●
Columbia	●	●	●	●
Dallas	●	●	●	●
District of Columbia	●	●	●	●
Fort Lauderdale	●	●	●	●
Fort Worth	●	●	●	●
Greensboro/Winston-Salem	●	●	●	●
Greenville	●	●	●	●
Houston	●	●	●	●
Jacksonville	●	●	●	●
Knoxville	●	●	●	●
Lexington	●	●	●	●
Little Rock	●	●	●	●
Louisville	●	●	●	●
Memphis	●	●	●	●
Miami	●	●	●	●
Nashville	●	●	●	●
New Orleans	●	●	●	●
Norfolk	●	●	●	●
Oklahoma City	●	●	●	●
Orlando	●	●	●	●
Palm Beach County	●	●	●	●
Raleigh	●	●	●	●
Richmond	●	●	●	●
San Antonio	●	●	●	●
Suburban Maryland	●	●	●	●
Suburban Virginia	●	●	●	●
Tampa	●	●	●	●
Tulsa	●	●	●	●



*=Number of MSAs in position in 2017

U.S. CRE Stock Acquisition Trends

This quarterly feature investigates CRE acquisition trends for the four major property sectors of the commercial real estate (CRE) industry – office, retail, industrial, and apartments. This analysis is unique in that trends are analyzed based on stock transaction volume as a percent of total stock, not dollar volume.

To analyze each sector peer to peer, the metro data is first divided into quartiles, defined as "one of the three points that divide a range of data or population into four equal parts."

Charts CAT-1 through CAT-4 display the stock acquisition trends for the four main property types divided into their appropriate quartiles. Our analysis covers the rolling 12-month period ending with the first quarter of 2017.

Analyzing CRE acquisitions is a common practice among industry professionals as it reflects the health of the industry, each property type, and geographic areas. During cyclical downturns and times of uncertainty, CRE transaction volume usually slows as investors are more indecisive about the future and pricing can be more difficult to determine. The opposite typically occurs during cyclical recoveries as investors look to "buy low" and capitalize on a recovering industry.

Most CRE reports focus on dollar volumes, giving accolades to U.S. metros that report the highest levels of capital sales. Not surprisingly, high-priced U.S. metros, like Manhattan and San Francisco, generally rise to the "top" of these sales volume reports not only because they tend to be more preferred by investors, but because they are pricier compared to most other markets on a dollar-per-square-foot basis. On the other hand, U.S. cities like Dallas and Charlotte tend to be viewed as "less preferred" because their dollar volumes and price-per-square-foot achievements are generally lower.

Many factors drive pricing, such as local economic performances, tenancy, building amenities, and supply-demand dynamics. These variables are often reflected in a property's price per square foot, lending support to why most assets in "top" markets, like Manhattan and San Francisco, garner the prices they do. But sales volume can sometimes tell only one side of the CRE capital story.

STOCK ACQUISITION ANALYSIS

Our analysis reveals the following trends.

- ◆ In this prolonged CRE cycle, all four property sectors reveal a decline in their average stock acquisition percentages relative to the same period one year ago.
- ◆ Just over half of the cities in the retail sector analysis have stock acquisition percentages above this sector's average of 12.0% (see Chart CAT-2). However, the current sector average has declined 370 basis points over the past three months.
- ◆ At 12.6%, the office sector maintains the highest average stock acquisition percentage among the four property types (see Chart CAT-1). Nevertheless, this average is down 150 basis points from one year ago.
- ◆ The apartment sector shows the smallest year-over-year decline in its average stock acquisition percentage (120 basis points), but has the lowest portion of cities (41.7%) above its average (see Chart CAT-4).
- ◆ In the industrial sector, the stock acquisition percentage is also down from a year ago, moving from 6.2% to 4.2%. Interestingly, the three cities that dominated sales activity remain the same – Dallas, Austin, and Memphis
- ◆ Dallas and Seattle each post above-average stock acquisition percentages in each property sector for the fifth consecutive quarter. In addition, Atlanta, Austin, and Charlotte also boast above-average percentages for all four property types.

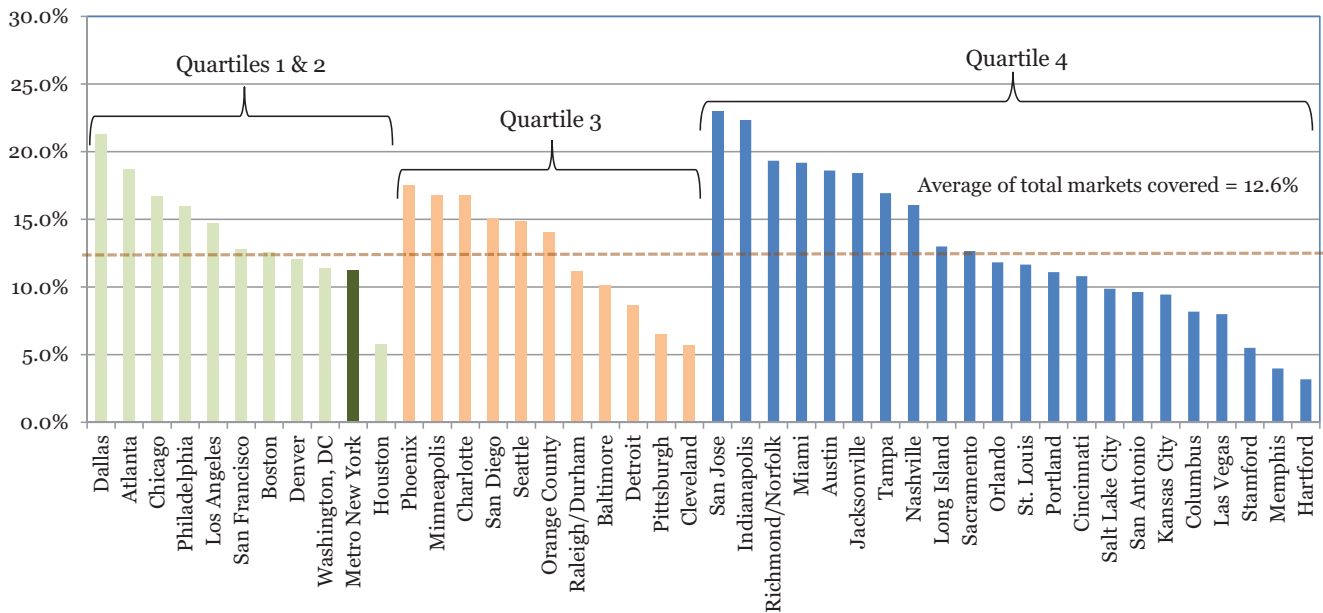
LOCATIONAL DIFFERENCES

While economic and demographic trends within a specific metro may pique investor interest for a certain property type, those same trends may not have the same impact on the other property types within that market. In our analysis, many top-performing markets were diverse in each property type with the exception of the five markets previously noted. Such diversity opens up broad investment options for investors not just in terms of geography, but with regard to property type as well. ◆

Chart CAT-1

OFFICE CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 1Q 2017

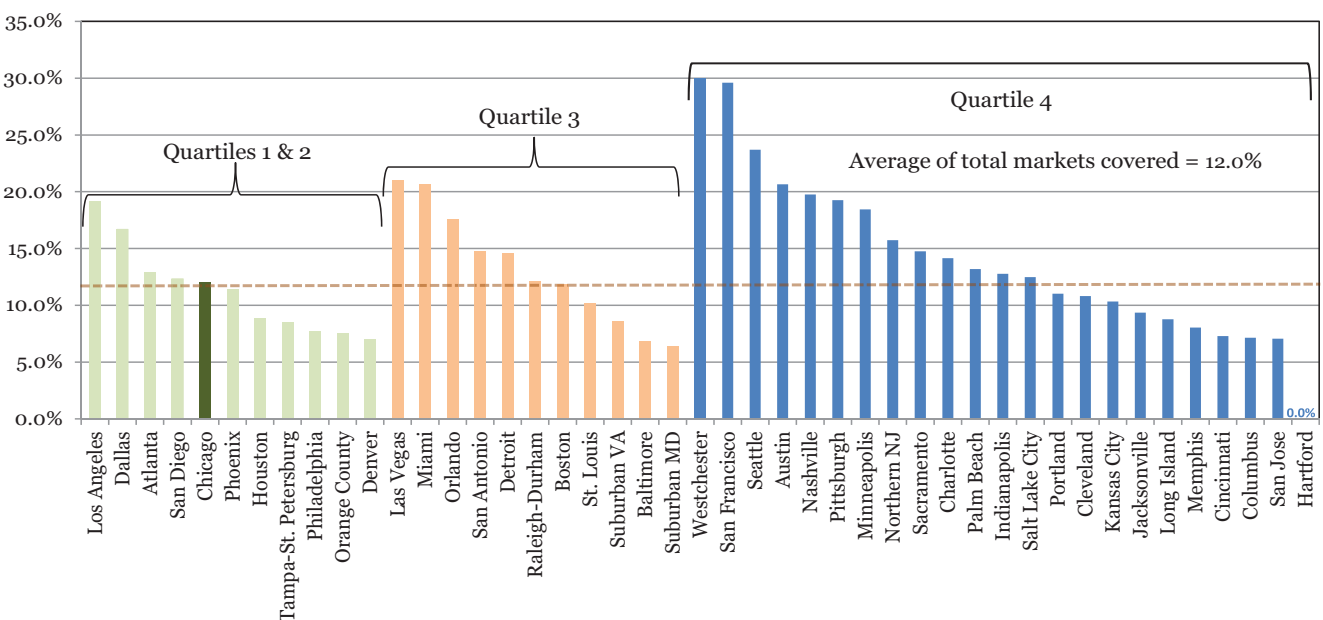


Source: Data provided by Real Capital Analytics and CBRE; compiled and analyzed by PwC Note: Quartiles are based on markets' total CRE stock

Chart CAT-2

RETAIL CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 1Q 2017

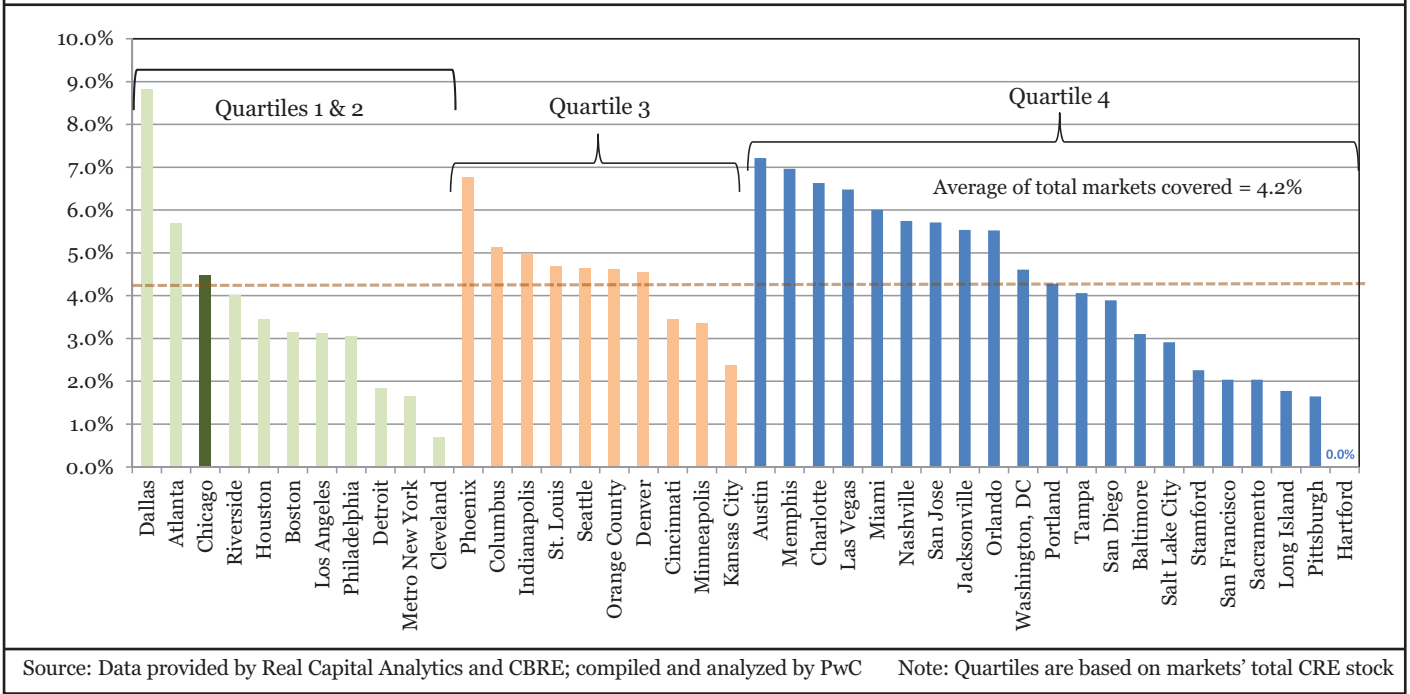


Source: Data provided by Real Capital Analytics and Reis; compiled and analyzed by PwC Note: Quartiles are based on markets' total CRE stock

Chart CAT-3

INDUSTRIAL CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 1Q 2017

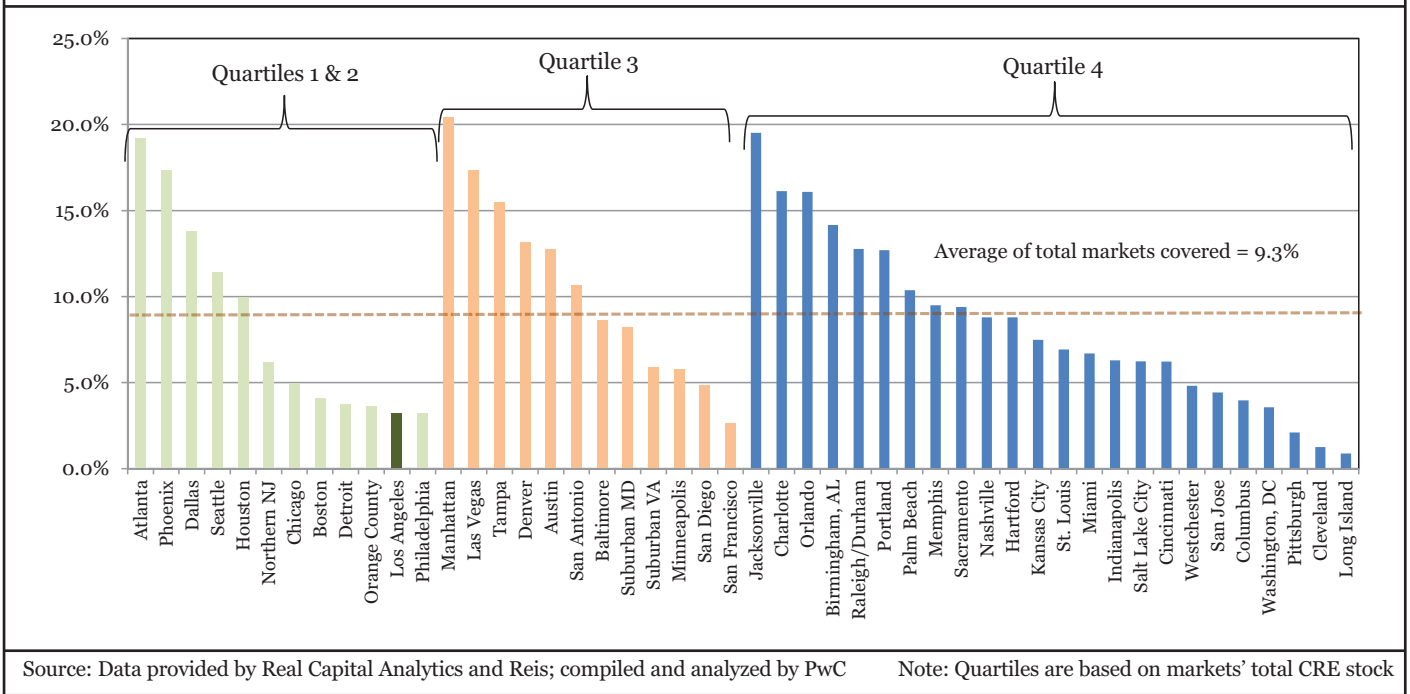


Source: Data provided by Real Capital Analytics and CBRE; compiled and analyzed by PwC Note: Quartiles are based on markets' total CRE stock

Chart CAT-4

APARTMENT CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 1Q 2017



Source: Data provided by Real Capital Analytics and Reis; compiled and analyzed by PwC Note: Quartiles are based on markets' total CRE stock

Survey Trends: CBD Office Sector

There is a sense among surveyed investors that the CBD office sector “has reached its capacity in terms of leasing ability and additions to supply.”

- In the national CBD office market, surveyed investors have adjusted rental rate growth downward as it becomes more difficult to retain tenants (see Chart ST-1).
- The average tenant retention rate assumption for the national CBD office market is well below where it was at the peak of the last cycle.
- In 2009, tenants took advantage of lower rental rents by signing deals at favorable lease terms.
- This quarter, this market’s average tenant retention rate of 68.9% is below the 11-year average of 69.3%.
- At 2.57%, the average initial-year market rent change rate assumption for this market is above the 11-year average of 2.02%, but below the level it achieved in the prior peak.

As shown in the Trends Tracker on this page, this market’s average overall cap rate (OAR) has declined significantly over its 24-year Survey history, posting its highest OAR average in 1994 (9.73%) and its lowest average in 2017 (5.55%).

Investors’ expectations of rent growth have also ebbed and flowed during this market’s Survey history, recording a high of 4.10% in 2007 (during the peak of the last cycle) and a low of -1.95% in 2009 (during the last recession). ♦

TRENDS TRACKER National CBD Office Market

Average Overall Cap Rate (OAR):

2Q 2007	6.83%	▼
2Q 2009	7.94%	▲
2Q 2011	6.95%	▼
2Q 2013	6.63%	▼
2Q 2015	6.07%	▼
2Q 2017	5.68%	▼

Low versus High⁽¹⁾:

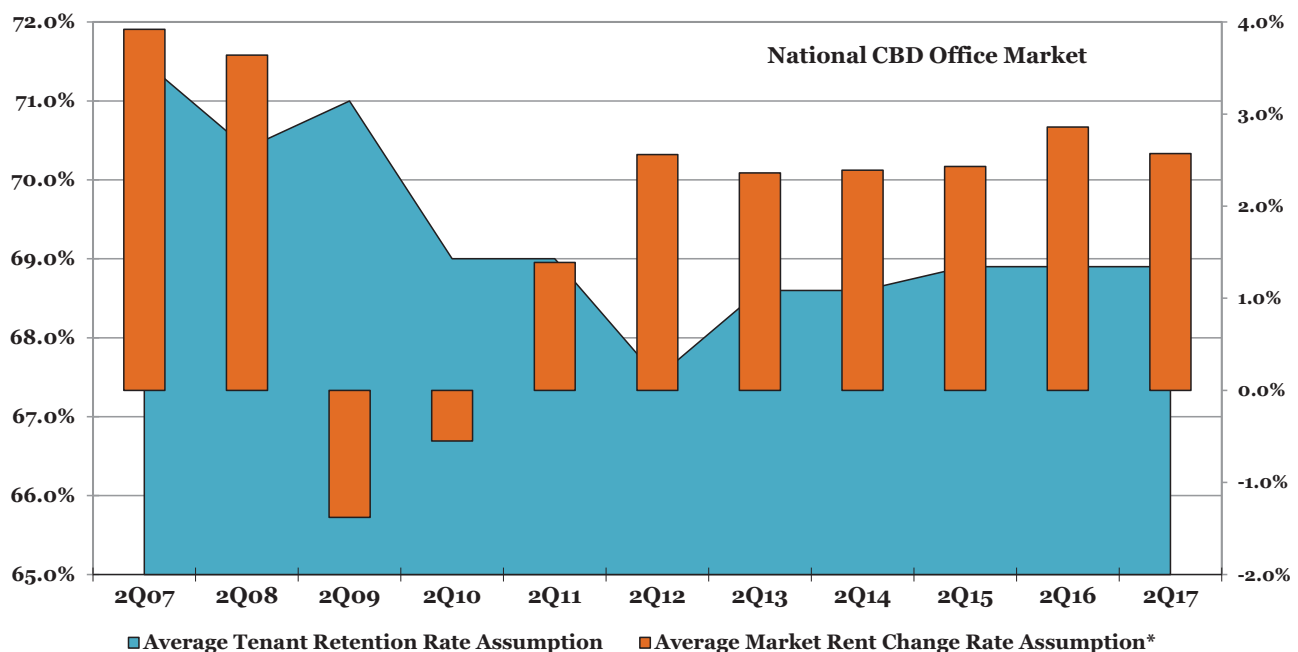
Lowest OAR: 5.55% in 1Q 2017
Highest OAR: 9.73% in 2Q 1994

Low versus High⁽¹⁾:

Lowest AMR: -1.95% in 4Q 2009
Highest AMR: 4.10% in 3Q 2007

* ▼, ▲, = change from prior quarter
(1) over 24-year history
AMR - average initial-year market rent change rate assumption

Chart ST-1
TENANT RETENTION & RENT GROWTH ASSUMPTIONS
2Q 2007 to 2Q 2017



Source: PwC Real Estate Investor Survey; *initial year of forecast (plotted on secondary axis)

Survey Trends: *Suburban Office Sector*

While some surveyed investors see opportunities to buy suburban office properties “over the next 12 to 18 months or until interest rates begin to move up enough to impede deals,” others are shying away from acquisitions as they see more hesitancy creep into the industry.

- At 63.0%, this quarter’s average tenant retention rate assumption for the national suburban office market stands at its lowest level in 11 years (see Chart ST-2).
- The current average tenant retention rate is well below this market’s 11-year average of 65.4%.
- As investors’ tenant retention levels have fallen, so too have their assumptions for near-term rent growth.
- This market’s average initial-year market rent change rate assumption represents its lowest average since 2014.
- At 2.03%, the average initial-year market rent change rate for this market is above its 11-year average of 1.35%, but below the level in the prior peak.

As shown in the Trends Tracker on this page, this market’s average overall cap rate (OAR) has declined significantly over its 24-year Survey history, posting its highest OAR average in 2002 (10.03%) and its lowest average in 2015 (6.36%).

Investors’ expectations of rent growth have also ebbed and flowed during this market’s Survey history, recording a high of 4.50% in 1998 and a low of -2.46% in 2010. ♦

TRENDS TRACKER

National Suburban Office Market

Average Overall Cap Rate (OAR):

2Q 2007	7.29%	▼
2Q 2009	8.24%	▲
2Q 2011	7.60%	▼
2Q 2013	7.55%	▼
2Q 2015	6.50%	▼
2Q 2017	6.64%	▲

Low versus High⁽¹⁾:

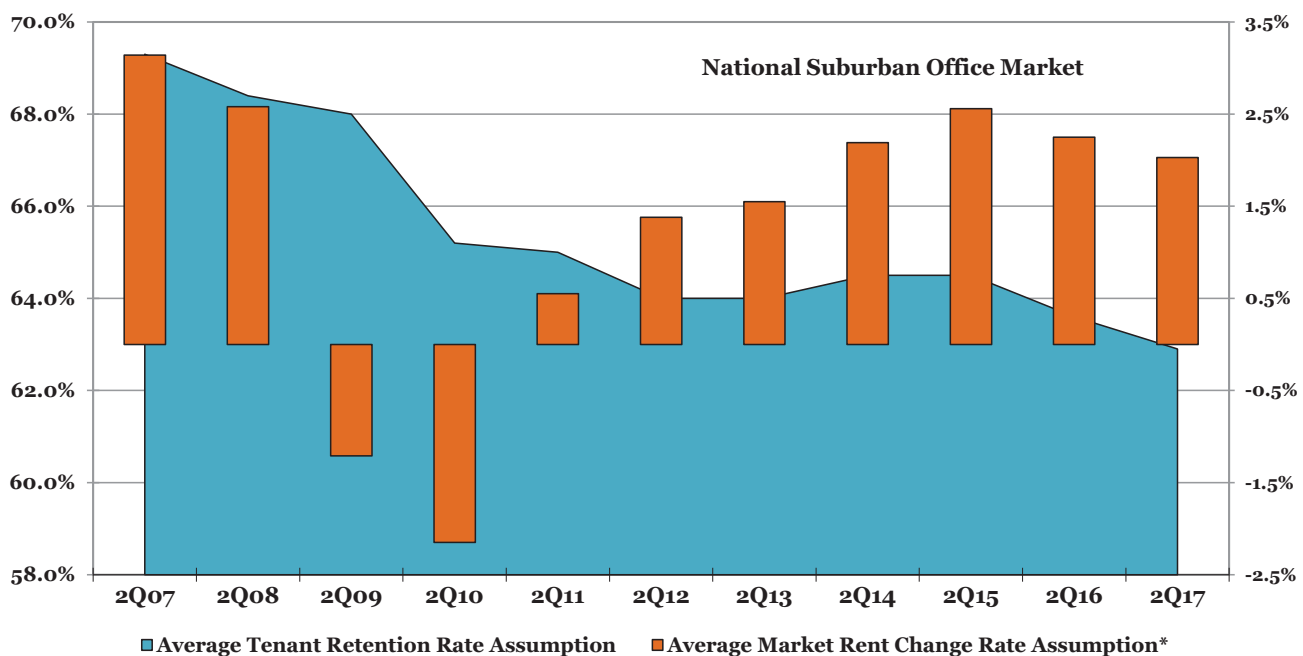
Lowest OAR: 6.36% in 4Q 2015
 Highest OAR: 10.03% in 4Q 2002

Low versus High⁽¹⁾:

Lowest AMR: -2.46% in 1Q 2010
 Highest AMR: 4.50% in 3Q 1998

* ▼, ▲, = change from prior quarter
 (1) over 24-year history
 AMR - average initial-year market rent change rate assumption

Chart ST-2
TENANT RETENTION & RENT GROWTH ASSUMPTIONS
 2Q 2007 to 2Q 2017



Source: PwC Real Estate Investor Survey; *initial year of forecast (plotted on secondary axis)

National Student Housing Market

While demand for assets outweighs supply in the national student housing market, our Survey results reveal little movement in key investment criteria this quarter. As shown in Table STH-1, both the average overall cap rate and the average initial-year market rent change rate remain at 6.02% and 2.44%, respectively. Moreover, 75.0% of surveyed investors foresee overall cap rates holding steady in this market over next six months.

Even though robust leasing has led to new construction in this market, rising interest rates, stricter lending requirements, and a shortage of good building sites are keeping the

supply pipeline in check. Surveyed investors reveal that the amount of debt as a percentage of the total asset value ranges from 40.0% to 80.0% in this market. The average loan-to-value ratio is 65.0%. In addition to increased difficulty obtaining financing, developers are also facing rising construction costs.

For buyers looking to acquire student housing properties, prices can reach as high as 130.0% of replacement cost with an average price of 109.0% of replacement cost, as per surveyed investors.

Survey participants agree that a primary challenge this year will be

acquiring additional assets due to elevated pricing in a highly competitive market. In fact, total sales in this sector were down 37.0% in the first quarter of 2017 compared to the fourth quarter of 2016, according to Real Capital Analytics. At the same time, the average sale price per bed rose 38.0%. Not surprising, certain investors intend to take advantage of the current sellers' market by selling assets. "We plan to sell the remainder of our assets in a fund nearing the end of its life," explains an investor. Another investor plans to "sell stabilized properties," while one other will "continue to seek value-added acquisitions." ♦

Table STH-1
NATIONAL STUDENT HOUSING MARKET*
Second Quarter 2017

	CURRENT	4Q 2016	YEAR AGO	2 YEARS AGO
DISCOUNT RATE (IRR)^a				
Range	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.00%	7.00% – 10.00%
Average	8.18%	8.18%	8.24%	8.64%
Change (Basis Points)		0	- 6	- 46
OVERALL CAP RATE (OAR)^a				
Range	4.50% – 7.50%	4.50% – 7.50%	4.50% – 7.50%	4.50% – 7.75%
Average	6.02%	6.02%	6.08%	6.32%
Change (Basis Points)		0	- 6	- 30
RESIDUAL CAP RATE				
Range	4.75% – 7.50%	4.75% – 7.50%	4.75% – 7.75%	4.75% – 8.00%
Average	6.30%	6.36%	6.38%	6.75%
Change (Basis Points)		- 6	- 8	- 45
MARKET RENT CHANGE^b				
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%
Average	2.44%	2.44%	2.38%	2.50%
Change (Basis Points)		0	+ 6	- 6
EXPENSE CHANGE^b				
Range	0.00% – 11.00%	0.00% – 11.00%	0.00% – 11.00%	0.00% – 12.00%
Average	3.09%	3.09%	3.09%	2.90%
Change (Basis Points)		0	0	+ 19
MARKETING TIME^c				
Range	0 – 6	0 – 6	0 – 6	2 – 8
Average	3.4	3.3	3.1	3.9
Change (▼, ▲, =)		▲	▲	▼
* Off-campus assets a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months				

NATIONAL STUDENT HOUSING MARKET – SELECT SURVEY RESPONSES*
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES		VACANCY		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		REPLACEMENT RESERVE		PREFERRED LEASE TERM		MARKETING	
	MARKET RENT	EXPENSES	TOTAL VACANCY	CAP RATE	SELLING	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	PER BED	PER BED	MONTHS	MONTHS	MONTHS	MONTHS		
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 1 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve is deducted; doesn't use a separate structural replacement reserve; sees overall cap rates holding steady over the next six months.	3.0% to 4.5%	2.0% to 2.5%	4.0% to 5.0%	4.75% to 5.50%	0.8% to 1.0%	7.00% to 9.00%	4.50% to 5.25%		\$125 to \$150		12		0 to 4			
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 3 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve is deducted; uses a separate structural replacement reserve of up to \$300 per bed; sees overall cap rates holding steady over the next six months.	0.0% to 4.0%	0.0% to 11.0%	4.0% to 10.0%	5.25% to 6.75%	1.5% to 3.0%	7.00% to 8.50%	5.25% to 7.00%		\$150 to \$300		12		2 to 6			
PRIVATE INVESTOR ♦ Forecast Period: 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before capital replacement reserve is deducted; uses a separate structural replacement reserve; sees overall cap rates increasing 25 to 50 basis points over the next six months.	2.0% to 3.0%	2.0% to 3.0%	4.0% to 10.0%	5.75% to 7.50%	1.0%	9.00% to 10.00%	5.50% to 7.50%		\$100 to \$175		12		2 to 6			
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 2 to 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve is deducted; uses a separate structural replacement reserve; sees overall cap rates holding steady over the next six months; invests in the South region of the country.	2.5% to 3.0%	2.0% to 3.0%	5.0% to 8.0%	6.25% to 7.50%	0.7% to 1.0%	8.00% to 9.50%	5.00% to 6.75%		\$100 to \$125		12		2 to 4			
PRIVATE INVESTOR ♦ Forecast Period: 1 to 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve is deducted; does not use a separate structural replacement reserve; sees overall cap rates holding steady over the next six months.	2.5% to 3.5%	2.0% to 2.5%	4.0% to 5.0%	5.50% to 6.00%	0.8% to 1.0%	7.50% to 9.00%	5.50% to 6.25%		\$150		12		0 to 4			
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 3 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve is deducted; uses a separate structural replacement reserve of up to \$100 per bed; sees overall cap rates holding steady over the next six months.	0.0% to 5.0%	0.0% to 10.0%	4.0% to 10.0%	5.50% to 7.00%	1.0% to 3.0%	6.50% to 8.50%	4.75% to 6.50%		\$150 to \$350		12		2 to 6			

*off-campus assets only

Source: Personal survey conducted by PwC during April 2017.



National Secondary Office Market

This quarter's Survey results reveal that 40.0% of investors view current conditions in the national secondary office market as neutral – equally favoring buyers and sellers. The balance is evenly split between perceiving the market as exclusively favoring either buyers or sellers.

Regardless of the varied opinions held about the state of this market, investors' goals include stabilizing income for the long term by increasing rents and lowering expenses, as well as attracting new tenants and retaining existing ones. Currently, this market's tenant retention rate ranges from 60.0% to 80.0% and averages 73.0%, exceeding the aver-

age for the national CBD and the national suburban office markets of 69.0% and 63.0%, respectively.

