

Control Number: 45702



Item Number: 89

Addendum StartPage: 0

SOAH DOCKET NO. 473-16-5296.WS
PUC DOCKET NO. 45702

RECEIVED

2016 NOV 28 PM 2:40

APPLICATION OF THE CITY OF §
CIBOLO FOR SINGLE CERTIFICATION §
IN INCORPORATED AREA AND TO §
DECERTIFY PORTIONS OF GREEN §
VALLEY SPECIAL UTILITY §
DISTRICT'S SEWER CERTIFICATE OF §
CONVENIENCE AND NECESSITY IN §
GUADALUPE COUNTY §

BEFORE THE PUBLIC UTILITY

COMMISSION
FILING CLERK

COMMISSION OF TEXAS

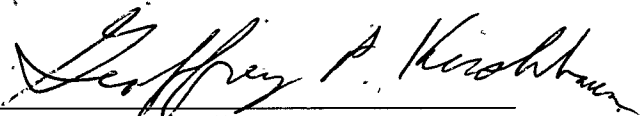
GREEN VALLEY SUD'S RESPONSE TO CIBOLO'S FOURTH
REQUESTS FOR INFORMATION

To: City of Cibolo, Texas, by and through its attorneys of record, David Klein and Christie Dickenson, Lloyd Gosselink, 816 Congress Ave., Suite 1900, Austin, Texas 78701.

Green Valley Special Utility District ("Green Valley SUD") provides its response to City of Cibolo's Fourth Requests for Information to Green Valley SUD. Green Valley SUD stipulates that the following response to requests for information may be treated by all parties as if the answer was filed under oath.

Respectfully submitted,

By:



Paul M. Terrill III
State Bar No. 00785094
Geoffrey P. Kirshbaum
State Bar No. 24029665
Shan S. Rutherford
State Bar No. 24002880
TERRILL & WALDROP
810 W. 10th Street
Austin, Texas 78701
(512) 474-9100
(512) 474-9888 (fax)

ATTORNEYS FOR GREEN VALLEY SPECIAL UTILITY
DISTRICT

CERTIFICATE OF SERVICE

I hereby CERTIFY that on November 28, 2016, a true and complete copy of the above was sent by the method indicated to counsel of record at the following addresses in accordance with P.U.C. PROC. R. 22.74:

David Klein
Christie Dickenson
Lloyd Gosselink
816 Congress Ave., Suite 1900
Austin, Texas 78701

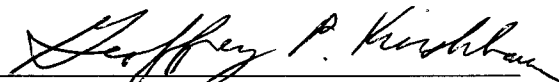
via fax to: (512) 472-0532

ATTORNEY FOR APPLICANT

Landon Lill
Public Utility Commission of Texas
1701 N Congress PO Box 13326
Austin, Texas 78711-3326

via fax to: (512) 936-7268

ATTORNEY FOR COMMISSION STAFF



Geoffrey P. Kirshbaum

RESPONSE TO REQUEST FOR INFORMATION

Cibolo RFI 4-1 Please identify the specific portion(s) of GVSUD's 2006 Wastewater Master Plan that you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment A to the City's Application, which is attached hereto as Attachment 1.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-2 Please explain your response to Cibolo RFI 4-1.

RESPONSE: See GVSUD's response to Cibolo RFI 4-1 and GVSUD's appraisal.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-3 Please identify the specific portions of GVSUD's TPDES Permit Application currently pending at the TCEQ that you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-4 Please explain the basis for your answer to Cibolo RFI 4-3.

RESPONSE: See GVSUD's response to Cibolo RFI 4-3 and GVSUD's appraisal.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-5 Please identify the specific portion(s) of GVSUD's 2014 Water Master Plan that you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests:

RESPONSE: GVSUD does not contend that a portion of the 2014 Water Master Plan will be rendered useless or valueless as the result of decertification. GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-6 Please explain the basis for your answer to Cibolo RFI 4-5.

RESPONSE: See GVSUD's response to Cibolo RFI 4-5 and GVSUD's appraisal.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-7 Please identify the specific portion(s) of GVSUD's IH-10 Industrial Park Water Service Feasibility Study that you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-8 Please explain the basis for your answer to Cibolo RFI 4-7 and GVSUD's appraisal.

RESPONSE: See GVSUD's response to Cibolo RFI 4-7 and GVSUD's appraisal.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-9 Please identify the specific portion(s) of the Woods of St. Claire Subdivision Water Service Feasibility Study that you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal.

Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-10 Please explain the basis for your answer to Cibolo RFI 4-9 and GVSUD's appraisal.

RESPONSE: See GVSUD's response to Cibolo RFI 4-9 and GVSUD's appraisal.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-11 Please identify any other specific items you contend are property interests related to GVSUD's wastewater system planning and design activities that would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-12 For any item identified in Cibolo RFI 4-11, please identify the specific portions of that item that you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-13 Please identify the specific "lost revenues" you contend would be rendered useless or valueless by decertification of the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-14 Please identify all specific items you would characterize as “investments” in a future GVSUD wastewater system.

RESPONSE: GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by the decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-15 Please explain how or if GVSUD’s water planning documents identified in previous GVSUD RFI Responses (GVSUD’s 2014 Water Master Plan, IH-10 Industrial Park Water Service Feasibility Study, Woods of St. Claire Subdivision Water Feasibility Study) relate to planning a GVSUD wastewater system beyond the population projections discussed in those documents.

RESPONSE: In addition to the population projections in the above-referenced documents, the documents demonstrate GVSUD’s responding to an increased level of interest and inquiries regarding the provision of water and wastewater service, which GVSUD must plan for and be prepared to serve. The IH-10 Industrial Park Water Service Feasibility Study includes a request for sanitary sewer service. The Woods of St. Claire Subdivision study relates to a request within the area of GVSUD’s wastewater CCN that Cibolo seeks to decertify.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-16 In your response to Cibolo 2-28, you identify GVSUD’s Water Revenue Bonds, Series 2014 as relating to the design and construction of sewer infrastructure. Please provide an explanation for that answer in light of GVSUD’s response to Cibolo RFI 2-13.

RESPONSE: GVSUD did not identify “Water Revenue Bonds, Series 2014” in its response to Cibolo 2-28.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-17 Do you contend that it is appropriate for wastewater customers to pay for debt assumed to construct water system facilities?

RESPONSE: Yes. All GVSUD revenues are eligible to pay all GVSUD debt.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-18 Please specifically identify and describe documents and other data relating to market research performed by Korman Realty Consultants, LLC for purposes of GVSUD's Appraisal and the source of such documents and data.

RESPONSE: All documents relating to market research were provided in the addenda to the June 28, 2016 appraisal report submitted as Exhibit GVSUD-1 at GVSUD 100490-100505. Please also see GVSUD 002706-002918.

Prepared and Sponsored by: Joshua Korman, Principal, KOR Group, Inc.

Cibolo RFI 4-19 For any item identified in Cibolo RFI 4-18, please identify and describe the specific portions of GVSUD's Appraisal derived from such documents or data.

RESPONSE: The market research was utilized to inform the entire appraisal process and not one particular component of the appraisal.

Prepared and Sponsored by: Joshua Korman, Principal, KOR Group, Inc.

Cibolo RFI 4-20 Please identify and describe growth projections pertaining specifically to the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: See GVSUD's June 28, 2016 Appraisal submitted in this proceeding. See also the growth projections contained in GVSUD's 2006 Wastewater Master Plan (GVSUD 000001-731) and TPDES Permit Application (GVSUD 000732-834). As is the norm in utility planning, GVSUD's growth projections are applicable to its entire CCN service areas, which include the subject decertification area. The density or pattern of development in GVSUD's CCN areas may vary, but GVSUD has an obligation to serve all customers within those areas.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-21 Does GVSUD intend to develop a new wastewater master plan or to update the existing 2006 Wastewater Master Plan? If yes, please explain when.

RESPONSE: Yes. GVSUD intends to update its 2006 Wastewater Master Plan in the near future, but has not determined a firm date for beginning that work.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-22 If GVSUD's TPDES Permit Application, as initially filed at the TCEQ, is approved by the TCEQ and infrastructure is constructed such that GVSUD can provide wastewater service, do you contend GVSUD can compel potential customers within its CCN service area to utilize GVSUD's wastewater service?

RESPONSE: No, GVSUD cannot compel potential customers to utilize its wastewater service. However, developer economics would dictate that customers inside subdivisions in GVSUD's wastewater service area would become GVSUD customers. Further, other retail public utilities would be unable to provide those customers with retail wastewater service in GVSUD's CCN area.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-23 Please identify and describe all issue with septic systems within GVSUD's CCN service area, including failures, improperly maintained systems, and systems contributing to contamination of surface and groundwater or otherwise causing public health issues, of which GVSUD is aware.

RESPONSE: GVSUD does not have the authority to inspect and permit septic systems, thus it is not aware of specific issues as described. Generally, however, septic systems have the potential to present such issues.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-24 Do you contend that the PUC must process and evaluate whether property is rendered useless or valueless by decertification in the precise manner as TCEQ previously processed and evaluated such matters?

RESPONSE: No.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-25 Please identify and describe any wastewater impact fee studies that GVSUD has performed that includes the service area colored in light blue in Attachment 1 to these Requests.

RESPONSE: The June 28, 2016 Appraisal contains impact fee estimates prepared based on information in the 2006 Wastewater Master Plan. A comprehensive impact fee study will be performed and presented to the GVSUD Board of Directors at the time the Wastewater Master Plan is updated, which will then be presented to TCEQ.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-26 Refer to page 10, line 20 through page 11, line 7 in the direct testimony of David "Pat" Allen ("Mr. Allen Direct"). Please provide documentation identifying:

- (a) growth in GVSUD's wastewater customer base;
- (b) growth in wastewater usage within GVSUD's service area;
- (c) that portion of the 11,000 customer connections attributable to wastewater service;
- (d) that portion of the 33,000 individuals who are wastewater customers; and
- (e) the nature of GVSUD's wastewater customers (i.e. residential, light commercial, industrial, or other).

RESPONSE: Cibolo has misconstrued GVSUD's testimony. After a diligent search, GVSUD has not identified any documents responsive to this request. See GVSUD's response to Cibolo RFA 1-1 and 1-3.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-27 Refer to page 11, line 25 through page 12, line in Mr. Allen's Direct. Please provide documentation identifying:

- (a) the referenced wastewater customer/constituents;
- (b) specific "investments" that will be rendered useless or valueless by decertification;
- (c) the referenced "remaining customers"; and
- (d) the increased costs for "remaining customers".

RESPONSE: The question does not provide a proper page and line reference. Subject thereto:

- (a) Cibolo has misconstrued GVSUD's testimony. After a diligent search, GVSUD has not identified any documents responsive to this request. See GVSUD's response to Cibolo RFA 1-1 and 1-3.

- (b) GVSUD contends that its appraisal filed at the PUC on June 28, 2016 includes all real and personal property of GVSUD that would be rendered useless or valueless by decertification as of the date of the Appraisal. Values identified in the appraisal will need to be updated as part of the second phase of this hearing.
- (c) The reference was to all current water customers and all future wastewater customers. See GVSUD-1 at 100014-100018. See also the attached GVSUD Operations Report.
- (d) The reference was to all current water customers and all future wastewater customers. See GVSUD-1 at 100014-100018. See also the attached GVSUD Operations Report.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-28 Refer to page 23, lines 10-11 in Mr. Allen's Direct. Please provide documentation identifying the referenced "current and future customers" to be provided with wastewater service.

RESPONSE: Cibolo has misconstrued GVSUD's testimony. After a diligent search, GVSUD has not identified any documents responsive to this request. See GVSUD's response to Cibolo RFA 1-1 and 1-3.

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

Cibolo RFI 4-29 Refer to page 12, line 17 through page 13, line 1 in Mr. Allen's Direct. Please provide documentation identifying:

- (a) GVSUD's "rapidly-growing base" of water customers;
- (b) GVSUD's "rapidly-growing" base of wastewater customers;
- and
- (c) the referenced "current and future customers".

RESPONSE:

- (a) See GVSUD 100142 - 100147 See also the attached GVSUD Operations Report.
- (b) Cibolo has misconstrued GVSUD's testimony. After a diligent search, GVSUD has not identified any documents responsive to this request. See GVSUD's response to Cibolo RFA 1-1 and 1-3.
- (c) See GVSUD's response to subparts (a) and (b).

Prepared and Sponsored by: Pat Allen, General Manager - Green Valley Special Utility District

SOAH DOCKET NO. 473-16-5296.WS
PUC DOCKET NO. 45702

APPLICATION OF THE CITY OF CIBOLO FOR SINGLE CERTIFICATION IN INCORPORATED AREA AND TO DECERTIFY PORTIONS OF GREEN VALLEY SPECIAL UTILITY DISTRICT'S SEWER CERTIFICATE OF CONVENIENCE AND NECESSITY IN GUADALUPE COUNTY	§ § § § § § §	BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS
---	---------------------------------	---

**GREEN VALLEY SPECIAL UTILITY DISTRICT'S
 BATES NUMBER LOG**

Document #	Description
GVUSD 000001-731	Green Valley Special Utility District's Wastewater Master Plan
GVSUD 000732-834	GVSUD's Application for a TPDES Permit
GVUSD 000835-860	November 12, 2015 City of Cibolo's Formal Comments on TPDES Application
GVSUD 000861-876	Notice of Application and Preliminary Decision for TPDES Permit
GVSUD 000877-947	Draft TPDES Permit from TCEQ
GVSUD 000948-1196	USDA Loan Documents - \$584,000 Green Valley Special Utility District Revenue Bonds Series 2003
GVSUD 001197-1225	CCN Area Maps and Metes and Bounds for Green Valley Special Utility District
GVSUD 001226-1228	Interlocal Agreement between the City of Marion and Green Valley Special Utility District
GVSUD 001229-1237	Unimproved Property Contract - 65 acres on Linne Road
GVSUD 001238-1240	Payment for 65 acres
GVSUD 001241	Resolution of Green Valley Special Utility District's Board of Directors regarding purchase of 65 acres
GVSUD 001242-1249	Correction Warranty Deed - Murphey v. Green Valley Special Utility District for 45.689 acres

GVSUD 001250-1256	Correction Warranty Deed - Murphey v. Green Valley Special Utility District for 19.311 acres
GVSUD 001257-1292	Various e-mails between River City Engineers and TCEQ staff members
GVSUD 001293-1341	May 1, 2015 Response to TCEQ comments on TPDES Application
GVSUD 001342-1378	Various e-mails between River City Engineers and TCEQ staff members
GVSUD 001379	May 3, 2016 USDA Letter to Green Valley Special Utility District
GVSUD 001380-1383	June 17, 2016 Green Valley Special Utility District letter to TCEQ regarding WWTP Permit Application
GVSUD 001384-1978	Various documents filed at the Public Utility Commission related to Project No 45702
GVSUD 001979-1981	September 15, 2014 River City Engineering Professional Service Proposal for Wastewater Planning, Site Acquisition, and Permitting
GVSUD 002200-2203	2014-2015 Green Valley Special Utility District Annual Budget
GVSUD 002204-2207	2015-2016 Green Valley Special Utility District Annual Budget
GVSUD 002208-2255	Green Valley Special Utility District's Monthly Budgeting Reports for October 2014 to September 2015
GVSUD 002256-2303	Green Valley Special Utility District's 2014 Audit
GVSUD 002304-2351	Green Valley Special Utility District's 2015 Audit
GVSUD 002352-2367	IH-10 Industrial Park Feasibility Study
GVSUD 002368-2381	Woods of St. Claire Feasibility Study
GVSUD 002382-2511	2014 Water Master Plan
GVSUD 002512-2551	Green Valley Special Utility District's Planning Documents - Cost Estimates, Quantity Summaries, and Schematics and Plans for Proposed Wastewater Treatment Plant

GVSUD 002552-2592	Green Valley Special Utility District's By-laws and Operating Procedures
GVSUD 002593	Sewer CCN
GVSUD 002594-2597	Various correspondence with TWDB and USDA
GVSUD 002598-2606	May 18, 2015 Admin Complete Letter from the TCEQ
GVSUD 002607-2609	Green Valley Special Utility District's Ledger of Wastewater Expenses to Date
GVSUD 002610	Location Map
GVSUD 002611	Map of Proposed Santa Clara Treatment Facility
GVSUD 002612-2615	Cibolo Creek Municipal Authority's 2016 Notice of Application to Levy Impact Fees
GVSUD 002616-2647	GVSUD Agreements with River City Engineers
GVSUD 002648-2650	Interlocal Agreement between City of Marion and GVSUD
GVSUD 002651-2671	Emails and Documents regarding provision of sewer service
GVSUD 002672-2682	Applications for Sewer Service and Service Agreements
GVSUD 002683-2694	Road Ranger LLC Feasibility Study
GVSUD 002695-2701	E-mails and documents regarding provision of sewer service
GVSUD 002702	Resume of Garry Montgomery
GVSUD 002703	Resume of Pat Lackey
GVSUD 002704	GVSUD Letter to Nortex Subdivision
GVSUD 002705	Operations Report - October 2016
GVSUD 0002706 - 002816	PWC 1 st Quarter Investor Survey - CRE: Time to Wave the Caution Flag
GVSUD 002817 - 002918	PWC 2 nd Quarter Investor Survey - Stabilizing Values May Signal End of Expansion

OPERATIONS REPORT
October-2016

		<u>2016</u>	<u>Acre-feet *</u>		<u>2015</u>	<u>Acre-feet *</u>
PUMPING PERIOD:		<u>08/31/15 - 09/30/15</u>			<u>08/31/15 - 09/30/15</u>	
(does not coincide with bill reading dates)						
GALLONS PUMPED FROM WELLS:	25%	<u>24,496,000</u>	<u>75,1755</u>	34%	<u>40,434,000</u>	<u>124,0874</u>
GALLONS PUMPED FROM TRINITY AQUIFER WELL.	8%	<u>7,859,000</u>	<u>24,1184</u>	12%	<u>14,810,000</u>	<u>0.0000</u>
GALLONS PURCHASED FROM CRWA: (Lake Dunlap)	50%	<u>48,416,000</u>	<u>148,5832</u>	39%	<u>46,067,000</u>	<u>141,3744</u>
GALLONS PURCHASED FROM CRWA: (Wells Ranch)	16%	<u>15,706,000</u>	<u>48,1999</u>	14%	<u>17,002,000</u>	<u>52,1772</u>
GALLONS PURCHASED FROM ECWSC:	0%	<u>0</u>	<u>0.0000</u>	1%	<u>885,000</u>	<u>2,7160</u>
TOTAL GALLONS PRODUCED		<u>96,477,000</u>	<u>296,0770</u>		<u>119,198,000</u>	<u>365,8052</u>
LESS GALLONS VOL. FIRE DEPT		<u>650,000</u>	<u>1,9948</u>		<u>725,000</u>	<u>2,2249</u>
LESS GALLONS FOR FLUSHING:		<u>1,200,000</u>	<u>3,6827</u>		<u>1,100,000</u>	<u>3,3758</u>
TOTAL CUSTOMERS:		<u>11,517</u>			<u>10,639</u>	
ACTIVE CUSTOMERS		<u>11,080</u>			<u>10,233</u>	
INACTIVE CUSTOMERS:		<u>437</u>			<u>406</u>	
NEW ACCOUNTS:		<u>62</u>			<u>37</u>	

Average Daily Usage	<u>3,425,400</u>
Maximum Daily Usage	<u>5,285,400</u>
Minimum Daily Usage	<u>2,450,000</u>

OCTOBER BILLING REPORT

		<u>2016</u>		<u>2015</u>
WATER BILLED:		<u>83,079,300</u>	<u>254,9610</u>	<u>115,996,127</u> <u>355,9790</u>
TOTAL AMOUNT BILLED:		<u>\$637,172.31</u>		<u>\$819,346.45</u>
RESIDENTIAL AMOUNT BILLED		<u>\$581,110.27</u>		<u>\$743,455.68</u>
AVERAGE RESIDENTIAL BILL		<u>\$53.82</u>		<u>\$71.70</u>
AVERAGE RESIDENTIAL USAGE		<u>7.005</u>	<u>0.0215</u>	<u>9.715</u> <u>0.0298</u>

	<u># of Cust. in Cycle</u>				
RESIDENTIAL USAGE	10797	<u>75,637,600</u>	<u>232,1233</u>	91.04%	<u>100,739,027</u> <u>309,1567</u>
COMMERCIAL USAGE	166	<u>3,038,000</u>	<u>9,3233</u>	3.66%	<u>4,013,300</u> <u>12,3164</u>
INDUSTRIAL USAGE	11	<u>2,485,000</u>	<u>7,6262</u>	2.99%	<u>4,211,900</u> <u>12,9258</u>
IRRIGATION USAGE	34	<u>865,600</u>	<u>2,6564</u>	1.04%	<u>4,026,300</u> <u>12,3563</u>
WHOLESALE USAGE	1	<u>725,100</u>	<u>2,2253</u>	0.87%	<u>828,000</u> <u>2,5410</u>
OTHER (FIREPLUGS)	16	<u>328,000</u>	<u>1,0066</u>	0.39%	<u>2,177,600</u> <u>6,6828</u>

LINE LEAKS:	32
A/C	1
TUBING	9
MAIN	22
OTHER	0

TOTAL WORK ORDERS PRODUCED 785

<u>METERS SET.</u>	71	<u>Long Creek - 1</u>	<u>Heights of Cibola - 3</u>
		<u>Saratoga - 20</u>	<u>Landmark Point - 7</u>
		<u>Glenncrest - 5</u>	<u>Legend Pond - 14</u>
		<u>Turning Stone - 5</u>	<u>Preston Estate - 1</u>
		<u>Ridgemont - 1</u>	<u>Saddle Creek - 6</u>
		<u>Woodlake - 1</u>	<u>Samuels Court - 4</u>
		<u>Altwein Ln - 1</u>	<u>S Santa Clara - 1</u>

* 1 Acre-foot = 325,851 gallons

First Quarter 2016

CRITICAL Time to Wave the Caution Flag?