In spite of its high average tenant retention rate, signing tenants may require offering enticements, such as free rent and/or increased tenant improvement (TI) allowances. This quarter, our investors unanimously agree that free rent is common in this market, ranging from one to ten months on a ten-year lease and averaging five months. Excessive TI allowances (over and above what is typical in a balanced market) are as much as \$20.00 per square foot and average \$4.44 per square foot this quarter. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	73.0%	▲
Range	60.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	5.0	=
Range	1 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.40%	▲
CBD	7.06%	▲
Suburbs	7.74%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table SEC-1
NATIONAL SECONDARY OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 13.00%	6.00% – 13.00%	5.75% – 13.00%	6.50% – 14.00%	6.75% – 14.00%
Average	8.95%	8.91%	8.79%	9.19%	9.54%
Change (Basis Points)		+ 4	+ 16	- 24	- 59
OVERALL CAP RATE (OAR)^a					
Range	4.50% – 9.50%	4.50% – 9.50%	4.50% – 10.00%	4.50% – 10.00%	4.00% – 11.00%
Average	7.40%	7.35%	7.39%	7.81%	8.10%
Change (Basis Points)		+ 5	+ 1	- 41	- 70
RESIDUAL CAP RATE					
Range	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.00%	4.50% – 10.00%	6.00% – 10.50%
Average	7.72%	7.72%	7.69%	7.97%	8.30%
Change (Basis Points)		0	+ 3	- 25	- 58
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 10.00%	0.00% – 10.00%	0.00% – 12.00%
Average	2.88%	2.95%	3.65%	3.40%	2.89%
Change (Basis Points)		- 7	- 77	- 52	- 1
EXPENSE CHANGE^b					
Range	1.50% – 3.00%	1.50% – 3.00%	1.50% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.48%	2.48%	2.48%	2.52%	2.57%
Change (Basis Points)		0	0	- 4	- 9
MARKETING TIME^c					
Range	3 – 9	3 – 9	2 – 9	2 – 9	2 – 12
Average	5.7	6.0	5.8	5.8	6.2
Change (▼, ▲, =)		▼	▼	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Table SOM-1

NATIONAL SECONDARY OFFICE MARKET—SELECT SURVEY RESPONSES

Second Quarter 2017

	GEOGRAPHY	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
		MARKET RENT	EXPENSES	CAP RATE	SELLING EXPENSE	FREE & CLEAR		MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS		
FULL-SERVICE ADVISORY FIRM ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; does not use rent spikes.	West/ Sacramento	0.0%	2.5%	6.75% to 7.00% (CBD); 7.75% to 8.25% (suburbs)	2.5% to 5.0%	9.00% to 11.00% (CBD); 11.00% to 13.00% (suburbs)	6.00% to 7.00% (CBD); 7.75% to 8.25% (suburbs)	6	75.0%	5.0%	\$0.15 to \$0.20	6 to 9
		4.0% to 5.0%	2.0% to 2.5%	7.50% to 8.25% in both CBD & suburbs	2.0% to 3.0%	8.00% to 9.00% in both CBD & suburbs	7.00% to 7.75% in both CBD & suburbs	6 to 9	75.0%	10.0%	\$0.10 to \$0.15	3 to 5
REAL ESTATE FIRM ♦ Forecast Period: 1 to 3 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; expects overall cap rates to increase 25 to 50 basis points over the next six months; may use a rent spike.	Mountain/ Las Vegas	3.0% to 5.0%	3.0%	7.25% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	1.0% to 3.0%	7.75% to 8.50% (CBD); 8.25% to 9.50% (suburbs)	6.25% to 7.25% (CBD); 7.00% to 8.75% (suburbs)	6 to 10	70.0% to 75.0%	5.0% to 7.5%	\$0.15 to \$0.25	4 to 6
		1.0% to 3.0%	2.0% to 3.0%	6.75% to 7.25% (CBD); 7.75% to 8.50% (suburbs)	2.0% to 3.0%	7.75% to 9.00% (CBD); 9.00% to 10.50% (suburbs)	6.00% to 7.25% (CBD); 7.25% to 8.75% (suburbs)	3 to 9	70.0% to 75.0%	2.0% to 8.0%	\$0.10 to \$0.25	6 to 9
REAL ESTATE ADVISOR ♦ Forecast Period: 3 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions currently favor buyers; expects cap rates to increase 25 to 50 basis points over the next six months.	South/ Orlando	3.0% to 5.0%	2.0% to 3.0%	6.50% to 8.50% (CBD); 7.00% to 9.00% (suburbs)	1.0% to 5.0%	7.25% to 8.75% (CBD); 8.75% to 11.00% (suburbs)	6.00% to 8.00% (CBD); 7.00% to 9.00% (suburbs)	5 to 9	70.0% to 75.0%	5.0% to 7.0%	\$0.10 to \$0.25	5 to 8
		3.0% to 5.0%	3.0%	6.50% to 8.50% (CBD); 7.00% to 9.00% (suburbs)	1.0% to 5.0%	7.25% to 8.75% (CBD); 8.75% to 11.00% (suburbs)	6.00% to 8.00% (CBD); 7.00% to 9.00% (suburbs)	5 to 9	70.0% to 75.0%	5.0% to 7.0%	\$0.10 to \$0.25	5 to 8

Source: Personal survey conducted by PwC during April 2017.

Table SOM-2

NATIONAL SECONDARY OFFICE MARKET—SELECT SURVEY RESPONSES

Second Quarter 2017

	GEOGRAPHY		INITIAL-YEAR CHANGE RATES		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	REGION/ CITY	MARKET RENT	MARKET RENT EXPENSES	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS		
REAL ESTATE COMPANY ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions currently favor sellers; no longer uses rent spikes.	West/ San Jose	2.0%	2.0% to 3.0%	6.50% to 7.50% in both CBD & suburbs	1.0% to 1.5%	6.50% to 7.50% in both CBD & suburbs	5.00% to 7.00% (CBD); 5.50% to 7.50% (suburbs)	60.0% to 70.0%	6 to 9	3.0% to 7.0%	Does not use	3 to 6				
REAL ESTATE INVESTOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions favor buyers; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.	East North Central/ Indianapolis	2.5% to 4.0%	2.0% to 3.0%	8.00% to 10.00% (CBD); 8.50% to 10.00% (suburbs)	1.5% to 3.0%	9.00% to 12.00% (suburbs)	8.00% to 9.50% (CBD); 8.25% to 9.50% (suburbs)	70.0% to 75.0%	8 to 10	8.0% to 10.0%	Does not use	3 to 5				
REAL ESTATE SERVICE FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions currently favor sellers; expects overall cap rates to hold steady over the next six months; may use rent spikes.	Northeast/ Pittsburgh	2.0%	1.5% to 2.0%	6.50% to 7.25% (CBD); 7.25% to 7.75% (suburbs)	2.0% to 3.0%	8.25% to 9.00% (suburbs)	6.50% to 7.50% (CBD); 7.25% to 8.25% (suburbs)	70.0% to 80.0%	6 to 10	5.0% to 7.0%	\$0.15 to \$0.25	6 to 9				
REAL ESTATE ADVISOR ♦ Forecast Period: 3 to 15 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions currently favor sellers; expects cap rates to hold steady over the next six months; no longer uses rent spikes.	Southwest/ Austin	3.0% to 5.0%	2.0% to 3.0%	6.00% to 7.00% (CBD); 7.00% to 8.50% (suburbs)	0.5% to 6.0%	6.50% to 10.00% (suburbs)	4.50% to 7.75% (CBD); 5.50% to 8.50% (suburbs)	70.0% to 75.0%	5 to 9	5.0% to 7.0%	\$0.10 to \$0.20	5 to 8				
INVESTMENT FIRM ♦ Forecast Period: 5 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions equally favor buyers and sellers; expects overall cap rates to hold steady over the next six months.	Southeast/ Jacksonville	3.0%	2.5% to 3.0%	8.00% to 8.50% in both CBD & suburbs	2.0% to 3.0%	9.00% to 10.50% (suburbs)	8.00% to 9.00% (CBD); 7.50% to 8.50% (suburbs)	70.0% to 75.0%	6 to 10	5.0% to 10.0%	\$0.20 to \$0.30	4				

Source: Personal survey conducted by PwC during April 2017.

National Regional Mall Market

As the retail sector remains challenged by the growing popularity of on-line shopping, many regional malls continue to deal with store closings and the need to continually work on ways to draw in consumers using interior and exterior facelifts, dynamic merchant rosters, and “live-ly shopping experiences.” Carrying out these tasks can be very costly and is one reason that most flourishing malls are toward the “A” end of the class spectrum while other centers are struggling.

Our Survey shows that Class-A+ regional malls generate in-line retail sales of at least \$650.00 per square foot while Class-A malls tally sales of

between \$500.00 and \$649.00 per square foot (see page 100). These “trophy” malls tend to be located in high-density, affluent or tourist markets and have proven track records of strong sales growth. It’s not surprising that “Class-A malls continue to be highly sought after by investors,” says a participant. However, few Class-A+ malls have been offered for sale as of late and those that do come up for sale are priced quite high.

On the flip side, Class-B regional mall trades have risen significantly over the past three years, demonstrating that ownership of these assets remains attractive to certain investors. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	72.0%	▼
Range	50.0% to 85.0%	

Months of Free Rent⁽¹⁾:

Average	(2)
Range	(2)
% of participants using	(2)

Average Overall Cap Rates:

Class A+	4.69%	▼
Class A	5.44%	▲
Class B+	6.59%	▲

* ▼, ▲, = change from prior quarter

(1) on a ten-year lease

(2) 60% are not using free rent

Table 1
NATIONAL REGIONAL MALL MARKET^(d)
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.00% – 11.50%	5.50% – 11.50%	5.50% – 11.50%	6.00% – 12.00%	5.50% – 14.00%
Average	7.60%	7.70%	7.65%	8.67%	9.33%
Change (Basis Points)		- 10	- 5	- 107	- 173
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 10.00%	4.00% – 10.00%	4.00% – 9.00%	4.25% – 10.00%	4.75% – 10.50%
Average	6.20%	6.13%	6.00%	6.60%	7.23%
Change (Basis Points)		+ 7	+ 20	- 40	- 103
RESIDUAL CAP RATE					
Range	4.00% – 10.00%	4.00% – 10.00%	4.00% – 9.00%	4.50% – 11.00%	5.00% – 12.00%
Average	6.70%	6.70%	6.50%	6.94%	7.56%
Change (Basis Points)		0	+ 20	- 24	- 86
MARKET RENT CHANGE^b					
Range	1.00% – 4.00%	1.00% – 4.00%	0.00% – 5.00%	1.00% – 5.00%	(2.00%) – 3.00%
Average	2.45%	2.55%	2.65%	3.00%	1.58%
Change (Basis Points)		- 10	- 20	- 55	+ 87
EXPENSE CHANGE^b					
Range	2.00% – 5.00%	2.00% – 5.00%	2.00% – 5.00%	0.00% – 3.00%	0.00% – 4.00%
Average	3.00%	3.00%	3.00%	2.17%	2.25%
Change (Basis Points)		0	0	+ 83	+ 75
MARKETING TIME^c					
Range	3 – 18	3 – 18	3 – 24	3 – 18	3 – 18
Average	9.0	8.7	9.0	8.8	8.4
Change (▼, ▲, =)		▲	=	▲	▲

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

d. relates to Class A+, A, B+, and B malls

National Power Center Market

While the current retail evolution presents challenges to owners in the national power center market as they worry about tenant health and potential vacancies, it also offers some owners opportunities to reconfigure spaces and retenant properties. “Merchant bankruptcies and store closings are allowing us to make improvements and enhance our properties,” says a participant.

The changing retail landscape is also allowing “the strong to survive,” making investors feel more comfortable with their acquisitions of power centers even in a world where on-line retail sales growth continues to surge. “It’s again becoming a preferred

property type for buyers as a lot of tenants have right sized their formats,” affirms an investor.

Recent power center trades include First Colony Commons, a 410,121-square-foot center in the Houston suburb of Sugar Land and Centre at Westbank, a 174,445-square-foot center located just south of New Orleans. First Colony Commons was 99.0% leased at the time of sale with tenants including The Home Depot, Tuesday Morning, Babies “R” Us, and Office Depot. Centre at Westbank was built in 2001, fully leased when it sold, and had a tenant roster that included Best Buy, Barnes & Noble, Michaels, and Petco. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	69.0%	=
Range	55.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	5	=
Range	0 to 12	
% of participants using	50.0%	=

Average Overall Cap Rates:

75.0% big-box space	6.33%	▲
85.0% big-box space	6.48%	=
100.0% big-box space	6.63%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 2
NATIONAL POWER CENTER MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.00%	6.00% – 11.00%
Average	7.56%	7.69%	7.79%	8.13%	8.32%
Change (Basis Points)		- 13	- 23	- 57	- 76
OVERALL CAP RATE (OAR)^a					
Range	5.25% – 8.00%	5.25% – 8.00%	5.00% – 8.00%	5.50% – 8.00%	6.00% – 9.00%
Average	6.35%	6.39%	6.35%	6.65%	7.14%
Change (Basis Points)		- 4	0	- 30	- 79
RESIDUAL CAP RATE					
Range	5.50% – 9.00%	5.50% – 9.00%	5.00% – 9.00%	6.00% – 9.00%	6.00% – 9.00%
Average	7.00%	6.92%	6.81%	7.15%	7.41%
Change (Basis Points)		+ 8	+ 19	- 15	- 41
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 3.00%	0.00% – 3.00%
Average	1.96%	1.96%	2.00%	1.40%	1.21%
Change (Basis Points)		0	- 4	+ 56	+ 75
EXPENSE CHANGE^b					
Range	0.00% – 5.00%	0.00% – 3.00%	2.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%
Average	2.75%	2.58%	2.75%	2.50%	2.54%
Change (Basis Points)		+ 17	0	+ 25	+ 21
MARKETING TIME^c					
Range	2 – 18	2 – 18	2 – 18	2 – 18	3 – 18
Average	5.6	5.8	6.1	6.1	7.1
Change (▼, ▲, =)		▼	▼	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

National Strip Shopping Center Market

For the second half of 2017, the primary investment goals of our Survey participants vary greatly in the national strip shopping center market. “We are looking to sell weaker assets and hold our best assets,” shares an investor. “We continue to seek off-market opportunities in more urban settings,” says another. Clearly, the desire to own strip shopping centers remains strong, which should keep the best assets aggressively priced.

In a recent grocery-anchored sale, New Market Properties acquired Castleberry-Southard, an 80,018-square-foot shopping center anchored by a 45,600-square-foot Publix. Another recent trade included the Promenade

Shopping Plaza, a 202,696-square-foot center anchored by Publix. Investors are also developing new grocery-anchored centers, such as Landstar Marketplace, a 62,222-square-foot shopping center planned in Orlando. This property will be anchored by a 43,865-square-foot Walmart Neighborhood Market.

While strip shopping centers without grocery store anchors are also being looked at by investors, many are concerned about the “risk associated with too much in-line space.” In such centers, investors are looking for established service-oriented tenants, like dry cleaners and barbers, as well as dining establishments. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	72.0%	=
Range	50.0% to 100.0%	

Months of Free Rent⁽¹⁾:

Average	2	=
Range	0 to 6	
% of participants using	44.0%	▼

Market Conditions Favor:

Buyers	11.0%	=
Sellers	44.0%	=
Neither	45.0%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 3
NATIONAL STRIP SHOPPING CENTER MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 10.50%	5.00% – 10.50%	6.00% – 10.75%	6.25% – 11.00%	6.50% – 12.50%
Average	7.32%	7.39%	7.54%	8.31%	8.41%
Change (Basis Points)		-7	-22	-99	-109
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 9.50%	4.00% – 9.50%	4.50% – 9.50%	5.00% – 10.00%	5.50% – 9.50%
Average	6.26%	6.32%	6.26%	7.09%	7.18%
Change (Basis Points)		-6	0	-83	-92
RESIDUAL CAP RATE					
Range	4.75% – 9.75%	4.75% – 9.75%	4.75% – 9.75%	6.00% – 10.00%	6.00% – 12.00%
Average	6.50%	6.56%	6.50%	7.44%	7.77%
Change (Basis Points)		-6	0	-94	-127
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 5.00%	0.00% – 5.00%
Average	1.72%	1.83%	1.89%	1.78%	1.59%
Change (Basis Points)		-11	-17	-6	+13
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.50% – 3.00%	2.50% – 5.00%
Average	2.69%	2.69%	2.69%	2.97%	3.11%
Change (Basis Points)		0	0	-28	-42
MARKETING TIME^c					
Range	2 – 18	2 – 12	2 – 12	2 – 12	2 – 18
Average	6.2	6.3	5.8	6.3	7.0
Change (▼, ▲, =)		▼	▲	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

National CBD Office Market

While overall fundamentals remain healthy for the national CBD office market, there is a sense among surveyed investors that “this particular office segment has reached its capacity in terms of leasing ability and additions to supply.” For the first quarter of 2017, the overall vacancy rate for the national CBD office market stood at 12.4% – unchanged from the prior quarter, up slightly from a year ago, and up 50 basis points over the past two years, according to Cushman & Wakefield.

One major concern is that the amount of new supply has topped absorption in each of the last two quarters. Specifically, speculative

construction for the U.S. CBD office market totaled approximately four million square feet for the first three months of 2017 while direct absorption totaled just 350,000 square feet. As market conditions appear to soften in many CBD office areas, some investors are “opting not to invest,” looking “to find mispriced deals,” or focusing on “asset leasing and sustaining occupancy.”

Shifts in this market’s quarterly key indicators underscore a cautious outlook among investors. Most notably, its average overall cap rate moves up 13 basis point to 5.68% – this market’s highest quarterly average since year-end 2015. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	69.0%	=
Range	50.0% to 85.0%	

Months of Free Rent⁽¹⁾:

Average	6	=
Range	0 to 15	
% of participants using	86.0%	=

Market Conditions Favor:

Buyers	14.0%	=
Sellers	29.0%	▼
Neither	57.0%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 4
NATIONAL CBD OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 9.50%	5.50% – 9.50%	5.50% – 10.00%	6.00% – 11.00%	5.25% – 11.00%
Average	7.05%	7.09%	7.16%	7.89%	8.53%
Change (Basis Points)		- 4	- 11	- 84	- 148
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 7.50%	3.50% – 7.50%	3.50% – 7.50%	3.75% – 8.00%	4.25% – 10.00%
Average	5.68%	5.55%	5.55%	6.30%	6.86%
Change (Basis Points)		+ 13	+ 13	- 62	- 118
RESIDUAL CAP RATE					
Range	4.75% – 7.50%	4.75% – 7.50%	4.75% – 7.50%	4.75% – 9.00%	5.25% – 11.00%
Average	6.13%	6.11%	6.02%	6.79%	7.55%
Change (Basis Points)		+ 2	+ 11	- 66	- 142
MARKET RENT CHANGE^b					
Range	0.00% – 6.00%	0.00% – 6.00%	0.00% – 7.00%	0.00% – 6.00%	(1.00%) – 9.00%
Average	2.57%	2.64%	2.86%	2.39%	2.56%
Change (Basis Points)		- 7	- 29	+ 18	+ 1
EXPENSE CHANGE^b					
Range	0.00% – 5.00%	0.00% – 4.00%	2.00% – 4.00%	1.00% – 3.00%	2.00% – 4.00%
Average	2.79%	2.64%	2.79%	2.61%	2.75%
Change (Basis Points)		+ 15	0	+ 18	+ 4
MARKETING TIME^c					
Range	2 – 18	2 – 12	2 – 15	2 – 15	2 – 18
Average	6.8	6.4	6.6	6.9	7.8
Change (▼, ▲, =)		▲	▲	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

National Suburban Office Market

Even though the overall vacancy rate for the national suburban office market is one of the lowest it's been in the past five years, some investors are shying away from acquiring more assets right now. "Our strategy is to avoid this asset class for the remainder of 2017," reveals an investor. On the other hand, some see short-term potential here. "We see some opportunity to buy over the next 12 to 18 months or until interest rates begin to move up enough to impede deals," shares another.

Overall, various quarterly shifts in this market's Survey results highlight a bit of trepidation among surveyed investors. First, this market's average

initial-year market rent change rate holds steady at 2.03% this quarter. Second, its average tenant retention rate assumption slips to 63.0%. And lastly, the average amount of free rent offered to tenants on a ten-year lease moves up to seven months.

As more hesitancy creeps into the industry, a growing number of participants are "tidying up their portfolios" by streamlining operating costs and looking to sell weaker assets. "We are interested in selling some properties, but most buyers are being very selective." Interestingly, most Survey participants (62.0%) currently view this market as neutral – equally favoring buyers and sellers. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	63.0%	▼
Range	40.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	7	▲
Range	0 to 18	
% of participants using	88.0%	=

Market Conditions Favor:

Buyers	25.0%	=
Sellers	13.0%	=
Neither	62.0%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 5
NATIONAL SUBURBAN OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 11.50%	6.00% – 10.50%	5.75% – 10.00%	6.00% – 11.00%	6.00% – 12.50%
Average	7.97%	7.88%	7.59%	8.03%	8.72%
Change (Basis Points)		+ 9	+ 38	- 6	- 75
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 10.00%	5.00% – 9.50%	4.50% – 9.00%	5.00% – 9.00%	5.00% – 10.50%
Average	6.64%	6.61%	6.43%	6.75%	7.57%
Change (Basis Points)		+ 3	+ 21	- 11	- 93
RESIDUAL CAP RATE					
Range	6.00% – 11.50%	6.00% – 10.50%	5.50% – 10.00%	6.00% – 10.00%	6.00% – 11.00%
Average	7.45%	7.39%	7.28%	7.55%	8.03%
Change (Basis Points)		+ 6	+ 17	- 10	- 58
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	(3.00%) – 4.00%
Average	2.03%	2.03%	2.25%	2.19%	1.38%
Change (Basis Points)		0	- 22	- 16	+ 65
EXPENSE CHANGE^b					
Range	0.00% – 4.00%	0.00% – 4.00%	2.00% – 4.00%	1.00% – 3.50%	2.00% – 4.00%
Average	2.75%	2.75%	2.91%	2.69%	2.79%
Change (Basis Points)		0	- 16	+ 6	- 4
MARKETING TIME^c					
Range	1 – 12	1 – 12	3 – 12	3 – 12	2 – 18
Average	6.0	6.0	6.1	7.6	8.5
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Atlanta Office Market

Investors' opinions are divided with regard to the current state of the Atlanta office market. While most (67.0%) view this market as neutral – equally favoring buyers and sellers, the remainder is equally split between the advantage being held by either buyers (16.5%) or sellers (16.5%). Similarly, Survey participants outline varied strategies with regard to investing here in the coming months. “We seek build-to-suit development opportunities and value-added acquisitions,” remarks one investor. Another exclaims, “We are buying as much office as we can!”

Buyer optimism is evidenced by a positive outlook for property value

growth among most investors. Specifically, they foresee values declining as much as 5.0% or increasing as much as 10.0% in the coming year. The average value change is an increase of 2.5% – above the aggregate average of 1.6% for the Survey's 19 city-specific office markets.

Regardless of the confidence in near-term property value changes here, this market's average overall cap rate inches up for the third consecutive quarter, suggesting a more cautious perspective among investors. “Our focus is minimizing downside risk versus putting a premium on upside potential,” says a participant. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	69.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	6	=
Range	1 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.21%	▲
CBD	6.75%	=
Suburbs	7.67%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 6
ATLANTA OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 10.25%	6.00% – 10.25%	6.00% – 9.50%	6.00% – 10.00%	7.75% – 11.00%
Average	8.33%	8.33%	7.98%	8.53%	9.01%
Change (Basis Points)		0	+ 35	- 20	- 68
OVERALL CAP RATE (OAR)^a					
Range	5.25% – 9.00%	5.25% – 9.00%	5.25% – 9.00%	6.25% – 9.25%	7.00% – 10.00%
Average	7.21%	7.18%	7.10%	7.81%	8.40%
Change (Basis Points)		+ 3	+ 11	- 60	- 119
RESIDUAL CAP RATE					
Range	6.00% – 9.00%	6.00% – 9.00%	6.00% – 9.00%	6.50% – 9.25%	7.00% – 10.00%
Average	7.48%	7.39%	7.41%	7.83%	8.46%
Change (Basis Points)		+ 9	+ 7	- 35	- 98
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 7.00%	0.00% – 5.00%	(3.00%) – 2.00%
Average	3.04%	3.04%	3.50%	1.83%	0.04%
Change (Basis Points)		0	- 46	+ 121	+ 300
EXPENSE CHANGE^b					
Range	1.50% – 5.00%	1.50% – 5.00%	0.00% – 3.50%	0.00% – 3.50%	0.00% – 3.00%
Average	2.90%	2.90%	2.28%	2.33%	2.21%
Change (Basis Points)		0	+ 62	+ 57	+ 69
MARKETING TIME^c					
Range	2 – 12	1 – 12	1 – 12	1 – 12	2 – 15
Average	5.8	5.8	4.5	4.1	7.9
Change (▼, ▲, =)			▲	▲	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Boston Office Market

While the delivery of new space to Boston's downtown office area has kept rental rates elevated, it has also created large blocks of empty space as some tenants have relocated. Many of these empty spaces have reportedly been vacant for 12 months or more. As a result, the vacancy rate has risen recently in some core submarkets, like the Black Bay.

The increased amount of vacated space, combined with a pullback in tenant demand, has some investors speculating that this office market has peaked. "Rents have peaked, and we suspect that a downward adjustment is looming so it's a good time sell," attests a participant.

Other investors also sense that this market's performance is slowing. "It's time for us to preserve value by signing tenant renewals at current rates and leasing vacant floors," says another. However, others aren't planning to "throw in the towel." "We are in it for the long term here," exclaims a participant. "Steady as it goes," states another.

Over the next 12 months, most of our surveyed investors foresee property value growth staying positive for this market. Expected value changes range from -5.0% to +7.0% and average +2.8% – however, lower than its average outlook a year ago when it was +3.6%. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	67.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	6	=
Range	1 to 10	
% of participants using	83.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.27%	=
CBD	5.42%	=
Suburbs	7.13%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 7
BOSTON OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.75% – 10.00%	5.75% – 10.00%	6.00% – 10.00%	6.25% – 11.00%	6.75% – 15.00%
Average	7.43%	7.42%	7.49%	8.28%	9.28%
Change (Basis Points)		+ 1	- 6	- 85	- 185
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 10.00%	4.00% – 10.00%	4.00% – 9.00%	4.25% – 9.50%	5.00% – 12.00%
Average	6.27%	6.27%	6.19%	6.83%	7.80%
Change (Basis Points)		0	+ 8	- 56	- 153
RESIDUAL CAP RATE					
Range	5.00% – 10.50%	5.00% – 10.50%	5.00% – 9.00%	5.75% – 11.00%	6.00% – 12.00%
Average	6.82%	6.80%	6.78%	7.34%	7.94%
Change (Basis Points)		+ 2	+ 4	- 52	- 112
MARKET RENT CHANGE^b					
Range	0.00% – 6.00%	0.00% – 6.00%	0.00% – 7.00%	0.00% – 6.00%	0.00% – 5.00%
Average	3.54%	3.67%	3.83%	3.46%	1.64%
Change (Basis Points)		- 13	- 29	+ 8	+ 190
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.50% – 4.00%	0.00% – 4.50%
Average	2.71%	2.71%	2.71%	3.04%	2.89%
Change (Basis Points)		0	0	- 33	- 18
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 12	2 – 12
Average	5.8	6.2	6.2	5.6	6.7
Change (▼, ▲, =)		▼	▼	▲	▼
a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months					

Charlotte Office Market

A healthy local economy continues to sustain fundamentals in the Charlotte office market. In particular, recent job growth in office-space-using employment sectors is generating tenant demand for space. Year over year through March 2017, a total of 3,100 jobs were added to the financial-services sector while 12,100 were added to the professional-and-business-services sector in the Charlotte-Concord-Gastonia metro area, as per the U.S. Bureau of Labor Statistics.

This job growth has contributed to robust leasing activity and single-digit vacancy rates. In fact, the first quarter vacancy rates for Charlotte's CBD (7.9%) and suburbs (8.4%) sit

well below the national averages of 12.4% and 13.6%, respectively, as per Cushman & Wakefield. Low vacancy has also led to increases in the average rental rates for the local CBD and suburbs. "We are focused on tenant retention and growing rental rates as vacancy declines," affirms a participant.

Even though the outlook for future rent growth among surveyed investors dips slightly this quarter, investment appetite is steady. "Capital flows to the CBD continue to be strong, yielding a lot of competition for deals," says an investor. "We plan to invest in local properties with good amenities and cash flow," states another. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	72.0%	=
Range	65.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	6	=
Range	1 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.90%	=
CBD	6.50%	=
Suburbs	7.30%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 8
CHARLOTTE OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 10.00%	6.50% – 10.00%	6.50% – 11.00%	7.00% – 12.00%	8.00% – 12.00%
Average	8.36%	8.36%	8.48%	9.17%	9.34%
Change (Basis Points)		0	-12	-81	-98
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 8.75%	5.00% – 8.75%	5.50% – 8.75%	5.00% – 9.00%	6.00% – 9.50%
Average	6.90%	6.90%	6.99%	7.41%	8.07%
Change (Basis Points)		0	-9	-51	-117
RESIDUAL CAP RATE					
Range	5.50% – 8.50%	5.50% – 8.50%	5.50% – 8.50%	5.75% – 9.00%	6.00% – 10.00%
Average	7.18%	7.20%	7.11%	7.44%	8.21%
Change (Basis Points)		-2	+7	-26	-103
MARKET RENT CHANGE^b					
Range	2.00% – 4.50%	2.00% – 4.50%	0.00% – 6.00%	0.00% – 10.00%	0.00% – 5.00%
Average	3.10%	3.15%	3.20%	2.75%	1.33%
Change (Basis Points)		-5	-10	+35	+177
EXPENSE CHANGE^b					
Range	1.50% – 4.00%	1.50% – 4.00%	1.80% – 3.00%	2.00% – 4.00%	2.00% – 4.00%
Average	2.45%	2.45%	2.49%	2.71%	2.79%
Change (Basis Points)		0	-4	-26	-34
MARKETING TIME^c					
Range	1 – 9	1 – 9	1 – 12	1 – 12	2 – 12
Average	3.9	3.9	4.5	4.5	5.8
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Chicago Office Market

While Chicago's CBD office market witnessed a burst of activity over the past year with new space deliveries, tenant relocations, and leasing activity, the net effect has been a reversion to its overall vacancy rate of a year ago (12.9%) – 50 basis points above its prior quarter rate. In Chicago's suburbs, the overall vacancy rate rose from a year ago due to a slowdown in leasing activity despite a lack of new supply. Overall, the consensus among investors is that this market has entered a "status quo" mode and that now is the time to either focus on increasing occupancy or selling as much as possible.

When offering office buildings in

this market, our Survey results show that prices range from 75.0% to 120.0% of replacement cost and average 83.9% of replacement cost. Even though this figure is well below the average for the Survey's 19 city-specific office markets (92.8%), most investors believe that sellers still control pricing more than buyers in this market.

From a leasing standpoint, however, tenants appear to hold the upper hand as vacancy rates are either rising or holding steady throughout the market. One exception may be the Class-A office submarket, where average rental rates continue to rise in both the CBD and suburbs. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	70.0%	=
Range	60.0% to 85.0%	

Months of Free Rent⁽¹⁾:

Average	10	=
Range	6 to 12	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.24%	▼
CBD	5.95%	▼
Suburbs	8.54%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 9
CHICAGO OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.75% – 12.00%	5.75% – 12.00%	6.00% – 12.00%	6.25% – 13.00%	6.50% – 13.00%
Average	8.64%	8.68%	8.61%	8.98%	9.13%
Change (Basis Points)		- 4	+ 3	- 34	- 49
OVERALL CAP RATE (OAR)^a					
Range	4.50% – 10.00%	4.50% – 10.00%	5.00% – 10.00%	5.50% – 11.00%	5.75% – 11.00%
Average	7.24%	7.26%	7.36%	7.96%	8.11%
Change (Basis Points)		- 2	- 12	- 72	- 87
RESIDUAL CAP RATE					
Range	5.50% – 11.00%	5.50% – 11.00%	5.50% – 11.00%	6.00% – 11.00%	6.50% – 11.00%
Average	7.75%	7.73%	7.72%	8.05%	8.22%
Change (Basis Points)		+ 2	+ 3	- 30	- 47
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 4.50%	0.00% – 4.00%	(10.00%) – 3.00%
Average	2.14%	2.14%	2.00%	1.57%	0.44%
Change (Basis Points)		0	+ 14	+ 57	+ 170
EXPENSE CHANGE^b					
Range	2.00% – 6.00%	2.00% – 6.00%	2.00% – 5.00%	2.00% – 3.00%	2.00% – 3.00%
Average	3.29%	3.29%	3.14%	2.86%	2.94%
Change (Basis Points)		0	+ 15	+ 43	+ 35
MARKETING TIME^c					
Range	2 – 9	2 – 9	2 – 8	2 – 8	3 – 12
Average	4.7	4.5	4.2	4.2	6.8
Change (▼, ▲, =)		▲	▲	▲	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Dallas Office Market

While most surveyed investors believe current market conditions in the Dallas office market favor sellers, many are focused on bolstering rent rolls rather than selling assets in this prolonged expansion. “In the coming year, we plan to lease up and hold,” explains an investor. “We need to sign longer lease deals at this point in the cycle,” states another.

Robust job growth in office-space-using sectors is driving leasing activity in this market, where leasing totaled nearly 3.2 million square feet in the first quarter, as per Cushman & Wakefield. Specifically, in the 12 months leading up to March of this year, the professional-and-business-

services sector added 27,300 jobs and the financial-services sector added 10,800 jobs in the Dallas-Plano-Irving metro area, according to the U.S. Bureau of Labor Statistics.

Amid this positive activity, both the average overall cap rate and the average initial-year market rent change rate remain unchanged this quarter at 6.50% and 3.46%, respectively (see Table 10). “Steady as she goes,” underscores a participant. While most investors foresee overall cap rates holding steady over the next six months, expectations of future rent growth here are the fourth highest among the 19 city-specific office markets in our Survey. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	60.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	6	▲
Range	3 to 10	
% of participants using	67.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.50%	=
CBD	6.25%	=
Suburbs	6.75%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 10
DALLAS OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 11.00%	6.00% – 11.00%	6.00% – 11.00%	7.00% – 11.00%	7.50% – 12.00%
Average	7.87%	7.94%	8.14%	8.15%	9.02%
Change (Basis Points)		-7	-27	-28	-115
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 8.50%	5.00% – 8.50%	5.00% – 9.00%	5.25% – 9.00%	5.50% – 10.00%
Average	6.50%	6.50%	6.84%	7.14%	7.87%
Change (Basis Points)		0	-34	-64	-137
RESIDUAL CAP RATE					
Range	5.50% – 9.00%	5.50% – 9.00%	6.00% – 9.00%	6.25% – 9.50%	7.00% – 10.00%
Average	7.15%	7.18%	7.37%	7.60%	8.21%
Change (Basis Points)		-3	-22	-45	-106
MARKET RENT CHANGE^b					
Range	2.00% – 6.00%	2.00% – 6.00%	0.00% – 6.00%	1.00% – 7.00%	0.00% – 5.00%
Average	3.46%	3.46%	3.47%	4.17%	1.83%
Change (Basis Points)		0	-1	-71	+163
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.50% – 4.00%	1.00% – 3.00%
Average	2.88%	2.88%	2.91%	3.13%	2.71%
Change (Basis Points)		0	-3	-25	+17
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	1 – 12	3 – 24
Average	5.3	5.3	4.6	3.7	7.6
Change (▼, ▲, =)		=	▲	▲	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Denver Office Market

A 28-basis-point decline in the Denver office market's average initial-year market rent change rate highlights its unsteady performance seen in the first quarter of this year. First, its overall vacancy rose 90 basis points to 14.5% in the face of major additions to supply and an influx of sublease space, according to Cushman & Wakefield. Second, despite solid leasing activity, net absorption was negative in both the CBD and suburban submarkets.

Due to this slip in market fundamentals, surveyed investors are resolute to strengthen rent rolls in their assets. "We are aggressively leasing space that will be available in 2018,"

comments a participant. "Our strategy is to keep our buildings full and control costs," echoes another.

These recent trends aside, the long-term outlook for this market is bright given its expanding transportation network, creative development and redevelopment projects, and diverse tenant pool. "Our goal is to acquire assets well located along transit lines," notes an investor.

In the coming year, Survey participants unanimously see property values rising here. While some see increases of up to 5.0%, the average increase is 1.8% – just above the 1.6% average for the 19 city-specific office markets in our Survey. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	4	=
Range	0 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.56%	▲
CBD	5.88%	▼
Suburbs	7.25%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 11
DENVER OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.75% – 11.00%	7.00% – 11.00%	6.50% – 11.00%	6.50% – 11.00%	7.50% – 15.00%
Average	7.98%	8.09%	7.98%	7.92%	9.88%
Change (Basis Points)		- 11	0	+ 6	- 190
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	6.00% – 11.00%
Average	6.56%	6.51%	6.45%	6.77%	7.87%
Change (Basis Points)		+ 5	+ 11	- 21	- 131
RESIDUAL CAP RATE					
Range	5.75% – 9.50%	5.75% – 9.50%	5.75% – 9.50%	6.25% – 9.50%	6.50% – 11.00%
Average	7.32%	7.35%	7.22%	7.52%	8.27%
Change (Basis Points)		- 3	+ 10	- 20	- 95
MARKET RENT CHANGE^b					
Range	2.00% – 4.00%	2.00% – 5.00%	3.00% – 5.00%	2.00% – 8.00%	(20.00%) – 5.00%
Average	2.80%	3.08%	3.67%	4.20%	(0.40%)
Change (Basis Points)		- 28	- 87	- 140	+ 320
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 5.00%	2.00% – 3.00%	3.00% – 3.00%
Average	2.90%	2.83%	3.00%	2.90%	3.00%
Change (Basis Points)		+ 7	- 10	0	- 10
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	1 – 6	2 – 12
Average	3.7	3.8	4.1	3.9	5.2
Change (▼, ▲, =)		▼	▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Houston Office Market

While high vacancy, abundant sublease space, and limited accessibility to debt persist in the Houston office market, a relative calming in oil pricing and a first-quarter increase in tonnage handled through the local port have some investors hopeful. “This market seems to have turned a corner, and many more buyers are spending time here trying to find deals,” remarks a participant. “We hope to see further absorption of space and positive job growth,” says another. In fact, sales volume in the first quarter of 2017 and the resulting average price per square foot were both more than twice the levels seen during the same period a year

ago, as per Real Capital Analytics.

For now, however, the outlook for future rent growth falls again this quarter and remains the only negative average initial-year market rent change rate in our Survey, reflecting the tentativeness among investors (see Table 12). “We will continue to deploy capital, but with caution,” states one investor. Another says, “We will look for distressed assets.”

For those investors that prefer to “lease and hold,” preserving value in existing assets is a priority. “Our plan is to complete various upgrades to our portfolio through retaining tenants and preparing for new ones as the market turns around here.” ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	63.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	10	▲
Range	2 to 24	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.31%	=
CBD	6.77%	▼
Suburbs	7.85%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 12
HOUSTON OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 14.00%	6.50% – 13.00%	6.50% – 12.00%	7.00% – 14.00%	7.00% – 14.00%
Average	9.19%	8.82%	8.68%	9.26%	9.25%
Change (Basis Points)		+ 37	+ 51	- 7	- 6
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 10.00%	5.75% – 10.00%	5.50% – 10.00%	5.00% – 11.00%	5.00% – 12.00%
Average	7.31%	7.31%	7.05%	7.60%	7.90%
Change (Basis Points)		0	+ 26	- 29	- 59
RESIDUAL CAP RATE					
Range	5.75% – 10.00%	6.50% – 10.00%	6.00% – 10.00%	5.00% – 11.00%	5.00% – 11.00%
Average	7.53%	7.56%	7.48%	7.80%	7.98%
Change (Basis Points)		- 3	+ 5	- 27	- 45
MARKET RENT CHANGE^b					
Range	(8.00%) – 3.00%	(8.00%) – 3.00%	(8.00%) – 3.00%	2.00% – 6.00%	0.00% – 7.00%
Average	(1.57%)	(1.36%)	(0.64%)	3.42%	2.83%
Change (Basis Points)		- 21	- 93	- 499	- 440
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.50%	2.50%	2.79%	2.67%	2.67%
Change (Basis Points)		0	- 29	- 17	- 17
MARKETING TIME^c					
Range	3 – 12	3 – 12	1 – 12	3 – 12	3 – 12
Average	8.5	8.9	7.5	6.7	7.3
Change (▼, ▲, =)		▼	▲	▲	▲

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Los Angeles Office Market

Solid fundamentals throughout the Los Angeles office market continue to persuade investors to search for ownership opportunities. The key focus for most of them, however, is “to find value creation.” As one participant notes, “We don’t want to overreach now so we are focusing on the basics of buying and seeing where we can add value.” In addition, investors caution against “overleveraging” as they anticipate interest rates moving up in the future.

A top-performing location in this market remains Los Angeles West, where strong tenant demand has owners commanding the highest average asking rental rate in the market.

Over the past year, the average asking rental rate in the West has increased 12.8% for all classes and 13.3% for Class-A office space, according to Cushman & Wakefield. It remains to be seen how this submarket will contend with the recent growth in inventory and the one million square feet of new supply slated for delivery in 2017.

As a whole, our surveyed investors are now using less aggressive rent growth assumptions in their cash flow forecasts than they were three months ago. As shown in Table 13, the average initial-year market rent change rate slips 16 basis points this quarter while the low end of its range falls to 1.50%. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	5	=
Range	0 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	5.84%	=
CBD	5.58%	=
Suburbs	6.10%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 13
LOS ANGELES OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.00% – 10.00%	5.00% – 9.00%	5.00% – 9.00%	5.75% – 10.00%	6.50% – 11.00%
Average	7.21%	7.04%	6.93%	7.48%	8.22%
Change (Basis Points)		+ 17	+ 28	- 27	- 101
OVERALL CAP RATE (OAR)^a					
Range	4.25% – 8.00%	4.25% – 8.00%	4.50% – 7.50%	4.50% – 7.50%	4.50% – 8.50%
Average	5.84%	5.84%	5.75%	6.01%	6.84%
Change (Basis Points)		0	+ 9	- 17	- 100
RESIDUAL CAP RATE					
Range	5.00% – 8.00%	5.00% – 8.00%	5.00% – 8.00%	5.00% – 8.00%	6.00% – 9.00%
Average	6.54%	6.52%	6.70%	6.61%	7.51%
Change (Basis Points)		+ 2	- 16	- 7	- 97
MARKET RENT CHANGE^b					
Range	1.50% – 6.00%	3.00% – 6.00%	2.00% – 7.00%	0.00% – 7.00%	0.00% – 5.00%
Average	3.67%	3.83%	4.00%	3.58%	2.50%
Change (Basis Points)		- 16	- 33	+ 9	+ 117
EXPENSE CHANGE^b					
Range	2.00% – 3.50%	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%
Average	2.71%	2.67%	2.70%	2.75%	2.75%
Change (Basis Points)		+ 4	+ 1	- 4	- 4
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	1 – 12	1 – 12
Average	4.4	4.9	4.7	4.8	5.5
Change (▼, ▲, =)		▼	▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Manhattan Office Market

Shifts in key indicators for the Manhattan office market this quarter suggest that investors see a combination of stability and uncertainty over the near term. First, this market's average overall cap rate holds steady at 4.98% – basically maintaining the same rate for the past four quarters yet still the lowest average cap rate of the 19 city-specific office markets in the Survey. Second, this market's average initial-year market rent change rate holds steady at 3.13% – one of this market's lowest quarterly averages since 2011 and the eighth highest among the Survey's 19 metro office markets.

Another indication of a “market

in flux” is an increase in the average amount of free rent offered on a ten-year lease. This quarter, the average moves up from eight to nine months. Combined, these shifts suggest that investors anticipate “modest price appreciation” in the near term.

Specifically, they see values rising as much as 7.0% and declining as much as 1.0%. The average expected value change is +3.2% over the next 12 months. Last quarter, the average expected change in value was +4.1%.

For the rest of 2017, surveyed investors note they are focused on “retaining tenants” and “acquiring assets that provide a compelling case compared to replacement cost.” ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	69.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	9	▲
Range	0 to 15	
% of participants using	100.0%	=

Market Conditions Favor:

Buyers	0.0%	=
Sellers	50.0%	▼
Neither	50.0%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 14
MANHATTAN OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.75% – 9.00%	5.75% – 9.00%	5.50% – 9.00%	6.00% – 9.00%	6.00% – 10.00%
Average	6.85%	6.88%	6.85%	7.44%	7.50%
Change (Basis Points)		-3	0	-59	-65
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 8.50%	3.50% – 8.50%	3.75% – 8.00%	4.00% – 8.00%	4.00% – 8.00%
Average	4.98%	4.98%	5.15%	5.25%	5.38%
Change (Basis Points)		0	-17	-27	-40
RESIDUAL CAP RATE					
Range	3.50% – 8.50%	3.50% – 8.50%	4.75% – 8.00%	5.00% – 8.00%	5.00% – 7.50%
Average	5.65%	5.67%	5.94%	6.08%	6.08%
Change (Basis Points)		-2	-29	-43	-43
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 6.50%	0.00% – 10.00%	3.00% – 10.00%
Average	3.13%	3.13%	3.54%	3.67%	5.21%
Change (Basis Points)		0	-41	-54	-208
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	0.00% – 4.00%	2.00% – 3.00%
Average	2.75%	2.75%	2.75%	2.75%	2.92%
Change (Basis Points)		0	0	0	-17
MARKETING TIME^c					
Range	1 – 9	1 – 6	1 – 6	1 – 6	3 – 6
Average	4.8	4.3	4.3	4.1	4.1
Change (▼, ▲, =)		▲	▲	▲	▲

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Northern Virginia Office Market

Even though the overall vacancy rate for the Northern Virginia office market remains well above the national average and well above its ten-year average, one Survey participant says that “buying more office buildings here is a priority for the remainder of the year.” It’s a difficult task, however, since limited offerings exist in the office areas where most buyers are looking. In addition, it can be challenging to underwrite assets in a market “where tenants’ appetite for space still remains unclear amid additions to supply.” Overall, this market’s fundamentals are viewed as “neutral” with respect to whether buyers or sellers control market pricing.

In the first quarter of 2017, about 2.2 million square feet of speculative construction were underway in the Northern Virginia office market, as per Cushman & Wakefield. In addition, another 2.5 million square feet of build-to-suit construction were counted. Most of this space (1.55 million square feet) is located in Tysons Corner while the second-largest total is located in Alexandria (720,000 square feet). One of the most anticipated developments in Northern Virginia is The Boro, a premier, mixed-use development of residential, retail, entertainment, and office space located along the metro’s new Silver Line in Tysons Corner. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	64.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	7	=
Range	2 to 12	
% of participants using	100.0%	=

Market Conditions Favor:

Buyers	20.0%	▼
Sellers	20.0%	=
Neither	60.0%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 15
NORTHERN VIRGINIA OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 9.50%	6.00% – 9.50%	6.00% – 9.50%	6.50% – 10.00%	7.00% – 9.50%
Average	7.55%	7.60%	7.75%	8.15%	8.42%
Change (Basis Points)		- 5	- 20	- 60	- 87
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 8.50%	5.00% – 8.50%	5.00% – 8.50%	5.00% – 9.00%	6.00% – 9.00%
Average	6.63%	6.68%	6.88%	7.10%	7.34%
Change (Basis Points)		- 5	- 25	- 47	- 71
RESIDUAL CAP RATE					
Range	5.75% – 8.50%	5.75% – 9.00%	5.75% – 8.50%	6.00% – 9.00%	5.00% – 9.00%
Average	6.85%	6.95%	7.25%	7.45%	7.52%
Change (Basis Points)		- 10	- 40	- 60	- 67
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	(5.00%) – 3.00%	0.00% – 3.50%
Average	1.40%	1.10%	1.30%	1.00%	1.79%
Change (Basis Points)		+ 30	+ 10	+ 40	- 39
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	2.00% – 3.00%
Average	1.90%	2.40%	2.40%	2.60%	2.82%
Change (Basis Points)		- 50	- 50	- 70	- 92
MARKETING TIME^c					
Range	1 – 8	1 – 8	3 – 9	3 – 9	2 – 9
Average	4.2	4.2	4.7	4.9	5.5
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Pacific Northwest Office Market

An expanding regional economy continues to benefit the Pacific Northwest office market. In Portland, the unemployment rate stood at 3.4% in February 2017 while it was 3.0% in both Bellevue and Seattle, as per the U.S. Bureau of Labor Statistics. Sectors that spur growth for leasing activity have been particularly positive, like the professional-and-business-services sector, which has grown annually since 2009 for the Seattle-Bellevue-Everett MSA and the Portland-Vancouver-Hillsboro MSA.

For investors looking for opportunities in Portland, “there are very few high-quality assets available for sale.” And those that do come to market

will likely be snatched up quickly as “Portland is now a target market for many buyers.” In lieu of acquiring new assets, some local owners are focused on “retaining tenants and leasing space in order to maintain a competitive position.”

In Bellevue, investors like the leasing and rental rate trends that continue to allow the city to “achieve stabilization much faster than anyone expected.” One surveyed investor feels that “there could be some good buying opportunities in this city if asset pricing rightfully reflected the risks associated with new supply and the anticipated contraction of a few local tenants.” ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	71.0%	▲
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	5	▼
Range	0 to 12	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.01%	▼
CBD	5.58%	▼
Suburbs	6.44%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 16
PACIFIC NORTHWEST OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.25% – 10.00%	5.25% – 10.50%	5.50% – 10.50%	6.00% – 11.00%	6.50% – 12.00%
Average	7.32%	7.38%	7.46%	7.88%	8.59%
Change (Basis Points)		- 6	- 14	- 56	- 127
OVERALL CAP RATE (OAR)^a					
Range	4.25% – 8.00%	4.25% – 8.00%	4.50% – 8.00%	4.50% – 9.00%	4.50% – 10.00%
Average	6.01%	6.03%	5.99%	6.46%	7.25%
Change (Basis Points)		- 2	+ 2	- 45	- 124
RESIDUAL CAP RATE					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	5.00% – 10.00%
Average	6.42%	6.45%	6.55%	6.83%	7.40%
Change (Basis Points)		- 3	- 13	- 41	- 98
MARKET RENT CHANGE^b					
Range	2.00% – 5.00%	2.00% – 5.00%	2.00% – 7.00%	0.00% – 8.00%	0.00% – 10.00%
Average	3.33%	3.42%	3.66%	3.94%	4.79%
Change (Basis Points)		- 9	- 33	- 61	- 146
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%
Average	2.86%	2.86%	2.86%	2.85%	2.75%
Change (Basis Points)		0	0	+ 1	+ 11
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	1 – 12	1 – 12
Average	4.9	4.9	4.7	5.1	4.8
Change (▼, ▲, =)		=	▲	▼	▲

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Philadelphia Office Market

The Survey's average overall cap rate for the Philadelphia office market dips ten basis points this quarter to its lowest level since 2001 when this market debuted in our Survey. Specifically, this key investment indicator sits at 7.43%, well below its 16-year Survey average of 8.76%.

As shown in the Key 2Q17 Survey Stats, the CBD's average overall cap rate of 6.80% is 125 basis points below the average for the suburbs, stressing investors' perception of less risk for CBD assets. By comparison, this spread was 120 basis points a year ago and 113 basis points two years ago.

Despite having a higher average

overall cap rate, the overall vacancy rate for Philly's suburbs fell to its lowest level since 2001 in the first quarter of this year. As a result, certain investors are looking to "acquire well-located suburban office properties with good cash flow."

In addition to buying suburban office assets, investors outline other strategies for this market through the end of the year. "We plan to wait and see the effects of increasing interest rates," says an investor. And, while one investor is focused on leasing and cost control at the asset level, another will "continue to monitor key acquisition targets while not stretching too far on pricing." ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	66.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	6	▲
Range	3 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.43%	▼
CBD	6.80%	▼
Suburbs	8.05%	▼

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 17
PHILADELPHIA OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	7.00% – 11.00%	7.00% – 11.00%	7.00% – 10.00%	7.00% – 12.00%	8.00% – 11.00%
Average	8.51%	8.64%	8.51%	9.21%	9.18%
Change (Basis Points)		- 13	0	- 70	- 67
OVERALL CAP RATE (OAR)^a					
Range	6.00% – 9.50%	6.00% – 9.50%	6.00% – 9.00%	6.50% – 10.50%	7.50% – 10.00%
Average	7.43%	7.53%	7.50%	8.26%	8.53%
Change (Basis Points)		- 10	- 7	- 83	- 110
RESIDUAL CAP RATE					
Range	6.00% – 10.00%	6.00% – 10.00%	6.00% – 9.00%	6.50% – 10.00%	7.00% – 11.00%
Average	8.00%	8.03%	7.85%	8.19%	8.75%
Change (Basis Points)		- 3	+ 15	- 19	- 75
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%
Average	1.85%	1.90%	1.85%	1.80%	1.00%
Change (Basis Points)		- 5	0	+ 5	+ 85
EXPENSE CHANGE^b					
Range	0.00% – 4.00%	0.00% – 3.00%	0.00% – 3.00%	1.00% – 3.00%	2.75% – 3.00%
Average	2.40%	2.30%	2.30%	2.63%	2.96%
Change (Basis Points)		+ 10	+ 10	- 23	- 56
MARKETING TIME^c					
Range	3 – 12	3 – 12	3 – 12	3 – 12	4 – 18
Average	6.0	6.0	5.4	6.1	7.6
Change (▼, ▲, =)		=	▲	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Phoenix Office Market

Solid underlying fundamentals in the Phoenix office market are directly related to gains in two major office-space-using employment sectors.

First, the professional-and-business-services sector in the Phoenix-Mesa-Scottsdale metropolitan area gained 9,400 jobs year over year through March 2017, as per the U.S. Bureau of Labor Statistics. At the same time, this metro's financial-services sector added 10,400 jobs.

As a result of vigorous tenant demand, the first quarter 2017 overall vacancy rate declined 80 basis points in Phoenix's CBD and 90 basis points in its suburbs over the prior year, as per Cushman & Wakefield.

Plus, this market's average overall rental rates increased 5.5% in the CBD and 6.3% in the suburbs over the same period. By comparison, the average growth rates for the U.S. were 6.4% and 7.2%, respectively.

Our Survey results also show investors being aggressive with rent growth assumptions this quarter (see Table 18). Specifically, this market's average initial-year market rent change rate assumption rises to 4.10%, representing the highest average among the 19 city-specific office markets surveyed. Furthermore, investors foresee office property values in Phoenix rising an average of 5.1% in the coming year. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	69.0%	=
Range	60.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	7	=
Range	2 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.62%	▼
CBD	6.47%	▼
Suburbs	6.78%	▼

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 18
PHOENIX OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	7.00% – 10.00%	7.00% – 10.00%	7.00% – 11.00%	7.00% – 14.50%	7.75% – 16.00%
Average	8.33%	8.28%	8.43%	9.19%	10.99%
Change (Basis Points)		+ 5	- 10	- 86	- 266
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 8.00%	5.00% – 8.00%	5.00% – 8.50%	5.50% – 10.00%	6.50% – 11.00%
Average	6.62%	6.79%	6.84%	7.35%	9.26%
Change (Basis Points)		- 17	- 22	- 73	- 264
RESIDUAL CAP RATE					
Range	6.00% – 8.00%	5.50% – 8.25%	5.50% – 9.00%	6.25% – 9.50%	7.00% – 10.00%
Average	7.08%	7.13%	7.15%	7.56%	8.80%
Change (Basis Points)		- 5	- 7	- 48	- 172
MARKET RENT CHANGE^b					
Range	2.00% – 7.00%	2.00% – 7.00%	2.00% – 7.00%	0.00% – 5.00%	0.00% – 2.00%
Average	4.10%	4.00%	4.10%	1.88%	0.30%
Change (Basis Points)		+ 10	0	+ 222	+ 380
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	2.00% – 3.00%
Average	2.50%	2.50%	2.70%	2.75%	2.80%
Change (Basis Points)		0	- 20	- 25	- 30
MARKETING TIME^c					
Range	1 – 18	1 – 18	1 – 12	1 – 9	2 – 12
Average	7.5	7.5	5.1	5.5	5.5
Change (▼, ▲, =)		=	▲	▲	▲
a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months					

San Diego Office Market

After 18 consecutive quarters of either increasing or holding steady, the average initial-year market rent change rate in the San Diego office market falls ten basis points this quarter to 3.70% (see Table 19). Nevertheless, it exceeds the composite average of 2.55% for the Survey's 19 city-specific office markets. Investors' use of such an optimistic assumption stems from the local employment growth, which continues to fuel demand for space. In fact, total leasing activity was up 20.4% year over year through the first quarter of 2017, as per Cushman & Wakefield. The Class-A sector represented 32.0% of the total space leased.

Regardless of positive leasing trends, our investors are offering incentives to tenants in an effort to "limit vacancy exposure in the coming year." For instance, investors unanimously agree that free rent exists in this market. The amount of free rent ranges from one to ten months on a ten-year lease and the average is four months – down from five months two years ago.

At the same time, this market's average overall cap rate dips just two basis points this quarter compared to its 20-basis-point plunge in the prior quarter. Over the next six months, most participants foresee overall cap rates holding steady here. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	67.0%	=
Range	60.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	4	=
Range	1 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.51%	▼
CBD	6.50%	=
Suburbs	6.53%	▼

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 19
SAN DIEGO OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 10.50%	6.25% – 10.50%	6.25% – 10.50%	6.75% – 11.50%	7.00% – 12.50%
Average	7.83%	7.86%	7.83%	8.21%	9.38%
Change (Basis Points)		- 3	0	- 38	- 155
OVERALL CAP RATE (OAR)^a					
Range	5.25% – 8.50%	5.00% – 8.50%	5.25% – 8.50%	5.50% – 9.00%	6.00% – 10.00%
Average	6.51%	6.53%	6.81%	7.05%	7.88%
Change (Basis Points)		- 2	- 30	- 54	- 137
RESIDUAL CAP RATE					
Range	5.50% – 8.75%	5.50% – 8.75%	5.75% – 8.75%	6.00% – 8.00%	6.75% – 9.00%
Average	6.82%	6.86%	7.20%	7.08%	7.89%
Change (Basis Points)		- 4	- 38	- 26	- 107
MARKET RENT CHANGE^b					
Range	2.00% – 5.00%	2.00% – 6.00%	2.00% – 6.00%	0.00% – 5.00%	(10.00%) – 5.00%
Average	3.70%	3.80%	3.80%	3.10%	0.50%
Change (Basis Points)		- 10	- 10	+ 60	+ 320
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.80%	2.70%	2.80%	2.90%	2.90%
Change (Basis Points)		+ 10	0	- 10	- 10
MARKETING TIME^c					
Range	3 – 12	3 – 12	1 – 6	1 – 6	1 – 9
Average	5.1	5.1	4.3	4.3	4.8
Change (▼, ▲, =)		=	▲	▲	▲

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

San Francisco Office Market

Even though overall vacancy continues to trend upward in the San Francisco office market on the heels of new construction deliveries and space givebacks, a positive vibe still exists for this market among existing owners and prospective buyers. In fact, some believe that the increase in vacancy will actually motivate some local companies to complete lease deals now, giving a boost to a lulling leasing market. “Tenants that have been sidelined now have more options with the delivery of new space and may start to sign deals,” says a participant.

A total of 5.1 million square feet was under construction at the end of

the first quarter of 2017, according to Cushman & Wakefield. The newest addition was Oceanwide Center’s ground breaking at 50 First Street in the South Financial District. Scheduled for completion in 2021, it will add one million square feet to the downtown office submarket and be the second tallest office tower there.

From a pricing standpoint, tenants looking for space may also find better lease terms now as additions to supply have caused the city’s overall asking rental rate to decline a bit in the first quarter. Still, the current average of \$69.66 per square foot remains above the previous record peak set in the fourth quarter of 2000. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	69.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	5	=
Range	0 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	5.45%	▼
CBD	5.00%	▲
Suburbs	5.91%	▼

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 20
SAN FRANCISCO OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.00% – 9.50%	5.00% – 9.50%	5.75% – 10.00%	6.00% – 11.00%	6.00% – 11.00%
Average	6.89%	6.86%	6.90%	7.60%	8.25%
Change (Basis Points)		+ 3	- 1	- 71	- 136
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 8.00%	3.50% – 8.00%	3.50% – 9.00%	4.00% – 9.00%	4.50% – 9.50%
Average	5.45%	5.46%	5.71%	6.15%	6.82%
Change (Basis Points)		- 1	- 26	- 70	- 137
RESIDUAL CAP RATE					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	4.50% – 9.00%	5.00% – 10.00%
Average	6.25%	6.25%	6.25%	6.68%	7.33%
Change (Basis Points)		0	0	- 43	- 108
MARKET RENT CHANGE^b					
Range	1.00% – 5.00%	0.00% – 5.00%	2.00% – 6.00%	2.00% – 10.00%	0.00% – 15.00%
Average	3.00%	3.10%	4.10%	6.42%	5.67%
Change (Basis Points)		- 10	- 110	- 342	- 267
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 4.00%	0.00% – 3.00%
Average	2.60%	2.60%	2.60%	2.75%	2.67%
Change (Basis Points)		0	0	- 15	- 7
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	1 – 8	1 – 12
Average	3.9	3.9	3.9	4.3	5.4
Change (▼, ▲, =)		=	=	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Seattle Office Market

When looking for properties to acquire in the Seattle office market, most investors are drawn to buildings that “appeal to tech and creative tenants” as these employment sectors remain top drivers behind the city’s positive leasing trends. Overall, the information sector for the Seattle-Tacoma-Bellevue MSA has grown annually since 2011, as per the U.S. Bureau of Labor Statistics. A key tech company benefitting Seattle, and specifically its CBD, is Amazon, which recently signed for 291,000 square feet at the 11-story, Class-A Tilt49 in the Denny Regrade submarket. Tech companies that recently have leased space in Seattle’s suburbs include

Zipwhip, which signed for 29,716 square feet, and Microscan, which renewed for 40,942 square feet.

Regardless of strong fundamentals, investors in this market are keeping an eye on the new supply deliveries “too see if all the new product gets absorbed.” In the CBD, Madison Centre (764,000 square feet) and The Mark (528,000 square feet) are among the Class-A projects scheduled for delivery in 2017. In the suburbs, the pipeline includes 744 N. 34th Street, in the North Seattle/Northgate submarket, and the Southport Office Campus, in the Renton submarket. Combined, these two projects will add over 850,000 square feet in 2018. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	70.0%	▲
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	5	▼
Range	0 to 12	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	5.82%	▲
CBD	5.46%	▲
Suburbs	6.19%	▲

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 21
SEATTLE OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO
DISCOUNT RATE (IRR)^a				
Range	5.25% – 10.00%	5.25% – 10.00%	5.50% – 10.50%	6.00% – 11.00%
Average	7.19%	7.24%	7.37%	8.04%
Change (Basis Points)		- 5	- 18	- 85
OVERALL CAP RATE (OAR)^a				
Range	4.25% – 8.00%	4.25% – 8.00%	4.50% – 8.00%	4.50% – 9.00%
Average	5.82%	5.83%	5.81%	6.47%
Change (Basis Points)		- 1	+ 1	- 65
RESIDUAL CAP RATE				
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%
Average	6.27%	6.27%	6.43%	6.68%
Change (Basis Points)		0	- 16	- 41
MARKET RENT CHANGE^b				
Range	2.50% – 5.00%	2.50% – 5.00%	2.50% – 5.00%	2.50% – 8.00%
Average	3.54%	3.60%	3.71%	4.25%
Change (Basis Points)		- 6	- 17	- 71
EXPENSE CHANGE^b				
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%
Average	2.79%	2.79%	2.79%	2.75%
Change (Basis Points)		0	0	+ 4
MARKETING TIME^c				
Range	1 – 12	1 – 12	1 – 12	1 – 12
Average	4.8	4.8	5.0	5.3
Change (▼, ▲, =)		=	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Southeast Florida Office Market

Strong tenant demand, low vacancy levels, and rising rental rates characterize Miami thus far for 2017, keeping it in the expansion phase of the real estate cycle for the rest of this year, as per our PwC real estate barometer (see page 8). The other two main locations of the Southeast Florida office market, Fort Lauderdale and West Palm Beach, are expected to stay in contraction for the remainder of 2017, as well as over the next three years.

Even though the contraction phase of the real estate cycle is characterized by a shift in the supply-demand balance leading to growing vacancy levels, slowing rent growth,

and rising overall cap rates, most participants remain upbeat regarding the outlook for this market. “Southeast Florida’s fundamentals remain good and should represent a compelling time to buy,” says an investor.

For the remainder of 2017, one surveyed investor is planning to “maximize income and rent growth by stabilizing existing assets that are underperforming the market in terms of occupancy,” while another is “looking to possibly exit this market.” And yet, another Survey participant is focused on “acquiring value-added assets to which we can increase net operating income through significant asset repositioning.” ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	65.0%	=
Range	40.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	6	=
Range	1 to 12	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.26%	=
CBD	6.63%	=
Suburbs	7.90%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 22
SOUTHEAST FLORIDA OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 10.50%	6.00% – 10.50%	6.00% – 10.75%	7.00% – 12.00%	7.00% – 13.00%
Average	8.31%	8.31%	8.24%	8.96%	9.28%
Change (Basis Points)		0	+ 7	- 65	- 97
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 10.00%	5.00% – 10.00%	4.50% – 10.00%	5.00% – 10.50%	6.00% – 12.00%
Average	7.26%	7.26%	7.13%	7.74%	8.41%
Change (Basis Points)		0	+ 13	- 48	- 115
RESIDUAL CAP RATE					
Range	5.00% – 10.50%	5.00% – 10.50%	4.50% – 10.00%	5.00% – 10.50%	7.00% – 10.50%
Average	7.49%	7.49%	7.22%	7.82%	8.54%
Change (Basis Points)		0	+ 27	- 33	- 105
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 7.00%	(10.00%) – 4.00%	(10.00%) – 4.00%
Average	2.20%	2.20%	2.83%	0.45%	(0.17%)
Change (Basis Points)		0	- 63	+ 175	+ 237
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%
Average	2.70%	2.70%	2.75%	2.60%	2.58%
Change (Basis Points)		0	- 5	+ 10	+ 12
MARKETING TIME^c					
Range	3 – 12	3 – 12	2 – 12	2 – 12	2 – 18
Average	5.4	5.5	5.2	6.0	6.6
Change (▼, ▲, =)		▼	▲	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Suburban Maryland Office Market

Muted leasing velocity and a quiet new supply pipeline are two reasons investors remain guarded when it comes to pursuing additional acquisitions in the Suburban Maryland office market. “This market will continue to favor tenants until a big leap in absorption is made,” remarks a participant. Until that time, concessions remain a common part of lease negotiations with an office tenant here receiving between five and 12 months of free rent on a ten-year lease, as per our Survey. The average amount of free rent is nine months – the fourth highest average of the Survey’s 19 city-specific office markets.

Buyers looking for assets in this

market remain primarily drawn to the submarkets of Rockville and Bethesda/Chevy Chase. According to Transwestern, roughly 26.0% of the 2016 notable investment sales in Suburban Maryland occurred in Rockville while 23.0% occurred in Bethesda/Chevy Chase.