PwC Real Estate Investor Survey™

pwc

GVSUD 002706



Dear Reader:

From stock market volatility to worries about China's economy, as well as our own, surveyed investors shared their concerns for the commercial real estate (CRE) industry's near-term performance this quarter while also highlighting their positive thoughts. Clearly, there are varying degrees of caution and trepidation based on investor type, property sector, and geography. Investors' opinions are included throughout the Survey's market pages and highlighted in our lead story "CRE: Time to Wave the Caution Flag?"

I often tell readers that one of the best ways to get a quick snapshot of investor sentiment is to look at the Survey's overall cap rate trends. Our *Overall Cap Rate Analysis*, which starts on page 3, shows a drop in the number of Survey markets reporting overall cap rate declines. This section also shows how investors foresee cap rates trending over the next six months – *where do you think they're heading?*

This quarterly issue also contains coverage of our semiannual *National Lodging Highlights* and our four individual lodging chain-scale segments, starting on page 54. It shows the Survey results from our hotel participants and excerpts from *Hospitality Directions US*, published in January 2016 by PwC Hospitality & Leisure.

Lastly, I invite you to our quarterly CRE webcast planned for this April 2016. Information on how to register will be emailed soon, so check your inbox. And remember, you can follow the Survey's senior editor, Amy Olson, on Twitter @amyolsonatl, and receive other real estate industry tweets from PwC following @PwC_LLPL and @mitch_roschelle.

Sincerely,

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

Susan M. Smith
Editor-in-Chief

In This Issue

National Highlights: CRE: Time to Wave the Caution Flag?	2	Suburban Maryland	43
Overall Cap Rate Analysis	3	Washington, DC	44
Looking Forward	4	National Flex/R&D Market	45
Key Indicator Breakout	4	National Warehouse Market	46
Valuation Issues		ENC Region Warehouse Market	47
Replacements Reserves	5	Pacific Region Warehouse Market	48
Market Rent Change Rates	5	National Apartment Market	49
Management Fees	6	Regional Apartment Markets	50
Leasing Commissions	6	Southeast Region	
Concessions	7	Pacific Region	
PwC Real Estate Barometer	8	Mid-Atlantic Region	
U.S. CRE Stock Acquisition Trends	15	National Net Lease Market	52
National Secondary Office Market	18	National Medical Office Buildings Market	53
National Retail Markets		National Lodging Highlights	54
Regional Mall	21	National Lodging Segments	
Power Center	22	Full Service	56
Strip Shopping Center	23	Limited-Service Midscale & Economy	57
Office Markets		Luxury/Upper Upscale	58
National CBD	24	Select Service	59
National Suburban	25	Investor Survey Response Tables	60
Atlanta	26	Investment and Property Characteristics	
Boston	27	Office Markets	98
Charlotte	28	National and Regional Markets	99
Chicago	29	Yield Comparisons	100
Dallas	30	Dividend Comparisons	100
Denver	31	Institutional-Grade vs. Noninstitutional-Grade Property Rates	
Houston	32	Office Markets	101
Los Angeles	33	National and Regional Markets	102
Manhattan	34	Income Capitalized in Direct Capitalization	103
Northern Virginia	35	Forecast Periods and Change Rates	
Pacific Northwest	36	Office Markets	104
Philadelphia	37	National and Regional Markets	105
Phoenix	38	Definitions	106
San Diego	39		
San Francisco	40		
Seattle	41		
Southeast Florida	42		

PwC Real Estate Investor Survey

National Highlights CRE: TIME TO WAVE THE CAUTION FLAG?

At this point in the national economic recovery, which by most accounts started July 2009 and is going on seven years now, a growing number of investors are taking more time to reflect on investment strategies with some opting to downplay their near-term plans due to a host of recent negative macro factors, including volatility in the stock market, global economic instability, a surge in foreign capital targeting U.S. commercial real estate (CRE), and just an overall sense that “the recovery has gone on too long.” But are investors’ concerns well founded, or is it too soon to start waving the caution flag?

Posing this question to investors finds that while there is still much enthusiasm with regard to the industry and the opportunities it presents, the enthusiasm has decidedly cooled since the end of 2015. “We’re in the late innings of a great game, but we could have a rain delay soon,” quips one apartment sector investor. “We’re still flying, but there are more headwinds than tailwinds,” remarks an office sector investor. Other phrases used by investors to describe their outlook for the CRE industry are “cautiously optimistic” and “uncertain at best” as they sense pricing is at or near peak levels in most sectors and top metros.

For some investors, the reason for less fervor is nothing more than a “feeling” – a sense that the recovery “is getting long in the tooth” and with interest rates likely to continue going up and construction levels also rising, it’s a good time to pause and re-evaluate goals and strategies in advance of a downturn. This by no means translates into a doom-and-gloom outlook for the industry, but their need for reflection is exacerbated by the aggressive pursuit of U.S. CRE on behalf of foreign investors. “In the wake of economic weakness in their own homelands, international buyers are bidding up prices in U.S. gateway markets,” says an investor. In 2015, cross-border CRE property purchases totaled \$91.1 billion, accounting for 17.0% of the year’s total deal volume – up from an average of 10.0% the previous four years, according to Real Capital Analytics.

With average CRE prices at or close to peak levels in most sectors and top markets, the thought of overpaying for quality CRE adds to investors’ anxieties, especially when many of them are seeing rent growth slow and overall cap rate compression wane. After five years of annual gains, a slight year-over-year decline is recognized this quarter for the Survey’s aggregate average initial-year market rent change rate assumption for its city-specific office markets. In addition, after 22 quarters of overall cap rate compression, the aggregate average overall cap rate for all Survey markets, excluding lodging and development land, holds steady this quarter at 6.31%.

Less cap rate compression and the use of more conservative underwriting assumptions certainly point to an air of caution among investors for 2016, but uncertainty and less exuberance can be a good thing for the CRE industry even if most of it is simply tied to a fear of the unknown path for the U.S. economy, the capital markets, and the CRE industry. No one knows what’s in store for 2016, but if a sixth sense has investors making mindful adjustments and strategically placing capital instead of just rushing to “get money out” then maybe the expansion can linger a bit longer and ease investors’ concerns. After all, CRE fundamentals remain quite healthy with the bulk of investors’ worries tied to the capital markets and the global economy – *when did we hear that statement before?* ♦

Overall Cap Rate Analysis

In the first quarter of 2016, the average overall capitalization (cap) rate decreases in 12 Survey markets, holds steady in ten, and increases in 12. The quarterly shifts are much different than they have been in the past few quarters with a lower number of markets reporting declines and a greater

number posting increases in their average cap rates. In addition, the magnitude of the shifts is much smaller this quarter, ranging from -10 to +12 basis points (see Exhibit 1). A year ago, 24 markets reported quarterly declines in their average overall cap rates with dips of as much as 29 basis points.

This quarter's average overall cap rate shifts suggest varied viewpoints by investors across the industry. In the office sector, for example, some investors are showing optimism for the national CBD office market, but appear more cautious with regard to Dallas and Houston. Cap rate shifts

Exhibit 1

OVERALL CAPITALIZATION RATES

First Quarter 2016

National Markets	Average	Quarterly Change*
Apartment	5.35%	0
Warehouse	5.52%	4
CBD Office	5.58%	-10
Regional Mall	6.00%	-3
Power Center	6.33%	2
Suburban Office	6.38%	2
Strip Shopping Center	6.41%	3
Net Lease	6.75%	-3
MOB**	6.83%	-1
Flex/R&D	7.15%	0
Regional Warehouse		
Pacific Region	5.28%	3
ENC*** Region	5.48%	-5
Apartment Markets		
Pacific Region	4.50%	0
Southeast Region	5.30%	0
Mid-Atlantic Region	5.46%	11
Office Markets		
Manhattan	5.15%	0
Washington, DC	5.40%	0
Los Angeles	5.69%	-2
San Francisco	5.70%	2
Seattle	6.10%	0
Pacific Northwest	6.11%	3
Boston	6.15%	-4
Denver	6.49%	0
San Diego	6.81%	-9
Phoenix	6.84%	-4
Northern Virginia	6.88%	0
Dallas	7.00%	12
Houston	7.13%	12
Charlotte	7.14%	-7
Southeast Florida	7.18%	0
Suburban Maryland	7.28%	5
Atlanta	7.33%	-2
Chicago	7.34%	4
Philadelphia	7.53%	-2

* Basis points; ** Medical office buildings;

*** East North Central

Source: PwC Real Estate Investor Survey

Exhibit 2

OVERALL CAPITALIZATION RATE FORECASTS

First Quarter 2016

MARKET	OVERALL CAP RATE	SIX-MONTH EXPECTATIONS		
	4Q 2015	INCREASE	DECREASE	HOLD STEADY
National				
Regional Mall	6.00%	20%	0%	80%
Power Center	6.33%	17%	17%	67%
Strip Shopping Center	6.41%	25%	0%	75%
CBD Office	5.58%	17%	17%	67%
Suburban Office	6.38%	0%	0%	100%
Net Lease	6.75%	20%	20%	60%
Medical Office Buildings	6.83%	13%	13%	75%
Industrial				
National Flex/R&D	7.15%	0%	20%	80%
National Warehouse	5.52%	0%	18%	82%
ENC Region Warehouse	5.48%	0%	20%	80%
Pacific Region Warehouse	5.28%	0%	0%	100%
Apartment				
National	5.35%	0%	0%	100%
Mid-Atlantic Region	5.46%	0%	0%	100%
Pacific Region	4.50%	0%	0%	100%
Southeast Region	5.30%	0%	0%	100%
Office				
Atlanta	7.33%	0%	0%	100%
Boston	6.15%	17%	17%	67%
Charlotte	7.14%	0%	20%	80%
Chicago	7.34%	14%	0%	86%
Dallas	7.00%	13%	25%	63%
Denver	6.49%	40%	0%	60%
Houston	7.13%	57%	0%	43%
Los Angeles	5.69%	0%	0%	100%
Manhattan	5.15%	0%	0%	100%
Northern Virginia	6.88%	0%	20%	80%
Pacific Northwest	6.11%	0%	0%	100%
Philadelphia	7.53%	20%	20%	60%
Phoenix	6.84%	0%	0%	100%
San Diego	6.81%	0%	0%	100%
San Francisco	5.70%	40%	0%	60%
Seattle	6.10%	0%	0%	120%
Southeast Florida	7.18%	0%	17%	83%
Suburban Maryland	7.28%	0%	0%	100%
Washington, DC	5.40%	0%	0%	100%

Source: PwC Real Estate Investor Survey

for the Survey's apartment markets also reveal a more guarded outlook among investors as new supply is delivered. In most of the other property sectors and markets, a more "stabilized" outlook is noted with only minor shifts in quarterly overall cap rates.

LOOKING FORWARD

Even though surveyed investors hold a positive outlook for the commercial real estate industry for the near term, they are also mindful of the potential for additional interest rate increases and are approaching acquisitions with

a bit more care and due diligence.

While overall cap rates are expected to hold steady in most Survey markets over the next six months, a greater percentage of investors foresee cap rate increases today (9.2% of them) compared to last year (3.0% of them).

KEY INDICATOR BREAKOUT

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, averages 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, presenting lower investment risk.

In addition, downtown cores tend to provide better forms of mass transportation and embody 18- or 24-hour, live-work lifestyles that appeals 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. ♦

Exhibit 3 BREAKOUT OF KEY INDICATORS First Quarter 2016						
CBD OF:	DISCOUNT RATE RANGE	AVERAGE	OVERALL CAPITALIZATION RATE RANGE	AVERAGE	RESIDUAL CAPITALIZATION RATE RANGE	AVERAGE
Atlanta	6.00% - 10.00%	8.15%	5.25% - 9.00%	7.05%	6.00% - 9.00%	7.13%
Boston	6.00% - 9.00%	7.19%	4.00% - 7.00%	5.35%	5.00% - 7.50%	6.13%
Charlotte	6.50% - 9.75%	8.10%	5.50% - 8.50%	6.80%	5.50% - 8.00%	6.88%
Chicago	6.00% - 10.00%	7.64%	5.00% - 8.00%	6.07%	5.50% - 9.00%	6.63%
Dallas	6.00% - 11.00%	7.92%	5.00% - 9.00%	6.75%	5.75% - 9.00%	7.13%
Denver	6.75% - 10.00%	7.69%	5.00% - 7.50%	6.00%	5.75% - 8.50%	6.78%
Houston	6.50% - 10.00%	8.20%	5.75% - 8.00%	6.73%	5.50% - 9.50%	7.05%
Los Angeles	5.50% - 9.00%	6.95%	4.50% - 7.00%	5.53%	5.00% - 8.00%	6.58%
Manhattan	5.50% - 9.00%	6.85%	3.75% - 8.00%	5.15%	5.00% - 8.00%	5.98%
Pacific Northwest	5.50% - 10.00%	7.05%	4.00% - 9.00%	5.59%	5.00% - 8.00%	6.23%
Philadelphia	7.00% - 9.00%	7.93%	6.00% - 8.00%	6.90%	6.00% - 8.00%	7.25%
Phoenix	7.00% - 10.00%	8.17%	5.00% - 8.00%	6.58%	5.50% - 7.50%	6.67%
San Diego	6.50% - 10.50%	7.94%	5.50% - 8.50%	6.81%	6.25% - 8.75%	7.25%
San Francisco	5.75% - 8.00%	6.48%	3.50% - 7.00%	4.90%	5.00% - 8.00%	5.75%
Seattle	5.50% - 10.00%	7.08%	4.00% - 9.00%	5.60%	5.00% - 8.00%	6.10%
Southeast Florida	6.00% - 10.00%	7.90%	4.50% - 9.50%	6.65%	4.50% - 10.00%	6.80%
Washington, DC	5.50% - 8.00%	6.81%	4.25% - 6.50%	5.40%	5.00% - 6.50%	5.85%
SUBURBS OF:	DISCOUNT RATE RANGE	AVERAGE	OVERALL CAPITALIZATION RATE RANGE	AVERAGE	RESIDUAL CAPITALIZATION RATE RANGE	AVERAGE
Atlanta	7.00% - 10.00%	8.53%	6.00% - 9.25%	7.60%	6.50% - 9.25%	7.63%
Boston	7.00% - 10.00%	8.33%	5.00% - 8.00%	6.94%	6.50% - 8.25%	7.40%
Charlotte	7.00% - 11.00%	8.95%	6.00% - 9.00%	7.48%	6.50% - 8.50%	7.60%
Chicago	7.50% - 12.00%	9.52%	7.00% - 10.00%	8.61%	7.50% - 10.00%	8.68%
Dallas	7.00% - 11.00%	8.43%	5.75% - 9.00%	7.25%	6.00% - 9.00%	7.43%
Denver	7.00% - 11.00%	8.08%	6.00% - 9.00%	6.98%	6.50% - 9.50%	7.58%
Houston	7.50% - 12.00%	9.17%	5.50% - 10.00%	7.52%	6.25% - 10.75%	7.65%
Los Angeles	5.00% - 9.00%	6.85%	4.50% - 7.25%	5.85%	5.50% - 8.00%	6.83%
Northern Virginia	6.00% - 9.50%	7.75%	5.00% - 8.50%	6.88%	5.75% - 8.50%	7.25%
Pacific Northwest	6.00% - 11.00%	7.96%	5.00% - 9.00%	6.64%	5.00% - 9.00%	6.89%
Philadelphia	7.75% - 10.00%	9.18%	7.00% - 9.00%	8.15%	7.00% - 9.00%	8.45%
Phoenix	7.00% - 12.00%	8.80%	6.00% - 8.50%	7.10%	6.50% - 9.00%	7.58%
San Diego	6.25% - 10.50%	7.73%	5.25% - 8.50%	6.80%	5.75% - 8.75%	7.15%
San Francisco	6.00% - 10.00%	7.30%	4.50% - 9.00%	6.50%	5.50% - 9.00%	6.68%
Seattle	6.00% - 11.00%	7.85%	5.00% - 9.00%	6.60%	5.00% - 9.00%	6.73%
Southeast Florida	7.00% - 11.50%	8.75%	5.00% - 10.00%	7.71%	6.00% - 10.50%	7.88%
Suburban Maryland	7.25% - 10.00%	8.88%	5.50% - 9.00%	7.28%	6.50% - 9.75%	7.88%

Source: PwC Real Estate Investor Survey

Valuation Issues

REPLACEMENT RESERVES

Incorporating an appropriate reserve for the replacement of building components during a holding period plays an important role in accurately forecasting the real cash return potential of an acquisition. The ranges and averages of current and year-ago assumptions for replacement reserves are shown in Exhibit 4. These figures do not include estimates for larger capital costs for items that are replaced only a few times during the life of a property and that are usually accounted for separately as capital improvements.

The Investor Survey Responses in the back of this issue show a sampling of specific replacement reserve assumptions for each market.

MARKET RENT CHANGE RATES

After five years of annual gains, a slight year-over-year decline is recognized this quarter for the aggregate average initial-year market rent change rate

Table VI-1

INITIAL-YEAR MARKET RENT CHANGE RATES

City-Specific Office Markets Only

Quarter	Average	Change (Basis Points)
1Q16	2.80%	- 10
1Q15	2.90%	+ 10
1Q14	2.80%	+ 58
1Q13	2.22%	+ 51
1Q12	1.71%	+ 130
1Q11	0.41%	+ 163
1Q10	(1.22%)	- 314
1Q09	1.92%	- 200
1Q08	3.92%	+ 45
1Q07	3.47%	+ 104
1Q06	2.43%	+ 88
1Q05	1.55%	-

Source: PwC Real Estate Investor Survey

for the city-specific office markets surveyed during each time period (see Table VI-1). At 2.80%, the current average is still one of the highest posted for the past eight years and underscores the favorable outlook that many surveyed investors hold for the office sector in the near term.

Over the past three years, the San Diego office market has posted the largest gain in this key assumption, increasing 350 basis points. Investors cite San Diego's high-tech economy, employment growth, and recovering housing market as reasons for its rebounding office market.

Exhibit 4

REPLACEMENT RESERVES PER SQUARE FOOT

First Quarter 2016

MARKET	CURRENT QUARTER		YEAR AGO	
	RANGE	AVERAGE	RANGE	AVERAGE
National				
Regional Mall	\$0.10 - \$0.50	\$0.28	\$0.10 - \$0.50	\$0.26
Power Center	\$0.10 - \$0.35	\$0.22	\$0.10 - \$0.35	\$0.22
Strip Shopping Center	\$0.10 - \$0.50	\$0.26	\$0.10 - \$0.50	\$0.25
Net Lease	\$0.05 - \$0.25	\$0.15	\$0.10 - \$0.25	\$0.18
Medical Office Buildings	\$0.10 - \$0.60	\$0.31	\$0.10 - \$0.60	\$0.26
Industrial				
National Flex/R&D	\$0.10 - \$0.50	\$0.27	\$0.10 - \$0.50	\$0.28
National Warehouse	\$0.05 - \$0.35	\$0.14	\$0.05 - \$0.35	\$0.15
ENC Region Warehouse	\$0.40 - \$1.05	\$0.21	\$0.50 - \$1.20	\$0.20
Pacific Region Warehouse	\$0.05 - \$0.35	\$0.15	\$0.05 - \$0.35	\$0.15
Apartment (per unit)				
National	\$100 - \$2,000	\$425	\$100 - \$2,000	\$425
Mid-Atlantic Region	\$100 - \$1,500	\$468	\$100 - \$1,500	\$465
Pacific Region	\$200 - \$350	\$269	\$50 - \$400	\$235
Southeast Region	\$200 - \$1,500	\$490	\$200 - \$1,500	\$490
Office				
National CBD	\$0.10 - \$0.50	\$0.26	\$0.10 - \$0.50	\$0.27
National Suburban	\$0.10 - \$0.50	\$0.30	\$0.10 - \$0.50	\$0.29
Atlanta	\$0.10 - \$0.40	\$0.24	\$0.10 - \$0.40	\$0.23
Boston	\$0.15 - \$0.75	\$0.31	\$0.15 - \$0.75	\$0.31
Charlotte	\$0.10 - \$0.50	\$0.29	\$0.10 - \$0.75	\$0.30
Chicago	\$0.15 - \$1.00	\$0.34	\$0.15 - \$1.00	\$0.34
Dallas	\$0.10 - \$0.50	\$0.28	\$0.10 - \$0.50	\$0.28
Denver	\$0.10 - \$0.30	\$0.20	\$0.10 - \$0.30	\$0.20
Houston	\$0.15 - \$0.50	\$0.25	\$0.15 - \$0.30	\$0.22
Los Angeles	\$0.10 - \$0.25	\$0.19	\$0.10 - \$0.25	\$0.19
Manhattan	\$0.10 - \$0.50	\$0.26	\$0.10 - \$1.00	\$0.33
Northern Virginia	\$0.15 - \$0.75	\$0.33	\$0.15 - \$0.75	\$0.33
Pacific Northwest	\$0.05 - \$2.00	\$0.34	\$0.05 - \$2.00	\$0.34
Philadelphia	\$0.15 - \$0.50	\$0.28	\$0.15 - \$0.50	\$0.28
Phoenix	\$0.10 - \$0.35	\$0.22	\$0.10 - \$0.35	\$0.23
San Diego	\$0.00 - \$0.35	\$0.20	\$0.00 - \$0.35	\$0.19
San Francisco	\$0.10 - \$0.30	\$0.22	\$0.10 - \$0.30	\$0.21
Seattle	\$0.05 - \$2.00	\$0.43	\$0.05 - \$2.00	\$0.43
Southeast Florida	\$0.10 - \$1.00	\$0.34	\$0.10 - \$1.00	\$0.34
Suburban Maryland	\$0.25 - \$0.75	\$0.38	\$0.20 - \$0.75	\$0.35
Washington, DC	\$0.15 - \$0.75	\$0.28	\$0.10 - \$0.75	\$0.29

Source: PwC Real Estate Investor Survey

Exhibit 5
MANAGEMENT FEES AND LEASING COMMISSIONS
First Quarter 2016

MARKET	MANAGEMENT FEES (AS A % OF EFFECTIVE GROSS REVENUE)			LEASING COMMISSIONS NEW LEASE			RENEWEL LEASES		
	LOW	HIGH	AVERAGE	LOW	HIGH	AVERAGE	LOW	HIGH	AVERAGE
National									
Regional Mall	1.00%	5.00%	2.93%	(a)	(a)	(a)	(a)	(a)	(a)
Power Center	0.03%	6.00%	2.67%	3.00%	6.00%	5.20%	2.50%	5.00%	3.19%
Strip Shopping Center	2.00%	6.00%	3.47%	2.00%	8.00%	5.41%	0.00%	5.00%	2.78%
CBD Office	1.00%	5.00%	2.54%	3.00%	8.50%	5.95%	2.00%	7.00%	3.95%
Suburban Office	1.50%	6.00%	3.22%	3.00%	8.00%	5.82%	1.50%	7.00%	3.54%
Net Lease	1.00%	3.00%	1.75%	3.00%	6.00%	4.17%	2.00%	6.00%	3.33%
Medical Office Buildings	1.30%	5.00%	3.71%	3.00%	7.00%	5.31%	1.00%	6.00%	3.59%
Industrial									
National Flex/R&D	1.50%	4.00%	2.80%	4.00%	7.50%	6.20%	2.00%	6.00%	3.90%
National Warehouse	0.00%	3.50%	2.43%	3.00%	8.30%	5.73%	1.50%	8.00%	3.89%
ENC Region Warehouse	1.50%	5.00%	2.75%	3.00%	9.00%	5.80%	1.50%	6.00%	3.15%
Pacific Region Warehouse	1.50%	5.00%	2.85%	3.00%	8.00%	5.75%	2.50%	8.00%	3.75%
Apartment									
National	2.00%	5.00%	2.90%	(a)	(a)	(a)	(a)	(a)	(a)
Mid-Atlantic Region	1.75%	4.00%	2.69%	(a)	(a)	(a)	(a)	(a)	(a)
Pacific Region	1.75%	4.00%	2.60%	(a)	(a)	(a)	(a)	(a)	(a)
Southeast Region	2.00%	3.50%	2.88%	(a)	(a)	(a)	(a)	(a)	(a)
Office									
Atlanta	1.50%	4.00%	2.80%	4.00%	7.50%	6.20%	2.00%	6.00%	3.90%
Boston	1.00%	4.00%	2.79%	1.50%	7.50%	4.75%	1.50%	6.00%	3.19%
Charlotte	1.50%	5.00%	2.75%	6.00%	6.50%	6.05%	2.00%	6.00%	3.90%
Chicago	1.25%	3.50%	2.20%	4.00%	8.00%	6.00%	4.00%	8.00%	5.50%
Dallas	2.00%	4.00%	2.88%	3.00%	7.00%	6.08%	2.00%	6.75%	5.36%
Denver	1.50%	4.00%	2.94%	5.00%	8.00%	6.50%	3.00%	7.00%	4.81%
Houston	1.00%	5.00%	2.95%	2.00%	6.00%	5.00%	1.50%	6.00%	4.07%
Los Angeles	1.50%	3.00%	2.65%	4.00%	7.00%	5.69%	1.50%	6.00%	3.31%
Manhattan	1.00%	4.00%	2.29%	3.00%	7.50%	5.25%	1.50%	5.00%	3.20%
Northern Virginia	2.00%	4.00%	2.80%	3.00%	6.00%	5.10%	2.00%	4.75%	3.70%
Pacific Northwest	1.00%	4.00%	2.60%	5.00%	7.50%	6.50%	0.00%	7.50%	4.25%
Philadelphia	1.50%	5.00%	3.55%	4.00%	6.00%	5.15%	2.00%	4.00%	2.80%
Phoenix	1.50%	4.00%	2.75%	5.00%	8.00%	6.69%	3.00%	7.50%	4.94%
San Diego	2.00%	4.00%	3.00%	3.00%	7.00%	5.00%	2.00%	5.00%	3.50%
San Francisco	1.00%	3.00%	2.20%	3.00%	8.00%	5.33%	2.00%	6.00%	3.08%
Seattle	1.00%	3.50%	2.58%	5.00%	7.50%	6.35%	0.00%	7.50%	3.80%
Southeast Florida	2.00%	5.00%	3.13%	4.00%	7.00%	5.92%	2.00%	6.00%	3.63%
Suburban Maryland	1.00%	3.00%	2.50%	3.50%	7.50%	5.25%	1.00%	3.00%	2.67%
Washington, DC	1.00%	3.00%	2.42%	3.00%	6.00%	4.83%	1.50%	5.00%	3.30%

(a) Most investors include leasing commissions in their management fee assumption.

Source: PwC Real Estate Investor Survey

MANAGEMENT FEES

Management fees used in cash flow projections typically constitute either an in-house related duty expensed to an affiliated company or a third-party cost paid to an outside management firm. Regardless of how they are contracted, management fees are generally included as an “above-the-line” operating expense and are deducted

from revenue in order to derive net operating income (NOI). Management fee assumptions, expressed as a percentage of effective gross revenue (EGR), are detailed in Exhibit 5. The average for the 34 Survey markets is 2.76%.

LEASING COMMISSIONS

Although leasing commissions may

be placed either above or below the NOI line, most investors consider them a “below-the-line” item. Like management fees, leasing commissions are usually expressed as a percentage of EGR. Current leasing commission assumptions for both new leases and renewals are detailed in Exhibit 5. Most ranges and averages remain unchanged from last year.

CONCESSIONS

While tenant concessions remain common throughout the industry, they vary greatly between individual markets and properties and typically include months of free rent and/or an excessive tenant improvement (TI) allowance – an additional amount above the standard TI in a

given market. Other inducements, such as the reimbursement of either moving costs or lease buyouts, are offered on a select basis.

As shown in Exhibit 6, roughly 86.0% of our Survey participants indicate the use of free rent during lease negotiations – slightly higher than a year ago (84.0%). While free

rent is offered to some degree in each Survey market, its use has grown in three of the four apartment markets over the past year.

In the Survey's office markets, incorporating free rent into lease negotiations is unanimous except in the office markets of Dallas and San Francisco. ♦

Exhibit 6
CONCESSIONS
First Quarter 2016

	% OF PARTICIPANTS USING FREE RENT		MONTHS OF FREE RENT (1)			EXCESSIVE TENANT IMPROVEMENT ALLOWANCES (2)	
MARKET	CURRENT	YEAR AGO	LOW	HIGH	AVERAGE	HIGH END OF THE RANGE	AVERAGE
National							
Regional Mall	40.0%	17.0%	(3)				
Power Center	50.0%	50.0%	0	12	5		
Strip Shopping Center	63.0%	75.0%	0	6	2	\$20.00	\$7.50
CBD Office	100.0%	86.0%	0	12	6	\$15.00	\$7.50
Suburban Office	88.0%	88.0%	0	12	5	\$25.00	\$8.13
Net Lease	40.0%	40.0%	(3)			\$10.00	\$1.00
Medical Office Buildings	67.0%	67.0%	1	6	3	\$25.00	\$8.50
Secondary Office	100.0%	90.0%	1	10	6	\$15.00	\$4.15
Industrial							
National Flex/R&D	100.0%	100.0%	1	12	4		
National Warehouse	90.0%	90.0%	0	6	3		
ENC Region Warehouse	100.0%	100.0%	0	5	3		
Pacific Region Warehouse	100.0%	100.0%	1	6	2		
Apartment							
National	60.0%	50.0%	0	3	1	not applicable to this property type	
Mid-Atlantic Region	40.0%	50.0%	0	2	1	not applicable to this property type	
Pacific Region	60.0%	50.0%	0	1.5	1	not applicable to this property type	
Southeast Region	60.0%	40.0%	0	1.5	1	not applicable to this property type	
Office							
Atlanta	100.0%	100.0%	1	10	6	\$10.00	\$5.00
Boston	100.0%	100.0%	0	10	5	\$30.00	\$12.08
Charlotte	100.0%	100.0%	1	10	7	\$5.00	\$5.30
Chicago	100.0%	100.0%	6	18	11	\$25.00	\$15.58
Dallas	75.0%	83.0%	2	12	7	\$10.00	\$4.17
Denver	100.0%	100.0%	0	10	4	\$10.00	\$5.63
Houston	100.0%	100.0%	1	24	8	\$15.00	\$6.67
Los Angeles	100.0%	100.0%	0	10	5		
Manhattan	100.0%	100.0%	0	12	7	\$20.00	\$8.13
Northern Virginia	100.0%	100.0%	2	12	7	\$25.00	\$11.88
Pacific Northwest	100.0%	100.0%	0	12	5	\$50.00	\$14.38
Philadelphia	100.0%	100.0%	3	9	5	\$10.00	\$5.50
Phoenix	100.0%	100.0%	2	10	7	\$10.00	\$1.67
San Diego	100.0%	100.0%	1	12	4		
San Francisco	80.0%	83.0%	0	9	4	\$30.00	\$20.00
Seattle	100.0%	100.0%	1	12	6		
Southeast Florida	100.0%	100.0%	3	12	6	\$15.00	\$6.75
Suburban Maryland	100.0%	100.0%	5	12	8		
Washington, DC	100.0%	100.0%	0	12	6	\$25.00	\$16.25

(1) On a ten-year lease; for apartments, lease term is 12 months.

(2) No entry suggests excessive TIs are not common in this market.

(3) Too few participants are using free rent for us to report a range and/or average.

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 Charts 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

Limited additions to supply and growth in office-space-using employment combine to present a positive outlook for the office sector for the next four years. As shown in Chart REB-1, most U.S. metros in our barometer analysis stand in the expansion phase of the cycle through 2019 with the number peaking in 2017. As the sector's recovery and expansion start to wind down, a growing number of metros, including Atlanta and Los Angeles, are expected to enter the contraction phase by year-end 2019.

RETAIL

Our barometer analysis presents one of the best outlooks for the retail sector in the past five years. As shown in Chart REB-2, most retail metros will be in either recovery or expansion over the next four years. At the same time, the number of metros in recession will increase slightly between 2016 and 2017. Metros expected to experience recovery and/or expansion over the next four years include Denver, Baltimore, San Antonio, Indianapolis, and Buffalo. Metros "in the red" by year-end 2019 include St. Louis and Seattle.

INDUSTRIAL

A surge in new supply in the industrial sector over the next couple years will likely propel a growing number of U.S. industrial metros into contraction – characterized by softer market conditions leading to higher vacancy rates, slower rental growth, and higher overall cap rates. These metros include Boston, Phoenix, and Indianapolis. In addition, the number of metros in recession is expected to increase over the same time period. Cities in recession by year-end 2019 are forecast to include Portland, Tampa, and Philadelphia.

MULTIFAMILY

Compared to where this sector stood five years ago, the outlook today is one of challenges consisting of softening market conditions, increasing vacancy, and slowing rental growth brought about by new supply entering the sector. As shown in Chart REB-4, the amount of "red" in the barometer forecast rises greatly between 2016 and 2017 with most metros being in the contraction phase of the cycle and the fewest in recovery. ♦

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 rental growth, and rising overall cap rates.

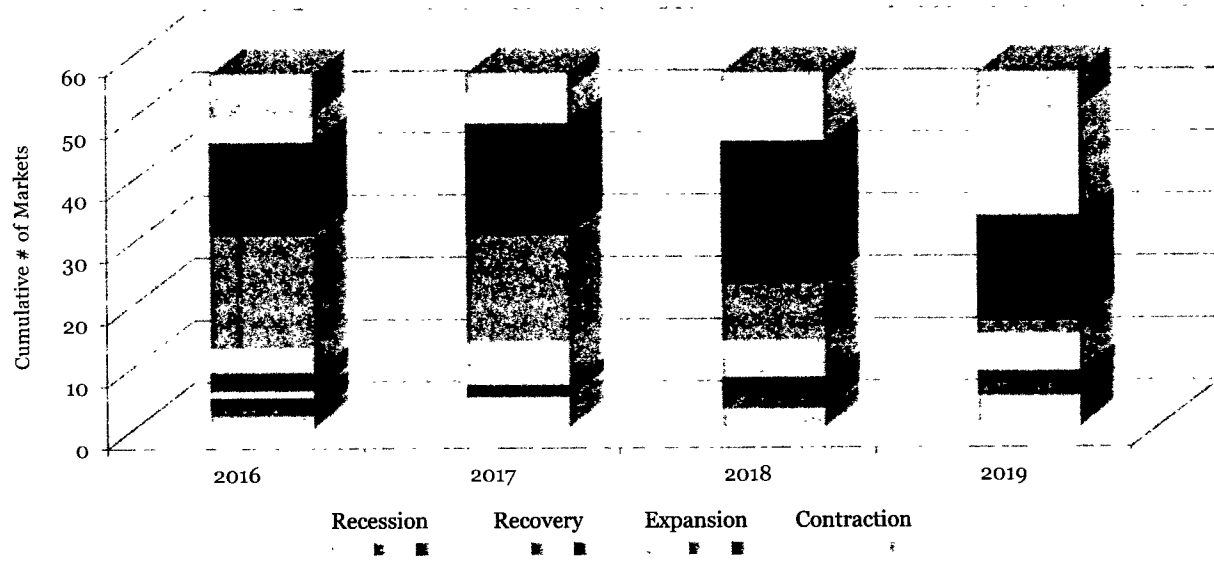
Expansion: The phase following recovery, characterized by strong demand and increasingly tight market conditions leading to low vacancy rates, robust rental growth, and decreasing overall cap rates.

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 rental 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 rental growth, and a stabilization of overall cap rates.