These locations are considered “highly walkable neighborhoods with access to transportation, retail, and other amenities,” which many tenants like. Unfortunately, finding assets for sale in these locations is becoming difficult. “In the close-in markets, very few quality properties are for sale,” says an investor, who also likes Gaithersburg and Silver Spring. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	9	=
Range	5 to 12	
% of participants using	100.0%	=

Market Conditions Favor:

Buyers	20.0%	▲
Sellers	20.0%	=
Neither	60.0%	▼

* ▼, ▲, = change from prior quarter (1) on a ten-year lease

Table 23
SUBURBAN MARYLAND OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	7.00% – 10.00%	7.00% – 10.00%	7.25% – 10.00%	7.00% – 10.00%	7.25% – 9.50%
Average	8.65%	8.65%	8.78%	8.68%	8.53%
Change (Basis Points)		0	-13	-3	+12
OVERALL CAP RATE (OAR)^a					
Range	5.50% – 9.00%	5.50% – 9.00%	5.50% – 9.00%	5.25% – 9.00%	5.00% – 9.00%
Average	7.48%	7.48%	7.28%	7.45%	7.46%
Change (Basis Points)		0	+20	+3	+2
RESIDUAL CAP RATE					
Range	6.50% – 9.50%	6.50% – 9.50%	6.50% – 9.75%	6.50% – 9.75%	5.00% – 9.75%
Average	7.73%	7.73%	7.88%	8.03%	7.83%
Change (Basis Points)		0	-15	-30	-10
MARKET RENT CHANGE^b					
Range	0.00% – 1.50%	0.00% – 1.50%	0.00% – 1.00%	(2.00%) – 3.00%	(2.00%) – 3.00%
Average	0.35%	0.35%	0.10%	0.60%	0.83%
Change (Basis Points)		0	+25	-25	-48
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	2.00% – 3.00%
Average	2.00%	2.00%	2.00%	2.60%	2.83%
Change (Basis Points)		0	0	-60	-83
MARKETING TIME^c					
Range	3 – 9	3 – 9	3 – 9	3 – 9	1 – 9
Average	6.1	6.1	5.7	6.1	5.3
Change (▼, ▲, =)		=	▲	=	▲

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Washington, DC Office Market

A slowdown in leasing activity combined with a few large-scale relocations and downsizings prompted the vacancy rate for the Washington, DC office market to increase in the first quarter of 2017. Specifically, it ended the three months at 12.3% – above the rate of 11.8% a year ago, as per Cushman & Wakefield. Although local investors remain confident that the new U.S. government’s policies will boost leasing activity and net absorption, it has yet to do so, leaving many property owners with empty spaces. “Our goal is to lease vacancy, execute renewals, and hold assets for the long term,” says an investor.

While many investors are looking

for assets to acquire, it remains “tough to find properties that fit our strategy,” says a participant. Another confirms, “We are interested in increasing our exposure here, but capital markets are challenging with strong investor interest and limited product available.” Office buildings that sold recently include Lafayette Center in the CBD; 575 7th Street NW in the East End submarket; 425 3rd Street NW in the Southwest submarket; and 1875 K Street NW in the CBD.

Another desirable play in this market is to acquire Class-B properties to renovate and reposition, especially as rental rates in the Class-A sector continue to rise. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	8	=
Range	0 to 12	
% of participants using	100.0%	=

Market Conditions Favor:

Buyers	17.0%	=
Sellers	33.0%	=
Neither	50.0%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 24
WASHINGTON, DC OFFICE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.00% – 8.00%	5.00% – 8.00%	5.50% – 8.00%	6.00% – 8.00%	6.00% – 9.00%
Average	6.48%	6.50%	6.81%	6.85%	7.46%
Change (Basis Points)		– 2	– 33	– 37	– 98
OVERALL CAP RATE (OAR)^a					
Range	4.25% – 6.50%	4.25% – 6.50%	4.25% – 6.50%	4.25% – 6.50%	4.50% – 8.00%
Average	5.29%	5.29%	5.40%	5.48%	5.89%
Change (Basis Points)		0	– 11	– 19	– 60
RESIDUAL CAP RATE					
Range	5.00% – 6.50%	5.00% – 6.50%	5.00% – 6.50%	5.00% – 6.50%	5.25% – 8.25%
Average	5.69%	5.73%	5.81%	5.93%	6.42%
Change (Basis Points)		– 4	– 12	– 24	– 73
MARKET RENT CHANGE^b					
Range	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%
Average	1.58%	1.33%	1.42%	1.67%	2.36%
Change (Basis Points)		+ 25	+ 16	– 9	– 78
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	1.50% – 3.00%
Average	2.33%	2.33%	2.75%	2.92%	2.89%
Change (Basis Points)		0	– 42	– 59	– 56
MARKETING TIME^c					
Range	1 – 6	1 – 6	2 – 6	2 – 6	2 – 12
Average	3.6	3.6	4.0	4.3	5.3
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

National Flex/R&D Market

Steady leasing demand and less additions to supply continued to help the national flex/R&D market experience a decline in overall vacancy in the first three months of 2017. According to Reis, vacancy slipped to 10.9% in this sector for that time period, down from 11.1% in the fourth quarter of 2016. “Currently, we’re in lease-up mode with all of our flex assets,” shares a participant.

Metros that tracked the strongest levels of net absorption and vacancy declines during the quarter included Boston with 736,000 square feet of net absorption, San Diego with 335,000 square feet, Sacramento with 252,000 square feet, and Kansas City with

222,000 square feet. Together, these cities accounted for 60.0% of the total net absorption in this sector for the quarter. Negative quarterly totals were recorded for 16 metros, including Phoenix and Chicago.

While the national flex/R&D market as a whole is seeing strength from a vacancy standpoint, few locations are seeing significant rent growth. “Rents are stable or up a bit,” confirms a participant. Even though the average initial-year market rent change rate assumption for this market holds steady at 2.50% for the fourth consecutive quarter, it remains above its average from one, three, and five years ago (see Table 25). ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	67.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	3	=
Range	0 to 6	
% of participants using	100.0%	=

Market Conditions Favor:

Buyers	0.0%	=
Sellers	0.0%	=
Neither	100.0%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 25
NATIONAL FLEX/R&D MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.75% – 10.00%	6.75% – 10.00%	7.00% – 11.00%	7.25% – 12.00%	8.00% – 13.00%
Average	8.08%	8.08%	8.23%	8.83%	9.48%
Change (Basis Points)		0	-15	-75	-140
OVERALL CAP RATE (OAR)^a					
Range	5.50% – 9.50%	5.50% – 9.00%	5.75% – 9.00%	6.00% – 10.00%	6.50% – 12.00%
Average	7.10%	7.05%	7.15%	7.75%	8.65%
Change (Basis Points)		+5	-5	-65	-155
RESIDUAL CAP RATE					
Range	6.00% – 9.50%	6.00% – 9.00%	6.00% – 9.00%	6.50% – 10.00%	7.00% – 10.00%
Average	7.38%	7.33%	7.40%	7.90%	8.50%
Change (Basis Points)		+5	-2	-52	-112
MARKET RENT CHANGE^b					
Range	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%	0.00% – 3.00%	0.00% – 3.00%
Average	2.50%	2.50%	2.30%	2.00%	1.33%
Change (Basis Points)		0	+20	+50	+117
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.60%	2.60%	2.70%	2.90%	2.92%
Change (Basis Points)		0	-10	-30	-32
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 15	2 – 18
Average	6.6	6.6	7.0	7.3	7.8
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

National Warehouse Market

Investors continue to show confidence in the performance of the national warehouse market through a steady pace of acquisitions. In the first quarter of 2017, sales volume for warehouse properties totaled \$8.6 billion – up 14.0% year over year, according to Real Capital Analytics. Warehouses located near port cities are of particular interest to investors. “Port locations are our top pick, especially in growing metros,” shares an investor. Some of the most active port locations for sales have been Miami, Inland Empire, and Los Angeles.

Northern New Jersey has also been an active coastal warehouse region for buyers. For the 12 months ending

with March 2017, 62 warehouses sold in that region at an average price of \$88.00 per square foot. Buyer interest is strong in that area given its extremely tight fundamentals, especially for core submarkets along the turnpike. Vacancy is 0.8% for Exit 7A, 2.5% for Exit 8A, and 4.3% for the Meadowlands. In a recent local sale, a 369,000-square-foot, manufacturing-and-distribution building at 83 Stults Road in South Brunswick sold for \$68.00 per square foot. The new owner is planning to modernize the 1970s building by spending \$10.0 million to reskin the building, raise the roof from 24 feet to 32 feet, and install a new sprinkler system. ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	3	▲
Range	0 to 7	
% of participants using	80.0%	=

Market Conditions Favor:

Buyers	0.0%	=
Sellers	60.0%	=
Neither	40.0%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 26
NATIONAL WAREHOUSE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 9.00%	5.50% – 9.00%	5.50% – 9.25%	5.75% – 9.25%	5.75% – 12.00%
Average	6.66%	6.74%	6.90%	7.29%	8.27%
Change (Basis Points)		– 8	– 24	– 63	– 161
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 6.90%	4.25% – 6.90%	3.00% – 7.00%	5.00% – 7.00%	5.50% – 12.00%
Average	5.27%	5.37%	5.38%	5.95%	7.33%
Change (Basis Points)		– 10	– 11	– 68	– 206
RESIDUAL CAP RATE					
Range	5.00% – 7.00%	5.00% – 7.00%	4.75% – 8.50%	5.50% – 8.50%	6.00% – 12.00%
Average	5.95%	6.03%	6.28%	6.63%	7.66%
Change (Basis Points)		– 8	– 33	– 68	– 171
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 6.00%	0.00% – 5.00%	0.00% – 6.00%	(3.00%) – 5.00%
Average	2.55%	2.50%	2.41%	2.45%	1.70%
Change (Basis Points)		+ 5	+ 14	+ 10	+ 85
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	3.00% – 3.00%	2.50% – 3.00%	2.00% – 3.00%
Average	2.45%	2.55%	3.00%	2.98%	2.88%
Change (Basis Points)		– 10	– 55	– 53	– 43
MARKETING TIME^c					
Range	1 – 9	1 – 9	1 – 12	2 – 12	2 – 18
Average	3.8	3.8	4.4	5.2	6.8
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

ENC Region Warehouse Market

The ENC warehouse region continues to entice investors looking for opportunities, but buying into this market remains competitive. “Sellers are 100.0% in control of pricing at the moment,” says a participant. “Marketing times are dropping and prices are rising,” states another investor.

Favorable fundamentals remain this region’s main draw, particularly in many of its key cities, like Chicago, Cincinnati, Indianapolis, Columbus, and Cleveland, which are experiencing incredible leasing demand from diverse e-commerce companies. The consensus is that these major hubs will remain choice tenant locations

for the long term. As such, “the newest assets with the best transportation links will likely provide the best consistent returns,” attests a participant.

This market’s key indicator trends highlight investors’ enthusiasm. First, its average overall cap rate slips to 5.43% in the second quarter of 2017 – its lowest average since debuting in the Survey in the fourth quarter of 2012. In addition, the low end of the range for this assumption slips 25 basis points. At the same time, its average market rent change rate for the next 12 months ticks up slightly to 2.65% – down from last year, but comparable to where it was three years ago. ◆

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average 65.0% =
Range 50.0% to 75.0%

Months of Free Rent⁽¹⁾:

Average 3 =
Range 0 to 5
% of participants using 100.0% =

Market Conditions Favor:

Buyers 0.0% =
Sellers 100.0% ▲
Neither 0.0% ▼

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 27
EAST NORTH CENTRAL (ENC) REGION WAREHOUSE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO
DISCOUNT RATE (IRR)^a				
Range	5.75% – 7.00%	5.75% – 7.00%	5.75% – 7.50%	6.50% – 8.25%
Average	6.43%	6.50%	6.73%	7.48%
Change (Basis Points)		-7	-30	-105
OVERALL CAP RATE (OAR)^a				
Range	4.25% – 6.00%	4.50% – 6.00%	4.50% – 6.25%	5.50% – 7.25%
Average	5.43%	5.45%	5.48%	6.40%
Change (Basis Points)		-2	-5	-97
RESIDUAL CAP RATE				
Range	5.00% – 7.00%	5.50% – 7.00%	5.50% – 7.00%	5.75% – 8.25%
Average	6.08%	6.23%	6.45%	7.03%
Change (Basis Points)		-15	-37	-95
MARKET RENT CHANGE^b				
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%
Average	2.65%	2.63%	2.90%	2.67%
Change (Basis Points)		+2	-25	-2
EXPENSE CHANGE^b				
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 4.00%	3.00% – 4.00%
Average	2.90%	2.90%	3.00%	3.08%
Change (Basis Points)		0	-10	-18
MARKETING TIME^c				
Range	2 – 9	2 – 9	2 – 9	2 – 9
Average	4.7	5.0	5.0	5.0
Change (▼, ▲, =)		▼	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Pacific Region Warehouse Market

Despite high levels of new construction, the Pacific region warehouse market continues to perform exceptionally well. In Portland, for example, net absorption has outpaced new supply so far this year, pushing overall vacancy for warehouse assets to 3.8%, as per Cushman & Wakefield. In many locations within California, the trends are similar. In Orange County, for instance, fundamentals have never been stronger with an overall vacancy rate of 2.0%, virtually unchanged from year-end 2016.

The strength of this region's fundamentals, both now and in the near term, are providing investors with the ability and confidence to push up

rental rates. In North Orange County, for example, the average overall asking rental rate has increased 14.8% in the last year and has surpassed the peak of the previous cycle (year-end 2007). In Portland, the average asking rental rate has increased to a record high, ending the first quarter of 2017 at \$6.84 per square foot – a 21.3% year-over-year increase.

Over the next 12 months, surveyed investors see positive value changes for this market, ranging up to an increase of 10.0%. The average appreciation rate forecast is 2.7% – below the forecast for the national warehouse market (+3.7%) and the ENC region warehouse market (+3.5%). ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	62.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	3	=
Range	1 to 6	
% of participants using	100.0%	=

Market Conditions Favor:

Buyers	0.0%	=
Sellers	80.0%	=
Neither	20.0%	=

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 28
PACIFIC REGION WAREHOUSE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 8.50%	5.50% – 8.50%	5.50% – 9.00%	6.00% – 8.00%	6.50% – 8.50%
Average	6.53%	6.53%	6.65%	7.19%	7.48%
Change (Basis Points)		0	-12	-66	-95
OVERALL CAP RATE (OAR)^a					
Range	3.75% – 7.00%	3.75% – 7.00%	3.75% – 7.00%	4.50% – 7.50%	5.00% – 7.75%
Average	4.98%	5.00%	5.20%	5.85%	6.50%
Change (Basis Points)		-2	-22	-87	-152
RESIDUAL CAP RATE					
Range	4.50% – 8.00%	4.50% – 8.00%	4.50% – 7.50%	5.50% – 7.50%	6.00% – 8.75%
Average	5.70%	5.70%	5.80%	6.52%	6.94%
Change (Basis Points)		0	-10	-82	-124
MARKET RENT CHANGE^b					
Range	0.00% – 4.00%	0.00% – 4.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 3.00%
Average	2.25%	2.15%	2.40%	3.08%	1.75%
Change (Basis Points)		+10	-15	-83	+50
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.80%	2.80%	2.80%	2.92%	2.88%
Change (Basis Points)		0	0	-12	-8
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	1 – 12	1 – 18
Average	3.3	3.3	3.2	4.3	5.3
Change (▼, ▲, =)		=	▲	▼	▼
a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months					

National Apartment Market

Several trends in the national apartment market suggest further movement into the contraction phase of the real estate cycle by year-end 2017. First, its overall average vacancy inched up ten basis points in the first quarter of this year as net absorption was just half of the level seen in the prior quarter, as per Reis. Second, its average effective rent grew at an eight-year low of 0.2% for the year. Finally, an increase in the use of free rent in the marketplace signals a shift in power from landlords to tenants in this sector.

On the investment side, this market's average overall cap rate rises seven basis points this quarter and

investors' expectations of future rent growth dips 16 basis points (see Table 29). While total first-quarter sales volume fell 35.0% year over year, it remains steady relative to past averages. According to Real Capital Analytics, the largest year-over-year sales decline in this sector occurred in large portfolio deals.

Surveyed investors are closely monitoring trade activity, as well as the capital markets. "Our strategy is to sell weaker assets and selectively acquire value-added ones," declares a participant. Another says, "We will see if the capital markets sense an over allocation to this sector and the impact it has on financing deals." ♦

KEY 2Q17 SURVEY STATS*

Total Vacancy Assumption:

Average	6.0%	=
Range	2.0% to 10.0%	

Months of Free Rent⁽¹⁾:

Average	1	=
Range	0 to 2	
% of participants using	78.0%	▲

Market Conditions Favor:

Buyers	0.0%	=
Sellers	33.0%	▼
Neither	67.0%	▲

* ▼, ▲, = change from prior quarter
(1) on a one-year lease

Table 29
NATIONAL APARTMENT MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 10.00%	5.50% – 10.00%	5.50% – 10.00%	6.00% – 13.00%	5.25% – 14.00%
Average	7.28%	7.24%	7.28%	7.98%	8.30%
Change (Basis Points)		+ 4	0	- 70	- 102
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 8.00%	3.50% – 8.00%	3.50% – 8.00%	3.50% – 10.00%	3.75% – 10.00%
Average	5.40%	5.33%	5.29%	5.59%	5.76%
Change (Basis Points)		+ 7	+ 11	- 19	- 36
RESIDUAL CAP RATE					
Range	4.50% – 8.00%	4.25% – 8.00%	4.25% – 7.50%	4.25% – 9.50%	4.50% – 9.75%
Average	5.82%	5.75%	5.76%	6.02%	6.15%
Change (Basis Points)		+ 7	+ 6	- 20	- 33
MARKET RENT CHANGE^b					
Range	(1.00%) – 5.00%	0.00% – 5.00%	0.00% – 7.00%	0.00% – 8.00%	(2.00%) – 8.00%
Average	2.64%	2.80%	3.08%	2.75%	2.80%
Change (Basis Points)		- 16	- 44	- 11	- 16
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 4.00%	2.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%
Average	2.69%	2.73%	2.81%	2.76%	2.65%
Change (Basis Points)		- 4	- 12	- 7	+ 4
MARKETING TIME^c					
Range	1 – 9	1 – 9	1 – 9	0 – 10	0 – 18
Average	3.8	3.9	3.6	4.1	5.3
Change (▼, ▲, =)		▼	▲	▼	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Regional Apartment Markets

Our PwC real estate barometer shows that the contraction phase of the cycle will dominate the greatest percentage of apartment metros by the end of this year – characterized by softening market conditions, rising vacancy rates, slowing rent growth, and higher overall cap rates (see Chart REB-4 on page 7). According to Reis, four of the six apartment metros with the largest quarterly increases in overall vacancy are in the Southeast and Mid-Atlantic regions, including Birmingham, Charleston, Nashville, and Palm Beach.

Even though the average overall cap rate in each apartment region holds steady this quarter, certain

investors foresee cap rate increases in the Mid-Atlantic and Pacific regions over the next six months (see Exhibit 2 on page 3).

Despite the anticipated increases in overall cap rates, many investors plan to acquire apartment assets in these regions. “We continue to look for deals in the Mid-Atlantic region and do not see a drop-off in demand in the near term,” states an investor. A Pacific region investor cautions, “We will remain patient and disciplined with respect to new investment opportunities.” In the Southeast region, which investors categorize as favoring sellers, a Survey participant notes, “Our strategy is to sell value-

added investments and purchase Class-A properties.”

Overall, the outlook for property value increases in the Mid-Atlantic, Pacific, and Southeast regional apartment markets is positive in the coming year, but does fall short of the average property value increase expected for the national apartment market (+2.6%). Specifically, investors foresee property appreciation of up to 5.0% in the Mid-Atlantic and Southeast regions with average increases of 1.4% and 1.7%, respectively. In the Pacific region, investors’ expectations range from a decline of 10.0% to an increase of 15.0% and an overall average increase of 1.7%. ♦

Table 30
SOUTHEAST REGION APARTMENT MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.75% – 10.00%	5.75% – 10.00%	5.75% – 10.00%	6.00% – 10.00%	6.50% – 11.00%
Average	7.50%	7.50%	7.53%	7.70%	8.40%
Change (Basis Points)		0	-3	-20	-90
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 6.50%	3.50% – 6.50%	3.50% – 6.50%	4.00% – 7.25%	5.00% – 7.00%
Average	5.10%	5.10%	5.15%	5.55%	5.86%
Change (Basis Points)		0	-5	-45	-76
RESIDUAL CAP RATE					
Range	4.50% – 7.00%	4.50% – 7.00%	4.50% – 7.00%	5.00% – 7.00%	5.50% – 9.75%
Average	5.75%	5.75%	5.75%	6.15%	6.64%
Change (Basis Points)		0	0	-40	-89
MARKET RENT CHANGE^b					
Range	1.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%	2.00% – 4.00%	(10.00%) – 10.00%
Average	3.05%	3.05%	3.05%	3.05%	2.25%
Change (Basis Points)		0	0	0	+80
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 4.00%	1.00% – 3.00%
Average	2.80%	2.80%	2.80%	3.00%	2.36%
Change (Basis Points)		0	0	-20	+44
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	1 – 6	1 – 18
Average	3.3	3.1	3.1	3.0	6.0
Change (▼, ▲, =)		▲	▲	▲	▼

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

Table 31

REGIONAL APARTMENT MARKETS

Second Quarter 2017

	MID-ATLANTIC REGION					PACIFIC REGION				
	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
	DISCOUNT RATE (IRR)^a									
Range	5.25% – 10.00%	5.25% – 10.00%	5.50% – 10.00%	6.00% – 11.00%	5.50% – 14.00%	5.25% – 10.00%	5.25% – 9.00%	5.50% – 9.00%	5.00% – 12.00%	5.00% – 12.50%
Average	7.35%	7.35%	7.50%	8.08%	9.25%	6.75%	6.65%	6.80%	7.42%	8.58%
Change (Basis Points)	0	-15	-73	-73	-190	+10	-5	-5	-67	-183
OVERALL CAP RATE (OAR)^a										
Range	3.00% – 6.75%	3.00% – 6.75%	3.00% – 7.50%	4.00% – 7.50%	4.00% – 7.50%	3.50% – 6.00%	3.50% – 6.00%	3.50% – 6.00%	3.50% – 6.25%	4.00% – 7.00%
Average	5.01%	5.01%	5.23%	5.46%	5.71%	4.49%	4.52%	4.81%	5.19%	5.19%
Change (Basis Points)	0	-22	-45	-45	-70	0	-3	-32	-70	-70
RESIDUAL CAP RATE										
Range	4.00% – 6.75%	4.00% – 7.50%	4.25% – 7.00%	4.50% – 9.75%	4.50% – 9.75%	4.25% – 6.00%	4.25% – 6.50%	4.00% – 6.00%	4.00% – 7.00%	4.00% – 7.50%
Average	5.53%	5.53%	5.53%	6.10%	6.35%	5.05%	5.05%	5.05%	5.60%	5.67%
Change (Basis Points)	0	0	-57	-57	-82	-5	-5	-5	-60	-67
MARKET RENT CHANGE^b										
Range	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%	(5.00%) – 7.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	2.00% – 7.00%	0.00% – 10.00%
Average	1.85%	1.85%	2.10%	2.25%	2.92%	2.85%	2.90%	3.10%	4.13%	3.79%
Change (Basis Points)	0	-25	-40	-40	-107	-5	-25	-25	-128	-94
EXPENSE CHANGE^b										
Range	0.00% – 4.00%	0.00% – 4.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%	2.00% – 4.00%	2.00% – 3.00%
Average	2.50%	2.50%	2.70%	2.75%	2.58%	2.23%	2.23%	2.83%	2.96%	2.79%
Change (Basis Points)	0	-20	-25	-25	-8	0	-60	-60	-73	-56
MARKETING TIME^c										
Range	1 – 9	1 – 9	2 – 9	2 – 8	1 – 18	1 – 9	1 – 9	1 – 9	1 – 9	1 – 12
Average	3-9	3-9	4.2	4.4	5.4	4.1	4.1	4.5	4.2	5.6
Change (▼, ▲, =)	=	▼	▼	▼	▼	=	▼	▼	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

National Net Lease Market

Investor sentiment shifts into neutral in the national net lease market this quarter as more Survey participants believe current market conditions equally favor buyers and sellers. As shown in the Key 2Q17 Survey Stats table, half of investors now perceive this market as neutral, compared to 20.0% in the prior quarter. The other half believes sellers hold the advantage, a decline from 80.0% last quarter. These shifts are fueled by the uncertainty surrounding U.S. economic conditions, rising interest rates, and potential tax reform, which could greatly impact 1031 exchanges.

Despite these concerns, robust demand for net leased assets has

resulted in record-high pricing. In fact, the average sale price per square foot for the office, industrial, and retail net lease sectors reached \$379.00, \$85.00, and \$267.00, respectively, in the first quarter of 2017 – reflecting the highest levels seen in the past ten years, according to Real Capital Analytics.

Going forward, many investors believe that an uptick in overall cap rates will temper pricing. As shown in Table 32, the average overall cap rate rises 13 basis points this quarter to 6.88%. Furthermore, investors foresee cap rates increasing an average of 33 basis points over the next six months. ◆

KEY 2Q17 SURVEY STATS*

Market Conditions Favor:

Neutral	50.0%	▲
Sellers	50.0%	▼

Months of Free Rent:

Average	(1)
Range	(1)
% of participants using	(1)

Portfolio Allocation:

Sale leasebacks	18.0%	▲
Net lease sales	49.0%	▲
1031 exchanges	24.0%	▲
Build to suit	10.0%	▼

* ▼, ▲, = change from prior quarter
(1) 60.0% of participants are not using free rent.

Table 32
NATIONAL NET LEASE MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.00%	7.00% – 9.00%	7.00% – 9.00%
Average	8.00%	8.00%	8.00%	7.94%	8.16%
Change (Basis Points)		0	0	+ 6	- 16
OVERALL CAP RATE (OAR)^a					
Range	5.25% – 9.00%	5.25% – 9.00%	5.25% – 9.00%	6.00% – 8.50%	6.00% – 8.75%
Average	6.88%	6.75%	6.75%	6.98%	7.40%
Change (Basis Points)		+ 13	+ 13	- 10	- 52
RESIDUAL CAP RATE					
Range	6.00% – 9.00%	6.00% – 9.00%	6.00% – 9.00%	7.00% – 9.00%	7.00% – 9.00%
Average	7.60%	7.63%	7.63%	7.75%	8.22%
Change (Basis Points)		- 3	- 3	- 15	- 62
MARKET RENT CHANGE^b					
Range	0.00% – 4.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	(3.00%) – 3.00%
Average	1.92%	1.70%	1.80%	1.85%	0.79%
Change (Basis Points)		+ 22	+ 12	+ 7	+ 113
EXPENSE CHANGE^b					
Range	0.00% – 4.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%
Average	1.67%	1.40%	1.70%	2.15%	1.88%
Change (Basis Points)		+ 27	- 3	- 48	- 27
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 12	1 – 12
Average	5.4	4.9	4.8	4.3	4.7
Change (▼, ▲, =)		▲	▲	▲	▲

a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months

National Medical Office Buildings Market

Uncertainty surrounding future health care legislation and rising interest rates have many investors in the national medical office buildings market on the edge of their seats. “Interest rates are key to investing in this sector,” says an investor. Their unease is evidenced by a 22-basis-point plunge in this market’s outlook for future rent growth, which dips to its lowest average since the third quarter of 2015 (see Table 33). In addition, this market’s average overall cap rate holds steady this quarter and 80.0% of investors believe this trend will continue over the next six months.

Regardless of concerns, all of our MOB Survey participants view current

conditions as favoring sellers. “We plan to take advantage of this market’s low cap rates and sell some assets this year,” confirms one participant.

While this market’s historically low cap rates are keeping some buyers from pursuing deals since it is “difficult to compete,” others are undeterred and intend to be net buyers of MOB assets this year. “Our strategy is to seek opportunities where the properties are anchored by a leading health system in its market,” says an investor. Another echoes, “We are looking to buy high-quality MOB properties leased to either hospital systems or large specialty practice groups.” ♦

KEY 2Q17 SURVEY STATS*

Tenant Retention Rate:

Average	81.0%	=
Range	70.0% to 90.0%	

Months of Free Rent⁽¹⁾:

Average	2	▼
Range	1 to 6	
% of participants using	80.0%	▼

Average Overall Cap Rates:

Market (as a whole)	6.76%	=
On campus	6.43%	▲
Off campus	7.10%	▼

* ▼, ▲, = change from prior quarter
(1) on a ten-year lease

Table 33
NATIONAL MEDICAL OFFICE BUILDINGS MARKET
Second Quarter 2017

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.75% – 11.00%	5.75% – 11.00%	5.50% – 11.00%	6.00% – 12.00%	6.50% – 13.00%
Average	7.85%	7.85%	8.13%	8.45%	8.96%
Change (Basis Points)		0	-28	-60	-111
OVERALL CAP RATE (OAR)^a					
Range	4.75% – 10.00%	4.75% – 10.00%	4.50% – 10.00%	5.25% – 11.00%	5.75% – 11.00%
Average	6.76%	6.76%	6.81%	7.64%	7.95%
Change (Basis Points)		0	-5	-88	-119
RESIDUAL CAP RATE					
Range	5.50% – 10.25%	5.50% – 10.25%	5.25% – 10.25%	5.50% – 11.00%	6.00% – 12.00%
Average	7.00%	7.02%	7.09%	7.74%	8.17%
Change (Basis Points)		-2	-9	-74	-117
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 4.00%	0.00% – 4.00%	(5.00%) – 3.00%	0.00% – 3.00%
Average	2.20%	2.42%	2.41%	1.53%	1.08%
Change (Basis Points)		-22	-21	+67	+112
EXPENSE CHANGE^b					
Range	1.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%
Average	2.50%	2.42%	2.41%	2.43%	2.11%
Change (Basis Points)		+8	+9	+7	+39
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	1 – 12	1 – 12
Average	4.8	4.7	4.4	5.3	5.4
Change (▼, ▲, =)		▲	▲	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

National Development Land Market

This quarter, most surveyed investors note that the industrial sector presents the best opportunities for development land investing in the near term. Other top choices include restaurant and high-end luxury residential.

These three property classes are each doing well from a fundamental standpoint. Industrial space demand remains strong due to growing Internet sales and the need for warehousing goods and rapidly delivering them to customers. High-end luxury housing is also doing well, despite additions to supply, mainly due to demand from retirees and young workers. In the restaurant sector, revenue continues to rise as more people are eating out than dining at home.

With most of the industrial sector poised to enter the contraction phase of the real estate cycle starting in 2018 and the apartment sector projected to be in the same cycle position by the end of this year, the “window of opportunity may be closing in this sector.” As one investor comments, “Scary times are around the corner; while things look good right now, it seems that there’s a lot of lipstick on the pig.”

Total spending on U.S. private construction was up 7.0% on a year-over-year basis in March 2017, according to the U.S. Census Bureau (see Table DVL-1). When looking more closely, private residential spending

was up 7.5% while private nonresidential spending was up 6.4% – still positive, but below its year-over-year growth for March 2016 (9.3%). In the nonresidential sector, communication, office, and education reported the highest year-over-year gains in spending as of March 2017. In contrast, spending for health care, religious, and transportation construction declined year over year in March 2017.

DISCOUNT RATES

Free-and-clear discount rates including developer's profit range from 10.0% to 20.0% and average 16.00% this quarter (see Exhibit DL-1). This average is up 50 basis points from the fourth quarter of 2016 and assumes that entitlements are in place. Without entitlements in place, certain investors increase the discount rate between 100 and 800 basis points (an average increase of 394 basis points).

GROWTH RATE ASSUMPTIONS

Growth rates for development expenses, such as amenities, real estate taxes, advertising, and administration, typically range from 1.0% to 7.5% and average 4.1%. For lot pricing, investors indicate a range up to 8.0%; the average growth rate for lot pricing is 4.2%.

ABSORPTION PERIOD

The absorption period required to sell an entire project varies significantly

depending on such factors as location, size, and property type. This quarter, preferred absorption periods for participants range from one to 20 years. The mean absorption period is 9.5 years, more than a year above the average six months ago (8.4 years).

FORECAST VALUE CHANGE

Over the next 12 months, all investor participants expect development land values to increase. Appreciation ranges from 2.0% to 10.0% and averages 5.3% – similar to the average six months ago (5.9%) and well above the average a year ago (3.6%). None of our surveyed investors expect property value declines in the national development land market over the next 12 months.