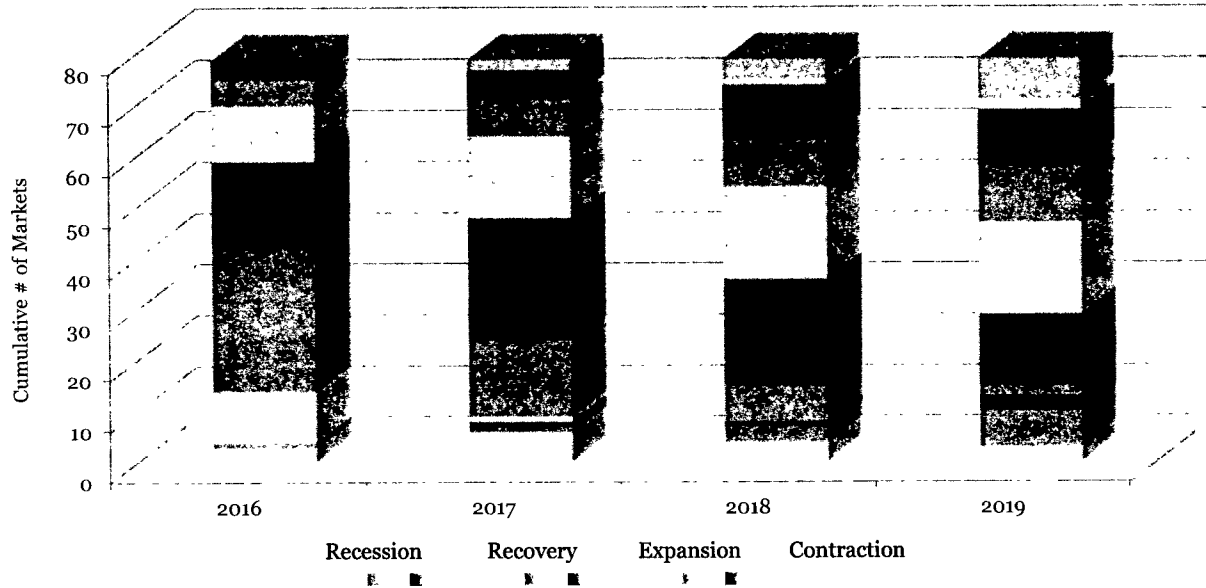
Stock: The total inventory of space, in square feet or units, in a given market.

Chart REB-1
PwC REAL ESTATE BAROMETER
 U.S. Office Markets – 2016 to 2019



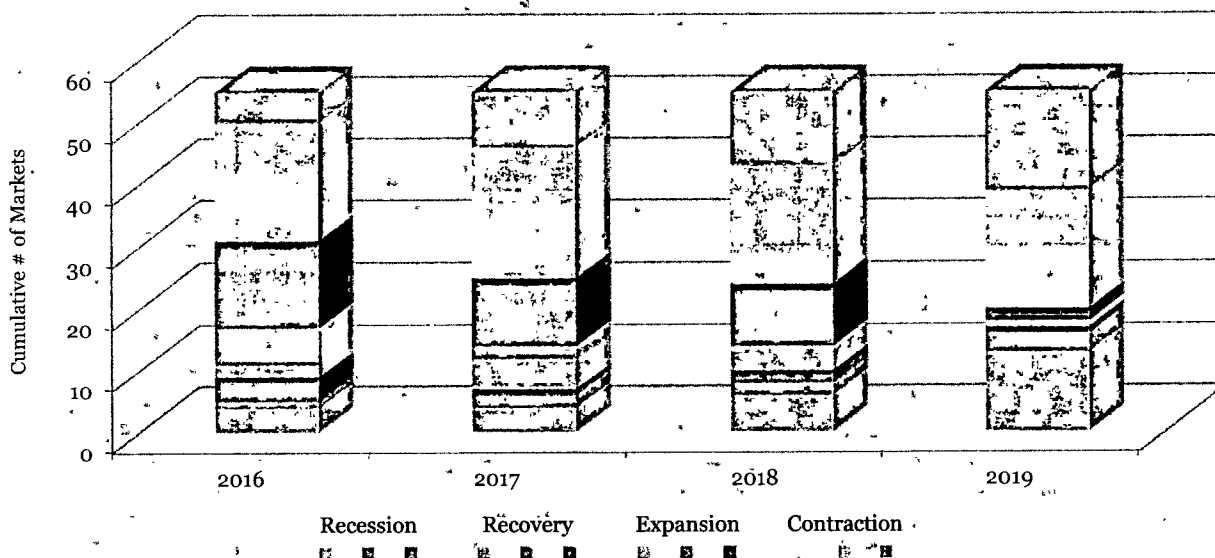
Source: Data provided by CBRE; compiled and analyzed by PwC

Chart REB-2
PwC REAL ESTATE BAROMETER
 U.S. Retail Markets – 2016 to 2019



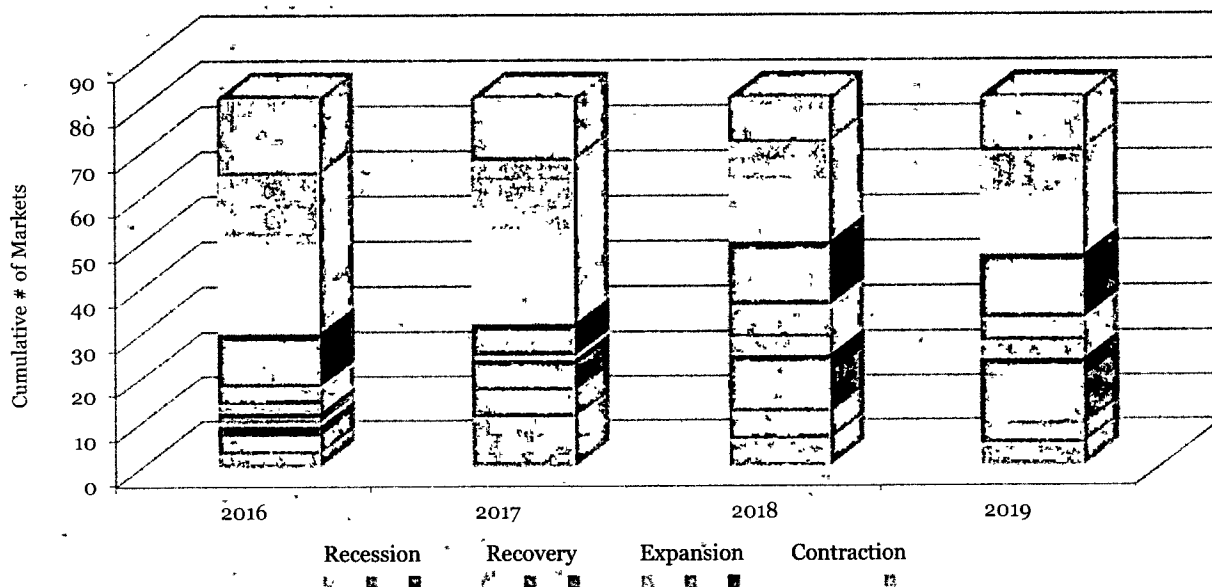
Source: Data provided by Reis; compiled and analyzed by PwC

Chart REB-3
PwC REAL ESTATE BAROMETER
 U.S. Industrial Markets – 2016 to 2019



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

Chart REB-4
PwC REAL ESTATE BAROMETER
 U.S. Multifamily Markets – 2016 to 2019



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

United States

2016	2017	2018	2019
○	⊙	⊙	⊙

NORTHEAST REGION

MSA Name	2016	2017	2018	2019
Boston	⊙	⊙	⊙	○
Hartford	⊙	⊙	⊙	⊙
Long Island	⊙	○	⊙	⊙
New York	⊙	⊙	⊙	⊙
Newark	⊙	○	⊙	⊙
Philadelphia	⊙	⊙	⊙	○
Pittsburgh	⊙	⊙	⊙	⊙
Stamford	○	⊙	○	○
Trenton	⊙	○	⊙	⊙

MIDWEST REGION

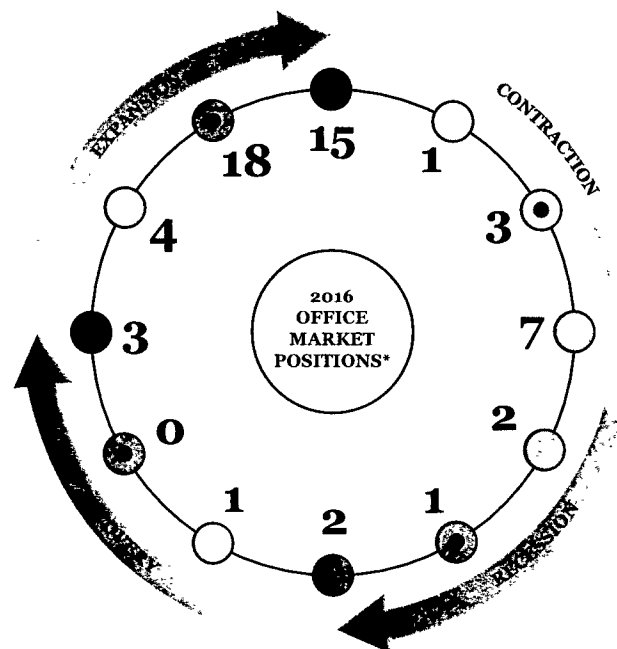
MSA Name	2016	2017	2018	2019
Chicago	⊙	⊙	⊙	○
Cincinnati	⊙	⊙	⊙	○
Cleveland	⊙	⊙	⊙	⊙
Columbus	⊙	⊙	⊙	⊙
Detroit	○	○	○	○
Indianapolis	⊙	⊙	⊙	⊙
Kansas City	○	⊙	⊙	⊙
Minneapolis	⊙	⊙	⊙	⊙
St. Louis	⊙	⊙	⊙	⊙
Toledo	⊙	⊙	⊙	⊙

WEST REGION

MSA Name	2016	2017	2018	2019
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	2016	2017	2018	2019
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 2016

United States

2016	2017	2018	2019
●	○	○	○

NORTHEAST REGION

MSA Name	2016	2017	2018	2019
Boston	●	○	○	○
Buffalo	○	○	○	○
Central New Jersey	○	●	○	○
Fairfield County	○	○	○	○
Hartford	○	○	○	○
Long Island	○	○	○	○
New Haven	○	○	○	○
Northern New Jersey	○	○	○	○
Philadelphia	○	○	○	○
Pittsburgh	○	○	○	○
Rochester	○	○	○	○
Syracuse	○	○	○	○
Westchester	○	○	○	○

MIDWEST REGION

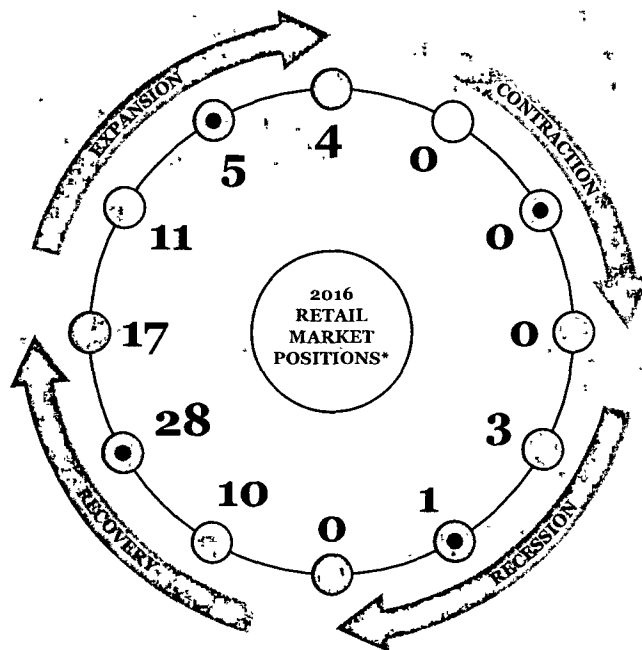
MSA Name	2016	2017	2018	2019
Chicago	○	○	○	○
Cincinnati	○	○	○	○
Cleveland	○	○	○	○
Columbus	○	○	○	○
Dayton	○	○	○	○
Detroit	○	○	○	○
Indianapolis	○	○	○	○
Kansas City	○	○	○	○
Milwaukee	○	○	○	○
Minneapolis	○	○	○	○
Omaha	○	○	○	○
St. Louis	○	○	○	○
Wichita	○	○	○	○

WEST REGION

MSA Name	2016	2017	2018	2019
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	2016	2017	2018	2019
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	○	○	○	○
Raleigh	○	○	○	○
Richmond	○	○	○	○
San Antonio	○	○	○	○
Suburban Maryland	○	○	○	○
Suburban Virginia	○	○	○	○
Tampa	○	○	○	○
Tulsa	○	○	○	○



	2016	2017	2018	2019
United States	●	○	○	○

NORTHEAST REGION

MSA Name	2016	2017	2018	2019
Allentown	○	○	●	○
Boston	●	●	○	○
Hartford	●	●	○	○
Long Island	○	○	○	○
New York	○	○	○	○
Newark	○	○	●	●
Philadelphia	●	●	●	○
Pittsburgh	●	○	○	○
Stamford	●	○	○	○
Trenton	●	○	○	○

MIDWEST REGION

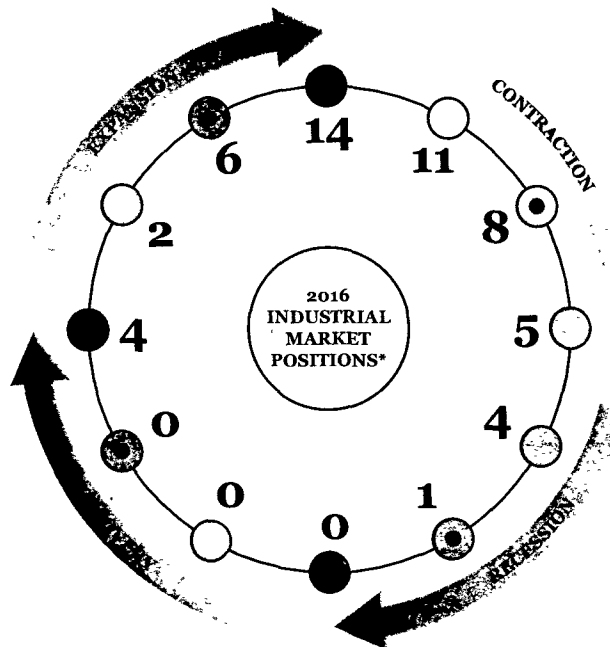
MSA Name	2016	2017	2018	2019
Chicago	●	●	●	○
Cincinnati	●	●	●	○
Cleveland	○	○	○	○
Columbus	○	○	○	○
Detroit	○	○	○	○
Indianapolis	●	●	○	○
Kansas City	○	●	●	●
Minneapolis	●	●	●	○
St. Louis	○	○	○	○

WEST REGION

MSA Name	2016	2017	2018	2019
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	2016	2017	2018	2019
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 2016

United States

2016	2017	2018	2019
○	⊗	⊗	○

NORTHEAST REGION

MSA Name	2016	2017	2018	2019
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

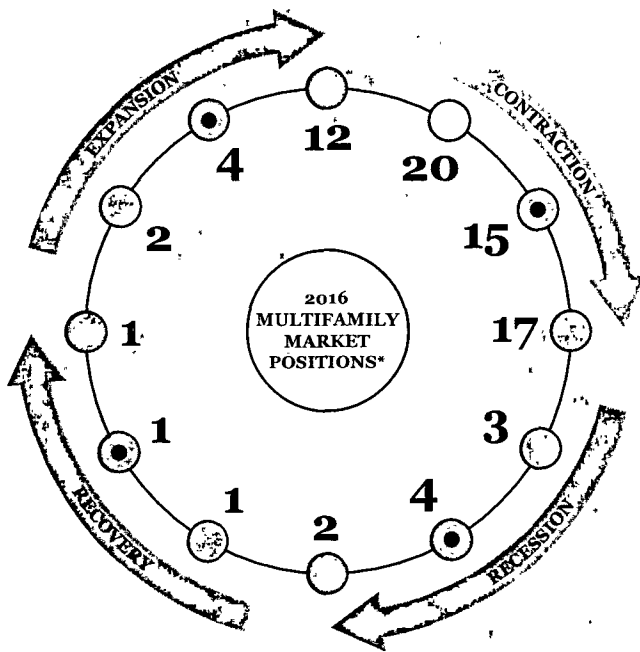
MSA Name	2016	2017	2018	2019
Chicago	○	○	○	○
Cincinnati	⊗	○	○	⊗
Cleveland	⊗	⊗	⊗	⊗
Columbus	○	○	○	○
Dayton	○	○	○	○
Detroit	⊗	⊗	⊗	⊗
Indianapolis	○	○	○	⊗
Kansas City	○	○	○	○
Milwaukee	○	○	○	○
Minneapolis	⊗	○	○	○
Omaha	⊗	⊗	○	○
St. Louis	○	⊗	⊗	⊗
Wichita	⊗	⊗	⊗	⊗

WEST REGION

MSA Name	2016	2017	2018	2019
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	2016	2017	2018	2019
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 2016

U.S. CRE Stock Acquisition Trends

Editor's Note: 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 fourth quarter of 2015.

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 buying trends.

- ◆ The industrial sector posted the largest increase in its average stock acquisition percentage since last quarter's analysis, rising 100 basis points from 5.2% to 6.2% (see Chart CAT-1).
- ◆ Both the apartment and retail sectors revealed increases in their stock acquisition percentages of 70 and 10 basis points, respectively, since last quarter (see Charts CAT-2 and CAT-3).
- ◆ The office sector's stock acquisition percentage held steady at 14.1% over the past three months (see Chart CAT-4). Metros with strong economic trends like Atlanta, Dallas, and Phoenix, as well as high-tech markets like San Jose, Austin, and Seattle are attracting buyers.
- ◆ At 22, the apartment sector had the most metros with stock acquisition percentages above the sector's average; the retail sector had 21 cities, the office sector had 19 cities, and the industrial sector had ten.
- ◆ Sunbelt metros like Atlanta, Dallas, Phoenix, Tampa, and Orlando continued to see a high volume of apartment transactions as a percent of stock.
- ◆ Only Atlanta and Dallas posted above-average stock acquisition percentages in each property sector this quarter, compared with seven metros last quarter. The decline is due to a number of factors including, a decrease in offerings, hesitancy among buyers, and tighter underwriting requirements.

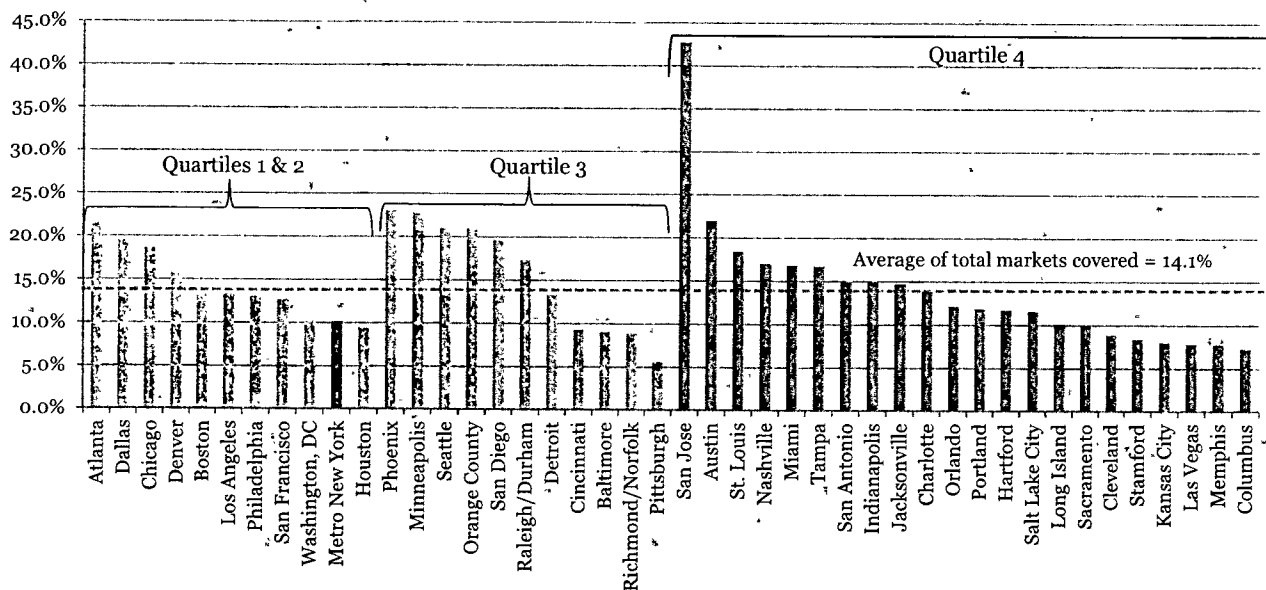
LOCATIONAL DIFFERENCES

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 seven markets previously mentioned. Such diversity opens up broad investment options for investors not just in terms of geography, but property type as well. ◆

Chart CAT-1

OFFICE CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 4Q 2015



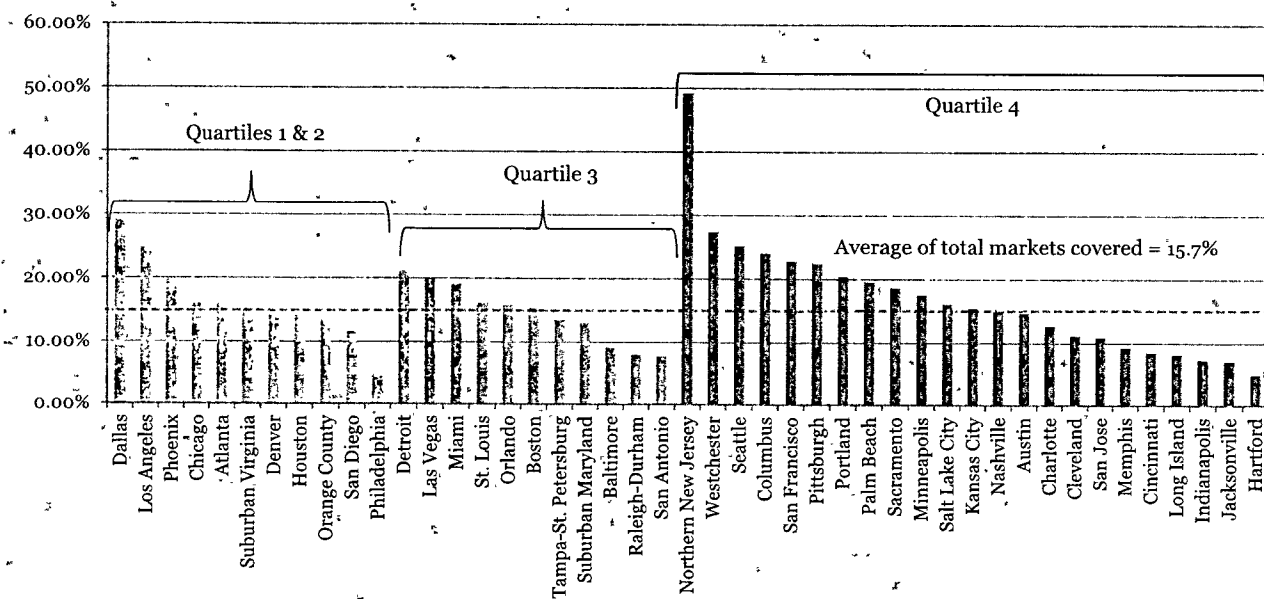
Source: Data provided by Real Capital Analytics and CBRE; compiled and analyzed by PwC

Note: Quartiles are based on markets' total CRE stock

Chart CAT-2

RETAIL CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 4Q 2015



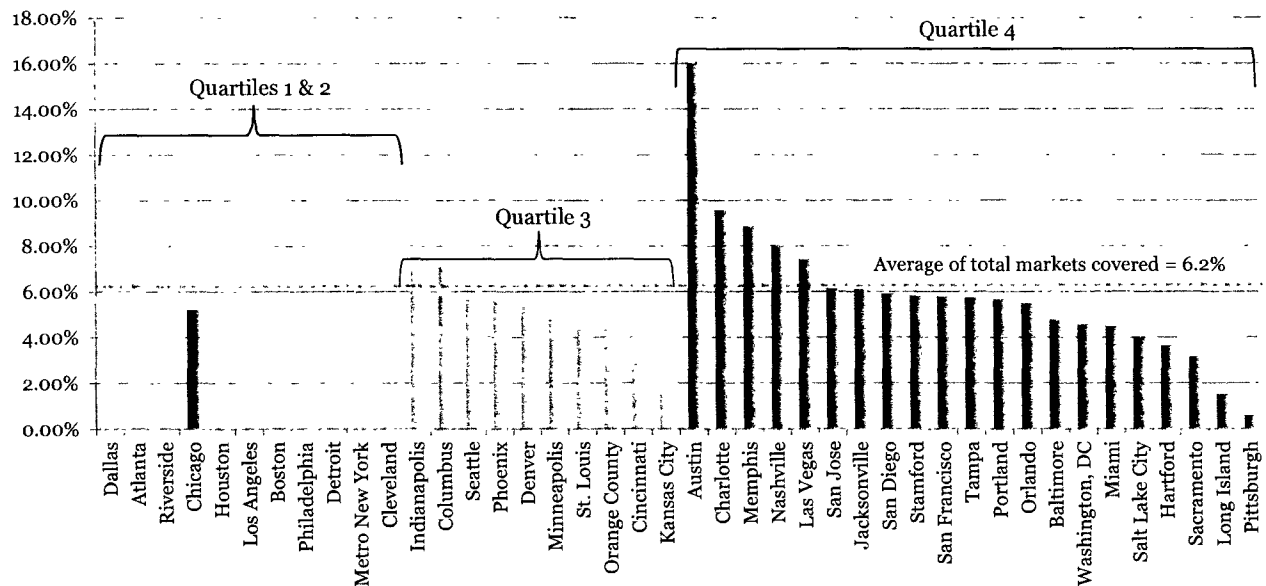
Source: Data provided by Real Capital Analytics and Reis; compiled and analyzed by PwC

Note: Quartiles are based on markets' total CRE stock

Chart CAT-3

INDUSTRIAL CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 4Q 2015



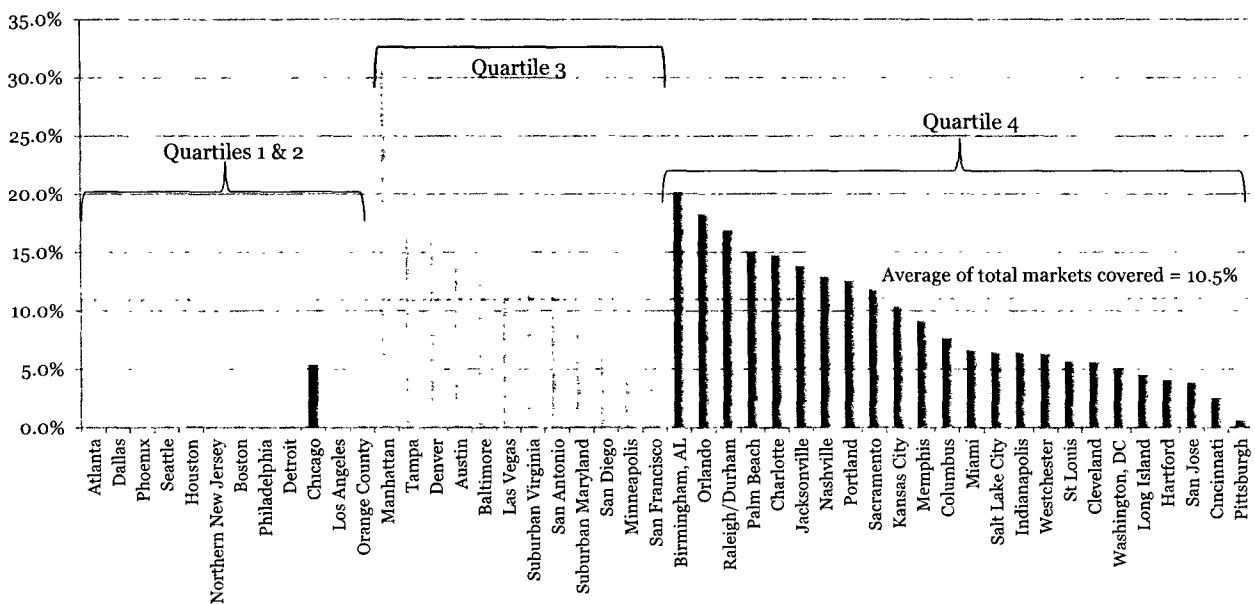
Source: Data provided by Real Capital Analytics and CBRE; compiled and analyzed by PwC

Note: Quartiles are based on markets' total CRE stock

Chart CAT-4

APARTMENT CRE TRANSACTIONS TO TOTAL STOCK

4-Quarter Rolling Percentages through 4Q 2015



Source: Data provided by Real Capital Analytics and Reis; compiled and analyzed by PwC

Note: Quartiles are based on markets' total CRE stock

National Secondary Office Market

The robust pace of transactions in the national secondary office market continues as investors seek opportunities for greater yields than found in many primary markets, where high demand and limited supply have elevated pricing. As shown in our U.S. CRE Stock Acquisition Trends analysis on page 16, many of the metros with above-average stock acquisition percentages are considered secondary markets, like Phoenix, Minneapolis, Austin, and Nashville.

Although the shift in this market's average overall cap rate suggests strong demand for assets in these cities, investors' outlook has cooled for future rent growth. First, the over-

all cap rate dips 13 basis points this quarter and sits at 7.39% (see Table SEC-1). Second, the average initial-year market rent change rate falls 28 basis points to 3.65%. Despite this decline, it remains above the average of 2.80% for the 19 city-specific office markets in our Survey.

Slower rent growth prospects are a reflection of the various challenges investors express for this market, including rising interest rates, declining oil prices, a slowdown in the tech employment sector, and questionable pricing. "Buyers must not overpay as the yield is earned on the buy in many secondary markets," explains an investor. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	72.0%	=
Range	60.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	6.0	=
Range	1 to 10	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.39%	▼
CBD	7.11%	▼
Suburbs	7.66%	▼

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

Table SEC-1

NATIONAL SECONDARY OFFICE MARKET First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO
DISCOUNT RATE (IRR)^a				
Range	5.75% – 12.50%	5.75% – 12.00%	6.00% – 12.00%	6.75% – 14.00%
Average	8.78%	8.60%	8.77%	9.50%
Change (Basis Points)		+ 18	+ 1	- 72
OVERALL CAP RATE (OAR)^a				
Range	4.50% – 10.00%	4.50% – 10.00%	4.50% – 10.00%	4.00% – 11.00%
Average	7.39%	7.52%	7.55%	8.06%
Change (Basis Points)		- 13	- 16	- 67
RESIDUAL CAP RATE				
Range	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.00%	6.00% – 10.50%
Average	7.71%	7.71%	7.74%	8.22%
Change (Basis Points)		0	- 3	- 51
MARKET RENT CHANGE^b				
Range	0.00% – 10.00%	0.00% – 10.00%	0.00% – 10.00%	0.00% – 8.00%
Average	3.65%	3.93%	3.88%	3.04%
Change (Basis Points)		- 28	- 23	+ 61
EXPENSE CHANGE^b				
Range	1.50% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.45%	2.53%	2.53%	2.54%
Change (Basis Points)		- 8	- 8	- 9
MARKETING TIME^c				
Range	2 – 9	2 – 9	2 – 9	2 – 12
Average	5.8	5.8	5.8	6.0
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
First Quarter 2016

GEOGRAPHY		INITIAL-YEAR CHANGE RATES		RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP VACANCY RATE (OAR) ASSUMPTIONS		REPLACEMENT MARKETING RESERVE	
REGION/ CITY	MARKET RENT	EXPENSES	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING PER VACANCY & CREDIT LOSS	SQUARE FOOT	MONTHS
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 decrease 50 to 100 basis points over the next six months, does not use rent spikes.											
West/ Sacramento	0.0%	2.5%	7.00% to 7.50% (CBD); 8.00% to 8.50% (suburbs)	2.5% to 5.0%	9.00% to 11.00% (CBD); 11.00% to 12.50% (suburbs)	6.50% to 7.25% (CBD); 7.75% to 8.25% (suburbs)	6	75.0%	5.0%	\$0.15 to \$0.20	6 to 9
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 hold steady over the next six months; may use a rent spike of 6.0% in years 4 and 5											
Mountain/ Las Vegas	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	2 to 4
REAL ESTATE ADVISOR ♦ Forecast Period: 3 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; does not use rent spikes.											
Southeast/ Tampa	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)	5 to 10	70.0% to 75.0%	5.0% to 7.5%	\$0.15 to \$0.25	4 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 replacement reserve; believes market conditions currently favor sellers, expects cap rates to decrease 5 to 15 basis points over the next six months.											
South/ Orlando	1.0% to 3.0%	2.0% to 2.5%	6.75% to 7.00% (CBD); 7.75% to 8.00% (suburbs)	2.0% to 3.0%	7.75% to 9.00% (CBD); 9.00% to 10.00% (suburbs)	6.00% to 7.25% (CBD); 7.25% to 8.50% (suburbs)	6 to 10	60.0% to 75.0%	5.0% to 8.0%	\$0.10 to \$0.25	6 to 9
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 equally favor buyers and sellers; uses face rents and reflects concessions when they are scheduled to occur.											
Southwest/ San Antonio	3.0% to 5.0%	2.0% to 3.0%	6.50% to 8.50% (CBD); 9.00% to 9.00% (suburbs)	1.0% to 5.0%	7.25% to 9.25% (CBD); 9.25% to 10.75% (suburbs)	6.00% to 8.00% (CBD); 8.00% 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 January 2016

pwc

Table SOM-2

NATIONAL SECONDARY OFFICE MARKET—SELECT SURVEY RESPONSES

First Quarter 2016

INITIAL-YEAR				RESIDUAL		DISCOUNT		OVERALL CAP VACANCY		REPLACEMENT	
GEOGRAPHY CHANGE RATES				CAP RATE		RATE (IRR)		RATE (OAR) ASSUMPTIONS		RESERVE	
REGION/ CITY	MARKET RENT	EXPENSES	SELLING EXPENSE	CAP RATE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING PER VACANCY & 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; may use a rent spike of 6.0% in year 1.											
West/ San Jose	4.0% to 6.0%	2.0% to 3.0%	1.0% to 1.5%	6.50% to 7.00% (CBD); 6.00% to 7.00% (suburbs)	6.25% to 6.75% (CBD); 5.75% to 6.50% (suburbs)	5.00% to 7.00% (CBD); 4.50% to 7.00% (suburbs)	6 to 9	60.0% to 70.0%	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 sellers, uses face rents and reflect concessions when they are scheduled to occur; may use rent spikes.											
East North Central/ Indianapolis	3.0% to 5.0%	2.0% to 3.0%	1.5% to 3.0%	8.00% to 9.00% (CBD); 8.00% to 10.00% (suburbs)	7.00% to 10.00% (CBD); 8.00% to 12.00% (suburbs)	7.50% to 10.00% (CBD); 8.00% to 10.00% (suburbs)	6 to 9	60.0% to 75.0%	8.0% to 10.0%	\$0.20 to \$0.25	3 to 4
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% to 2.0%	1.5% to 2.0%	2.0% to 3.0%	6.75% to 7.50% (CBD); 7.25% to 7.75% (suburbs)	8.25% to 8.50% (CBD); 8.75% to 9.00% (suburbs)	6.75% to 8.00% (CBD); 7.25% to 8.25% (suburbs)	6 to 10	75.0% to 80.0%	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	6.0% to 10.0%	2.0% to 3.0%	0.5% to 6.0%	6.00% to 7.00% (CBD); 7.50% to 8.50% (suburbs)	9.00% to 7.00% to 10.00% (suburbs)	4.50% to 7.75% (CBD); 5.50% to 8.50% (suburbs)	5 to 9	70.0% to 75.0%	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 decrease 20 to 25 basis points over the next six months.											
Southeast/ Jacksonville	3.0% to 3.0%	2.5% to 3.0%	2.0% to 3.5%	8.00% to 8.50% (CBD); 9.00% to 9.00% (suburbs)	8.50% to 11.00% (CBD); 11.00% to (suburbs)	7.50% to 9.00% (CBD); 7.50% to 8.50% (suburbs)	6 to 10	70.0% to 75.0%	5.0% to 10.0%	\$0.20 to \$0.30	5 to 8

Source: Personal survey conducted by PwC during January 2016

National Regional Mall Market

Sale transactions involving regional malls increased 4.0% in 2015 over the prior year, according to Real Capital Analytics. At the same time, however, the number of regional malls sold was down 25.0%. "Opportunities to acquire dominant centers have declined recently as fewer quality assets are offered for sale," says a participant. In addition, maintaining inline store sales volume remains a challenge, making it difficult to price assets for either selling or buying.

After closely monitoring the quarterly Survey responses that our participants provide on a regular basis for defining regional mall classifications, we've modified our regional

mall classifications [based on inline retail sales per square foot] as follows: Class A+ is \$650.00 per square foot and higher; Class A is \$500.00 to \$649.00 per square foot; Class B+ is \$400.00 to \$499.00 per square foot; Class B is \$300.00 to \$399.00 per square foot; and Class C+/C is less than \$300.00 per square foot.

Our regional mall classifications were last updated in midyear 2009 and prior to that were updated at year-end 2001. Although there is still a large pricing gap between high- and low-performing regional malls, investors are hopeful that the gap will narrow as the real estate cycle evolves. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	72.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

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

Average Overall Cap Rates:

Class A+	4.58%	▼
Class A	5.20%	▼
Class B+	6.25%	▼

* ▼, ▲, = change from prior quarter

(1) on a ten-year lease

(2) 80% are not using free rent

Table 1
NATIONAL REGIONAL MALL MARKET^(d)
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.00% – 12.00%	5.00% – 12.00%	5.50% – 12.00%	5.75% – 14.00%	5.75% – 14.00%
Average	7.63%	7.65%	8.19%	9.25%	9.69%
Change (Basis Points)		- 2	- 56	- 162	- 206
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 9.00%	4.00% – 9.00%	4.00% – 9.00%	4.50% – 10.00%	5.00% – 10.50%
Average	6.00%	6.03%	6.38%	6.92%	7.50%
Change (Basis Points)		- 3	- 38	- 92	- 150
RESIDUAL CAP RATE					
Range	4.00% – 9.00%	4.00% – 9.00%	4.75% – 10.00%	4.50% – 12.00%	5.75% – 12.00%
Average	6.50%	6.53%	6.96%	7.19%	8.00%
Change (Basis Points)		- 3	- 46	- 69	- 150
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.50% – 5.00%	1.00% – 5.00%	0.00% – 6.00%	(3.00%) – 3.00%
Average	2.73%	2.78%	2.67%	2.75%	1.33%
Change (Basis Points)		- 5	+ 6	- 2	+ 140
EXPENSE CHANGE^b					
Range	2.00% – 5.00%	1.00% – 5.00%	1.00% – 5.00%	0.00% – 3.00%	0.00% – 3.00%
Average	3.00%	2.80%	2.71%	2.00%	2.17%
Change (Basis Points)		+ 20	+ 29	+ 100	+ 83
MARKETING TIME^c					
Range	3 – 24	3 – 24	4 – 24	3 – 24	3 – 18
Average	9.0	9.0	9.7	9.7	7.4
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

Despite a 25-basis-point increase in the low end of the range for this market's overall cap rate, select cash flow assumptions continue to highlight optimism for this sector among investors. First, the average initial-year market rent change for the national power center market increases eight basis points – the highest shift for the Survey's three retail markets. Second, the average amount of free rent offered on a ten-year lease slips to five months.