MARKETING PERIOD

The typical time that a property is on the market prior to selling ranges from three to 36 months and averages 15 months. ♦

Exhibit DL-1 DISCOUNT RATES (IRRS) ^a Second Quarter 2017		
	CURRENT QUARTER	FOURTH QUARTER 2016
FREE & CLEAR		
Range	10.00% – 20.00%	10.00% – 20.00%
Average	16.00%	15.50%
Change		+ 50

a. Rate on unleveraged, all-cash transactions; including developer's profit

Table DVL-1
U.S. CONSTRUCTION SPENDING*
March 2016 to March 2017

	Year-Over-Year Change
Nonresidential	
Communication	+ 19.1%
Office	+ 17.7%
Educational	+ 15.3%
Commercial	+ 12.7%
Amusement & Recreation	+ 11.8%
Lodging	+ 8.6%
Power	+ 8.2%
Health Care	- 1.0%
Religious	- 7.3%
Transportation	- 8.7%
Manufacturing	- 9.8%
Total	+ 6.4%
Residential	+ 7.5%
Total Private	+ 7.0%

* Private construction
Source: U.S. Census Bureau; seasonally adjusted

NATIONAL REGIONAL MALL MARKET—SELECT SURVEY RESPONSES ⁽¹⁾
 Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)			VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME			
<p>PUBLIC REAL ESTATE COMPANY ♦ Forecast Period: 3 to 8 years Mainly uses DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; does not use rent spikes.</p>	1.0% to 4.0% Year 1; 2.0% to 4.0% Year 2	2.0% to 5.0%	2.0% to 4.0%	4.00% to 10.00%	2.0% to 3.0%	5.00% to 11.50%	4.00% to 9.00%	9 to 18	60.0% to 80.0%	3.0% to 8.0%	\$0.25 to \$0.50		6 to 15				
<p>INVESTMENT BANKER ♦ Forecast Period: 1 to 10 years Relies on DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; retail sales based on historical and market analysis; typical sales growth per market per year is at the inflation rate (CPI); expects overall cap rates to hold steady over the next six months.</p>	3.0% Years 1 to 3	3.0%	5.00% to 7.25%	0.8% to 1.0%	4.25% to 6.00%	5.50% to 7.00%	4 to 6	70.0%	1.0% to 2.0%	\$0.15 to \$0.30		6					
<p>REIT ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; no longer uses rent spikes; expects overall cap rates to increase up to 75 basis points over the next six months.</p>	1.0% to 2.0% Year 1; 2.0% to 3.0% Year 2	2.0% to 3.0%	3.0% to 4.0%	5.00% to 10.00%	0.5% to 1.0%	7.00% to 10.00%	5.00% to 10.00%	4 to 8	80.0% to 85.0%	3.0% to 8.0%	Does not use		9 to 18				
<p>PUBLIC C CORP ♦ Forecast Period: 7 to 10 years Mainly uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; free rent is no longer awarded; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.5%	3.0%	3.0%	4.25% to 9.00%	1.0% to 3.0%	6.00% to 11.00%	4.00% to 9.00%	6 to 9	70.0% to 80.0%	5.0% to 7.0%	\$0.25 to \$0.50		6 to 9				
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses mainly DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; sees overall cap rates holding steady over the next six months.</p>	2.0% to 3.5% Years 1 to 3	3.0%	1.5% to 3.0%	5.00% to 7.50%	0.5% to 2.5%	5.50% to 7.50%	4.00% to 6.75%	6 to 12	50.0% to 75.0%	4.0% to 7.0%	\$0.20 to \$0.50		3 to 12				

Source: Personal survey conducted by PwC during April 2017; (1) relates to Class A+, A, B+, and B malls



NATIONAL POWER CENTER MARKET –SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE		FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION		
<p>REALTY ADVISOR ♦ Forecast Period: 3 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use rent spikes; expects overall cap rates to decrease 25 to 50 basis points over the next six months.</p>	0.0% Year 1; 0.0% to 1.0% Year 2; 1.0% to 1.5% Year 3	3.0%	3.0%	6.00% to 8.00%	1.5% to 2.5%	6.00% to 10.00%	5.50% to 7.50%	3 to 10	60.0% to 80.0%	5.0% to 10.0%	\$0.20 to \$0.35	3 9
<p>PENSION FUND ADVISOR ♦ Forecast Period: 10 years Prefers DCF analysis; also uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.</p>	0.0% to 3.0% Year 1; 3.0% Year 2	3.0%	3.0%	5.75% to 7.00%	1.0% to 2.0%	6.25% to 7.00%	5.25% to 6.50%	6 to 9	65.0% to 75.0%	5.0% to 8.0%	Does not use	2 to 6
<p>INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Primarily interested in high-credit deals; uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; sees overall cap rates holding steady over the next six months; no longer uses rent spikes.</p>	3.0% Years 1 to 3	3.0%	3.0%	6.25% to 6.50%	1.0% to 1.5%	6.50% to 6.75%	5.50% to 6.25%	4 to 8	65.0% to 70.0%	5.0% to 7.0%	\$0.20 to \$0.30	2 to 4
<p>INVESTMENT BANKER ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; prefers urban areas with easy access and good anchor tenancy; credit is key; may use a rent spike of 10.0% in year 5.</p>	0.0% to 3.0% Years 1 & 2	2.0%	2.0% to 3.0%	7.00% to 9.00%	2.0%	8.00% to 10.00%	6.00% to 7.00%	4 to 8	60.0% to 75.0%	5.0% to 10.0%	\$0.20	3 to 5
<p>PENSION FUND ♦ Forecast Period: 1 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.</p>	2.5% to 3.0%	3.0%	Did not disclose	6.50% to 7.50%	2.0%	6.50% to 7.75%	6.20% to 7.00%	1 to 3	70.0% to 5.0%	3.0% to 5.0%	\$0.10 to \$0.20	6

Source: Personal survey conducted by PwC during April 2017.



NATIONAL STRIP SHOPPING CENTER MARKET—SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME
INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before deducting TIs, leasing commissions and capital replacement reserve; does not use rent spikes.	2.0% to 3.0%	3.0%	3.0%	6.00% to 7.00%	1.0% to 3.0%	6.75% to 7.50%	5.00% to 7.50%	6 to 12	65.0% to 80.0%	1.0% to 3.0%	\$0.20 to \$0.50	3 to 6			
INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Invests primarily in 200,000- to 400,000-square-foot, well-anchored community centers and good credit quality anchored power centers; relies on DCF; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.	3.0%	3.0%	3.0%	6.00% to 6.50%	2.0% to 2.5%	7.00% to 7.25%	5.25% to 6.00%	5 to 7	65.0% to 70.0%	4.0% to 6.0%	\$0.15 to \$0.25	3 to 6			
REIT ♦ Forecast Period: 1 to 3 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before deducting TIs, leasing commissions and capital replacement reserve; does not use rent spikes.	0.0% to 1.0%	3.0%	3.0%	6.00% to 9.75%	1.0% to 2.0%	8.00% to 10.50%	7.00% to 9.50%	9 to 15	70.0% to 75.0%	2.5% to 5.0%	\$0.15 to \$0.25	9 to 12			
REIT ♦ Forecast Period: 10 years Primarily uses direct capitalization in valuing assets; also uses yield capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to increase up to 25 basis points over the next six months.	2.0% to 3.0%	3.0%	4.0%	6.25% to 7.00%	4.0% to 5.0%	6.00% to 7.25%	5.00% to 8.50%	9 to 18	70.0% to 75.0%	3.0% to 7.0%	\$0.25 to \$0.75	3 to 6			
DOMESTIC PENSION FUND ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	4.75% to 6.50%	0.5% to 3.0%	5.50% to 7.50%	4.00% to 6.50%	6 to 12	60.0% to 70.0%	1.0% to 5.0%	\$0.10 to \$0.25	6 to 12			
PENSION FUND ADVISOR ♦ Forecast Period: 10 years Prefers DCF analysis; also uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	0.0%	3.0%	3.0%	5.50% to 6.25%	1.0% to 3.0%	6.00% to 6.50%	4.75% to 5.75%	6 to 9	65.0% to 70.0%	4.0% to 7.0%	Does not use	2 to 3			

Source: Personal survey conducted by PwC during April 2017.



NATIONAL CBD OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME	
LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses mainly DCF analysis; in direct cap, capitalizes NOI before tenant improvements, leasing commissions, and capital replacement reserve; may use a rent spike of 6.0% in year 1 and 5.0% in years 2 and 3.	0.0% to 6.0%	2.0% to 4.0%	1.0% to 3.0%	5.00% to 6.50%	0.8% to 2.5%	5.75% to 7.00%	3.75% to 6.75%	6 to 18	50.0% to 75.0%	4.0% to 9.0%	\$0.20 to \$0.50	3 to 9				
PENSION FUND ♦ Forecast Period: 8 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur.	2.0% to 5.0%	0.0% to 5.0%	1.0% to 3.0%	5.50% to 7.50%	2.0% to 3.0%	6.50% to 9.00%	5.00% to 7.50%	6 to 12	60.0% to 75.0%	1.0% to 2.0%	\$0.10 to \$0.20	3 to 18				
PUBLIC REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses a rent spike.	2.0% to 4.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	6.25% to 7.25%	1.0% to 1.5%	6.50% to 7.50%	5.00% to 7.50%	6 to 12	60.0% to 70.0%	5.0% to 8.0%	Does not use	2 to 6				
PENSION FUND ADVISOR ♦ Forecast Period: 10 years Prefers DCF analysis; also uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike of 4.0% in year 3 and 5.0% in year 4.	0.0% to 3.0%	3.0%	3.0%	5.00% to 6.25%	1.0% to 4.0%	5.75% to 6.25%	4.50% to 6.00%	6 to 9	65.0% to 75.0%	3.0% to 7.0%	\$0.15 to \$0.30	3 to 6				
REIT ♦ Forecast Period: 5 to 10 years Uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that overall cap rates will decline 50 to 100 basis points over the next six months.	0.0% to 4.0%	2.0% to 3.0%	2.0% to 3.0%	5.50% to 7.50%	1.0% to 2.0%	5.50% to 7.00%	5.50% to 7.00%	6 to 9	65.0% to 85.0%	1.0% to 5.0%	\$0.25 to \$0.50	3 to 9				
PRIVATE REAL ESTATE ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.	1.0% to 3.0%	3.0%	2.0% to 3.0%	5.50% to 6.50%	1.0% to 3.0%	8.50% to 9.50%	5.50% to 6.50%	6 to 12	70.0% to 75.0%	3.0% to 5.0%	\$0.25 to \$0.50	6 to 9				

Source: Personal survey conducted by PwC during April 2017.



NATIONAL SUBURBAN OFFICE MARKET—SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE		FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS		
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses DCF and face rents; prefers 24-hour cities across the country; may use a rent spike of 5.0% in year 2 and 3; uses effective rents in DCF analysis.	0.0% Year 1; 3.0% to 5.0% Year 2	0.0% to 3.0%	2.0% to 3.0%	6.00% to 8.00%	1.0% to 3.0%	6.75% to 9.50%	5.25% to 8.50%	6 to 12	65.0% to 75.0%	1.0% to 11.0%	\$0.10 to \$0.40	1 to 3	
LIFE INSURANCE COMPANY ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; no longer uses rent spikes.	0.0% to 2.5%	2.0% to 3.0%	1.5% to 2.5%	6.50% to 9.50%	1.0% to 2.0%	6.00% to 10.00%	5.00% to 8.50%	6 to 15	50.0% to 67.0%	7.0% to 15.0%	\$0.25 to \$0.50	3 to 6	
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike of 6.0% in year 4.	3.0% Years 1 to 3	3.0%	3.0%	6.00% to 7.00%	1.0% to 3.0%	6.50% to 7.50%	5.50% to 6.50%	6 to 12	50.0% to 65.0%	3.0% to 3.0%	\$0.25 to \$0.50	3 to 6	
PUBLIC REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; prefers coastal markets.	1.0% to 4.0%	2.0% to 3.0%	2.0% to 3.0%	6.50% to 8.00%	1.0%	6.50% to 8.00%	5.00% to 8.00%	9 to 12	55.0% to 70.0%	5.0% to 9.0%	Does not use	3 to 6	
DOMESTIC PENSION FUND ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	6.50% to 7.25%	0.5% to 3.0%	7.50% to 8.55%	5.50% to 7.00%	9 to 12	65.0% to 75.0%	0.0% to 7.0%	\$0.10 to \$0.25	6 to 12	
LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses mainly DCF analysis; in direct cap, capitalizes NOI before tenant improvements, leasing commissions, and capital replacement reserve; may use a rent spike of 5.0% in years 1 to 3.	0.0% to 5.0%	2.0% to 4.0%	1.5% to 3.0%	6.00% to 8.50%	1.0% to 2.5%	6.50% to 9.00%	5.00% to 7.50%	6 to 24	50.0% to 75.0%	5.0% to 10.0%	\$0.20 to \$0.50	6 to 9	

Source: Personal survey conducted by PwC during April 2017.



ATLANTA OFFICE MARKET – SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE			FREE & CLEAR	MONTHS VACANT	TENANT RETENTION		
<p>INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; uses effective rent after all concessions are extracted; expects overall cap rates to increase 10 to 50 basis points over the next six months.</p>	3.0% to 5.0%	2.8% to 3.5%	2.5% to 3.5%	6.50% to 8.50% (CBD); (suburbs)	1.5% to 3.0%	6.00% to 8.50% (CBD); (suburbs)	5.75% to 8.50% (CBD); (suburbs)	7 to 9	50.0% to 75.0%	3.0% to 5.0%	\$0.15 to \$0.25	2 to 4
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.</p>	3.0% Year 1; 3.0% to 4.0% Year 2	3.0%	3.0%	6.75% to 9.00% (CBD); (suburbs)	2.0% to 3.0%	7.50% to 9.50% (CBD); (suburbs)	5.25% to 8.50% (CBD); (suburbs)	6 to 10	60.0% to 65.0%	8.0% to 10.0%	\$0.20 to \$0.25	8 to 10
<p>INVESTMENT BANKER ♦ Forecast Period: 5 to 10 years Prefers DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses a rent spike; expects overall cap rates to hold steady over the next six months.</p>	3.0% to 4.0%	1.5% to 2.5%	1.5% to 2.5%	6.50% to 7.75% (CBD); (suburbs)	1.0% to 2.0%	7.00% to 9.50% (CBD); (suburbs)	6.25% to 8.00% (CBD); (suburbs)	4 to 8	70.0% to 80.0%	5.0% to 7.0%	\$0.10 to \$0.25	3 to 4
<p>PRIVATE INVESTMENT FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.</p>	3.0% to 5.0%	3.0% to 5.0%	0.0% to 3.0%	7.50% to 8.50% (CBD); (suburbs)	2.0% to 3.0%	8.00% to 10.00% (CBD); (suburbs)	7.00% to 8.00% (suburbs)	6 to 9	70.0% to 80.0%	4.0% to 8.0%	\$0.20 to \$0.25	3 to 6
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses DCF, direct capitalization, and sales comparison approach; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to increase 15 to 25 basis points over the next six months.</p>	0.0% to 3.0% Years 1 & 2	2.5% to 3.0%	3.0%	6.00% to 8.75% (CBD); (suburbs)	0.7% to 1.5%	7.00% to 9.00% (CBD); (suburbs)	5.75% to 9.00% (CBD); (suburbs)	4 to 12	60.0% to 70.0%	6.0% to 10.0%	\$0.20 to \$0.35	3 to 6

Source: Personal survey conducted by PwC during April 2017.



BOSTON OFFICE MARKET – SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	MONTHS
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	3.0%	3.0%	3.0%	5.75% to 6.75% (CBD); 6.50% to 8.25% (suburbs)	2.0% to 3.0%	6.25% to 7.25% (CBD); 7.00% to 8.50% (suburbs)	4.25% to 6.50% (CBD); 5.25% to 7.25% (suburbs)	65.0% to 70.0%	4.0% to 6.0%	6 to 8		\$0.20 to \$0.25	6 to 8		
<p>PENSION FUND ADVISOR ♦ Forecast Period: 3 to 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	0.0% to 2.0%	0.0% to 3.0%	1.0% to 3.0%	6.50% to 8.50% (CBD); 7.50% to 10.50% (suburbs)	1.0% to 2.5%	6.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	7.00% to 8.50% (CBD); 7.50% to 10.00% (suburbs)	50.0% to 75.0%	4.0% to 8.0%	6 to 9		\$0.15 to \$0.65	2 to 5		
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 10 years Uses DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use rent spikes of 5.0% in years 1 and 2 and 4.0% in year 3.</p>	3.0% to 6.0%	3.0%	3.0%	5.00% to 6.00% (CBD); 6.75% to 7.75% (suburbs)	1.0% to 2.0%	6.00% to 7.25% (CBD); 6.75% to 7.75% (suburbs)	4.00% to 4.75% (CBD); 6.00% to 6.25% (suburbs)	65.0% to 70.0%	2.0% to 7.0%	6 to 9		\$0.20 to \$0.30	6 to 12		
<p>PRIVATE EQUITY INVESTOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses rent spikes.</p>	3.0% to 4.0%	2.5% to 3.0%	2.0% to 2.5%	5.75% to 8.00% (suburbs)	2.0% to 2.5%	7.00% to 8.50% (CBD); 7.50% to 8.00% (suburbs)	5.50% to 6.75% (CBD); 6.75% to 8.00% (suburbs)	65.0% to 70.0%	5.0%	5 to 9		\$0.15 to \$0.20	3 to 6		
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 10 years Uses mainly direct capitalization; major focus is on the initial cash-on-cash return; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.</p>	5.0%	3.0%	3.0%	5.50% to 7.00% (suburbs)	1.3%	7.00% to 10.00% (suburbs)	4.25% to 4.75% (CBD); 6.25% to 7.25% (suburbs)	70.0% to 8.0%	4.0%	7 to 8		Does not use	4 to 6		
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 to 12 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	4.0% to 4.5%	3.0%	3.0%	5.50% to 8.00% (suburbs)	1.0% to 3.0%	5.75% to 7.75% (CBD); 6.25% to 7.75% (suburbs)	4.00% to 5.00% (CBD); 7.00% to 8.00% (suburbs)	65.0% to 70.0%	5.0% to 8.0%	7 to 10		\$0.15 to \$0.25	4 to 7		

Source: Personal survey conducted by PwC during April 2017.



CHARLOTTE OFFICE MARKET—SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE			FREE & CLEAR	FREE & CLEAR	MONTHS VACANT		
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 8 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 4.0%	3.0% to 4.0%	1.0% to 3.0%	6.00% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	0.5% to 1.0%	7.00% to 8.50% (CBD); 7.50% to 9.00% (suburbs)	5.00% to 7.00% (CBD); 6.00% to 8.00% (suburbs)	5 to 10	65.0% to 75.0%	5.0% to 10.0%	\$0.10 to \$0.25	1 to 9
<p>INSTITUTIONAL INVESTOR ♦ Forecast Period: 5 to 10 years Mainly uses DCF analysis and sales comparison approach; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; prefers the CBD; no longer uses a rent spike; sees overall cap rates holding steady over the next six months.</p>	2.5% to 3.5%	1.5% to 2.5%	2.0% to 2.5%	6.50% to 7.50% (CBD); 7.00% to 8.00% (suburbs)	1.0% to 3.0%	7.50% to 9.00% (CBD); 7.75% to 9.50% (suburbs)	6.25% to 7.25% (CBD); 6.75% to 8.00% (suburbs)	3 to 9	70.0% to 75.0%	5.0% to 7.5%	\$0.10 to \$0.35	2 to 4
<p>VALUE-ADDED INVESTOR ♦ Forecast Period: 3 to 5 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to increase up to 50 basis points over the next six months; may use a rent spike.</p>	2.0% to 3.0%	2.0% to 3.0%	2.5% to 3.0%	6.50% to 7.50% (CBD); 7.00% to 8.00% (suburbs)	0.8% to 1.3%	8.00% to 10.00% (suburbs)	6.50% to 7.25% (CBD); 7.00% to 8.00% (suburbs)	5 to 10	70.0%	5.0% to 10.0%	\$0.10 to \$0.25	2 to 4
<p>PRIVATE INVESTOR ♦ Forecast Period: 3 to 7 years Mainly uses DCF analysis; in direct capitalization, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions favor sellers; expects overall cap rates to hold steady over the next six months; no longer uses a rent spike.</p>	3.0% to 4.0%	2.0% to 2.5%	2.0% to 2.5%	6.75% to 7.75% (CBD); 7.75% to 8.50% (suburbs)	1.5% to 2.5%	8.00% to 10.00% (suburbs)	6.50% to 7.25% (CBD); 7.50% to 8.75% (suburbs)	7 to 10	65.0% to 75.0%	7.0% to 10.0%	\$0.25 to \$0.40	4 to 7
<p>INVESTMENT MANAGER ♦ Forecast Period: 3 to 10 years Uses all three approaches to value; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to hold steady over the next six months; no longer uses a rent spike.</p>	2.5% to 4.5%	2.0%	2.0% to 3.0%	5.50% to 6.50% (CBD); 6.50% to 8.50% (suburbs)	1.0% to 1.5%	6.50% to 7.50% (CBD); 7.00% to 9.00% (suburbs)	5.50% to 6.50% (CBD); 6.00% to 7.00% (suburbs)	4 to 9	70.0% to 80.0%	3.0% to 6.0%	\$0.25 to \$0.50	2 to 4

Source: Personal survey conducted by PwC during April 2017.



CHICAGO OFFICE MARKET—SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 5 to 10 years Relies mainly on DCF analysis; also uses direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.</p>	3.0% Years 1 & 2	3.0%	2.5% to 3.0%	6.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	0.8% to 1.5%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	5.50% to 8.00% (CBD); 7.50% to 9.00% (suburbs)	6 to 9	65.0% to 75.0%	12.0% to 18.0%	\$0.25 to \$0.50	3 to 6		
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; no longer uses a rent spike.</p>	0.0% Years 1 & 2	2.0% to 3.0%	2.0%	6.00% to 9.00% (CBD); 7.50% to 10.00% (suburbs)	1.0% to 2.5%	7.00% to 9.50% (CBD); 8.00% to 11.00% (suburbs)	5.50% to 8.00% (CBD); 7.00% to 10.00% (suburbs)	6 to 9	60.0% to 75.0%	10.0% to 15.0%	\$0.50 to \$0.75	4 to 6		
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 10 years Uses mainly direct capitalization; major focus is on the initial cash-on-cash return; typically extends forecast period to capture impact of all lease expirations; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	0.0% Year 1; 0.0% to 3.0% Year 2	3.0%	3.0%	6.00% to 6.50% (CBD); 8.00% to 9.00% (suburbs)	1.5%	7.00% to 7.50% (CBD); 10.00% to 11.00% (suburbs)	5.00% to 6.00% (CBD); 8.00% to 9.00% (suburbs)	10 to 12	70.0% to 85.0%	8.0% to 8.0%	Does not use	4 to 8		
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents; does not use rent spikes.</p>	1.0% to 2.0%	3.0%	2.0% to 3.0%	5.50% to 7.50% (CBD); 8.50% to 10.00% (suburbs)	5.0%	9.00% to 10.00% (CBD); 11.00% to 12.00% (suburbs)	5.50% to 7.50% (CBD); 8.50% to 9.50% (suburbs)	6 to 9	60.0% to 70.0%	8.0% to 12.0%	\$0.15 to \$0.25	3 to 6		
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; sees overall cap rates holding steady over the next six months.</p>	5.0%	3.0%	3.0%	5.75% to 6.50% (CBD); 8.00% to 10.00% (suburbs)	0.5% to 1.0%	5.75% to 6.50% (CBD); 8.00% to 10.00% (suburbs)	4.50% to 5.75% (CBD); 7.00% to 9.00% (suburbs)	9	65.0% to 75.0%	5.0% to 8.0%	\$0.25 to \$0.50	2 to 6		
<p>INVESTMENT ADVISOR ♦ Forecast Period: 10 years Relies on DCF; uses face rents and reflects concessions as they are scheduled to occur; prefers the West Loop; does not use a rent spike; sees overall cap rates increasing over the next six months.</p>	1.0% to 3.0%	3.0% to 6.0%	2.0% to 3.0%	5.50% to 6.25% (CBD); 7.50% to 9.00% (suburbs)	1.0% to 1.5%	6.00% to 7.00% (CBD); 8.25% to 10.50% (suburbs)	4.75% to 6.75% (CBD); 7.00% to 9.00% (suburbs)	6 to 12	60.0% to 75.0%	3.0% to 5.0%	\$0.20 to \$0.30	3 to 9		

Source: Personal survey conducted by PwC during April 2017.



DALLAS OFFICE MARKET – SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME	
<p>PRIVATE INVESTOR ♦ Forecast Period: 3 to 7 years Relies on DCF; also uses direct capitalization and sales comparison approach; uses face rents; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; may use a rent spike of 5.0% in year 2.</p>	2.0% to 5.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	6.00% to 8.00% (CBD); 6.00% to 9.00% (suburbs)	1.0% to 3.0%	6.00% to 8.00% (CBD); 9.00% (suburbs)	5.00% to 8.00% (CBD); 6.00% to 8.50% (suburbs)	6 to 9	65.0% to 75.0%	2.0% to 5.0%	\$0.10 to \$0.25		3 to 6		
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that local market conditions equally favor sellers and buyers; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 2.5% Years 1 & 2	3.0%	3.0%	6.25% to 7.25% (CBD); 7.25% to 8.00% (suburbs)	2.0% to 2.5%	6.00% to 7.25% (CBD); 8.50% (suburbs)	5.00% to 6.25% (CBD); 7.00% (suburbs)	6 to 9	70.0% to 75.0%	5.0% to 7.0%	\$0.20 to \$0.40		3 to 6		
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; uses face rents and reflects concessions when they are scheduled to occur; believes market conditions favor buyers.</p>	2.0% to 3.0% Years 1 & 2	3.0%	3.0%	6.50% to 7.75% (CBD); 7.50% to 8.50% (suburbs)	2.0% to 3.0%	7.50% to 8.50% (CBD); 9.00% (suburbs)	5.00% to 7.25% (CBD); 7.75% (suburbs)	6 to 10	65.0% to 70.0%	5.0% to 10.0%	\$0.20 to \$0.25		6 to 12		
<p>PENSION FUND ADVISOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.</p>	3.0% Years 1 to 3	3.0%	Did not disclose	6.25% to 6.50% (CBD)	0.5% to 1.0%	6.75% to 7.25% (CBD)	5.25% to 6.00% (CBD)	6 to 9	65.0% to 75.0%	1.0% to 5.0%	\$0.15 to \$0.25		4 to 6		
<p>REAL ESTATE ADVISER ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to hold steady over the next six months.</p>	6.0% Year 1; 5.0% Year 2	3.0%	3.0%	6.25% to 7.00% (CBD); 6.50% to 7.25% (suburbs)	1.0%	6.75% to 7.50% in both CBD & suburbs	5.50% to 6.75% in both CBD & suburbs	9	65.0%	3.0%	\$0.50		1 to 6		

Source: Personal survey conducted by PwC during April 2017.

DENVER OFFICE MARKET – SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS		
<p>PRIVATE INVESTMENT FIRM ♦ Forecast Period: 3 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.</p>	2.0% to 4.0%	3.0%	3.0%	6.00% to 7.50% (CBD); 7.00% to 8.50% (suburbs)	0.5% to 3.0%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	5.50% to 7.00% (CBD); 6.50% to 8.75% (suburbs)	5 to 9	50.0% to 75.0%	3.0% to 8.0%	\$0.10 to \$0.25	1 to 3			
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 7 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 3.0% Years 1 to 3	2.0% to 3.0%	2.0% to 2.5%	5.75% to 8.00% (CBD); 8.00% to 9.50% (suburbs)	1.0% to 3.0%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	5.00% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	6 to 7	70.0% to 75.0%	7.0% to 8.0%	\$0.15 to \$0.25	2 to 4			
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.</p>	3.0% Years 1 to 3	3.0%	3.0%	6.50% to 7.00% (suburbs)	2.0% to 3.0%	7.00% to 7.50% (suburbs)	6.00% to 6.50% (suburbs)	6 to 8	60.0% to 70.0%	1.0% to 2.0%	\$0.20 to \$0.30	3 to 6			
<p>PENSION FUND INVESTOR ♦ Forecast Period: 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; believes that current market conditions equally favor buyers and sellers; does not use rent spikes.</p>	2.0% to 3.0% Years 1 to 3	3.0%	2.0% to 3.0%	6.00% to 6.50% (CBD); 6.50% to 7.50% (suburbs)	1.5% to 2.0%	6.75% to 7.25% (CBD); 7.00% to 8.00% (suburbs)	5.50% to 6.00% (CBD); 6.25% to 6.50% (suburbs)	5 to 6	60.0% to 70.0%	5.0%	Does not use	3 to 6			
<p>PRIVATE INVESTMENT FIRM ♦ Forecast Period: 5 to 11 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; expects overall cap rates to increase 10 to 50 basis points over the next six months; does not use rent spikes.</p>	3.0% Years 1 to 3	3.0%	3.0%	7.50% to 8.50% (CBD); 8.50% to 9.50% (suburbs)	3.0% to 5.0%	8.00% to 10.00% (CBD); 8.00% to 11.00% (suburbs)	5.00% to 7.00% (CBD); 7.00% to 9.00% (suburbs)	6 to 9	70.0% to 75.0%	5.0% to 10.0%	\$0.10 to \$0.30	3 to 6			

Source: Personal survey conducted by PwC during April 2017.



HOUSTON OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE			FREE & CLEAR	MONTHS VACANT	TENANT RETENTION		
<p>REAL ESTATE ADVISORS ♦ Forecast Period: 5 years Relies on DCF; also uses direct capitalization and sales comparison approach; uses effective rents; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to increase 25 to 50 basis points over the next six months.</p>	(8.0%) to (6.0%) Year 1	2.5%	1.5% to 1.8%	6.50% to 6.75% (CBD); 6.75% to 7.00% (suburbs)	1.5% to 2.5%	6.50% to 7.00% (CBD); 7.50% to 8.00% (suburbs)	6.50% to 6.75% (CBD); 6.75% to 7.25% (suburbs)	12 to 18	50.0% to 60.0%	5.0% to 10.0%	\$0.25	12
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 7 years Uses both DCF and direct capitalization; also looks at discount to replacement cost; relies on DCF; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike.</p>	0.0% Year 1; 0.0% to 4.0% Year 2	3.0%	3.0%	5.75% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	1.0% to 2.5%	8.00% to 12.00% (CBD); 9.00% to 14.00% (suburbs)	5.00% to 8.00% (CBD); 6.50% to 8.00% (suburbs)	2 to 5	Up to 80.0%	5.0% to 10.0%	\$0.15 to \$0.30	3 to 12
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur; believes market conditions favor buyers.</p>	0.0% Year 1; 0.0% to 1.0% Year 2	3.0%	3.0%	6.75% to 7.75% (CBD); 7.25% to 8.75% (suburbs)	2.0% to 3.0%	7.25% to 8.75% (CBD); 7.75% to 8.75% (suburbs)	5.75% to 7.25% (CBD); 6.50% to 8.00% (suburbs)	8 to 10	60.0% to 65.0%	8.0% to 10.0%	\$0.20 to \$0.25	10 to 12
<p>PENSION FUND ADVISOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	0.0%	3.0%		7.25% to 7.50% (CBD)	1.0% to 2.0%	8.25% to 9.25% (CBD)	6.00% to 6.50% (CBD)	9	65.0% to 70.0%	1.0% to 5.0%	\$0.15 to \$0.25	6 to 12
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 7 years Uses both DCF analysis and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that current market conditions equally favor buyers and sellers; does not use rent spikes.</p>	0.0% to 3.0% Years 1 to 3	2.0% to 3.0%	2.0% to 3.0%	7.00% to 9.50% (CBD); 7.50% to 10.00% (suburbs)	1.0% to 3.0%	8.00% to 10.00% (CBD); 9.00% to 11.50% (suburbs)	6.50% to 8.00% (CBD); 7.00% to 10.00% (suburbs)	6 to 12	65.0% to 75.0%	7.0% to 15.0%	\$0.15 to \$0.30	4 to 9

Source: Personal survey conducted by PwC during April 2017.

LOS ANGELES OFFICE MARKET – SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS		
<p>INVESTMENT ADVISOR ♦ Forecast Period: 7 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions favor sellers; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	3.0% to 5.0% Years 1 & 2	3.0%	3.0%	5.00% to 5.50% in both CBD & suburbs	0.5% to 1.0%	5.50% to 7.00% (CBD); 5.00% to 6.50% (suburbs)	4.50% to 5.50% (CBD); 5.00% to 6.00% (suburbs)	6 to 9	70.0% to 80.0%	5.0% to 7.0%	\$0.15 to \$0.25	1 to 3			
<p>REAL ESTATE COMPANY ♦ Forecast Period: 7 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use a rent spike of 6.0% in year 1 and 5.0% in year 2; believes market conditions equally favor buyers and sellers.</p>	3.0% to 6.0% Year 1; 3.0% to 5.0% Year 2	2.0% to 3.0%	2.0% to 3.0%	6.50% to 7.50% (CBD); 6.00% to 7.50% (suburbs)	1.0% to 1.5%	6.50% to 7.50% (CBD); 6.00% to 7.50% (suburbs)	5.50% to 6.50% (CBD); 4.50% to 6.50% (suburbs)	9 to 12	60.0% to 70.0%	5.0% to 8.0%	Does not use	3 to 6			
<p>INVESTMENT BANKER ♦ Forecast Period: 5 to 10 years Prefers DCF analysis; also uses direct cap; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike of 10.0% in year 5; expects overall cap rates to decrease 25 to 50 basis points over the next six months.</p>	3.0% to 5.0% Years 1 & 2	2.0%	2.0%	6.75% to 8.00% in both CBD & suburbs	2.0%	6.00% to 8.50% in both CBD & suburbs	5.00% to 7.00% in both CBD & suburbs	4 to 6	65.0% to 75.0%	5.0% to 10.0%	\$0.15 to \$0.25	3 to 4			
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 3 to 15 years Relies primarily on DCF; also uses direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; may use rent spikes; expects overall cap rates to increase over the next six months.</p>	3.0% to 4.0% Year 1; 3.0% to 4.0% Year 2	3.0%	2.5% to 3.5%	5.25% to 7.00% (CBD); 6.00% to 8.00% (suburbs)	1.5% to 2.0%	6.00% to 8.00% (CBD); 7.00% to 8.50% (suburbs)	5.00% to 6.00% (CBD); 6.25% to 7.50% (suburbs)	8 to 10	50.0% to 65.0%	1.0%	\$0.15 to \$0.20	1 to 3			
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 3.0%	3.0%	2.0% to 3.0%	6.00% to 7.50% (CBD); 6.00% to 7.75% (suburbs)	2.0% to 3.0%	6.50% to 8.00% in both CBD & suburbs	4.25% to 6.25% (CBD); 4.25% to 7.25% (suburbs)	6 to 8	65.0% to 70.0%	4.0% to 6.0%	\$0.20 to \$0.25	6 to 8			

Source: Personal survey conducted by PwC during April 2017.