In terms of sales activity, both volume and number of properties sold were down in 2015 compared to 2014. According to Real Capital Analytics, sales volume for power centers totaled

\$4.9 billion in 2015, down 39.0% from 2014 while the number of properties sold was down 35.0%. Even though a changing retail environment has kept some investors from purchasing power centers, competitive pricing has deterred others. "Pricing continues to rise without adequate support of rent growth or tenant demand," states a participant.

Other concerns noted by Survey participants include rising interest rates, long-term debt issues, lagging sales growth for big-box stores, lingering vacancies, and the vibrancy of the U.S. economy. As one investor asks, "Are we forging ahead or just flatlining?" ♦

KEY 1Q16 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	6.27%	▲
85.0% big-box space	6.44%	▲
100.0% big-box space	6.56%	▲

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

Table 2
NATIONAL POWER CENTER MARKET
First Quarter 2016

	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%	7.00% – 12.00%
Average	7.75%	7.79%	7.92%	8.17%	8.85%
Change (Basis Points)		- 4	- 17	- 42	- 110
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 8.00%	4.75% – 8.00%	5.50% – 8.00%	6.00% – 8.75%	6.00% – 9.50%
Average	6.33%	6.31%	6.56%	6.98%	7.80%
Change (Basis Points)		+ 2	- 23	- 65	- 147
RESIDUAL CAP RATE					
Range	5.00% – 9.00%	5.00% – 9.00%	6.00% – 9.00%	6.00% – 9.00%	6.50% – 10.00%
Average	6.79%	6.83%	7.02%	7.19%	7.95%
Change (Basis Points)		- 4	- 23	- 40	- 116
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%
Average	2.00%	1.92%	1.67%	1.17%	0.60%
Change (Basis Points)		+ 8	+ 33	+ 83	+ 140
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%
Average	2.83%	2.83%	2.83%	2.46%	2.80%
Change (Basis Points)		0	0	+ 37	+ 3
MARKETING TIME^c					
Range	2 – 18	2 – 18	2 – 18	2 – 18	3 – 12
Average	6.1	6.0	6.3	7.5	7.8
Change (▼, ▲, =)		▲	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National Strip Shopping Center Market

As investor interest remains strong for strip shopping centers, a highly competitive buying environment still exists, especially for quality assets in good locations and with strong anchor tenants. "Top-performing offerings remain richly priced," remarks a participant. While continuous cap rate compression was largely responsible for the aggressive pricing realized over the past several quarters, the anticipation of higher rental rates amid improving fundamentals is starting to drive pricing a bit more. "We like what we are finally starting to see in terms of rent growth potential," shares an investor.

Even though this market's aver-

age rent growth expectation remains slightly below its long-term average, it is "moving in the right direction" for property owners, particularly in robust metros, where vacancies are below the national average. Specific cities noted by surveyed investors as "hot prospects" for ownership include Seattle, Westchester County, Orange County, and Fairfield County, Connecticut.

While some investors continue to search for opportunities in secondary markets, others are strictly setting their sights on major metros and infill areas where they believe overall cap rates will hold up better over the long term. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 72.0% =

Range 60.0% to 85.0%

Months of Free Rent⁽¹⁾:

Average 2 =

Range 0 to 6

% of participants using 63.0% =

Market Conditions Favor:

Buyers 0.0% =

Sellers 75.0% =

Neither 25.0% =

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

Table 3
NATIONAL STRIP SHOPPING CENTER MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	6.00% – 10.75%	6.00% – 10.75%	6.00% – 11.00%	6.50% – 12.50%	6.75% – 12.50%
Average	7.66%	7.78%	8.09%	8.42%	8.97%
Change (Basis Points)		- 12	- 43	- 76	- 131
OVERALL CAP RATE (OAR)*					
Range	4.75% – 9.50%	4.50% – 9.50%	5.00% – 10.00%	5.50% – 9.50%	5.50% – 9.50%
Average	6.41%	6.38%	7.00%	7.04%	7.40%
Change (Basis Points)		+ 3	- 59	- 63	- 99
RESIDUAL CAP RATE					
Range	4.75% – 9.75%	4.75% – 9.75%	5.00% – 10.00%	6.00% – 12.00%	6.50% – 12.00%
Average	6.59%	6.70%	7.19%	7.61%	8.10%
Change (Basis Points)		- 11	- 60	- 102	- 151
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 4.00%	0.00% – 4.00%
Average	1.94%	1.88%	1.84%	1.44%	1.23%
Change (Basis Points)		+ 6	+ 10	+ 50	+ 71
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.50% – 4.00%	2.00% – 4.00%
Average	2.72%	2.72%	2.72%	3.03%	2.98%
Change (Basis Points)		0	0	- 31	- 26
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 18	2 – 18
Average	5.6	5.6	6.0	7.1	8.2
Change (▼, ▲, =)		=	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National CBD Office Market

The potential for overpaying, particularly in a rising interest rate environment, is a main concern noted by many surveyed investors in the national CBD office market this quarter. "Buyers need to be extremely careful and selective in their pursuit of downtown office assets," comments a participant. Even though many believe that the U.S. office sector has strengthened and that 2016 is poised to be a good year, sellers have slowly been gaining control of this market. This quarter, 67.0% of participants believe that CBD office market conditions favor sellers. This figure is up significantly from 43.0% just three months ago.

As more and more international

buyers look to acquire U.S. CBD assets, one concern is that "foreign buyers will unduly bid up pricing, especially in gateway cities." Currently, the average overall cap rate for this market sits at 5.58% – down ten basis points from last quarter and the lowest average reported for this market since it debuted in 1994.

Of the 17 Survey office markets that report separate average overall cap rates for their CBD components, five of them report averages below 5.58% this quarter. They are Boston (5.35%), Los Angeles (5.53%), Manhattan (5.15%), San Francisco (4.90%), and Washington, DC (5.40%) – see

Exhibit 3 on page 4. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	▼
Range	50.0% to 85.0%	

Months of Free Rent⁽¹⁾:

Average	6	=
Range	0 to 12	
% of participants using	100.0%	▲

Market Conditions Favor:

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

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

Table 4
NATIONAL CBD OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 10.00%	5.25% – 11.00%	5.50% – 11.00%	5.25% – 11.00%	6.00% – 11.00%
Average	6.88%	7.20%	7.46%	8.16%	8.64%
Change (Basis Points)		- 32	- 58	- 128	- 376
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 7.50%	3.50% – 8.00%	3.50% – 8.00%	4.25% – 10.00%	5.25% – 10.50%
Average	5.58%	5.68%	6.11%	6.63%	7.42%
Change (Basis Points)		- 10	- 53	- 105	- 184
RESIDUAL CAP RATE					
Range	4.75% – 7.50%	4.50% – 8.00%	5.00% – 9.00%	5.25% – 11.00%	5.50% – 10.50%
Average	6.02%	6.11%	6.59%	7.23%	7.56%
Change (Basis Points)		- 9	- 57	- 121	- 154
MARKET RENT CHANGE^b					
Range	0.00% – 7.00%	0.00% – 8.00%	0.00% – 7.00%	0.00% – 8.00%	(5.00%) – 5.00%
Average	2.92%	3.00%	2.43%	2.43%	1.25%
Change (Basis Points)		- 8	+ 49	+ 49	+ 167
EXPENSE CHANGE^b					
Range	2.00% – 4.00%	1.50% – 5.50%	1.00% – 3.00%	2.00% – 3.00%	2.00% – 4.00%
Average	2.75%	2.86%	2.61%	2.64%	2.80%
Change (Basis Points)		- 11	+ 14	+ 11	- 5
MARKETING TIME^c					
Range	2 – 15	2 – 15	2 – 15	2 – 18	2 – 12
Average	6.7	6.4	6.9	7.4	7.8
Change (▼, ▲, =)		▲	▼	▼	▼

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

National Suburban Office Market

The overall vacancy rate for the national suburban office market continued its trend of quarterly declines in the fourth quarter of 2015, ending the year at 15.7% as per Cushman & Wakefield. This figure stands 60 basis points below the average last year and 280 basis points lower than the average four years ago. Despite these positive shifts, some surveyed investors remain “cautious” and “concerned about the ability for certain suburbs to sustain occupancy.”

Quarterly changes in two key cash flow assumptions reflect investors’ guarded viewpoint of this market. First, both the low and high end of the range for this market’s overall cap

rate move up – 25 and 50 basis points, respectively. And second, its average initial-year market rent change rate slips 13 basis points to 2.75% (see Table 5). Rising overall cap rates and declining market rent growth rate assumptions lead to a diminished outlook in terms of value appreciation for this market. Specifically, its average 12-month forecast value change falls slightly to 3.6% – down from 4.0% last quarter.

Specific suburban areas piquing investors’ interest include Minneapolis, Seattle, and Philadelphia. “Focusing on fundamentals remains key for deciding where to buy suburban office assets,” says a participant. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 64.0% =

Range 50.0% to 75.0%

Months of Free Rent⁽¹⁾:

Average 5 =

Range 0 to 12

% of participants using 88.0% =

Market Conditions Favor:

Buyers 13.0% =

Sellers 25.0% =

Neither 62.0% =

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

Table 5

NATIONAL SUBURBAN OFFICE MARKET First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	5.75% – 10.00%	5.75% – 10.00%	6.00% – 10.00%	6.00% – 12.50%	6.50% – 12.50%
Average	7.52%	7.61%	7.78%	8.70%	9.11%
Change (Basis Points)		– 9	– 26	– 118	– 159
OVERALL CAP RATE (OAR)*					
Range	4.50% – 9.50%	4.25% – 9.00%	5.00% – 9.00%	5.00% – 10.50%	5.80% – 11.50%
Average	6.38%	6.36%	6.64%	7.50%	8.04%
Change (Basis Points)		+ 2	– 26	– 112	– 166
RESIDUAL CAP RATE					
Range	5.50% – 10.25%	5.50% – 9.75%	5.75% – 9.50%	6.00% – 11.00%	6.50% – 11.50%
Average	7.23%	7.20%	7.33%	8.03%	8.32%
Change (Basis Points)		+ 3	– 10	– 80	– 109
MARKET RENT CHANGE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	(3.00%) – 4.00%	(5.00%) – 4.00%
Average	2.75%	2.88%	2.56%	1.40%	0.42%
Change (Basis Points)		– 13	+ 19	+ 135	+ 233
EXPENSE CHANGE^b					
Range	2.00% – 4.00%	1.00% – 4.00%	1.00% – 3.50%	2.00% – 4.00%	2.00% – 4.00%
Average	2.91%	2.81%	2.75%	2.70%	2.83%
Change (Basis Points)		+ 10	+ 16	+ 21	+ 8
MARKETING TIME^c					
Range	3 – 12	3 – 12	3 – 12	2 – 18	2 – 24
Average	6.3	6.3	6.5	8.8	8.8
Change (▼, ▲, =)		=	▼	▼	▼
a Rate on unleveraged, all-cash transactions b Initial rate of change c In months					

Atlanta Office Market

The Atlanta office market revealed milestones in 2015 that suggest steady demand trends entering 2016. "This market continues to gain footing, and we will be keeping an eye on demand and adjusting our investment strategy as necessary," remarks an investor. First, the preliminary unemployment rate for the Atlanta metropolitan area dropped to 5.0% in November 2015, which is the lowest rate posted since 2008, according to the U.S. Department of Labor. Second, this market's year-end 2015 overall vacancy rate of 16.2% is the lowest level seen since 2008, as per Cushman & Wakefield. Finally, total annual net absorption of 3.0 million square feet in 2015 is a

record high since 2007.

Along with these positive trends, sales activity has surged. In 2015, total sales reached \$5.1 billion – the highest yearly total since 2007, as per Real Capital Analytics. A robust sales environment led to the ninth consecutive quarterly decline in this market's average overall cap rate, which sits at 7.33% (see Table 6). At the same time, its average initial-year market rent change rate moves up ten basis points. "While the fundamentals here are the strongest we've seen in 15 years, the concern is a macro-economic slowdown that could limit tenant expansions," cautions an investor. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	60.0% 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)	7.33%	▼
CBD	7.05%	▼
Suburbs	7.60%	▼

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

Table 6
ATLANTA OFFICE MARKET
First Quarter 2016

	CURRENT ^a	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%	7.50% – 11.00%	7.00% – 15.00%
Average	8.34%	8.35%	8.41%	9.06%	9.98%
Change (Basis Points)		-1	-7	-72	-164
OVERALL CAP RATE (OAR)^a					
Range	5.25% – 9.25%	5.50% – 9.25%	6.00% – 9.25%	6.75% – 9.50%	7.00% – 11.00%
Average	7.33%	7.35%	7.63%	8.11%	8.71%
Change (Basis Points)		-2	-30	-78	-138
RESIDUAL CAP RATE					
Range	6.00% – 9.25%	6.00% – 9.25%	6.00% – 9.25%	6.50% – 9.50%	7.00% – 11.00%
Average	7.38%	7.41%	7.60%	7.98%	8.88%
Change (Basis Points)		-3	-22	-60	-150
MARKET RENT CHANGE^b					
Range	0.00% – 7.00%	0.00% – 6.00%	0.00% – 5.00%	(1.00%) – 2.50%	(3.00%) – 1.00%
Average	3.60%	3.50%	2.67%	0.79%	(0.14%)
Change (Basis Points)		+10	+93	+281	+374
EXPENSE CHANGE^b					
Range	0.00% – 3.50%	0.00% – 3.50%	0.00% – 3.50%	0.00% – 3.00%	0.00% – 3.00%
Average	2.28%	2.28%	2.31%	2.25%	2.32%
Change (Basis Points)		0	-3	+3	-4
MARKETING TIME^c					
Range	2 – 12	2 – 12	1 – 12	1 – 12	2 – 15
Average	4.6	4.6	4.1	5.5	8.3
Change (▼, ▲, =)		=	▲	▼	▼

^a Rate on unleveraged, all-cash transactions

^b Initial rate of change

^c In months

Boston Office Market

Positive net absorption and declining vacancy rates highlight the Boston office market's performance in 2015. As a result, investors continue to search for buying opportunities although "scarcity of quality offerings is a concern" for some. In addition, one Survey participant notes that "pricing and cash flow assumptions have gotten very aggressive." With a total sales volume of \$8.27 billion in 2015, Boston ranks as the third most active office market for the year – behind Manhattan first and Chicago second, according to Real Capital Analytics.

In terms of stock acquisitions, 13.4% of Boston's office stock has

traded during the four quarters ending with the fourth quarter of 2015 – just slightly below the average for the 44 major metros included in our analysis (see page 16). As prices for quality, stabilized office properties remain elevated here, some investors are looking for value-added plays in order to achieve better yields. Others, however, remain focused on "core deals in areas with diverse amenities and proximity to affluent suburbs."

As in other major office markets, investors here are keeping an eye on employment growth, especially in the high-tech and bio/science sectors, which remain main drivers of office space demand. ♦

KEY 1Q16 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) 6.15% ▼

CBD 5.35% =

Suburbs 6.94% ▼

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

Table 7
BOSTON OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	6.00% – 10.00%	6.00% – 10.00%	6.25% – 11.00%	6.50% – 15.00%	7.75% – 14.00%
Average	7.76%	7.77%	8.00%	9.09%	9.42%
Change (Basis Points)		- 1	- 24	- 133	- 166
OVERALL CAP RATE (OAR)*					
Range	4.00% – 8.00%	4.00% – 8.00%	4.00% – 9.50%	4.75% – 12.00%	5.75% – 12.00%
Average	6.15%	6.19%	6.48%	7.43%	8.11%
Change (Basis Points)		- 4	- 33	- 128	- 196
RESIDUAL CAP RATE					
Range	5.00% – 8.25%	5.00% – 8.25%	5.50% – 11.00%	6.00% – 12.00%	6.00% – 12.00%
Average	6.76%	6.80%	7.16%	7.75%	8.42%
Change (Basis Points)		- 4	- 40	- 99	- 166
MARKET RENT CHANGE^b					
Range	0.00% – 7.00%	0.00% – 7.00%	0.00% – 5.50%	0.00% – 10.00%	0.00% – 3.00%
Average	3.83%	3.83%	3.50%	3.00%	0.93%
Change (Basis Points)		0	+ 33	+ 83	+ 290
EXPENSE CHANGE^b					
Range	2.50% – 4.00%	2.50% – 4.00%	2.50% – 4.00%	0.00% – 4.50%	0.00% – 4.50%
Average	3.04%	3.04%	3.04%	2.89%	2.81%
Change (Basis Points)		0	0	+ 15	+ 23
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 12	2 – 12
Average	6.2	6.2	6.3	6.4	7.1
Change (▼, ▲, =)		=	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Charlotte Office Market

Investors characterize current conditions in the Charlotte office market as favoring sellers due to steady economic conditions as well as declining vacancy and positive rental rate growth amid strong tenant demand. Based on data from Cushman & Wakefield, this market's overall vacancy rate declined from 9.8% in 2014 to 9.0% in 2015 while its average asking rental rate rose 7.8% during that period.

Although supply-and-demand trends favor owners of office properties in Charlotte, they remain watchful. "Overall leasing velocity needs to be more diversified beyond the banks, energy companies, and law

firms," warns a participant. Another cautions, "While new construction is still below historical peaks, it should be monitored closely." In addition, certain buyers seeking assets here are facing roadblocks. "Our value-added strategy is diminished by the decreasing vacancy so there are fewer opportunities to pursue offerings that fit our profile."

Overall, the outlook with regard to value appreciation is favorable for the Charlotte office market in the coming year. Our Survey results show an average expected value appreciation rate of 5.1% – the second highest among the 19 city-specific office markets in our Survey. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	71.0%	▼
Range	65.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	7	=
Range	1 to 10	+
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.14%	▼
CBD	6.80%	=
Suburbs	7.48%	▼

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

Table 8
CHARLOTTE OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 11.00%	7.00% – 11.00%	7.00% – 11.50%	7.00% – 12.00%	8.00% – 12.00%
Average	8.53%	8.65%	8.80%	9.33%	9.53%
Change (Basis Points)		- 12	- 27	- 80	- 100
OVERALL CAP RATE (OAR)^a					
Range	5.50% – 9.00%	5.50% – 9.00%	5.50% – 9.00%	6.00% – 9.50%	6.50% – 10.00%
Average	7.14%	7.21%	7.25%	7.81%	8.53%
Change (Basis Points)		- 7	- 11	- 67	- 139
RESIDUAL CAP RATE					
Range	5.50% – 8.50%	5.50% – 8.75%	5.50% – 8.75%	6.00% – 9.00%	7.50% – 10.00%
Average	7.24%	7.26%	7.43%	7.70%	8.73%
Change (Basis Points)		- 2	- 19	- 46	- 149
MARKET RENT CHANGE^b					
Range	0.00% – 6.00%	0.00% – 6.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 2.00%
Average	3.30%	3.28%	2.94%	2.19%	0.42%
Change (Basis Points)		+ 2	+ 36	+ 111	+ 288
EXPENSE CHANGE^b					
Range	1.80% – 3.00%	1.80% – 3.00%	1.75% – 3.00%	2.00% – 4.00%	2.00% – 3.00%
Average	2.59%	2.59%	2.58%	2.94%	2.79%
Change (Basis Points)		0	+ 1	- 35	- 20
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	2 – 12	2 – 12
Average	4.5	4.5	3.9	5.1	6.2
Change (▼, ▲, =)		=	▲	▼	▼

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

Chicago Office Market

Positive absorption trends would likely be more comforting to investors in Chicago's CBD office market if less construction was underway and shadow space wasn't expected to grow so much in the coming year. "Excessive new development, downsizing tenants, and rising interest rates all concern us," shares a participant. New office towers underway or set to break ground soon include the 52-story River Point on W. Lake Street, the 53-story tower on N. Riverside Plaza, and the 35-story tower on N. Franklin.

While the first two new office buildings have preleased the majority of their space, The John Buck

Company's new tower on N. Franklin has commitments for about half of its space. "Back-filling the vacated space after the two new deliveries could reduce rental rates," remarks a participant. Also helping to diminish rental rates could be the nearly six million square feet of shadow space (space left behind by tenants that both relocate and downsize) estimated to flood this office market between 2016 and 2018, as per CBRE.

Other concerns for this office market include uncertainty in the equity markets, rising real estate taxes, and the future of exit cap rates – "Where will they be when I get there?" wonders an investor. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	70.0%	=
Range	60.0% to 85.0%	

Months of Free Rent⁽¹⁾:

Average	11	▲
Range	6 to 18	
% of participants using	100.0%	=

Average Overall Cap Rates:

Market (as a whole)	7.34%	▲
CBD	6.07%	▲
Suburbs	8.61%	▲

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

Table 9
CHICAGO OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.00% – 12.00%	6.00% – 12.00%	6.00% – 12.00%	6.50% – 13.00%	7.00% – 13.00%
Average	8.58%	8.59%	8.71%	9.13%	9.55%
Change (Basis Points)		- 1	- 13	- 55	- 97
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 10.00%	5.00% – 10.00%	4.75% – 11.00%	5.75% – 11.00%	6.00% – 11.00%
Average	7.34%	7.30%	7.42%	8.12%	8.33%
Change (Basis Points)		+ 4	- 8	- 78	- 99
RESIDUAL CAP RATE					
Range	5.50% – 10.00%	5.50% – 10.00%	5.50% – 10.00%	6.00% – 11.00%	7.00% – 11.00%
Average	7.65%	7.63%	7.69%	8.10%	8.44%
Change (Basis Points)		+ 2	- 4	- 45	- 79
MARKET RENT CHANGE^b					
Range	0.00% – 4.50%	0.00% – 4.50%	0.00% – 5.00%	(10.00%) – 3.00%	(10.00%) – 3.00%
Average	2.00%	2.00%	1.86%	0.89%	(0.11%)
Change (Basis Points)		0	+ 14	+ 111	+ 211
EXPENSE CHANGE^b					
Range	2.00% – 5.00%	2.00% – 5.00%	2.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%
Average	3.14%	3.14%	2.86%	2.78%	2.72%
Change (Basis Points)		0	+ 28	+ 36	+ 42
MARKETING TIME^c					
Range	2 – 8	2 – 8	2 – 8	2 – 9	2 – 15
Average	4.2	4.1	4.1	5.1	7.3
Change (▼, ▲, =)		▲	▲	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Dallas Office Market

As the Dallas office market continues to thrive from a leasing demand perspective, investors voice concern for the upcoming year over wide-ranging issues. "There is concern that the oil contagion negatively impacts Dallas," states a participant. Another comments, "We are wary of pricing that is getting ahead of market fundamentals." And, "How many more years of upward trajectory in lease rates will we see?" says another.

Two key investment criteria that typically trend in opposite directions both reveal quarterly increases (see Table 10). First, the average overall cap rate rises 12 basis points reflecting the concerns about pricing in

this market. Second, our Survey results show a varied outlook for cap rates in the next six months. Greater than half of Survey participants foresee cap rates holding steady; one quarter expects decreases of up to 50 basis points; and the balance foresees increases of up to 25 basis points.

Highlighting investors' positive outlook regarding leasing trends, this market's average initial-year market rent change rate rises 12 basis points this quarter. While this figure is below that of a year ago, it is near the peak of 3.60% seen in 2007 – near the apex of the last real estate cycle. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 69.0% ▲
Range 60.0% to 75.0%

Months of Free Rent⁽¹⁾:

Average 7 =
Range 2 to 12
% of participants using 75.0% ▼

Average Overall Cap Rates:

Market (as a whole) 7.00% ▲
CBD 6.75% ▲
Suburbs 7.25% ▲

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

Table 10
DALLAS OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	6.00% – 11.00%	6.00% – 11.00%	6.00% – 11.00%	6.00% – 11.00%	8.00% – 11.50%
Average	8.18%	8.16%	8.23%	8.66%	9.35%
Change (Basis Points)		+ 2	- 5	- 48	- 117
OVERALL CAP RATE (OAR)*					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	5.50% – 10.00%	6.75% – 11.50%
Average	7.00%	6.88%	7.08%	7.85%	8.75%
Change (Basis Points)		+ 12	- 8	- 85	- 175
RESIDUAL CAP RATE					
Range	5.75% – 9.00%	6.00% – 9.00%	6.00% – 9.00%	6.50% – 10.00%	7.25% – 11.00%
Average	7.28%	7.39%	7.41%	7.99%	8.93%
Change (Basis Points)		- 11	- 13	- 71	- 165
MARKET RENT CHANGE^b					
Range	0.00% – 6.00%	1.00% – 6.00%	1.00% – 10.00%	0.00% – 5.00%	0.00% – 3.00%
Average	3.41%	3.29%	4.17%	2.54%	0.50%
Change (Basis Points)		+ 12	- 76	+ 87	+ 291
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%	2.00% – 3.00%
Average	2.91%	2.88%	2.88%	2.75%	2.92%
Change (Basis Points)		+ 3	+ 3	+ 16	- 1
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	3 – 24	3 – 12
Average	4.6	4.8	4.4	7.2	7.4
Change (▼, ▲, =)		▼	▲	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Denver Office Market

The largest quarterly shift in the Denver office market's investment criteria occurs in the indicator for future rent growth prospects. As shown in Table 11, the average initial-year market rent change rate falls for the third consecutive quarter, dropping 20 basis points to 3.20%. This downward shift reflects some investors' concerns for the coming year, such as rising interest rates, the availability of interest-only debt, new construction in both the CBD and suburbs, and the potential for a negative external shock to the national economy.

While Denver's market rent change rate outpaces the composite average of 2.80% for the 19 city-spe-

cific office markets surveyed, it falls below many of the Survey's first-tier markets, such as Manhattan (3.92%), San Francisco (4.10%), Boston (3.83%), and Los Angeles (3.90%). "Denver is a marginally less liquid market than its larger primary market competitors and thus more easily impacted by changes in the capital markets," explains an investor.

Nevertheless, investors foresee property value appreciation here that is similar to some first-tier markets. The average expected appreciation rate in the coming year is 4.0% for Denver, compared to 4.6% for Manhattan, 4.1% for Los Angeles, and 3.6% for Boston. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	67.0%	=
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)	6.49%	=
CBD	6.00%	=
Suburbs	6.98%	=

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

Table 11
DENVER OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.75% – 11.00%	6.75% – 11.00%	6.50% – 11.00%	6.50% – 15.00%	7.75% – 15.00%
Average	7.88%	7.98%	7.93%	9.09%	9.85%
Change (Basis Points)		- 10	- 5	- 121	- 197
OVERALL CAP RATE (OAR)^a					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	4.50% – 10.50%	6.50% – 11.00%
Average	6.49%	6.49%	6.61%	7.10%	8.16%
Change (Basis Points)		0	- 12	- 61	- 167
RESIDUAL CAP RATE					
Range	5.75% – 9.50%	5.75% – 9.50%	6.00% – 9.50%	5.00% – 10.00%	7.00% – 11.00%
Average	7.18%	7.15%	7.35%	7.68%	8.45%
Change (Basis Points)		+ 3	- 17	- 50	- 127
MARKET RENT CHANGE^b					
Range	2.00% – 4.00%	2.00% – 5.00%	2.00% – 5.00%	(20.00%) – 10.00%	(20.00%) – 5.00%
Average	3.20%	3.40%	3.40%	1.70%	(1.20%)
Change (Basis Points)		- 20	- 20	+ 150	+ 440
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	3.00% – 5.00%	0.00% – 3.00%
Average	2.80%	2.80%	2.90%	3.30%	2.70%
Change (Basis Points)		0	- 10	- 50	+ 10
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	2 – 12	2 – 9
Average	4.0	3.7	3.9	5.0	5.7
Change (▼, ▲, =)		▲	▲	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Houston Office Market

Guarded investor sentiment with regard to future rent growth in the Houston office market is reflected in a 68-basis-point quarterly plunge in its average initial-year market rent change rate, which now sits at -0.43% – negative for the first time since the third quarter of 2010 (see Table 12). “We are very cautious about this market due to the uncertainty of oil prices,” states an investor. “Houston is going to struggle a bit until oil prices stabilize,” echoes another investor.

In addition to the volatility in oil prices and its negative impact on the local economy, investors also voice concern about rising sublet and

shadow space, abundant new office supply, and elevated asset pricing in this market. “The pricing gap between buyers and sellers is still so vast that we don’t think the current opportunities to invest amply reflect the inherent risk involved,” explains a participant.

Due to the challenges facing property owners here, the Houston office market is the only market in our Survey where investors (on average) foresee property values declining over the next 12 months. Specifically, the average expected value change is a decrease of 4.9%; last quarter the average was a decrease of 2.8%. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	65.0% ▼
Range	50.0% to 80.0%

Months of Free Rent⁽¹⁾:

Average	8 ▲
Range	1 to 24
% of participants using	100.0% =

Average Overall Cap Rates:

Market (as a whole)	7.13% ▲
CBD	6.73% ▲
Suburbs	7.52% ▲

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

Table 12
HOUSTON OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 12.00%	6.50% – 11.50%	6.50% – 12.00%	7.00% – 14.00%	7.75% – 15.00%
Average	8.68%	8.52%	8.38%	9.21%	9.63%
Change (Basis Points)		+ 16	+ 30	- 53	- 95
OVERALL CAP RATE (OAR)^a					
Range	5.50% – 10.00%	5.50% – 10.00%	5.00% – 10.00%	5.00% – 12.00%	6.75% – 11.00%
Average	7.13%	7.01%	6.60%	7.76%	8.26%
Change (Basis Points)		+ 12	+ 53	- 63	- 113
RESIDUAL CAP RATE					
Range	5.50% – 10.75%	6.00% – 10.75%	6.00% – 11.00%	5.00% – 11.00%	7.00% – 11.00%
Average	7.35%	7.46%	7.24%	7.94%	8.35%
Change (Basis Points)		- 11	+ 11	- 59	- 100
MARKET RENT CHANGE^b					
Range	(8.00%) – 5.00%	(4.00%) – 5.00%	(5.00%) – 5.00%	2.00% – 5.00%	0.00% – 3.00%
Average	(0.43%)	0.25%	2.00%	3.08%	0.50%
Change (Basis Points)		- 68	- 243	- 351	- 93
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	2.79%	2.75%	2.83%	2.67%	2.83%
Change (Basis Points)		+ 4	- 4	+ 12	- 4
MARKETING TIME^c					
Range	1 – 13	3 – 13	2 – 12	3 – 12	3 – 12
Average	7.5	7.8	6.4	6.7	7.2
Change (▼, ▲, =)		▼	▲	▲	▲

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Los Angeles Office Market

Investors in the Los Angeles office market find themselves pondering “how much will pricing get ahead of fundamentals” and “which submarket offers the best return,” given the vast number of submarkets and their varying performances. As a whole, overall vacancy rates have declined for Los Angeles’ CBD and suburbs over the past year, slipping to 19.6% in the CBD and 13.6% in the suburbs, as per Cushman & Wakefield. However, one Survey participant notes, “There is a large amount of new construction in the downtown area that will need to be absorbed.”

In the suburbs, the addition of new space is less of an issue to inves-

tors as those areas with new supply are seeing robust leasing activity and rising asking rental rates. Nevertheless, the CBD submarket continues to post a lower average overall cap rate for this market compared to its suburbs. As shown in the Key 1Q16 Survey Stats table, the average overall cap rate for the CBD is 5.53%, while it is 5.85% for the suburbs.

Looking ahead over the next six months, our Survey results reveal investors expecting overall cap rates to hold steady in this market. Although rent growth assumptions also remain quite strong, a slowdown in the U.S. economy could result in more conservative underwriting. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 70.0% =

Range 60.0% 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) 5.69% ▼

CBD 5.53% =

Suburbs 5.85% ▼

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

Table 13
LOS ANGELES OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	5.00% – 9.00%	5.00% – 9.00%	6.00% – 10.00%	6.00% – 10.00%	7.00% – 12.00%
Average	6.90%	6.90%	7.38%	7.96%	8.96%
Change (Basis Points)		0	-48	-106	-206
OVERALL CAP RATE (OAR)*					
Range	4.50% – 7.25%	4.50% – 7.25%	4.50% – 7.25%	4.50% – 8.50%	5.00% – 9.00%
Average	5.69%	5.71%	5.84%	6.66%	7.44%
Change (Basis Points)		-2	-15	-97	-175
RESIDUAL CAP RATE					
Range	5.00% – 8.00%	5.00% – 8.00%	5.00% – 8.00%	6.00% – 9.00%	7.00% – 9.50%
Average	6.70%	6.70%	6.70%	7.28%	8.05%
Change (Basis Points)		0	0	-58	-135
MARKET RENT CHANGE^b					
Range	0.00% – 7.00%	0.00% – 7.00%	0.00% – 7.00%	0.00% – 7.50%	(1.00%) – 3.00%
Average	3.90%	4.00%	3.90%	2.96%	0.42%
Change (Basis Points)		-10	0	+94	+348
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%
Average	2.80%	2.80%	2.70%	2.75%	2.75%
Change (Basis Points)		0	+10	+5	+5
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	1 – 12	1 – 12
Average	4.7	4.7	4.7	5.3	5.8
Change (▼, ▲, =)		=	=	▼	▼
a Rate on unleveraged, all-cash transactions b Initial rate of change c In months					

Manhattan Office Market

Many investors in the Manhattan office market continue to closely monitor the U.S. and global economies for signs of slowdowns and turmoil as such events could have significant negative effects on the local office market's investment environment. "Continued disorder in the world and unsettling domestic issues could mean a pullback from buyers and more conservative underwriting for office assets," says an investor. For now, however, most of our surveyed investors (67.0%) view this market as favoring sellers – up significantly from 50.0% just three months ago. The remainder sees it equally favoring buyers and sellers.

To some investors, acquiring assets in this market has "become a balancing act" of being aggressive enough to purchase deals while being conservative enough to not overpay. This scenario is especially true when it comes to the best offerings on the market. Even though the average overall cap rate holds steady this quarter, it remains the lowest average of the Survey's 19 city-specific office markets and is helping to keep prices elevated.

Although some investors are opting to look for value-added deals in order to achieve higher yields, some of these deals are priced just as aggressively as stabilized assets. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% to 75.0%	

Months of Free Rent⁽¹⁾:

Average	7	▲
Range	0 to 12	
% of participants using	100.0%	=

Market Conditions Favor:

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

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

Table 14
MANHATTAN OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 9.00%	5.75% – 9.00%	6.00% – 9.00%	6.00% – 10.00%	6.00% – 10.00%
Average	6.85%	6.92%	6.98%	7.50%	7.81%
Change (Basis Points)		- 7	- 13	- 65	- 96
OVERALL CAP RATE (OAR)^a					
Range	3.75% – 8.00%	3.75% – 8.00%	3.75% – 8.00%	4.00% – 8.00%	5.00% – 8.00%
Average	5.15%	5.15%	5.04%	5.25%	6.00%
Change (Basis Points)		0	+ 11	- 10	- 85
RESIDUAL CAP RATE					
Range	5.00% – 8.00%	5.00% – 8.00%	5.00% – 8.00%	5.00% – 7.50%	5.50% – 8.50%
Average	5.98%	6.00%	5.95%	6.02%	6.67%
Change (Basis Points)		- 2	+ 3	- 4	- 69
MARKET RENT CHANGE^b					
Range	0.00% – 7.00%	0.00% – 7.00%	0.00% – 8.00%	0.00% – 10.00%	0.00% – 5.00%
Average	3.92%	4.00%	4.43%	4.71%	2.17%
Change (Basis Points)		- 8	- 51	- 79	+ 175
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 4.00%	0.00% – 4.00%	2.00% – 3.00%
Average	2.75%	2.75%	2.93%	2.75%	2.75%
Change (Basis Points)		0	- 18	0	0
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 12	3 – 6	3 – 8
Average	4.3	4.3	4.8	4.1	4.4
Change (▼, ▲, =)		=	▼	▲	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Northern Virginia Office Market

While the Northern Virginia office market ended 2015 with a lower vacant rate than it started with at the beginning of the year, oversupply remains a main concern for both existing property owners and prospective ones. "This market has a tendency towards oversupply, so we focus on tenant quality when looking at potential acquisitions," says a participant. With an overall vacancy rate of 21.2% in the fourth quarter of 2015, the Northern Virginia office market posted the highest vacancy rate of the 38 suburban areas tracked by Cushman & Wakefield.

Even though an increase in federal government spending should help

to bolster this market's performance, many investors find it hard to see a long-term catalyst that will radically impact fundamentals here. "Tenant demand remains weak except in a few submarkets, and rent growth is meager," states a participant. This quarter, the average initial-year market rent change rate assumption for this market holds steady at 1.30% for the third consecutive quarter.