MANHATTAN OFFICE MARKET –SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	MONTHS	MONTHS
INVESTMENT BANKER ♦ Forecast Period: 5 years Strongest interest is in Midtown; uses both DCF and direct capitalization; does not use rent spikes; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	2.0% to 3.0%	1.0% to 3.0%	1.0% to 3.0%	3.50% to 5.00%	4.0%	6.50% to 8.50%	3.50% to 5.00%	6 to 12	65.0% to 75.0%	5.0% to 10.0%	Does not use	2 to 6			
PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 10 years Uses mainly direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.	5.0%	3.0%	3.0%	5.00% to 5.50%	4.0%	6.00% to 7.00%	4.00% to 5.00%	8 to 10	70.0% to 75.0%	2.5% to 3.0%	\$0.35 to \$0.50	3			
PENSION FUND ADVISOR ♦ Forecast Period: 10 to 12 years Mainly uses DCF analysis when valuing assets; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use a rent spike.	4.0% to 5.0%	3.0%	3.0%	4.50% to 5.50%	3.8% to 4.0%	5.75% to 6.50%	3.75% to 5.00%	9 to 12	60.0% to 70.0%	0.5% to 1.0%	\$0.10 to \$0.25	6 to 9			
INVESTMENT ADVISOR ♦ Forecast Period: 3 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commission, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.	0.0% to 1.5%	2.0% to 3.0%	1.0% to 3.0%	6.50% to 8.50%	2.0% to 3.0%	8.00% to 9.00%	6.50% to 8.50%	2 to 6	50.0% to 75.0%	2.5% to 7.5%	\$0.15 to \$0.50	1 to 6			
LIFE INSURANCE COMPANY ♦ Forecast Period: 10 to 12 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses effective rents in DCF analysis; does not use rent spikes.	3.0% to 4.0%	3.0%	3.0% to 4.0%	5.25% to 6.00%	1.0% to 3.0%	5.75% to 6.25%	4.00% to 5.00%	5 to 7	70.0% to 80.0%	5.0% to 7.0%	\$0.15 to \$0.25	5 to 6			
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; relies on DCF; uses face rents in DCF model, net effective rents in direct capitalization; prefers Midtown and Times Square; does not use rent spikes.	2.0% to 3.0%	3.0%	3.0%	5.75% to 6.75%	1.5% to 2.0%	5.75% to 7.25%	4.00% to 5.50%	5 to 8	65.0% to 70.0%	3.0% to 6.0%	\$0.20 to \$0.25	4 to 6			

Source: Personal survey conducted by PwC during April 2017.



NORTHERN VIRGINIA OFFICE MARKET – SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	MONTHS	
<p>REIT ♦ Forecast Period: 3 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; expects overall cap rates to decrease over the next six months; does not use rent spikes.</p>	2.0% to 3.0% Year 1; 2.5% to 3.0% Year 2	1.0% to 2.0%	2.5% to 3.0%	7.50% to 8.50%	1.5% to 2.0%	7.00% to 8.00%	7.50% to 8.50%	6 to 15	50.0% to 65.0%	5.0% to 7.0%	\$0.25 to \$0.50	4 to 8			
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	0.0% Year 1; 2.0% Year 2	0.0%	2.0% to 2.5%	5.75% to 6.50%	0.5% to 2.0%	5.00% to 7.00%	6.00% to 8.50%	12	50.0% to 75.0%	5.0% to 9.0%	\$0.25 to \$0.70	1 to 3			
<p>INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Relies on DCF; also uses direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; does not use rent spikes.</p>	3.0% Years 1 & 2	3.0%	3.0%	6.50% to 7.00%	2.0% to 3.0%	6.00% to 6.50%	7.00% to 7.50%	6 to 7	60.0% to 70.0%	3.0% to 5.0%	\$0.15 to \$0.25	3 to 5			
<p>PENSION FUND ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; does not use rent spikes; believes market conditions are neutral.</p>	0.0% to 3.0% Year 1; 1.5% to 3.0% Year 2	3.0%	3.0%	5.75% to 7.50%	1.0% to 2.0%	5.25% to 8.00%	6.00% to 8.50%	6 to 9	70.0%	5.0%	\$0.15 to \$0.25	3 to 6			
<p>REIT ♦ Forecast Period: 10 years Looks at cash-on-cash return and the growth in the return over a ten-year period; does not price properties through DCF; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.</p>	0.0% Years 1 & 2; 0.0% to 2.0% Year 3	2.0%	2.0%	6.00% to 7.50%	2.0% to 2.5%	5.00% to 8.50%	6.50% to 9.50%	8 to 12	65.0%	1.0% to 3.0%	\$0.25	3 to 6			

Source: Personal survey conducted by PwC during April 2017.



PACIFIC NORTHWEST OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS		
<p>INVESTMENT ADVISOR ♦ Forecast Period: 7 to 10 years Mainly uses DCF analysis; in direct cap. capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions equally favor buyers and sellers; does not use rent spikes.</p>	3.0% to 5.0%	3.0%	3.0%	5.00% to 5.50% (CBD); 5.00% to 6.00% (suburbs)	0.5% to 1.0%	5.25% to 6.50% (CBD); 5.50% to 7.00% (suburbs)	4.50% to 5.50% (CBD); 5.00% to 6.50% (suburbs)	6 to 9	70.0% to 80.0%	5.0%	\$0.15 to \$0.25	1 to 3			
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Mainly uses DCF analysis; in direct cap. capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects cap rates to hold steady over the next six months; does not use rent spikes.</p>	2.5% to 3.3% Years 1 & 2	3.0%	3.0%	5.50% to 6.25% (CBD); 6.25% to 7.25% (suburbs)	3.0% to 4.0%	6.25% to 7.50% (CBD); 7.00% to 8.50% (suburbs)	5.00% to 6.00% (CBD); 6.00% to 7.00% (suburbs)	6 to 9	70.0% to 75.0%	3.0% to 6.0%	\$0.15 to \$0.25	3 to 6			
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap. capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 3.0%	3.0%	3.0%	5.50% to 6.25% (CBD); 6.25% to 7.25% (suburbs)	3.0% to 4.0%	6.25% to 7.00% (CBD); 7.00% to 8.20% (suburbs)	5.25% to 6.00% (CBD); 6.00% to 7.00% (suburbs)	6 to 9	70.0% to 75.0%	3.0% to 5.0%	\$0.15 to \$0.25	3 to 6			
<p>PRIVATE INVESTOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap. capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	2.5% to 3.0%	2.5% to 3.0%	1.5% to 3.0%	5.00% to 9.00% (CBD)	2.0% to 4.0%	8.00% to 10.00% (suburbs)	5.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	6 to 12	50.0% to 75.0%	1.0% to 2.0%	\$1.00 to \$2.00	6 to 12			
<p>REAL ESTATE SERVICE FIRM ♦ Forecast Period: 5 to 12 years Uses both DCF and direct capitalization; in direct cap. capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses rent spikes; expects overall cap rates to hold steady over the next six months.</p>	3.0% to 5.0% Years 1 & 2	2.5% to 3.0%	2.5% to 3.0%	5.50% to 7.00% (CBD); 8.00% to 10.00% (suburbs)	0.1% to 2.0%	6.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	5.00% to 6.50% (CBD); 6.50% to 7.75% (suburbs)	6 to 9	70.0% to 75.0%	5.0%	\$0.10 to \$0.20	3 to 6			
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 7 to 10 years Uses both DCF and direct capitalization; in direct cap. capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	3.0%	3.0%	3.0%	6.50% to 7.50% (CBD)	2.5% to 3.0%	7.00% to 8.25% (CBD)	6.00% to 7.00% (CBD); 7.00% to 8.00% (CBD)	6 to 12	65.0% to 70.0%	5.0% to 8.0%	\$0.20 to \$0.50	3 to 6			

Source: Personal survey conducted by PwC during April 2017.



PHILADELPHIA OFFICE MARKET – SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME	
<p>PRIVATE INVESTOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses effective rents; expects overall cap rates to hold steady over the next six months; does not use rent spikes.</p>	2.0% to 2.5% Year 1; 2.5% Year 2	2.5% to 3.0%	2.5% (CBD); 7.25% to 8.25% (CBD); 7.75% to 8.75% (suburbs)	3.0% to 4.0%	7.50% to 8.50% (CBD); 8.00% to 9.00% (suburbs)	6.50% to 7.00% (CBD); 7.00% to 7.25% to 8.25% (suburbs)	7.50% to 8.50% (CBD); 8.00% to 9.00% (suburbs)	6.50% to 7.00% (CBD); 7.00% to 7.25% to 8.25% (suburbs)	7 to 9	65.0% to 70.0%	7.0% to 9.0%	\$0.25		4 to 6	
<p>REIT ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; focuses on suburban markets; uses effective rents; expects overall cap rates to hold steady over the next six months; does not use rent spikes.</p>	1.0% to 2.0% Year 1; 2.0% to 3.0% Year 2	3.0% to 3.0%	6.00% to 6.75% (CBD); 8.25% to 9.00% (suburbs)	2.0%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	6.00% to 7.00% (CBD); 7.00% to 7.25% to 8.25% (suburbs)	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	6 to 8	65.0%	5.0%	\$0.20		6 to 12		
<p>OPPORTUNITY FUND INVESTOR ♦ Forecast Period: 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; prefers suburbs; does not use rent spikes.</p>	3.0% Years 1 to 3	3.0%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	3.0%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	6.00% to 7.50% (CBD); 7.00% to 8.50% (suburbs)	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	6 to 9	65.0% to 75.0%	5.0%	\$0.25		4 to 8		
<p>REIT ♦ Forecast Period: 5 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 3.0%	1.0% to 2.0%	6.50% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	2.0% to 2.5%	7.00% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	6.00% to 7.00% (CBD); 7.00% to 7.00% to 9.00% (suburbs)	7.00% to 7.50% (CBD); 8.00% to 9.50% (suburbs)	6 to 15	60.0% to 70.0%	5.0% to 7.0%	\$0.25 to \$0.50		4 to 8		
<p>PRIVATE EQUITY INVESTOR ♦ Forecast Period: 3 to 5 years Uses mainly DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; uses face rents and reflects concessions when they are scheduled to occur.</p>	0.0% Year 1; 0.0% to 3.0% Year 2	0.0% to 4.0%	7.50% to 9.00% (CBD); 8.50% to 10.00% (suburbs)	1.5% to 3.0%	9.00% to 10.00% (CBD); 9.50% to 11.00% (suburbs)	7.00% to 8.00% (CBD); 8.00% to 9.50% (suburbs)	9.00% to 10.00% (CBD); 9.50% to 11.00% (suburbs)	9 to 12	50.0% to 75.0%	5.0% to 10.0%	\$0.15 to \$0.65		3 to 5		

Source: Personal survey conducted by PwC during April 2017.



PHOENIX OFFICE MARKET—SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME	
<p>PRIVATE INVESTOR ♦ Forecast Period: 3 to 7 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	2.0% to 4.0% Years 1 & 2	1.0% to 3.0%	3.0%	7.00% to 8.00% in both CBD & suburbs	2.0%	8.00% to 10.00% in both CBD & suburbs	6.50% to 8.00% (CBD); 7.00% to 8.00% (suburbs)	6	65.0% to 75.0%	5.0% to 10.0%	\$0.20 to \$0.25	6 to 18			
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 to 12 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike of 6.0% in year 3.</p>	4.0% to 6.0% Years 1 & 2	3.0%	3.0%	6.25% to 7.50% (CBD); 6.25% to 8.00% (suburbs)	1.0% to 2.0%	7.50% to 8.00% (CBD); 7.50% to 8.50% (suburbs)	5.50% to 6.50% in both CBD & suburbs	6 to 12	60.0% to 70.0%	5.0% to 7.0%	\$0.20 to \$0.25	4 to 8			
<p>PUBLIC REIT ♦ Forecast Period: 5 to 10 years Uses all approaches to value; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that this market equally favors buyers and sellers; expects overall cap rates to hold steady over the next six months.</p>	3.0% to 7.0% Year 1; 3.0% to 6.0% Year 2	1.0% to 3.0%	1.0% to 3.0%	6.00% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	0.5% to 1.0%	7.00% to 9.00% (CBD); 7.00% to 10.00% (suburbs)	5.00% to 7.50% (CBD); 6.00% to 8.00% (suburbs)	6 to 9	60.0% to 75.0%	4.0% to 7.0%	\$0.10 to \$0.25	1 to 12			
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; believes that market conditions favor buyers; may use a rent spike of 4.0% in year 3.</p>	3.0% to 4.0%	3.0%	3.0%	6.75% to 7.00% (suburbs)	1.0% to 3.0%	7.50% to 7.75% (suburbs)	6.00% to 6.50% (suburbs)	6 to 8	65.0% to 70.0%	6.0% to 7.0%	\$0.20 to \$0.25	4 to 6			
<p>PRIVATE EQUITY FIRM ♦ Forecast Period: 3 to 5 years Mainly uses DCF analysis; in direct capitalization, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions currently favor buyers.</p>	3.0% to 5.0% Years 1 & 2	2.0% to 3.0%		6.50% to 7.00% (CBD); 7.00% to 7.50% (suburbs)	1.5% to 2.0%	8.00% to 10.00% (CBD); 7.00% to 9.00% (suburbs)	6.25% to 6.50% (CBD); 7.00% to 7.25% (suburbs)	5 to 10	70.0% to 75.0%		\$0.10 to \$0.15	6 to 10			

Source: Personal survey conducted by PwC during April 2017.



SAN DIEGO OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE			FREE & CLEAR	FREE & CLEAR	MONTHS VACANT		
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 5 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to increase up to 50 basis points over the next six months; may use rent spikes.</p>	3.0% to 5.0% Year 1; 2.0% to 3.0% Year 2	2.0% to 3.0%	2.0% to 3.0%	5.50% to 6.50% (CBD); 6.00% to 7.50% (suburbs)	1.0% to 5.0%	Did not disclose	5.50% to 6.50% (CBD); 6.00% to 7.50% (suburbs)	5 to 10	65.0% to 75.0%	7.0% to 12.0%	\$0.10 to \$0.20	3 to 12
<p>PRIVATE INVESTOR ♦ Forecast Period: 1 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; may use rent spikes in certain submarkets.</p>	3.0% to 4.0% Year 1; 4.0% to 6.0% Year 2	3.0%	3.0%	7.25% to 8.75% (CBD); 6.75% to 8.75% (suburbs)	1.0% to 3.0%	8.50% to 10.50% in both CBD & suburbs	7.00% to 8.50% (CBD); 6.50% to 8.50% (suburbs)	9 to 12	60.0% to 70.0%	5.0% to 10.0%	\$0.25 to \$0.35	3 to 5
<p>PUBLIC REAL ESTATE COMPANY ♦ Forecast Period: 7 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use a rent spike of 6.0% in year 1 and 5.0% in year 2; believes market conditions equally favor buyers and sellers.</p>	4.0% to 5.0% Year 1; 4.0% to 6.0% Year 2	2.0% to 3.0%	2.0% to 3.0%	6.50% to 7.50% in both CBD & suburbs	1.0% to 1.5%	6.50% to 7.50% in both CBD & suburbs	6.00% to 7.00% (CBD); 5.50% to 7.50% (suburbs)	6 to 12	60.0% to 70.0%	4.0% to 8.0%	Does not use	3 to 6
<p>PENSION/CORE INVESTOR ♦ Forecast Period: 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; does not use rent spikes; expects overall cap rates to increase up to 25 basis points over the next six months.</p>	2.0% to 3.0% Year 1; 3.0% to 4.0% Year 2	3.0%	2.5% to 3.0%	5.75% to 6.50% (CBD); 6.50% to 7.00% (suburbs)	2.0%	6.75% to 7.75% (CBD); 7.50% to 8.00% (suburbs)	5.50% to 6.00% (CBD); 6.00% to 7.50% (suburbs)	9	60.0% to 70.0%	2.0% to 3.0%	Does not use	4 to 6
<p>PRIVATE INVESTMENT FIRM ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	3.0% to 4.0% Year 1	3.0%	3.0%	5.75% to 6.25% (suburbs)	1.0% to 2.0%	6.50% to 7.00% (suburbs)	5.25% to 5.50% (suburbs)	6 to 8	65.0% to 75.0%	1.0%	\$0.15 to \$0.25	3 to 6

Source: Personal survey conducted by PwC during April 2017.



SAN FRANCISCO OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE			FREE & CLEAR	MONTHS VACANT	TENANT RETENTION		
<p>INVESTMENT ADVISOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.</p>	1.0% to 3.0% Year 1; 2.0% to 3.0% Year 2	3.0%	2.0%	5.25% to 6.00% (CBD); 6.25% to 7.50% (suburbs)	0.7% to 1.5%	5.50% to 6.50% (CBD); 6.50% to 7.75% (suburbs)	4.25% to 5.25% (CBD); 5.00% to 6.25% (suburbs)	6 to 9	50.0% to 70.0%	3.0% to 5.0%	\$0.20 to \$0.30	3 to 5
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to increase 10 to 30 basis points over the next six months.</p>	2.0% to 5.0% Year 1; 3.0% to 5.0% Year 2	3.0%	3.0%	5.00% to 6.00% (CBD); 6.00% to 9.00% (suburbs)	1.0% to 2.0%	5.00% to 7.00% (CBD); 7.00% to 9.50% (suburbs)	3.50% to 7.00% (CBD); 5.00% to 8.00% (suburbs)	2 to 7	65.0% to 70.0%	5.0% to 10.0%	\$0.10 to \$0.30	2 to 6
<p>PENSION FUND ADVISOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions favor sellers; does not use rent spikes.</p>	3.0% to 4.0%	0.0% to 3.0%	3.0%	5.00% to 5.50% (CBD); 6.50% to 7.00% (suburbs)	3.0% to 3.5%	6.50% to 7.00% (CBD); 7.00% to 8.00% (suburbs)	4.50% to 5.50% (CBD)	10	70.0% to 75.0%	3.0% to 4.5%	Does not use	4 to 6
<p>INVESTMENT ADVISOR ♦ Forecast Period: 7 to 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions equally favor buyers and sellers; expects overall cap rates to hold steady over the next six months.</p>	3.0% to 5.0% Years 1 to 3	3.0%	3.0%	5.00% to 5.50% (CBD); 5.00% to 6.00% (suburbs)	0.5% to 1.0%	5.50% to 6.00% (CBD); 6.00% to 7.00% (suburbs)	3.50% to 5.50% (CBD); 5.00% to 6.00% (suburbs)	6 to 9	75.0% to 80.0%	2.5% to 5.0%	\$0.15 to \$0.25	1 to 3
<p>REAL ESTATE COMPANY ♦ Forecast Period: 10 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes.</p>	1.0% to 3.0%	2.0% to 3.0%	2.0%	6.00% to 6.50% (CBD); 7.50% (suburbs)	1.0% to 1.5%	6.50% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	5.00% to 6.00% (CBD); 5.50% to 6.50% (suburbs)	7 to 10	60.0% to 70.0%	5.0% to 7.0%	Does not use	3 to 6

Source: Personal survey conducted by PwC during April 2017.



SEATTLE OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	MONTHS
INVESTMENT ADVISOR ♦ Forecast Period: 7 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.	3.0% to 5.0%	3.0%	3.0%	5.00% to 5.50% (CBD); 5.00% to 6.00% (suburbs)	0.5% to 1.0%	5.25% to 5.50% (CBD); 5.00% to 7.00% (suburbs)	4.50% to 5.50% (CBD); 5.00% to 6.50% (suburbs)	6 to 9	70.0% to 80.0%	5.0%	\$0.15 to \$0.25		1 to 3		
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Mainly uses DCF; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; expects overall cap rates to hold steady over the next six months; does not use rent spikes.	2.5% to 3.0%	2.5% to 3.0%	1.5% to 3.0%	5.00% to 9.00% (CBD)	2.0% to 4.0%	8.00% to 10.00% (suburbs)	5.00% to 8.00% (CBD)	6 to 12	50.0% to 75.0%	1.0% to 2.0%	\$1.00 to \$2.00		6 to 12		
INVESTMENT BANKER ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; expects overall cap rates to decrease 10 to 50 basis points over the next six months; may use a rent spike of 10.0% in year 5.	3.0% to 5.0% Years 1 & 2	2.0%	2.0% to 3.0%	6.50% to 7.50% in both CBD & suburbs	2.0%	6.25% to 8.50% in both CBD & suburbs	5.00% to 7.00% in both CBD & suburbs	4 to 6	65.0% to 75.0%	5.0% to 10.0%	\$0.15 to \$0.25		3 to 4		
LIFE INSURANCE COMPANY ♦ Forecast Period: 7 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; expects overall cap rates to hold steady over the next six months; no longer uses rent spikes.	3.0% to 4.0%	3.0%	3.0%	6.00% to 6.50% (CBD)	2.5% to 3.0%	6.00% to 7.50% (CBD)	4.50% to 6.00% (CBD)	5 to 8	65.0% to 70.0%	5.0% to 8.0%	\$0.20 to \$0.50		1 to 3		
ASSET MANAGER ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions equally favor buyers and sellers; uses face rents and reflects concessions when they are scheduled to occur.	3.0% to 5.0%	3.0%	3.0%	5.50% to 6.50% (CBD); 6.50% to 7.00% (suburbs)	2.5% to 2.8%	6.00% to 7.75% (suburbs)	4.25% to 5.50% (CBD); 6.50% to 7.00% (suburbs)	6 to 12	70.0% to 75.0%	5.0%	\$0.20 to \$0.25		6 to 9		
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions equally favor buyers and sellers; no longer uses rent spikes.	2.5% to 3.5%	3.0%	3.0%	5.00% to 6.00% (CBD); 6.00% to 7.00% (suburbs)	3.0% to 4.0%	5.50% to 8.00% (suburbs)	4.50% to 5.75% (CBD); 6.75% to 8.00% (suburbs)	6 to 9	70.0% to 75.0%	3.0% to 5.0%	\$0.15 to \$0.25		3 to 6		

Source: Personal survey conducted by PwC during April 2017.

SOUTHEAST FLORIDA OFFICE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME	
<p>PRIVATE INVESTMENT FIRM ♦ Forecast Period: 3 to 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses a rent spike; sees overall cap rates holding steady over the next six months.</p>	3.0% to 5.0% Years 1 to 3	2.5% to 3.0%	2.0% to 2.5%	6.00% to 7.50% (CBD); 7.50% to 10.00% (suburbs)	1.5% to 2.0%	8.00% to 9.00% (CBD); 9.00% to 10.00% (suburbs)	5.00% to 7.00% (CBD); 7.00% to 9.50% (suburbs)	9 to 12	60.0% to 75.0%	6.0% to 8.0%	\$0.50 to \$1.00		3 to 5		
<p>REIT ♦ Forecast Period: 5 to 10 years Uses DCF analysis only; uses face rents and reflects concessions when they are scheduled to occur; expects overall cap rates to increase 25 to 50 basis points over the next six months; does not use rent spikes.</p>	2.0% to 3.0% Years 1 & 2	2.5% to 3.0%	2.0% to 2.5%	5.00% to 6.00% (CBD); 6.50% to 7.50% (suburbs)	1.0% to 2.5%	6.00% to 7.00% (CBD); 7.00% to 8.00% (suburbs)	5.00% to 6.00% (CBD); 6.00% to 7.00% (suburbs)	6 to 12	50.0% to 80.0%	3.0% to 8.0%	\$0.25 to \$0.50		4 to 8		
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes; sees overall cap rates holding steady over the next six months.</p>	1.0% to 5.0% Years 1 to 3	3.0%	3.0%	5.50% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	1.0% to 3.0%	6.50% to 8.00% (CBD); 7.00% to 8.50% (suburbs)	5.50% to 7.00% (CBD); 6.50% to 7.50% (suburbs)	6 to 12	65.0% to 75.0%	7.0% to 11.0%	\$0.10 to \$0.30		3 to 5		
<p>PRIVATE EQUITY INVESTOR ♦ Forecast Period: 3 to 5 years Uses mainly DCF analysis; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; uses face rents and reflects concessions when they are scheduled to occur; sees overall cap rates holding steady over the next six months.</p>	0.0% to 2.0% Year 1; 0.0% to 3.0% Year 2	1.0% to 3.0%	1.0% to 3.0%	7.00% to 10.50% (CBD); 8.50% to 10.50% (suburbs)	1.0% to 2.5%	8.50% to 10.00% (CBD); 10.00% to 10.50% (suburbs)	7.00% to 9.50% (CBD); 8.50% to 10.00% (suburbs)	6 to 12	40.0% to 70.0%	7.0% to 13.0%	\$0.20 to \$0.50		3 to 5		
<p>REIT ♦ Forecast Period: 10 years Valuation preference is DCF analysis; also uses direct cap; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; does not use rent spikes; prefers suburbs; sees overall cap rates holding steady over the next six months.</p>	0.0% to 1.0%	3.0%	2.0% to 3.0%	7.50% to 8.50% (suburbs)	2.0%	8.00% to 9.50% (suburbs)	7.75% to 8.75% (suburbs)	6 to 9	65.0%	5.0%	\$0.20		6 to 12		

Source: Personal survey conducted by PwC during April 2017.



SUBURBAN MARYLAND OFFICE MARKET—SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME
PRIVATE INVESTOR ♦ Forecast Period: 1 to 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	0.0% Years 1 & 2	1.0%	1.0% to 2.0%	7.00% to 8.50%	4.0% to 5.0%	9.00% to 10.00%	7.00% to 8.50%	9.00% to 10.00%	7.00% to 8.50%	9 to 12	70.0% to 80.0%	0.0%	Does not use	3 to 9	
LIFE INSURANCE COMPANY ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; no longer uses rent spikes.	0.0% Years 1 & 2	2.0% to 3.0%	2.0% to 2.5%	6.75% to 9.50%	2.0% to 3.0%	7.00% to 9.00%	6.75% to 9.00%	7.00% to 9.00%	6.75% to 9.00%	12	60.0% to 75.0%	5.0% to 15.0%	\$0.50 to \$0.75	3 to 9	
PRIVATE INVESTOR ♦ Forecast Period: 1 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; believes market conditions equally favor sellers and buyers.	0.0% to 1.0% Years 1 & 2	1.0% to 2.0%	2.0% to 3.0%	6.50% to 7.50%	1.0% to 2.0%	7.50% to 10.00%	6.50% to 7.50%	7.50% to 10.00%	5.50% to 7.00%	4 to 6	50.0% to 75.0%	6.0% to 9.0%	\$0.25 to \$0.50	4 to 8	
PRIVATE EQUITY FIRM ♦ Forecast Period: 5 to 8 years Mainly uses DCF analysis; in direct capitalization, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes that market conditions equally favor buyers and sellers.	0.0% Years 1 & 2	3.0%	3.0%	8.25% to 9.25%	2.5% to 3.0%	8.50% to 9.50%	8.25% to 9.25%	8.50% to 9.50%	8.00% to 9.00%	9 to 12	65.0% to 75.0%	7.0% to 10.0%	\$0.25 to \$0.30	6 to 9	
PRIVATE INVESTOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; believes market conditions favor buyers.	0.0% to 1.5% Years 1 & 2	2.0%	2.0%	6.50% to 7.50%	3.0%	7.50% to 8.50%	6.50% to 7.50%	7.50% to 8.50%	6.00% to 8.00%	8	65.0% to 8.00%	1.0% to 3.0%	\$0.25	5	

Source: Personal survey conducted by PwC during April 2017.



WASHINGTON, DC OFFICE MARKET – SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME	
<p>PENSION FUND ADVISOR ♦ Forecast Period: 10 years Prefers DCF analysis; also uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike of 4.0% in years 2 and 3.</p>	0.0% Year 1; 2.0% Year 2	3.0%	3.0%	5-25% to 5.50%	2.0% to 3.0%	5.75% to 6.00%	4.75% to 5.50%	3 to 9	65.0% to 70.0%	6.0% to 8.0%	\$0.15 to \$0.25	2 to 4			
<p>LIFE INSURANCE COMPANY ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; believes market conditions favor sellers.</p>	0.0% Year 1; 0.0% to 2.0% Year 2	0.0%	2.0% to 2.5%	5.00% to 6.00%	1.0% to 3.0%	5.00% to 6.50%	4.25% to 5.75%	6 to 12	50.0% to 75.0%	0.0% to 5.0%	\$0.20 to \$0.50	1 to 3			
<p>INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Relies on DCF; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses present value analysis of effective rents; no longer uses rent spikes; believes market conditions equally favor sellers and buyers.</p>	3.0% to 4.0% Year 1; 3.0% Year 2	3.0%	2.5% to 3.0%	5.00% to 6.00%	2.0% to 2.5%	6.00% to 6.50%	4.50% to 5.50%	4 to 6	65.0% to 75.0%	1.0% to 2.0%	\$0.15 to \$0.25	2 to 5			
<p>PENSION FUND ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; does not use rent spikes; expects overall cap rates to hold steady over the next six months.</p>	0.0% to 4.0%	3.0%	3.0%	5.00% to 6.50%	1.0% to 2.0%	5.50% to 7.00%	4.25% to 6.50%	6 to 9	70.0% to 75.0%	5.0% to 5.0%	\$0.25	3 to 6			
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months; believes market conditions favor buyers.</p>	2.0% to 3.0%	3.0%	3.0%	6.00%	2.5%	8.00%	6.00%	7 to 9	70.0% to 75.0%	3.0% to 5.0%	Does not use	3 to 6			

Source: Personal survey conducted by PwC during April 2017.



NATIONAL FLEX/R&D MARKET—SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME		
PRIVATE EQUITY INVESTOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIS, leasing commissions, and capital replacement reserve; believes market conditions equally favor buyers and sellers; does not use rent spikes.	3.0% Years 1 to 3	3.0%	3.0%	7.00% to 7.50%	1.5% to 3.0%	7.00% to 8.00%	6.25% to 7.00%	6 to 12	65.0% to 70.0%	2.0% to 5.0%	\$0.15 to \$0.40	2 to 5				
PRIVATE EQUITY INVESTOR ♦ Forecast Period: 2 to 5 years Uses mainly DCF analysis; in direct cap, capitalizes NOI before TIS, leasing commissions, and capital replacement reserve; does not use rent spikes; uses face rents and reflects concessions when they are scheduled to occur.	0.0% to 3.0% Years 1 to 3	0.0% to 2.0%	1.0% to 2.0%	7.50% to 9.50%	1.0% to 2.0%	8.00% to 10.00%	7.50% to 9.50%	9 to 12	50.0% to 75.0%	5.0% to 10.0%	\$0.15 to \$0.65	3 to 5				
REAL ESTATE SERVICES FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIS, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use rent spikes.	3.0% to 4.0% Years 1 to 3	3.0%	3.0%	6.75% to 7.50%	2.0% to 3.0%	7.50% to 9.00%	6.50% to 7.50%	6 to 12	65.0% to 75.0%	5.0% to 7.5%	\$0.20 to \$0.30	6 to 9				
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIS, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; uses a rent spike of 4.0% in years 2 and 3 and 4.5% in year 4.	2.0% Years 1 & 2	3.0%	3.0%	6.00% to 7.00%	1.0% to 4.0%	6.75% to 7.50%	5.50% to 6.25%	9 to 15	50.0% to 65.0%	3.0% to 8.0%	\$0.15 to \$0.50	6 to 12				
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIS, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use rent spikes.	2.0% to 3.0%	3.0%	2.0%	7.00% to 8.00%	4.0% to 6.0%	8.50% to 10.00%	7.00% to 8.00%	6 to 9	70.0% to 80.0%	5.0% to 7.0%	\$0.10 to \$0.20	6 to 12				

Source: Personal survey conducted by PwC during April 2017.



NATIONAL WAREHOUSE MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME
<p>REAL ESTATE SERVICES FIRM ♦ Forecast Period: 5 to 15 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; may use a rent spike of 5.0% in years 1 to 3.</p>	3.0% to 5.0% Years 1 & 2	2.0%	2.0%	5.00% to 6.00%	1.0% to 2.0%	5.50% to 6.00%	4.00% to 5.00%	4.00% to 5.00%	6 to 9	65.0% to 80.0%	0.0% to 5.0%	\$0.05 to \$0.15	\$0.05 to \$0.15	4 to 6	
<p>DOMESTIC PENSION FUND ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer uses rent spikes; data refers to the national warehouse sector; expects overall cap rates to hold steady over the next six months.</p>	3.0% Years 1 to 3	3.0%	3.0%	5.50% to 7.00%	1.0% to 3.0%	6.25% to 8.00%	4.50% to 6.50%	4.50% to 6.50%	6 to 12	65.0% to 75.0%	0.5% to 2.0%	\$0.10 to \$0.25	\$0.10 to \$0.25	6 to 9	
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Relies mainly on direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; data refers to the U.S. Southwest region.</p>	2.0% to 3.0%	3.0%	3.0%	6.00% to 7.00%	1.0% to 3.0%	6.50% to 7.00%	5.00% to 6.00%	5.00% to 6.00%	6 to 12	50.0% to 65.0%	3.0%	\$0.10 to \$0.35	\$0.10 to \$0.35	3 to 6	
<p>PENSION FUND ADVISOR ♦ Forecast Period: 10 years Prefers DCF analysis; also uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; data refers to the national warehouse sector.</p>	0.0% Year 1; 3.0% to 4.0% Year 2	3.0%	3.0%	5.00% to 6.00%	1.0% to 3.0%	5.75% to 6.50%	4.25% to 5.75%	4.25% to 5.75%	6 to 9	60.0% to 75.0%	5.0% to 7.0%	\$0.05 to \$0.15	\$0.05 to \$0.15	3 to 6	
<p>PENSION FUND ADVISOR ♦ Forecast Period: 5 to 10 years Mainly uses DCF; in direct capitalization, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; data refers to the U.S. Southeast region; expects overall cap rates to hold steady over the next six months.</p>	0.0% Year 1; 3.0% Year 2	0.0% to 3.0%	2.5% to 3.0%	6.50% to 6.75%	1.5% to 2.0%	7.00% to 7.25%	5.50% to 6.90%	5.50% to 6.90%	9 to 3	70.0% to 75.0%	1.0% to 7.0%	\$0.10 to \$0.20	\$0.10 to \$0.20	1 to 3	
<p>INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Relies on DCF; also uses direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; data refers to the U.S. Southeast region.</p>	3.0% to 4.0%	3.0%	3.0%	5.75% to 6.00%	2.0% to 3.0%	6.25% to 6.75%	5.00% to 5.25%	5.00% to 5.25%	4 to 6	65.0% to 70.0%	1.0% to 2.0%	\$0.10 to \$0.20	\$0.10 to \$0.20	3 to 4	

Source: Personal survey conducted by PwC during April 2017.



EAST NORTH CENTRAL (ENC) REGION WAREHOUSE MARKET –SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	MONTHS	MONTHS
PENSION FUND ADVISOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; expects overall cap rates to hold steady over the next six months; may use rent spikes.	0.0% to 3.0%	3.0%	3.0%	5.00% to 6.00%	1.0% to 2.0%	5.75% to 6.50%	4.25% to 5.50%	6 to 8	60.0% to 75.0%	4.0% to 7.0%	\$0.05 to \$0.15	2 to 3			
INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; no longer uses rent spikes.	2.0% to 3.0%	3.0%	2.5% to 3.0%	6.00% to 6.50%	2.0% to 3.0%	6.50% to 7.00%	5.50% to 6.00%	6 to 9	60.0% to 70.0%	2.0% to 4.0%	\$0.10 to \$0.20	3 to 6			
REAL ESTATE SERVICES FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions currently favor sellers; expects overall cap rates to hold steady over the next six months; may use a rent spike of 5.0% in years 1 to 3.	2.0% to 5.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	5.50% to 6.75%	1.0% to 2.0%	5.75% to 6.75%	4.75% to 5.75%	2 to 6	65.0% to 75.0%	0.0% to 5.0%	\$0.05 to \$0.15	6 to 9			
PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and replacement reserve; believes market conditions favor sellers; expects overall cap rates to hold steady over the next six months.	3.0% Years 1 to 3	3.0%	3.0%	5.75% to 6.75%	1.0% to 4.0%	6.25% to 7.00%	5.00% to 5.50%	6 to 12	50.0% to 65.0%	3.0% to 3.0%	\$0.10 to \$0.35	3 to 6			
PRIVATE EQUITY INVESTOR ♦ Forecast Period: 3 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months.	2.0% to 3.5%	3.0%		5.50% to 7.00%	1.0% to 4.0%	5.75% to 7.00%	6.00% to 7.00%	6 to 8	60.0% to 70.0%	3.0% to 3.0%	\$0.10 to \$0.20	3 to 6			

Source: Personal survey conducted by PwC during April 2017.



PACIFIC REGION WAREHOUSE MARKET—SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT RESERVE		MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS
PRIVATE ASSET MANAGER ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes market conditions equally favor buyers and sellers; may use a rent spike of 5.0% in years 1 and 2.	0.0% Year 1; 3.0% to 5.0% Year 2	3.0%	3.0%	4.75% to 5.50%	1.0% to 3.0%	5.50% to 6.00%	3.75% to 5.00%	60.0% to 75.0%	6 to 12	5.0% to 5.0%	\$0.05 to \$0.15	2 to 4		
PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Mainly uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; believes market conditions favor sellers; does not use rent spikes.	3.0% Years 1 to 3	3.0%	3.0%	6.00% to 6.50%	3.0% to 4.0%	6.00% to 7.00%	4.50% to 6.00%	60.0% to 70.0%	6 to 9	5.0% to 7.0%	Does not use	1 to 2		
INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Relies on DCF; also uses direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; no longer uses rent spikes; believes market conditions favor sellers.	3.0% Year 1; 3.0% Year 2	3.0%	3.0%	5.00% to 5.25%	2.0% to 3.0%	6.00% to 6.25%	4.25% to 4.75%	65.0% to 75.0%	4 to 6	2.0% to 4.0%	\$0.10 to \$0.20	2 to 4		
PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Relies mainly on direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.	4.0% Years 1 & 2	3.0%	3.0%	4.50% to 5.50%	0.7% to 3.0%	5.50% to 6.50%	3.75% to 4.75%	50.0% to 65.0%	3 to 6	3.0% to 3.0%	\$0.10 to \$0.35	3 to 6		
REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	0.0% to 1.5% Year 1; 1.5% to 2.0% Year 2	2.0%	1.5% to 2.5%	6.00% to 8.00%	2.0% to 3.0%	8.00% to 8.50%	6.00% to 7.00%	4 to 8	3.0% to 5.0%	\$0.10 to \$0.15	3 to 6			

Source: Personal survey conducted by PwC during April 2017.



NATIONAL APARTMENT MARKET – SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES		VACANCY		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		FF&E REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	TOTAL VACANCY	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	PER UNIT	PER MONTHS	PER UNIT	PER MONTHS		
INSURANCE COMPANY ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, FF&E reserve is not deducted from NOI before capitalization; does not use a separate structural replacement reserve.	0.0% to 5.0%	2.0% to 3.0%	3.0% to 7.0%	4.50% to 6.50%	0.8% to 2.5%	5.50% to 6.75%	3.50% to 6.00%	\$200 to \$500	3 to 6					
PENSION FUND ADVISOR ♦ Forecast Period: 10 years Prefers DCF analysis; also uses direct capitalization; FF&E reserve is not deducted from NOI before capitalization; does not use a separate structural replacement reserve.	0.0% to 3.0%	3.0%	3.0% to 8.0%	4.50% to 6.25%	1.5% to 4.0%	5.75% to 7.00%	4.00% to 6.00%	\$150 to \$350	2 to 3					
DOMESTIC PENSION FUND ♦ Forecast Period: 1 to 10 years Uses both DCF and direct capitalization; FF&E reserve is not deducted from NOI before capitalization; reflects concessions as they occur; does not use a separate structural replacement reserve.	3.0%	3.0%	3.0% to 10.0%	4.50% to 6.50%	0.5% to 3.0%	5.75% to 7.25%	3.75% to 6.00%	\$150 to \$300	3 to 9					
INSTITUTIONAL INVESTOR ♦ Forecast Period: 10 years Relies on DCF; FF&E reserve is not deducted from NOI before capitalization; does not use an additional structural reserve; believes current market conditions equally favor sellers and buyers.	3.0%	3.0%	4.0% to 6.0%	4.50% to 5.50%	2.0% to 3.0%	6.00% to 6.50%	4.00% to 5.00%	\$200 to \$250	2 to 3					
PENSION FUND ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; FF&E reserve is deducted from NOI before capitalization; buys 150- to 400-unit apartment complexes in first- and second-tier markets nationwide; uses a separate structural reserve of \$100 per unit.	3.0%	2.0%	7.0%	6.50% to 7.00%	1.0% to 2.0%	8.25% to 9.00%	5.75% to 7.00%	\$250 to \$350	1 to 2					
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 1 to 5 years Uses both DCF and direct capitalization; FF&E reserve is deducted from NOI before capitalization; sees overall cap rates holding steady; does not use a separate structural reserve.	(1.0%) to 3.5%	2.0% to 3.0%	2.0% to 7.0%	5.00% to 8.00%	3.0% to 4.0%	7.00% to 9.50%	5.00% to 8.00%	\$200 to \$350	1 to 6					

Source: Personal survey conducted by PwC during April 2017.



MID-ATLANTIC REGION APARTMENT MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES		VACANCY		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		FF&E REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	TOTAL VACANCY	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	PER UNIT	PER UNIT	MONTHS	MONTHS		
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 2 to 4 years Uses both DCF and direct capitalization; FF&E reserve is deducted from NOI before capitalization; uses a separate structural replacement reserve of \$100 to \$400 per unit; believes market conditions currently favor sellers; expects overall cap rates to hold steady over the next six months.</p>	0.0% to 4.0%	1.0% to 4.0%	2.0% to 4.0%	5.50% to 6.50%	1.0% to 2.0%	6.00% to 9.00%	4.50% to 6.50%	\$100 to \$400			3 to 5			
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Prefers DCF analysis; also uses direct capitalization; FF&E reserve is deducted from NOI before capitalization; uses a separate structural replacement reserve of \$200 to \$300 per unit.</p>	0.0% Year 1; 3.0% to 6.0% Year 2	0.0% to 3.0%	4.0% to 5.0%	4.00% to 5.00%	1.0% to 4.0%	5.25% to 7.00%	3.00% to 4.60%	\$200 to \$300			1 to 3			
<p>PENSION FUND INVESTOR ♦ Forecast Period: 4 to 7 years Uses all three approaches to value; FF&E reserve is not deducted from NOI before capitalization; uses a separate structural replacement reserve of \$1,000 to \$1,500 per unit; believes market conditions equally favor sellers and buyers.</p>	2.0% to 3.0% Year 1	3.0%	5.0% to 7.0%	5.00% to 6.75%	2.0% to 3.0%	8.00% to 10.00%	4.25% to 6.75%	\$250 to \$350			2 to 8			
<p>PRIVATE INVESTOR ♦ Forecast Period: 5 to 10 years Mainly uses direct capitalization; FF&E reserve is deducted from NOI before capitalization; also uses a separate structural replacement reserve of \$200 to \$350 per unit; expects overall cap rates to hold steady over the next six months.</p>	1.0% to 4.0% Years 1 & 2	2.0% to 3.0%	4.0% to 7.0%	4.75% to 5.75%	0.3% to 1.3%	5.25% to 7.00%	4.00% to 5.25%	\$200 to \$350			2 to 3			
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 8 years Mainly uses direct capitalization analysis; FF&E reserve is deducted from NOI before capitalization; believes that market conditions equally favor buyers and sellers; does not use a separate structural replacement reserve.</p>	1.0% to 3.5%	3.0%	5.0% to 7.0%	5.50% to 6.50%	1.0% to 3.0%	7.00% to 9.00%	5.00% to 6.25%	\$200 to \$300			3 to 9			

Source: Personal survey conducted by PwC during April 2017.



PACIFIC REGION APARTMENT MARKET –SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES		VACANCY		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		FF&E REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	TOTAL VACANCY	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	PER UNIT	PER MONTHS	PER UNIT	PER MONTHS		
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 8 years Uses both DCF and direct capitalization; FF&E reserve is deducted from NOI before capitalization; uses a separate structural replacement reserve of \$250 to \$350 per unit; expects overall cap rates to increase up to 25 basis points over the next six months.</p>	2.0% to 5.0%	2.5% to 3.0%	3.5% to 5.0%	4.50% to 6.00%	0.5% to 1.5%	7.00% to 10.00%	4.00% to 6.00%	\$250 to \$350	3 to 6					
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Prefers DCF analysis; also uses direct capitalization; FF&E reserve is deducted from NOI before capitalization; uses a separate structural replacement reserve of \$200 to \$300 per unit; expects overall cap rates to hold steady over the next six months.</p>	0.0% Year 1; 3.0% to 4.0% Years 2 & 3	0.0%	4.0% to 5.0%	4.25% to 5.00%	0.8% to 3.0%	5.75% to 6.25%	3.60% to 4.30%	\$200 to \$300	1 to 3					
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 8 years Mainly uses direct capitalization analysis; FF&E reserve is deducted from NOI before capitalization; believes market conditions equally favor buyers and sellers; does not use a separate structural reserve.</p>	2.0% to 3.5%	3.0%	5.0% to 6.0%	5.00% to 6.00%	1.0% to 3.0%	6.00% to 9.00%	4.75% to 5.50%	\$200 to \$300	3 to 9					
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; does not use an FF&E reserve; uses a separate structural replacement reserve of \$200 to \$300 per unit.</p>	5.0%	3.0%	3.0% to 5.0%	4.25% to 5.50%	1.0% to 3.0%	5.50% to 6.75%	3.50% to 4.75%	Does not use	3 to 9					
<p>PRIVATE INVESTMENT FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; FF&E reserve is deducted from NOI before capitalization; uses a separate structural replacement reserve of \$200 to \$350 per unit; believes market conditions equally favor buyers and sellers; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 4.0% Years 1 & 2	2.0% to 2.8%	3.0% to 5.0%	4.50% to 5.00%	0.3% to 1.5%	5.25% to 6.00%	3.75% to 4.75%	\$200 to \$375	1 to 3					

Source: Personal survey conducted by PwC during April 2017.



SOUTHEAST REGION APARTMENT MARKET – SELECT SURVEY RESPONSES

Second Quarter 2017

	INITIAL-YEAR CHANGE RATES		VACANCY		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		FF&E REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	TOTAL VACANCY	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	PER UNIT	PER UNIT	MONTHS	MONTHS		
<p>PENSION FUND INVESTOR ♦ Forecast Period: 4 to 7 years Uses all three approaches to value; FF&E reserve is not deducted from NOI before capitalization; also uses a separate structural replacement reserve of \$1,200 to \$1,500 per unit.</p>	3.0% to 4.0% Years 1 & 2	3.0%	5.0% to 7.0%	5.75% to 7.00%	2.0% to 3.0%	8.00% to 10.00%	4.75% to 6.50%	\$250 to \$350	2 to 4					
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 4 years Uses both DCF and direct capitalization; does not use an FF&E reserve; uses a separate structural replacement reserve of \$300 to \$350 per unit; expects overall cap rates to hold steady over the next six months.</p>	2.0% to 3.5% Years 1 to 3	2.0% to 3.0%	4.0% to 7.0%	6.50% to 7.00%	1.3% to 1.5%	8.00% to 10.00%	5.50% to 6.00%	Does not use	3 to 5					
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; does not use an FF&E reserve; uses a separate structural replacement reserve of \$200 to \$300 per unit; expects overall cap rates to hold steady over the next six months.</p>	4.0% Year 1; 3.0% Year 2	3.0%	5.0%	4.50% to 5.00%	1.0% to 4.0%	5.75% to 6.50%	3.50% to 4.75%	Does not use	3 to 6					
<p>PENSION FUND ADVISOR ♦ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; FF&E reserve is not deducted from NOI before capitalization; buys 150- to 400-unit apartment complexes; uses a separate structural reserve of \$250 to \$350 per unit.</p>	1.0% to 3.0% Years 1 & 2	2.0% to 3.0%	4.5% to 7.0%	5.50% to 6.25%	0.8% to 1.5%	6.50% to 7.25%	4.50% to 5.75%	\$200 to \$350	1 to 3					
<p>REAL ESTATE ADVISOR ♦ Forecast Period: 1 to 5 years Prefers DCF analysis; also uses direct capitalization; FF&E reserve is not deducted from NOI before capitalization; uses a separate structural replacement reserve of \$300 per unit.</p>	3.0% Years 1 to 3	3.0%	5.0%	4.75% to 5.25%	1.0% to 1.5%	6.00% to 7.00%	4.50% to 5.25%	\$300	2					

Source: Personal survey conducted by PwC during April 2017.



NATIONAL NET LEASE MARKET – SELECT SURVEY RESPONSES
Second Quarter 2017

	PREFERRED PROPERTY TYPE	CHANGE RATES		PREFERRED CREDIT RATING	RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	UNDERLYING VACANCY & CREDIT LOSS	REPLACEMENT RESERVE	MARKETING TIME
		MARKET RENT	EXPENSES		CAP RATE	SELLING EXPENSES					
INVESTOR/BROKERS ♦ Forecast Period: 3 to 10 years Primary valuation method is direct capitalization; also uses sales comparison approach; underlying credit rating of tenant is more important than real estate value; capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	Commodity retail, office, medical	1.0% to 3.0% Years 1 to 3	1.0% to 3.0%	BBB- to AAA	6.00% to 9.00%	3.0% to 5.0%	8.00% to 10.00%	5.50% to 8.50%	Does not use	Does not use	3 to 6
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 1 to 5 years Primary valuation method is direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; also uses DCF analysis; mainly focuses on net lease transactions; includes reimbursements paid by tenants as both revenues and expenses.	Office, health care, industrial, government	1.5% to 3.0% Years 1 to 3	1.0% to 2.0%	B to A	7.00% to 9.00%	2.0% to 4.0%	8.00% to 10.00%	6.50% to 9.00%	0.0%	\$0.10 to \$0.25	3 to 6
PRIVATE INVESTMENT FIRM ♦ Forecast Period: 5 to 10 years Primary valuation method is DCF analysis; only completes net lease sales; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; excludes reimbursements paid by tenants as both revenues and expenses.	Automotive; general (retail)	2.0% to 4.0% Years 1 to 3	2.0% to 4.0%		7.00% to 8.00%	4.0% to 6.0%		7.00% to 8.00%	0.0%	Does not use	4 to 12
INVESTMENT ADVISOR ♦ Forecast Period: 3 to 10 years Primary valuation method is direct capitalization; also uses DCF analysis; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; mainly focuses on net lease sales; excludes reimbursements paid by tenants as both revenues and expenses.	General-purpose office	1.0% to 2.5%	1.0% to 3.0%	BBB- to A	7.00% to 7.75%	4.0% to 5.0%	7.00% to 8.00%	5.50% to 7.00%	3.0% to 5.0%	\$0.05 to \$0.20	3 to 4
MANAGEMENT COMPANY ♦ Forecast Period: 10 to 20 years Mainly focuses on sale-leaseback deals and net lease sales; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to decrease 25 to 50 basis points over the next six months; excludes reimbursements paid by tenants as both revenues and expenses.	All varieties	0.0% to 2.0%	0.0%	B to AAA	Not disclosed	Not disclosed	Not disclosed	6.00% to 7.75%	Does not use	Does not use	2 to 12

Source: Personal survey conducted by PwC during April 2017.



NATIONAL MEDICAL OFFICE BUILDINGS MARKET – SELECT SURVEY RESPONSES
Second Quarter 2017

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)			VACANCY ASSUMPTIONS			REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING VACANCY & CREDIT LOSS	PER SQUARE FOOT	REPLACEMENT RESERVE	MARKETING TIME			
<p>REIT ♦ Forecast Period: 1 to 10 years Uses both DCF analysis and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to increase 25 to 50 basis points over the next six months; does not use rent spikes.</p>	2.0% to 3.0% Years 1 to 3	2.0% to 3.0%	2.0%	5.50% to 6.50% (on campus); 6.50% to 7.50% (off campus)	1.0% to 2.0%	7.00% to 8.00% (on campus); 7.50% to 9.00% (off campus)	5.50% to 6.50% (on campus); 6.00% to 7.00% (off campus)	9 to 12	75.0% to 90.0%	5.0% to 10.0%	\$0.15 to \$0.60	4 to 6					
<p>REIT ♦ Forecast Period: 3 to 5 years Mainly uses DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; believes market conditions favor sellers; expects overall cap rates to hold steady over the next six months.</p>	2.5% Years 1 & 2	2.5%	1.5% to 2.5%	5.50% to 6.50% (on campus); 7.00% (off campus)	1.0% to 2.0%	6.00% to 8.00% (on campus); 7.00% to 10.00% (off campus)	5.50% to 6.50% (on campus); 6.00% to 7.00% (off campus)	9 to 12	80.0% to 90.0%	0.0%	\$0.25 to \$0.45	3 to 6					
<p>REAL ESTATE SERVICE FIRM ♦ Forecast Period: 8 to 11 years Uses all approaches to value; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; expects overall cap rates to hold steady over the next six months; does not use rent spikes.</p>	2.0% to 3.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	5.50% to 7.00% for both on campus and off campus	1.0% to 2.0%	6.00% to 7.75% (on campus); 6.00% to 8.00% (off campus)	5.00% to 6.75% for both on campus and off campus	6 to 12	70.0% to 85.0%	2.0% to 5.0%	\$0.20 to \$0.25	2 to 4					
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 7 years Uses all approaches to value; indirect cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; expects overall cap rates to hold steady over the next six months.</p>	0.0% to 3.0% Years 1 to 3	2.0% to 3.0%	2.0% to 3.0%	7.00% to 8.50% (on campus); 8.00% to 10.25% (off campus)	1.0% to 3.0%	7.00% to 9.00% (on campus); 8.00% to 11.00% (off campus)	6.75% to 8.50% (on campus); 7.75% to 10.00% (off campus)	6 to 18	70.0% to 80.0%	5.0% to 10.0%	\$0.10 to \$0.30	4 to 6					
<p>PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 5 to 10 years Uses both DCF analysis and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions.</p>	1.0% to 3.0%	1.0% to 4.0%	2.0% to 5.0%	5.50% to 9.00% (on campus); 5.75% to 10.00% (off campus)	0.8% to 4.0%	5.75% to 9.50% (on campus); 6.00% to 10.50% (off campus)	4.75% to 8.00% (on campus); 5.00% to 10.00% (off campus)	6 to 12	75.0% to 90.0%	0.0% to 10.0%	\$0.15 to \$0.30	1 to 12					

Source: Personal survey conducted by PwC during April 2017.



NATIONAL DEVELOPMENT LAND MARKET –SELECT SURVEY RESPONSES
Second Quarter 2017

	PROPERTY TYPES	PREFERRED ABSORPTION	CHANGE RATES		MARKET CONDITIONS	DISCOUNT RATE (IRR)	DEVELOPERS' PROFIT	FORECAST VALUE CHANGE NEXT 12 MONTHS	MARKETING PERIOD
			YEARS	LOT PRICES					
DEVELOPER Primary method of pricing is comparable sales; analysis is prepared subject to financing; project size ranges from 300 to 2000 acres; value of land currently under development ranges from \$30.0 to \$500.0 million; development is concentrated in Hawaii, California, Mexico, Montana, New York, and Nevada.	Single-family luxury	11 to 20	3.0% to 5.0%	3.0% to 5.0%	Both buyers and sellers equally	20.00%	Included in the discount rate	2.0% to 3.0%	12 to 36
PRIVATE INVESTMENT COMPANY Primary method of pricing is DCF; analysis is prepared free and clear of financing; project size ranges from one to 25 acres; value of land currently under development ranges from \$5.0 to \$10.0 million; prefers Texas markets.	Retail	1 to 5	Did not disclose	% of specific revenue	Both buyers and sellers equally	10.00% to 15.00%	Included in the discount rate	5.0% to 10.0%	3 to 18
DEVELOPER Primary method of pricing is comparable sales; analysis is prepared free and clear of financing; project size ranges from 5 to 250 acres; value of land currently under development totals between \$15.0 and \$20.0 million; development is concentrated in the Midwest.	Industrial and commercial	Over 20	Did not disclose	% of specific revenue	Buyers	10.00% to 15.00%	Included in the discount rate	5.0% to 10.0%	12 to 24
DEVELOPER Primary method of pricing is DCF; analysis is prepared free and clear of financing; project size ranges from 2 to 1,200 acres; development is concentrated in Arizona, California, Alaska, and Washington; value of land currently under development ranges from \$95.0 to \$110.0 million.	Apartment, single-family residential, and industrial	6 to 10	5.0% to 8.0%	4.0% to 6.0%	Sellers	16.00% to 20.00%	Included in the discount rate	4.0% to 6.0%	9 to 15
DEVELOPER Primary method of pricing is comparable sales; analysis is prepared subject to financing; value of land currently under development is up to \$100.0 million; development is concentrated in Arizona, California, and Hawaii.	Single-family residential	6 to 10	1.0% to 3.0%	3.0%	Buyers	16.00% to 18.00%	Included in the discount rate	4.0%	15

Source: Personal survey conducted by PwC during April 2017.



INVESTMENT AND PROPERTY CHARACTERISTICS: OFFICE MARKETS

Second Quarter 2017

MARKET	FORECAST VALUE CHANGE NEXT 12 MONTHS			PRICE AS % OF REPLACEMENT COST			STRUCTURAL VACANCY			YEARS TO REACH STRUCTURAL VACANCY			TENANT IMPROVEMENT ALLOWANCE (PSE) NEW DEALS (1)		
	RANGE	AVERAGE	RANGE	RANGE	AVERAGE	RANGE	RANGE	AVERAGE	RANGE	RANGE	AVERAGE	RANGE	RANGE	AVERAGE	RANGE
National CBD	(5.0%) – 15.0%	2.5%	65.0% – 125.0%	100.5%	2.0% – 15.0%	7.5%	0 – 3	1.6	\$10.00 – \$75.00	\$37.92	\$5.00 – \$35.00	\$16.67			
National Suburban	(10.0%) – 10.0%	1.6%	70.0% – 110.0%	90.5%	4.0% – 15.0%	8.8%	0 – 5	1.7	\$0.00 – \$85.00	\$30.89	\$0.00 – \$25.00	\$13.39			
National Secondary	(10.0%) – 10.0%	0.6%	50.0% – 120.0%	80.6%	3.0% – 15.0%	8.4%	1 – 7	2.5	\$2.00 – \$75.00	\$26.03	\$2.50 – \$20.00	\$9.00			
Atlanta	(5.0%) – 10.0%	2.5%	50.0% – 100.0%	78.7%	4.0% – 10.0%	7.3%	0 – 3	1.5	\$10.00 – \$70.00	\$33.02	\$0.00 – \$20.00	\$12.25			
Boston	(5.0%) – 7.0%	2.8%	50.0% – 110.0%	89.5%	5.0% – 12.0%	7.8%	0 – 5	1.1	\$10.00 – \$90.00	\$47.71	\$5.00 – \$30.00	\$17.92			
Charlotte	0.0% – 15.0%	4.9%	85.0% – 110.0%	94.1%	2.0% – 12.0%	6.8%	0 – 3	1.8	\$10.00 – \$30.00	\$29.06	\$5.00 – \$10.00	\$13.75			
Chicago	(5.0%) – 10.0%	1.6%	25.0% – 120.0%	83.9%	5.0% – 15.0%	9.8%	0 – 5	2.3	\$7.50 – \$125.00	\$52.23	\$5.00 – \$40.00	\$19.88			
Dallas	(2.0%) – 20.0%	2.8%	50.0% – 110.0%	93.1%	5.0% – 10.0%	7.6%	0 – 3	1.5	\$5.00 – \$75.00	\$37.17	\$5.00 – \$35.00	\$16.00			
Denver	0.0% – 5.0%	1.8%	50.0% – 150.0%	100.0%	5.0% – 12.0%	7.4%	0 – 2	1.0	\$12.00 – \$65.00	\$34.81	\$3.00 – \$25.00	\$11.94			
Houston	(20.0%) – 20.0%	(4.5%)	55.0% – 110.0%	87.4%	5.0% – 15.0%	9.5%	1 – 5	3.3	\$8.00 – \$65.00	\$34.25	\$0.00 – \$45.00	\$16.92			
Los Angeles	(10.0%) – 10.0%	2.2%	65.0% – 140.0%	101.7%	3.0% – 15.0%	9.3%	0 – 4	1.3	\$10.00 – \$125.00	\$42.29	\$0.00 – \$50.00	\$16.67			
Manhattan	(1.0%) – 7.0%	3.2%	50.0% – 120.0%	88.8%	0.0% – 12.0%	6.2%	0 – 6	2.1	\$10.00 – \$125.00	\$57.08	\$10.00 – \$40.00	\$25.83			
Northern Virginia	(10.0%) – 10.0%	1.6%	60.0% – 100.0%	91.5%	5.0% – 10.0%	7.2%	0 – 10	3.5	\$20.00 – \$125.00	\$51.25	\$7.00 – \$80.00	\$25.70			
Pacific Northwest	(5.0%) – 15.0%	2.2%	50.0% – 125.0%	99.8%	3.0% – 15.0%	7.7%	0 – 5	1.4	\$10.00 – \$100.00	\$49.43	\$0.00 – \$50.00	\$19.09			
Philadelphia	(3.0%) – 3.0%	0.3%	55.0% – 100.0%	85.0%	5.0% – 12.0%	7.2%	1 – 4	1.7	\$5.00 – \$60.00	\$29.25	\$5.00 – \$20.00	\$9.00			
Phoenix	(5.0%) – 10.0%	3.0%	70.0% – 110.0%	89.0%	5.0% – 20.0%	9.8%	0 – 4	1.9	\$2.00 – \$65.00	\$55.00	\$0.00 – \$35.00	\$35.00			
San Diego	(5.0%) – 10.0%	2.3%	20.0% – 110.0%	89.4%	3.0% – 12.0%	6.6%	0 – 5	2.0	\$10.00 – \$75.00	\$34.38	\$0.00 – \$20.00	\$9.38			
San Francisco	(10.0%) – 5.0%	0.0%	85.0% – 130.0%	101.5%	3.0% – 10.0%	6.6%	0 – 3	0.9	\$10.00 – \$125.00	\$47.50	\$0.00 – \$35.00	\$14.00			
Seattle	(5.0%) – 15.0%	3.3%	50.0% – 125.0%	97.0%	3.0% – 15.0%	7.8%	0.5 – 5	1.9	\$10.00 – \$100.00	\$49.17	\$0.00 – \$50.00	\$19.17			
Southeast Florida	(2.5%) – 15.0%	3.6%	50.0% – 100.0%	81.3%	4.0% – 25.0%	9.6%	1 – 5	2.1	\$0.00 – \$75.00	\$33.13	\$5.00 – \$40.00	\$15.63			
Suburban Maryland	(10.0%) – 5.0%	(3.8%)	100.0% – 110.0%	103.8%	5.0% – 12.0%	8.5%	0 – 5	1.8	\$25.00 – \$85.00	\$59.58	\$15.00 – \$75.00	\$34.17			
Washington, DC	(5.0%) – 5.0%	1.0%	90.0% – 140.0%	107.9%	2.0% – 8.0%	5.5%	0 – 3	0.8	\$25.00 – \$150.00	\$67.50	\$10.00 – \$115.00	\$32.92			

(1) Includes both second-generation and new space; a breakout of TI allowances is included in each fourth quarter issue of the Survey.

Source: Personal survey conducted by PwC during April 2017.



INVESTMENT AND PROPERTY CHARACTERISTICS: NATIONAL AND REGIONAL MARKETS

Second Quarter 2017

MARKET	FORECAST VALUE CHANGE NEXT 12 MONTHS		PRICE AS % OF REPLACEMENT COST		CLASS-A+ and A MALLS IRRs		CLASS-B+ and B MALLS IRRs		OARs		STABILIZED OCCUPANCY			
	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE		
National Regional Mall	(12.0%) – 5.0%	0.6%	70.0% – 125.0%	106.7%	5.00% – 9.00%	6.80%	4.00% – 6.50%	5.06%	7.00% – 11.50%	8.94%	5.50% – 10.00%	7.67%	80.0% – 99.0%	92.4%
National Power Center	(5.0%) – 5.0%	0.7%	80.0% – 110.0%	98.3%									80.0% – 96.0%	91.4%
National Strip Shopping Center	(10.0%) – 5.0%	0.3%	50.0% – 125.0%	96.9%									85.0% – 97.0%	92.9%
MARKET	FORECAST VALUE CHANGE NEXT 12 MONTHS		PRICE AS % OF REPLACEMENT COST		FINISHED SPACE %		TENANT IMPROVEMENT ALLOWANCES (PSF) NEW DEALS (1)		RENEWAL LEASES					
	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE				
National Flex/R&D	Insufficient number of responses		Insufficient number of responses		Insufficient number of responses		\$0.00 – \$25.00	\$9.75	\$0.00 – \$10.00	\$4.38				
Warehouse (National)	0.0% – 10.0%	3.7%	95.0% – 140.0%	106.8%	0.0% – 20.0%	7.5%	\$0.00 – \$75.00	\$6.48	\$0.00 – \$2.50	\$0.81				
Warehouse (ENC Region)	0.0% – 10.0%	3.5%	90.0% – 125.0%	102.5%	0.0% – 15.0%	6.6%	\$0.00 – \$5.00	\$1.56	\$0.00 – \$2.50	\$0.69				
Warehouse (Pacific Region)	0.0% – 10.0%	2.7%	80.0% – 110.0%	100.1%	0.0% – 15.0%	6.7%	\$0.00 – \$5.00	\$1.25	\$0.00 – \$2.50	\$0.78				
Apartment (National)	(5.0%) – 10.0%	2.6%	90.0% – 125.0%	101.0%										
Apartment (Mid-Atlantic Region)	0.0% – 5.0%	1.4%	70.0% – 130.0%	100.0%										
Apartment (Pacific Region)	(10.0%) – 15.0%	1.7%	80.0% – 150.0%	107.3%										
Apartment (Southeast Region)	0.0% – 5.0%	1.7%	80.0% – 120.0%	102.5%										
National Net Lease	(20.0%) – 10.0%	(3.0%)	100.0% – 140.0%	112.5%										
National Medical Office Buildings	(10.0%) – 5.0%	(0.2%)	100.0% – 150.0%	116.3%										
National Student Housing	(5.0%) – 15.0%	3.8%	50.0% – 130.0%	108.2%										

(1) Includes both second-generation and new space; a breakout of TI allowances is included in each fourth quarter issue of the Survey.

Source: Personal survey conducted by PwC during April 2017.



YIELD COMPARISONS

April 1, 2017

	2012 AVERAGE	2013 AVERAGE	2014 AVERAGE	2015 AVERAGE	2016 AVERAGE	2016 OCTOBER	2017 JANUARY	2017 APRIL
PwC Yield Indicator (PYI) ^a	8.77%	8.39%	8.11%	7.82%	7.70%	7.68%	7.66%	7.65%
Long-Term Mortgages ^b	4.48%	4.16%	4.48%	4.31%	4.18%	3.93%	4.65%	4.63%
10-Year Treasuries ^c	1.86%	2.22%	2.69%	2.34%	1.81%	1.63%	2.45%	2.35%
Consumer Price Index Change ^d	2.16%	0.97%	1.66%	0.19%	1.63%	1.80%	1.84%	2.78%
SPREAD TO PYI (Basis Points)								
Long-Term Mortgages	429	423	363	351	352	375	301	302
10-Year Treasuries	691	617	542	548	589	605	521	530
Consumer Price Index Change	661	742	645	763	607	588	582	487

a. A composite IRR average of all markets surveyed (excluding hotels, development land, and student housing).

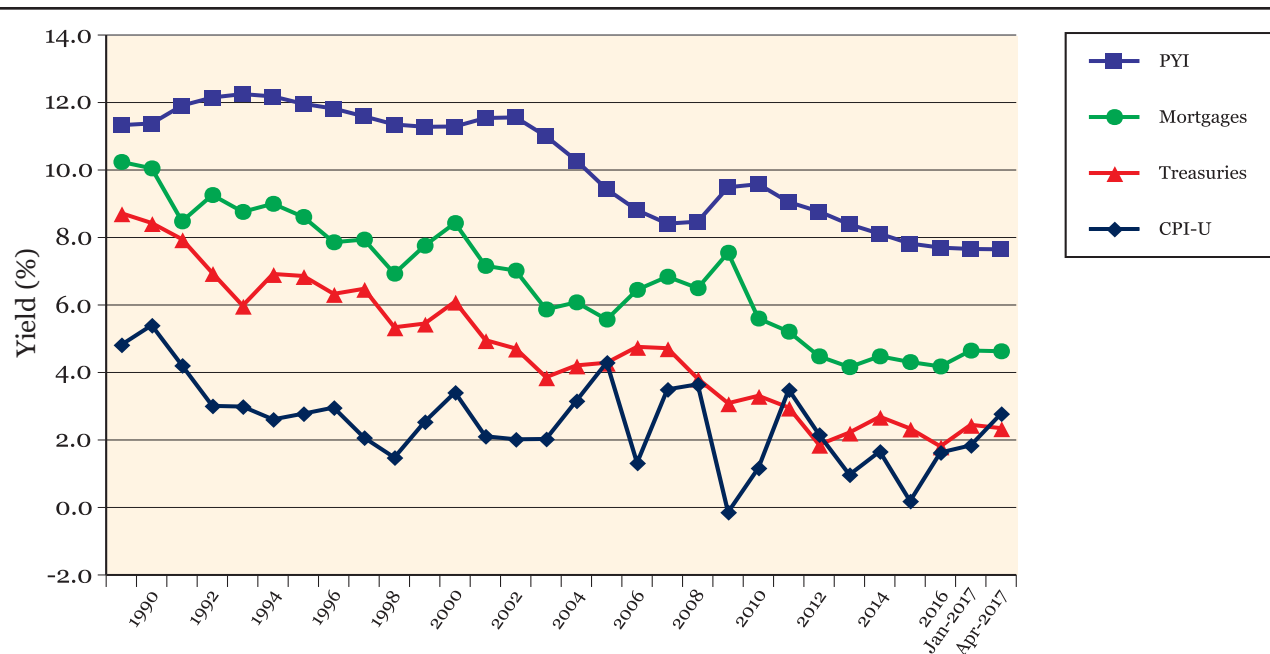
b. Source: CB Richard Ellis/L.J. Melody Capital Markets, Global Commercial Banc, Commercial Loan Direct; reflects conventional funding, 60% to 80% LTV commercial loans; fixed rates; 6- to 30-year terms.

c. Source: Federal Reserve; the annual average change is the mean of the four corresponding quarters.

d. Source: U.S. Department of Labor; quarterly changes are annualized based on the index change from the prior quarter; the annual average change is the mean of the four corresponding quarters.

COMPARATIVE YIELDS

April 1, 2017



DIVIDEND COMPARISONS

April 1, 2017

	2012 AVERAGE	2013 AVERAGE	2014 AVERAGE	2015 AVERAGE	2016 AVERAGE	2016 OCTOBER	2017 JANUARY	2017 APRIL
PwC Dividend Indicator (PDI) ^a	7.27%	6.92%	6.66%	6.38%	6.26%	6.23%	6.24%	6.24%
Equity REITs ^b	3.59%	3.68%	3.80%	3.64%	3.88%	4.00%	4.00%	4.01%
S&P 500 ^c	2.04%	2.09%	1.92%	2.03%	2.11%	2.08%	2.04%	1.96%
SPREAD TO PDI (Basis Points)								
Equity REITs	368	324	286	274	238	223	224	223
S&P 500	523	483	474	435	415	415	420	428

a. A composite OAR (initial rate of return in an all-cash transaction) average of all markets surveyed (excluding hotels and student housing).

b. Source: National Association of Real Estate Investment Trusts; dividend yields are as of the last day of the prior quarter until April 2013; then, starting month of quarter.

c. Source: Standard & Poors; dividend yields are quarterly yields as of the last day of the prior quarter.

INSTITUTIONAL-GRADE VS. NONINSTITUTIONAL-GRADE PROPERTY RATES: OFFICE MARKETS
 Second Quarter 2017

MARKET	INSTITUTIONAL IRRs			OARS			NONINSTITUTIONAL (BASIS-POINT SPREAD TO INSTITUTIONAL RATES) OARS		
	RANGE	AVERAGE	RANGE	RANGE	AVERAGE	RANGE	RANGE	AVERAGE	RANGE
National CBD Office	5.50% – 9.50%	7.05%	3.50% – 7.50%	5.68%	(a)	(a)	(a)	(a)	(a)
National Suburban Office	6.00% – 11.50%	7.97%	5.00% – 10.00%	6.64%	(a)	(a)	(a)	(a)	(a)
National Secondary Office	6.50% – 13.00%	8.95%	4.50% – 9.50%	7.40%	188	50 – 400	50 – 250	126	(a)
Atlanta Office	6.00% – 10.25%	8.33%	5.25% – 9.00%	7.21%	(a)	(a)	(a)	(a)	(a)
Boston Office	5.75% – 10.00%	7.43%	4.00% – 10.00%	6.27%	213	50 – 500	50 – 250	169	(a)
Charlotte Office	6.50% – 10.00%	8.36%	5.00% – 8.75%	6.90%	(a)	(a)	(a)	(a)	(a)
Chicago Office	5.75% – 12.00%	8.64%	4.50% – 10.00%	7.24%	285	100 – 600	50 – 350	163	(a)
Dallas Office	6.00% – 11.00%	7.87%	5.00% – 8.50%	6.50%	(a)	(a)	(a)	(a)	(a)
Denver Office	6.75% – 11.00%	7.98%	5.00% – 9.00%	6.56%	(a)	(a)	(a)	(a)	(a)
Houston Office	6.50% – 14.00%	9.19%	5.00% – 10.00%	7.31%	333	75 – 1,000	50 – 200	108	(a)
Los Angeles Office	5.00% – 10.00%	7.21%	4.25% – 8.00%	5.84%	142	50 – 300	50 – 150	96	(a)
Manhattan Office	5.75% – 9.00%	6.85%	3.50% – 8.50%	4.98%	96	50 – 150	50 – 200	113	(a)
Northern Virginia Office	6.00% – 9.50%	7.55%	5.00% – 8.50%	6.63%	(a)	(a)	(a)	(a)	(a)
Pacific Northwest Office	5.25% – 10.00%	7.32%	4.25% – 8.00%	6.01%	246	75 – 500	50 – 300	121	(a)
Philadelphia Office	7.00% – 11.00%	8.51%	6.00% – 9.50%	7.43%	(a)	(a)	(a)	(a)	(a)
Phoenix Office	7.00% – 10.00%	8.33%	5.00% – 8.00%	6.62%	(a)	(a)	(a)	(a)	(a)
San Diego Office	6.50% – 10.50%	7.83%	5.25% – 8.50%	6.51%	(a)	(a)	(a)	(a)	(a)
San Francisco Office	5.00% – 9.50%	6.89%	3.50% – 8.00%	5.45%	(a)	(a)	(a)	(a)	(a)
Seattle Office	5.25% – 10.00%	7.19%	4.25% – 8.00%	5.82%	(a)	(a)	(a)	(a)	(a)
Southeast Florida Office	6.00% – 10.50%	8.31%	5.00% – 10.00%	7.26%	(a)	(a)	(a)	(a)	(a)
Suburban Maryland Office	7.00% – 10.00%	8.65%	5.50% – 9.00%	7.48%	(a)	(a)	(a)	(a)	(a)
Washington, DC Office	5.00% – 8.00%	6.48%	4.25% – 6.50%	5.29%	108	75 – 200	50 – 200	125	(a)

(a) Participants are not currently pursuing noninstitutional investments in this market.
 Source: Personal survey conducted by PwC during April 2017.



INSTITUTIONAL-GRADE VS. NONINSTITUTIONAL-GRADE PROPERTY RATES: NATIONAL AND REGIONAL MARKETS
 Second Quarter 2017

MARKET	INSTITUTIONAL IRRS			NONINSTITUTIONAL (BASIS-POINT SPREAD TO INSTITUTIONAL RATES) OARS		
	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE
National Regional Mall	5.00% – 11.50%	7.60%	4.00% – 10.00%	6.20%	(a)	(a)
National Power Center	6.00% – 10.00%	7.56%	5.25% – 8.00%	6.35%	50 – 300	178
National Strip Shopping Center	5.50% – 10.50%	7.32%	4.00% – 9.50%	6.26%	50 – 800	200
National Flex/R&D	6.75% – 10.00%	8.08%	5.50% – 9.50%	7.10%	(a)	(a)
Warehouse (National)	5.50% – 9.00%	6.66%	4.00% – 6.90%	5.27%	50 – 400	225
Warehouse (ENC Region)	5.75% – 7.00%	6.43%	4.25% – 6.00%	5.43%	(a)	(a)
Warehouse (Pacific Region)	5.50% – 8.50%	6.53%	3.75% – 7.00%	4.98%	(a)	(a)
National Apartment	5.50% – 10.00%	7.28%	3.50% – 8.00%	5.40%	25 – 400	175
Apartment (Mid-Atlantic Region)	5.25% – 10.00%	7.35%	3.00% – 6.75%	5.01%	25 – 400	204
Apartment (Pacific Region)	5.25% – 10.00%	6.75%	3.50% – 6.00%	4.49%	(a)	(a)
Apartment (Southeast Region)	5.75% – 10.00%	7.50%	3.50% – 6.50%	5.10%	(a)	(a)
National Medical Office Buildings	5.75% – 11.00%	7.85%	4.75% – 10.00%	6.76%	100 – 300	163

(a) Participants are not currently pursuing noninstitutional investments in this market.
 Source: Personal survey conducted by PwC during April 2017.



INCOME CAPITALIZED IN DIRECT CAPITALIZATION

Second Quarter 2017

PERCENTAGE OF SURVEY RESPONDENTS USING:						
MARKET	METHOD 1 (a)		METHOD 2 (a)		METHOD 3 (a)	
	CURRENT	YEAR AGO	CURRENT	YEAR AGO	CURRENT	YEAR AGO
National Retail						
Regional Mall	20.0%	40.0%	80.0%	60.0%	0.0%	0.0%
Power Center	17.0%	33.0%	83.0%	67.0%	0.0%	0.0%
Strip Shopping Center	11.0%	13.0%	89.0%	88.0%	0.0%	0.0%
Office						
National CBD	0.0%	14.0%	100.0%	86.0%	0.0%	0.0%
National Suburban	25.0%	25.0%	63.0%	63.0%	13.0%	13.0%
National Secondary	10.0%	10.0%	90.0%	90.0%	0.0%	0.0%
Atlanta	0.0%	0.0%	83.0%	80.0%	17.0%	20.0%
Boston	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Charlotte	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Chicago	29.0%	29.0%	71.0%	71.0%	0.0%	0.0%
Dallas	17.0%	13.0%	83.0%	88.0%	0.0%	0.0%
Denver	40.0%	50.0%	60.0%	50.0%	0.0%	0.0%
Houston	43.0%	43.0%	43.0%	43.0%	14.0%	14.0%
Los Angeles	17.0%	20.0%	83.0%	80.0%	0.0%	0.0%
Manhattan	17.0%	17.0%	83.0%	83.0%	0.0%	0.0%
Northern Virginia	40.0%	40.0%	60.0%	60.0%	0.0%	0.0%
Pacific Northwest	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Philadelphia	20.0%	20.0%	80.0%	80.0%	0.0%	0.0%
Phoenix	20.0%	40.0%	80.0%	60.0%	0.0%	0.0%
San Diego	60.0%	60.0%	40.0%	40.0%	0.0%	0.0%
San Francisco	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Seattle	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Southeast Florida	20.0%	33.0%	60.0%	50.0%	20.0%	17.0%
Suburban Maryland	40.0%	40.0%	60.0%	60.0%	0.0%	0.0%
Washington, DC	33.0%	33.0%	67.0%	67.0%	0.0%	0.0%
Industrial						
National Flex/R&D	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
National Warehouse	20.0%	20.0%	80.0%	80.0%	0.0%	0.0%
ENC Region Warehouse	20.0%	20.0%	80.0%	80.0%	0.0%	0.0%
Pacific Region Warehouse	40.0%	40.0%	60.0%	60.0%	0.0%	0.0%
Apartments^b						
National	50.0%	90.0%	50.0%	10.0%		
Mid-Atlantic Region	80.0%	100.0%	20.0%	0.0%		
Pacific Region	100.0%	80.0%	0.0%	20.0%		
Southeast Region	0.0%	80.0%	100.0%	20.0%		
National Net Lease	60.0%	40.0%	20.0%	20.0%	20.0%	40.0%
National Medical Office Buildings	40.0%	25.0%	60.0%	75.0%	0.0%	0.0%
Note: Lines may not add to up to 100% due to rounding.						
a. Method 1: NOI after deducting capital replacement reserve but before deducting TIs (tenant improvements) and leasing commissions. Method 2: NOI before deducting capital replacement reserve, TIs, and leasing commissions. Method 3: Cash flow after deducting capital replacement reserve, TIs, and leasing commissions.						
b. Method 1: deducts FF&E reserve from NOI prior to direct capitalization. Method 2: does not deducts FF&E reserve from NOI prior to direct capitalization.						

LODGING INCOME CAPITALIZED IN DIRECT CAPITALIZATION

First Quarter 2017

SEGMENT	PRIOR 12 MONTHS ^a		FORECAST 12 MONTHS ^b		BOTH ^c	
	CURRENT	YEAR AGO	CURRENT	YEAR AGO	CURRENT	YEAR AGO
Full Service	17.0%	0.0%	50.0%	40.0%	33.0%	60.0%
Limited-Service Midscale & Economy	25.0%	60.0%	75.0%	40.0%	0.0%	0.0%
Luxury/Upper Upscale	40.0%	0.0%	40.0%	33.0%	20.0%	67.0%
Select Service	60.0%	40.0%	20.0%	20.0%	20.0%	40.0%
Note: Lines may not add to up to 100% due to rounding.						
a. Percentage of our lodging participants who capitalize the prior 12 months of income in direct capitalization.						
b. Percentage of our lodging participants who capitalize the next 12 months of income in direct capitalization.						
c. Percentage of our lodging participants who analyze both the prior 12 months of income and the next 12 months of income in direct capitalization.						

FORECAST PERIODS AND CHANGE RATES: OFFICE MARKETS

Second Quarter 2017

MARKET	FORECAST PERIOD			MARKET RENT CHANGE RATES			EXPENSE CHANGE RATES			
	RANGE	AVERAGE	INITIAL YEAR	RANGE	AVERAGE	INITIAL YEAR	RANGE	AVERAGE	INITIAL YEAR	
National CBD Office	5 – 12	9	0.00% – 6.00%	2.57%	0.00% – 4.00%	2.71%	0.00% – 5.00%	2.79%	2.00% – 4.00%	2.79%
National Suburban Office	5 – 10	8	0.00% – 5.00%	2.03%	0.00% – 4.00%	2.47%	0.00% – 4.00%	2.75%	2.00% – 4.00%	2.93%
National Secondary Office	1 – 15	7	0.00% – 5.00%	2.88%	1.00% – 6.00%	3.53%	1.50% – 3.00%	2.48%	1.50% – 3.50%	2.54%
Atlanta Office	3 – 10	8	0.00% – 5.00%	3.04%	0.00% – 4.00%	2.65%	1.50% – 5.00%	2.90%	1.50% – 5.00%	3.02%
Boston Office	3 – 12	9	0.00% – 6.00%	3.54%	2.00% – 3.50%	2.98%	0.00% – 3.00%	2.71%	2.00% – 4.50%	3.00%
Charlotte Office	3 – 10	6	2.00% – 4.50%	3.10%	2.00% – 5.00%	2.88%	1.50% – 4.00%	2.45%	1.75% – 4.00%	2.72%
Chicago Office	3 – 10	8	0.00% – 5.00%	2.14%	2.00% – 4.00%	3.13%	2.00% – 6.00%	3.29%	2.00% – 8.00%	3.40%
Dallas Office	3 – 10	8	2.00% – 6.00%	3.46%	2.00% – 6.00%	3.52%	2.00% – 3.00%	2.88%	2.50% – 6.00%	3.46%
Denver Office	3 – 11	8	2.00% – 4.00%	2.80%	2.00% – 3.00%	2.75%	2.00% – 3.00%	2.90%	2.00% – 3.00%	2.88%
Houston Office	3 – 10	7	(8.00%) – 3.00%	(1.57%)	(3.00%) – 9.00%	1.52%	0.00% – 3.00%	2.50%	0.00% – 9.00%	3.32%
Los Angeles Office	3 – 15	8	1.50% – 6.00%	3.67%	1.50% – 5.00%	3.46%	2.00% – 3.50%	2.71%	2.00% – 3.00%	2.83%
Manhattan Office	3 – 12	9	0.00% – 5.00%	3.13%	0.00% – 5.00%	2.83%	1.00% – 3.00%	2.75%	1.00% – 5.00%	2.92%
Northern Virginia Office	3 – 10	8	0.00% – 3.00%	1.40%	1.00% – 3.00%	2.33%	0.00% – 3.00%	1.90%	1.00% – 3.00%	2.40%
Pacific Northwest Office	5 – 12	8	2.00% – 5.00%	3.33%	2.00% – 5.00%	3.12%	2.00% – 3.00%	2.86%	2.00% – 3.00%	2.86%
Philadelphia Office	3 – 10	7	0.00% – 3.00%	1.85%	0.00% – 3.50%	2.55%	0.00% – 4.00%	2.40%	0.00% – 3.00%	2.38%
Phoenix Office	3 – 12	8	2.00% – 7.00%	4.10%	2.00% – 7.00%	3.60%	1.00% – 3.00%	2.50%	1.00% – 3.00%	2.50%
San Diego Office	1 – 10	8	2.00% – 5.00%	3.70%	2.00% – 5.00%	3.25%	2.00% – 3.00%	2.80%	2.00% – 3.00%	2.75%
San Francisco Office	5 – 10	9	1.00% – 5.00%	3.00%	0.00% – 4.00%	2.67%	0.00% – 3.00%	2.60%	2.00% – 3.00%	2.90%
Seattle Office	5 – 10	8	2.50% – 5.00%	3.54%	2.50% – 5.00%	3.30%	2.00% – 3.00%	2.79%	2.00% – 3.00%	2.79%
Southeast Florida Office	3 – 10	7	0.00% – 5.00%	2.20%	0.00% – 5.00%	2.75%	1.00% – 3.00%	2.70%	1.00% – 3.00%	2.69%
Suburban Maryland Office	1 – 10	7	0.00% – 1.50%	0.35%	0.00% – 3.00%	1.33%	1.00% – 3.00%	2.00%	1.00% – 3.00%	1.83%
Washington, DC Office	5 – 10	9	0.00% – 4.00%	1.58%	2.00% – 3.10%	2.68%	0.00% – 3.00%	2.33%	2.00% – 3.00%	2.75%

Source: Personal survey conducted by PwC during April 2017.



FORECAST PERIODS AND CHANGE RATES: NATIONAL AND REGIONAL MARKETS
Second Quarter 2017

MARKET	FORECAST PERIOD		MARKET RENT CHANGE RATES		EXPENSE CHANGE RATES		FORECAST PERIOD AVERAGE		FORECAST PERIOD AVERAGE	
	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE
National Regional Mall	1 – 10	7	1.00% – 4.00%	2.45%	2.00% – 4.00%	2.81%	2.00% – 5.00%	3.00%	2.00% – 5.00%	3.06%
National Power Center	1 – 12	8	0.00% – 5.00%	1.96%	0.00% – 5.00%	2.50%	0.00% – 5.00%	2.75%	2.00% – 3.00%	2.80%
National Strip Shopping Center	1 – 10	8	0.00% – 3.00%	1.72%	0.00% – 4.50%	2.75%	0.00% – 3.00%	2.69%	1.00% – 4.00%	2.88%
National Flex/R&D	2 – 10	7	0.00% – 4.00%	2.50%	0.00% – 3.00%	2.25%	0.00% – 3.00%	2.60%	0.00% – 3.00%	2.00%
Warehouse (National)	3 – 15	9	0.00% – 5.00%	2.55%	3.00% – 4.00%	3.16%	0.00% – 3.00%	2.45%	0.00% – 3.00%	2.30%
Warehouse (East North Central Region)	3 – 10	8	0.00% – 5.00%	2.65%	2.00% – 4.00%	3.00%	2.00% – 3.00%	2.90%	0.00% – 3.00%	2.13%
Warehouse (Pacific Region)	5 – 10	9	0.00% – 4.00%	2.25%	2.00% – 4.00%	2.99%	2.00% – 3.00%	2.80%	0.00% – 3.00%	2.20%
Apartment (National)	1 – 10	7	(1.00%) – 5.00%	2.64%	0.00% – 4.00%	2.78%	2.00% – 3.00%	2.69%	2.00% – 4.00%	2.89%
Apartment (Mid-Atlantic Region)	2 – 10	6	0.00% – 4.00%	1.85%	1.00% – 4.00%	2.85%	0.00% – 4.00%	2.50%	1.00% – 4.00%	2.90%
Apartment (Pacific Region)	3 – 10	7	0.00% – 5.00%	2.85%	2.00% – 5.00%	3.37%	0.00% – 3.00%	2.23%	2.00% – 3.00%	2.85%
Apartment (Southeast Region)	1 – 10	5	1.00% – 4.00%	3.05%	1.00% – 4.00%	2.85%	2.00% – 3.00%	2.80%	2.00% – 3.00%	2.90%
National Net Lease	1 – 20	7	0.00% – 4.00%	1.92%	1.00% – 4.00%	2.17%	0.00% – 4.00%	1.67%	1.00% – 4.00%	2.00%
National Medical Office Buildings	1 – 11	6	0.00% – 3.00%	2.20%	0.00% – 4.00%	2.30%	1.00% – 4.00%	2.50%	2.00% – 5.00%	2.70%
National Student Housing Market	1 – 10	5	0.00% – 5.00%	2.44%	1.50% – 4.00%	2.78%	0.00% – 11.00%	3.09%	2.00% – 5.00%	2.78%

Source: Personal survey conducted by PwC during April 2017.



Definitions

GENERAL

BASIS POINT

1/100th of a percentage point (0.01%).

CHANGE RATE

Annual compound rate of change.

DISCOUNT RATE (IRR)

Internal rate of return in an all-cash transaction, based on annual year-end compounding. All-cash refers to either all cash or market financing; unleveraged return.

EAST NORTH CENTRAL (ENC) REGION

As per NCREIF, includes Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin.

EXCESSIVE TENANT IMPROVEMENT ALLOWANCE³

The amount by which an awarded tenant improvement allowance exceeds that which is typical for the market.

INSTITUTIONAL-GRADE REAL ESTATE

Real property investments that are sought out by institutional buyers and have the capacity to meet generally prevalent institutional investment criteria.

MARKETING TIME

The period of time between the initial offering of a property for sale and the closing date of the sale.

MEDICAL OFFICE BUILDING (MOB)

A multitenant office building containing physicians' offices and exam rooms, and in some cases pharmacies and ancillary hospital-service space to conduct outpatient services, such as diagnostic testing, rehabilitation, and day-surgery operating procedures. MOBs are different from general office buildings since they typically require more plumbing and electrical and mechanical systems to accommodate equipment unique to medical practices.

MID-ATLANTIC REGION

As per NCREIF, includes Delaware, Maryland, Virginia, North Carolina, and South Carolina, as well as Washington, DC.

NET OPERATING INCOME (NOI)

Income remaining after deduction of all property expenses (including real estate taxes). In direct capitalization, investors capitalize one of the following:

1. NOI after capital replacement reserve deduction but before TIs and leasing commissions
2. NOI before capital replacement reserve

- deduction, TIs, and leasing commissions
3. Cash flow after capital replacement reserve deduction, TIs, and leasing commissions

OVERALL CAPITALIZATION (CAP) RATE

Initial rate of return in an all-cash transaction; the overall cap rates reported in this Survey reflect investors' expectations of property performance and are applied to one of the three net operating income levels noted above. All-cash refers to either all cash or market financing; unleveraged return.

PACIFIC REGION

As per NCREIF, includes Washington, Oregon, and California.

PROJECTION PERIOD⁴

A presumed period of ownership; a period of time over which expected net operating income is projected for purposes of analysis and valuation; also referred to as "forecast" period by Survey participants

PwC DIVIDEND INDICATOR (PDI)

A composite OAR average of the surveyed markets excluding lodging.

PwC YIELD INDICATOR (PYI)

A composite IRR average of the surveyed markets excluding lodging and development land

QUARTILE

One of the three points that divide a range of data or population into four equal parts. The first quartile (also called the lower quartile) is the number below which sits 25.0% of the bottom data. The second quartile (the median) divides the range in the middle and has 50.0% of the data below it. The third quartile (also called the upper quartile) has 75.0% of the data below it and the top 25.0% of the data above it.

RENT SPIKE

An increase in market rent that is markedly higher than the general rate of inflation.

REPLACEMENT COST¹

The estimated cost to construct, at current prices as of the effective appraisal date, a substitute for the building being appraised, using modern materials and current standards, design, and layout.

REPLACEMENT RESERVE

Amount allocated for periodic replacement of building components during a property's economic life

RESIDUAL

Estimated total price at conclusion of forecast period:

Cap Rate

Overall capitalization rate used in calculation of residual price; typically applied to the NOI in the year following the forecast.

Selling Expense

Transaction expenses (legal, brokerage, marketing, etc.) paid by the seller.

SHADOW SPACE³

Space within an occupied office suite that is not currently utilized by a tenant and is also not being marketed for subleasing

SOUTHEAST REGION

As per NCREIF, includes Alabama, Arkansas, Florida, Georgia, Mississippi, and Tennessee.

STRUCTURAL VACANCY³

Normal vacancy rate in a balanced market.

VACANCY ASSUMPTIONS

Months Vacant

The number of months a space remains unleased at the expiration of a vacating tenant lease.

Tenant Retention

Percentage of leased rentable area that is expected to be released by the existing tenants at lease expiration.

Underlying Vacancy/Credit Loss

Percentage of total revenue uncollected due to unexpected vacancy or credit loss (in addition to any rent loss from vacancies at lease expirations).

APARTMENT

NET OPERATING INCOME (APARTMENT NOI)

Income remaining after deduction of all property expenses (which includes leasing commissions); in direct capitalization, investors capitalize one of the following:

1. NOI after capital replacement reserve
2. NOI before capital replacement reserve
3. Cash flow after capital replacement reserve

GARDEN APARTMENT¹

Development consisting of two- or three-story, walk-up structures built in a garden-like setting; customarily a suburban or rural-urban fringe development.

HIGH-RISE APARTMENT⁵

Multifamily housing development consisting of at least four stories.

Various sources for these definitions include ¹The Dictionary of Real Estate Appraisal, Fifth Edition, published by the Appraisal Institute, ²International Council of Shopping Centers, ³investor interviews and PwC, ⁴Smith Travel Research, and ⁵National Multi Housing Council.

DEVELOPMENT LAND

DEVELOPMENT LAND

Land that has been purchased, readied for subdivision development (i.e. entitlements and infrastructure), and subsequently sold to builders

DEVELOPER'S PROFIT^{1,3}

A market-derived figure that reflects the amount a developer expects to receive for his or her contribution to a project and risk

INDUSTRIAL

FLEX/R&D³

An industrial property with 14- to 20-foot clear ceiling heights, up to 100.0% finished office space including lab and clean-room space (up to 60.0% finished office space excluding lab and clean-room space), and dock-high and/or grade-level loading used for minimal distribution, research and development, and specialized office space.

WAREHOUSE³

An industrial property with 16- to 30-foot clear ceiling heights, up to 15.0% finished office space, and dock-high loading facilities used for the storage and distribution of goods.

LODGING

AVERAGE DAILY RATE (ADR)⁴

Room revenue divided by rooms sold.

LIMITED-SERVICE MIDSACLE & ECONOMY^{3,4}

Midscale lodging with "rooms only" and no food or beverage except possible continental breakfast; includes all economy lodging; lower-tier pricing; corresponds to STR's limited-service hotels in the midscale chain scale and all hotels in the economy chain scale; includes brands such as Howard Johnson, Sleep Inn, and Motel 6.

FULL SERVICE^{3,4}

Lodging with restaurant and lounge facilities, meeting space, and a minimum service and amenities level; moderate to lower upper-tier pricing; corresponds to STR's full-service hotels in the upscale, upper midscale, and midscale chain scales; includes brands such as Doubletree, Radisson, and Ramada.

LUXURY/UPPER UPSACLE^{3,4}

High-quality lodging offering personalized guest services, typically with extensive amenities, and upper-tier pricing; corresponds to STR's luxury and upper-upscale chain scales; includes brands such as Ritz Carlton, Four Seasons, and Hyatt.

MANAGEMENT FEE

An expense item representing the sum paid for or the value of management serv-

ice, including incentives, expressed as a percentage of total revenues.

NET OPERATING INCOME (LODGING NOI)

Income remaining after deduction of all property expenses: in direct capitalization, investors capitalize one of the following:

1. Prior 12 months
2. Forecast next 12 months
3. Both of the above

OCCUPANCY⁴

Rooms sold divided by rooms available.

OPERATING EXPENSES

The ongoing expenditures incurred during the ordinary course of business necessary to maintain and continue the production of gross revenues, not including reserves, debt service, and capital costs.

PROPERTY EXPENSES

Includes all necessary operating expenses and a reserve for replacement of building components and FF&E.

RESERVE FOR REPLACEMENT

An allowance that provides for the periodic replacement of building components, and furniture, fixtures, and equipment, which deteriorate and must be replaced during the building's economic life.

REVPAR

Revenue per available room.

SELECT SERVICE^{3,4}

Upscale and upper-midscale lodging with "rooms only" and no or minimal food and beverage; moderate pricing; excludes economy properties; corresponds to STR's select-service hotels in the upscale chain scale and limited-service hotels in the upper-midscale chain scale; includes brands such as Hampton Inn, Residence Inn, and Comfort Inn.

NET LEASE

PROVISION 1031

A tax code that allows the seller of an investment property to defer capital gains taxes by exchanging the sale proceeds for an investment in a similar property or properties within 180 days of the original closing.

SALE LEASEBACK

A transaction in which an owner sells a property that it fully occupies to a third party and then leases the space back from the new owner.

SECONDARY OFFICE

INCLUDED MARKETS

Austin, Baltimore, Cincinnati, Cleveland, Detroit, Indianapolis, Jacksonville,

Kansas City, Las Vegas, Minneapolis, Nashville, Orlando, Pittsburgh, Raleigh, Riverside, Sacramento, San Antonio, San Jose, St. Louis, and Tampa

RETAIL

FORTRESS MALL

The dominant performing Class-A+ malls in the country whose inline stores generate at least \$650 per square foot in retail sales; they contain inline and anchor stores that are both well established and unmatched in the trade area.

LIFESTYLE CENTER²

Most often located near affluent residential neighborhoods, this center type caters to the retail needs and "lifestyle" pursuits of consumers in its trading area. It has an open-air configuration and typically includes at least 50,000 square feet of space occupied by upscale national chain specialty stores. Other elements, such as restaurants and entertainment, design ambience and amenities like fountains and street furniture, make the lifestyle center serve as a multi purpose leisure-time destination. One or more conventional or fashion specialty department stores often act as anchors.

OUTLET CENTER²

Consist mostly of manufacturers' outlet stores selling their own brands at a discount. Usually located in rural or occasionally in tourist locations. A strip configuration is most common, although some are enclosed or arranged in a "village" format.

POWER CENTER^{2,3}

An open center dominated by at least 75.0% large big-box anchors, including discount stores, warehouse clubs, and value-oriented category stores, and a minimal amount of inline store space

REGIONAL MALL^{2,3}

An enclosed shopping center that contains at least two department stores and has climate-controlled walkways that are lined with smaller retail shops

REGIONAL MALL CLASSIFICATIONS³

Class	Inline Retail Sales ³ (Per Sq. Ft.)
A+	\$650 and up
A	\$500 to \$649
B+	\$400 to \$499
B	\$300 to \$399
C+/C	Less than \$300

STRIP SHOPPING CENTER^{2,3}

An open row of stores either with or without anchor stores that offer convenience (neighborhood centers) and general merchandise (community centers).

Various sources include ¹The Dictionary of Real Estate Appraisal, Fifth Edition, published by the Appraisal Institute; ²ICSC; ³investor interviews and PwC, inline sales exclude anchor stores, movie theaters, and large drug stores; ⁴Smith Travel Research; and ⁵National Multi Housing Council.

REAL ESTATE INVESTOR SURVEY

VOL. 30, NO. 2
Second Quarter 2017
Released: June 15, 2017

PwC Real Estate Investor Survey
is published quarterly by PwC

Editor-in-Chief: Susan M. Smith, MAI
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Subscriptions: For information about subscription pricing, please call our publication department at 1-800-654-3387 (8:00 am to 5:00 pm CST) or email pwcm@materiallogic.com.

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Survey Process: Survey participants represent a cross section of major institutional equity real estate investors who invest primarily in institutional-grade property. As such, the information presented is not generally applicable to noninstitutional-grade investments. In addition, the information represents investors' investment expectations and does not reflect actual property performances.

The information in this survey is gathered through on-line questionnaires and telephone interviews. As such, the findings and opinions expressed reflect those of our investor participants and do not necessarily reflect those of PwC. Although we do not represent that the survey is statistically accurate, its results provide important insight into the thinking of a significant portion of the equity real estate marketplace.

Investor Survey Responses: The individual investor responses contained in the large tables in the back of each issue are a representative sample. Due to space constraints, not all responses are included.

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*16-page supplement following 9/11

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