As shown in Table 15, all key cash flow assumptions remain unchanged from last quarter for this market. In addition, most surveyed investors anticipate very little in terms of property value appreciation for office assets here in the year ahead. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 66.0% =

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
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	6.00% – 9.50%	6.00% – 9.50%	6.50% – 9.50%	7.00% – 10.00%	7.50% – 10.50%
Average	7.75%	7.75%	7.90%	8.42%	9.00%
Change (Basis Points)		0	-15	-67	-125
OVERALL CAP RATE (OAR)*					
Range	5.00% – 8.50%	5.00% – 8.50%	5.00% – 8.50%	5.75% – 9.00%	5.75% – 9.00%
Average	6.88%	6.88%	6.98%	7.27%	7.78%
Change (Basis Points)		0	-10	-39	-90
RESIDUAL CAP RATE					
Range	5.75% – 8.50%	5.75% – 8.50%	6.00% – 9.00%	6.00% – 9.00%	7.50% – 9.00%
Average	7.25%	7.25%	7.38%	7.58%	8.19%
Change (Basis Points)		0	-13	-33	-94
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	(5.00%) – 3.00%	(5.00%) – 3.00%	(2.00%) – 3.00%
Average	1.30%	1.30%	0.80%	1.04%	0.90%
Change (Basis Points)		0	+50	+26	+40
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.50% – 3.00%
Average	2.40%	2.40%	2.40%	2.61%	2.75%
Change (Basis Points)		0	0	-21	-35
MARKETING TIME^c					
Range	3 – 9	3 – 9	3 – 9	3 – 9	1 – 12
Average	4.7	4.7	4.9	5.6	6.1
Change (▼, ▲, =)		=	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Pacific Northwest Office Market

Many investors are bracing themselves for a “few tough years” in the Pacific Northwest office market as a large amount of new space enters Bellevue and tenant demand slips. “The supply pipeline is growing in Bellevue, and large tenants are pulling out of the market, so we will be cautious for the next few years,” shares an investor. “Bellevue will see an imbalance soon with too much speculative space coming and not enough tenant demand,” echoes another.

In Seattle, additions to supply are also causing trepidation among investors while uncertainty about the U.S. economic expansion contin-

uing is impacting the underwriting of deals in Portland. Overall, shifts in this market’s key cash flow assumptions highlight investors’ concerns. First, its average overall cap rate ticks up three basis points to 6.11% while its average initial-year market rent change rate falls 28 basis points to 3.86% (see Table 16).

Despite these issues and concerns, quality office buildings in this market continue to trade for a premium mainly due to limited offerings and the market’s bright long-term outlook. As one investor notes, “Short-term issues won’t keep us from aggressively buying long-term yields.” ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	68.0% ▼
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)	6.11% ▲
CBD	5.59% ▲
Suburbs	6.64% =

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

Table 16
PACIFIC NORTHWEST OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% – 11.00%	5.50% – 10.50%	5.75% – 10.50%	5.50% – 12.00%	7.00% – 14.00%
Average	7.50%	7.49%	7.71%	8.05%	9.71%
Change (Basis Points)		+1	-21	-55	-221
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 9.00%	4.00% – 9.00%	4.00% – 9.00%	4.50% – 10.00%	5.50% – 12.00%
Average	6.11%	6.08%	6.23%	6.90%	7.95%
Change (Basis Points)		+3	-12	-79	-184
RESIDUAL CAP RATE					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	5.00% – 10.00%	6.00% – 10.00%
Average	6.56%	6.57%	6.67%	6.99%	8.17%
Change (Basis Points)		-1	-11	-43	-161
MARKET RENT CHANGE^b					
Range	2.50% – 10.00%	2.50% – 10.00%	2.50% – 10.00%	2.00% – 10.00%	0.00% – 3.00%
Average	3.86%	4.14%	4.43%	5.34%	0.42%
Change (Basis Points)		-28	-57	-148	+344
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%	1.00% – 5.00%	1.00% – 3.00%
Average	2.91%	2.91%	2.84%	2.88%	2.75%
Change (Basis Points)		0	+7	+3	+16
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 12	1 – 12	1 – 12
Average	4.7	4.7	4.7	5.4	5.7
Change (▼, ▲, =) ^a		=	=	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

Philadelphia Office Market

The Philadelphia office market continues to move through the expansion phase of the real estate cycle, characterized by tightening market conditions, positive rent growth, and decreasing overall cap rates. According to data by Cushman & Wakefield, Philly's CBD vacancy rate fell from 11.0% at year-end 2014 to 9.4% at year-end 2015. Overall, suburban vacancy declined from 16.2% to 14.7% during that time period.

As vacancy rates dip, investors' outlooks for this market's performance remain strong. First, this market's average initial-year market rent change rate holds at its highest level since the third quarter of 2008 (see

Table 17). Second, the quarterly dip in its average overall cap rate brings this key cash flow assumption to its lowest level since this market's Survey debut in 2001.

While most investors foresee overall cap rates holding steady here over the next six months, the balance is equally divided between expecting cap rate compression and cap rate expansion.

Although many surveyed investors are not making significant changes to their investment strategies at this time, they are watchful of an economic slowdown in 2016 and its impact on local tenant demand, absorption trends, and rental rates. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 66.0% =

Range 50.0% to 75.0%

Months of Free Rent⁽¹⁾:

Average 5 =

Range 3 to 9

% of participants using 100.0% =

Average Overall Cap Rates:

Market (as a whole) 7.53% ▼

CBD 6.90% ▼

Suburbs 8.15% ▼

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

Table 17
PHILADELPHIA OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	7.00% – 10.00%	7.00% – 10.00%	7.00% – 11.50%	8.00% – 12.00%	8.00% – 11.00%
Average	8.55%	8.55%	8.76%	9.30%	9.37%
Change (Basis Points)		0	-21	-75	-82
OVERALL CAP RATE (OAR)*					
Range	6.00% – 9.00%	6.00% – 9.00%	6.00% – 10.50%	7.00% – 10.00%	7.25% – 10.00%
Average	7.53%	7.55%	7.79%	8.49%	8.61%
Change (Basis Points)		-2	-26	-96	-108
RESIDUAL CAP RATE					
Range	6.00% – 9.00%	6.25% – 9.00%	6.50% – 11.00%	7.00% – 11.00%	7.00% – 11.00%
Average	7.85%	7.88%	8.19%	8.55%	8.78%
Change (Basis Points)		-3	-34	-70	-93
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%	1.85%	1.70%	0.92%	0.75%
Change (Basis Points)		0	+15	+93	+110
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%
Average	2.30%	2.30%	2.30%	2.54%	2.93%
Change (Basis Points)		0	0	-24	-63
MARKETING TIME^c					
Range	3 – 12	3 – 12	3 – 12	3 – 18	2 – 18
Average	5.4	5.4	5.7	7.8	7.3
Change (▼, ▲, =)		=	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Phoenix Office Market

While overall vacancy rates in the Phoenix office market declined in 2015, the CBD Class-A sector revealed the largest downward shift in vacancy during the year. At year-end 2015, the CBD's Class-A overall vacancy rate was 19.7%, compared to 23.1% in the prior year, as per Cushman & Wakefield. At the same time, the overall vacancy rate in the suburban Class-A sector fell from 17.2% to 16.3%.

Driven by a growing local economy, strengthening fundamentals in Phoenix's CBD and suburbs are attracting a broad range of buyers. In fact, office building sales increased 52.0% in the Phoenix office market

in 2015, according to Real Capital Analytics. Moreover, the percentage of institutional buyers rose from 31.0% of total capital invested in 2014 to 45.0% in 2015. International capital represented 11.0% of the dollars invested in 2015.

Certain investors believe that strong buyer demand is "pushing prices up and returns down." In fact, optimistic investor sentiment is exhibited in this market's average overall cap rate, which dips four basis points to 6.84% this quarter, as well as in its average initial-year market rent change rate, which rises ten basis points to reach 4.00% (see Table 18). ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	60.0% to 80.0%	=

Months of Free Rent⁽¹⁾:

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

Average Overall Cap Rates:

Market (as a whole)	6.84%	▼
CBD	6.58%	▼
Suburbs	7.10%	=

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

Table 18
PHOENIX OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	7.00% – 12.00%	7.00% – 12.00%	7.00% – 14.50%	7.00% – 16.00%	8.00% – 16.00%
Average	8.48%	8.50%	9.13%	10.44%	10.47%
Change (Basis Points)		- 2	- 65	- 121	- 199
OVERALL CAP RATE (OAR)*					
Range	5.00% – 8.50%	5.50% – 8.50%	5.50% – 9.00%	6.00% – 11.00%	8.00% – 11.00%
Average	6.84%	6.88%	7.13%	8.79%	9.41%
Change (Basis Points)		- 4	- 29	- 166	- 257
RESIDUAL CAP RATE					
Range	5.50% – 9.00%	5.50% – 9.00%	6.00% – 9.50%	7.00% – 10.00%	7.75% – 10.00%
Average	7.12%	7.12%	7.38%	8.25%	9.00%
Change (Basis Points)		0	- 26	- 113	- 188
MARKET RENT CHANGE^b					
Range	2.00% – 7.00%	2.00% – 7.00%	0.00% – 7.00%	0.00% – 2.50%	(15.00%) – 4.00%
Average	4.00%	3.90%	2.04%	0.74%	(1.20%)
Change (Basis Points)		+ 10	+ 196	+ 326	+ 520
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	0.00% – 3.00%
Average	2.70%	2.70%	2.75%	2.70%	2.65%
Change (Basis Points)		0	- 5	0	+ 5
MARKETING TIME^c					
Range	1 – 9	1 – 9	1 – 9	2 – 15	3 – 12
Average	4.7	4.6	5.4	5.9	6.7
Change (▼, ▲, =)		▲	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

San Diego Office Market

Properties in the San Diego office market are in high demand from buyers due to growth in office-space-using employment sectors, a low unemployment rate, a positive outlook for future rent growth, and declining overall cap rates. According to Real Capital Analytics, office building sales exceeded \$2.8 billion in 2015, a 42.6% year-over-year increase and the highest local total posted since 2007 at the height of the last real estate cycle.

Steady investor appetite for assets here has led to cap rate compression since 2010. As shown in Table 19, this key indicator dips nine basis points to 6.81% this quarter. Over

the next six months, Survey participants unanimously foresee cap rates holding steady in this market. Even though its average initial-year market rent change rate holds steady at 3.80% this quarter, it remains above the composite average of 2.80% for the 19 city-specific office markets in our Survey.

Despite the attraction to this market, some investors are carefully observing its “depth of leasing demand” and the pipeline of new supply here, as well as volatility in the financial markets. “San Diego is less liquid than other primary markets and more easily affected by shifts in the capital markets,” says a participant. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 68.0% =

Range 60.0% to 80.0%

Months of Free Rent⁽¹⁾:

Average 4 =

Range 1 to 12

% of participants using 100.0% =

Average Overall Cap Rates:

Market (as a whole) 6.81% ▼

CBD 6.81% ▼

Suburbs 6.80% =

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

Table 19
SAN DIEGO OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	6.25% – 10.50%	6.25% – 10.50%	6.25% – 10.50%	6.75% – 12.50%	7.50% – 13.00%
Average	7.83%	7.83%	7.94%	9.16%	9.79%
Change (Basis Points)		0	– 11	– 133	– 196
OVERALL CAP RATE (OAR)*					
Range	5.25% – 8.50%	5.25% – 8.50%	5.50% – 8.50%	6.00% – 9.50%	6.50% – 11.00%
Average	6.81%	6.90%	6.97%	7.79%	8.16%
Change (Basis Points)		– 9	– 16	– 98	– 135
RESIDUAL CAP RATE					
Range	5.75% – 8.75%	5.75% – 8.75%	6.00% – 8.00%	6.75% – 9.00%	7.00% – 10.00%
Average	7.20%	7.23%	7.03%	7.83%	8.34%
Change (Basis Points)		– 3	+ 17	– 63	– 114
MARKET RENT CHANGE^b					
Range	2.00% – 6.00%	2.00% – 6.00%	0.00% – 6.00%	(10.00%) – 5.00%	(10.00%) – 1.00%
Average	3.80%	3.80%	3.60%	0.30%	(1.00%)
Change (Basis Points)		0	+ 20	+ 350	+ 480
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%	2.90%	2.90%	2.90%
Change (Basis Points)		0	– 10	– 10	– 10
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	1 – 9	1 – 12
Average	4.3	4.3	4.3	4.5	5.8
Change (▼, ▲, =)		=	=	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

San Francisco Office Market

Concerns for investors in the San Francisco office market include the sustainability of the tech boom, softening of the IPO market, and the resulting cutbacks in leasing demand and rent growth. In particular, the potential correction in tech valuations of “unicorns” – venture-backed companies valued in the private market at \$1.0 billion or more, has some expecting a rise in space givebacks. Of the 144 unicorn firms tracked nationally by venture-capital database CB Insights, 60 are based in or have a presence in the Bay Area. “We expect a contraction in unicorn leasing activity, resulting in moderating rental rate growth,” predicts a participant.

A softened outlook for rent growth is shown in this market’s average initial-year market rent change rate assumption, which falls 40 basis points this quarter to 4.10%. At the same time, the high end of the range for this cash flow assumption drops from 8.00% to 6.00% (see Table 20). Furthermore, certain investors here are also expecting overall cap rates to rise. “I see overall cap rates rising up to 50 basis points over the next six months,” says a participant.

Rising cap rates and declining rent growth expectations will likely make it more difficult for buyers to justify paying top dollar for near-term acquisitions. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	71.0%	▲
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	4	=
Range	0 to 9	
% of participants using	80.0%	▼

Average Overall Cap Rates:

Market (as a whole)	5.70%	▲
CBD	4.90%	=
Suburbs	6.50%	▲

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

Table 20
SAN FRANCISCO OFFICE MARKET
First Quarter 2016

	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%	5.50% – 11.00%	7.00% – 12.00%
Average	6.89%	6.89%	7.07%	7.86%	8.94%
Change (Basis Points)		0	-18	-97	-205
OVERALL CAP RATE (OAR)^a					
Range	3.50% – 9.00%	3.50% – 9.00%	3.50% – 9.00%	4.00% – 9.00%	5.00% – 11.00%
Average	5.70%	5.68%	5.77%	6.43%	7.39%
Change (Basis Points)		+2	-7	-73	-169
RESIDUAL CAP RATE					
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%	4.50% – 10.00%	6.00% – 12.00%
Average	6.21%	6.21%	6.30%	6.95%	7.79%
Change (Basis Points)		0	-9	-74	-158
MARKET RENT CHANGE^b					
Range	2.00% – 6.00%	2.00% – 8.00%	2.00% – 10.00%	2.00% – 10.00%	0.00% – 5.00%
Average	4.10%	4.50%	5.75%	6.69%	2.17%
Change (Basis Points)		-40	-165	-259	+193
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 4.00%	0.00% – 4.00%	0.00% – 3.00%
Average	2.60%	2.60%	2.75%	2.69%	2.56%
Change (Basis Points)		0	-15	-9	+4
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 8	1 – 8	1 – 12
Average	3.9	3.9	4.0	4.3	5.9
Change (▼, ▲, =)		=	▼	▼	▼

^a Rate on unleveraged, all-cash transactions

^b Initial rate of change

^c In months

Seattle Office Market

The downtown Seattle office market boasts one of the lowest overall vacancy rates in the country due mainly to a strong local economy driven by the tech sector. For 2015, the overall vacancy rate for Seattle's CBD was 7.6%, according to Cushman & Wakefield. By comparison, the average for the U.S. CBD office sector was 11.2%.

Seattle's strong market fundamentals in 2015 led to tremendous growth in rental rates, particularly in the Class-A downtown office sector. Specifically, the average direct Class-A asking rental rate grew 23.3% during 2015 – well above the U.S. average of 5.1%.

With a large amount of new supply entering the market, some investors are being more conservative with regard to rent growth assumptions. In fact, this quarter's average initial-year market rent change rate declines 25 basis points to 3.75% (see Table 21). In addition, the high end of the range for this key assumption falls from 6.00% to 5.00%.

"Due to the vast amount of space being built, I would be sure to keep in-

vestments focused on infill locations with limited places for new space to pop up," says an investor. As the near-term additions to supply will likely create softness in this market, another investor suggests "acquiring very well-located properties encumbered with credit and term," focusing on price versus replacement cost.

This quarter, our Survey results show that prices in this market range from 50.0% to 120.0% of replacement cost and average 95.9% – just above the average for the Survey's 19 city-specific office markets (91.9%). This pricing structure makes Seattle the seventh priciest office market in our Survey (see Table SEA-1). ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	68.0%	=
Range	50.0% 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)	6.10%	=
CBD	5.60%	=
Suburbs	6.60%	=

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

Table 21
SEATTLE OFFICE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER YEAR AGO	
DISCOUNT RATE (IRR)*			
Range	5.50% – 11.00%	5.50% – 11.00%	5.75% – 11.00%
Average	7.47%	7.47%	7.77%
Change (Basis Points)		0	– 30
OVERALL CAP RATE (OAR)*			
Range	4.00% – 9.00%	4.00% – 9.00%	4.00% – 9.00%
Average	6.10%	6.10%	6.19%
Change (Basis Points)		0	– 9
RESIDUAL CAP RATE			
Range	5.00% – 9.00%	5.00% – 9.00%	5.00% – 9.00%
Average	6.41%	6.43%	6.51%
Change (Basis Points)		– 2	– 10
MARKET RENT CHANGE ^b			
Range	2.50% – 5.00%	2.50% – 6.00%	2.50% – 8.00%
Average	3.75%	4.00%	4.25%
Change (Basis Points)		– 25	– 50
EXPENSE CHANGE ^b			
Range	2.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%
Average	2.88%	2.88%	2.75%
Change (Basis Points)		0	+ 13
MARKETING TIME ^c			
Range	1 – 12	1 – 12	1 – 12
Average	5.0	5.0	5.0
Change (▼, ▲, =)		=	=
a Rate on unleveraged, all-cash transactions b Initial rate of change c In months			

Table SEA-1
AVERAGE PRICE AS A % OF COST*
First Quarter 2016

Rank	Office Market	Average
1	Washington, DC	102.7%
2	Los Angeles	101.5%
3	Denver	100.5%
4	Pacific Northwest	99.2%
5	San Francisco	98.5%
6	San Diego	98.3%
7	Seattle	95.9%
8	Northern Virginia	94.9%
9	Charlotte	91.5%
10	Houston	91.3%

*Replacement cost; top ten
Source: PwC Real Estate Investor Survey

Southeast Florida Office Market

The Southeast Florida office market continues to be viewed favorably despite concerns from investors about stalled population growth, the threat of a value bubble, and the negative effects of a global slowdown. "We question if the recent value appreciation is sustainable here," asks a participant. "The rush of capital into commercial real estate is creating another value bubble and increasing interest rates will burst that bubble everywhere," predicts another.

Although some investors are actively looking for acquisition opportunities in this market, others have taken a wait-and-see approach. "We will be watching 2016 carefully for sentiment

changes before deciding to buy additional assets," shares a participant. Not surprisingly, most of this market's key indicators hold steady this quarter (see Table 22). Only the average initial-year market rent change rate, which moves up eight basis points, and the average marketing time, which slips to 5.2 months, change.

At 2.50%, this market's average initial-year market rent change rate now stands as its highest average since the third quarter of 2008 when it was 2.64%. It remains to be seen where this key cash flow assumption will trend in the coming months as investors approach this market with more caution. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 65.0% =

Range 40.0% to 80.0%

Months of Free Rent⁽¹⁾:

Average 6 =

Range 3 to 12

% of participants using 100.0% =

Average Overall Cap Rates:

Market (as a whole) 7.18% =

CBD 6.65% =

Suburbs 7.71% =

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

Table 22

SOUTHEAST FLORIDA OFFICE MARKET

First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	6.00% - 11.50%	6.00% - 11.50%	6.50% - 11.50%	7.00% - 12.00%	7.00% - 16.00%
Average	8.33%	8.33%	8.46%	9.05%	10.28%
Change (Basis Points)		0	-13	-72	-195
OVERALL CAP RATE (OAR)*					
Range	4.50% - 10.00%	4.50% - 10.00%	4.50% - 10.00%	6.00% - 12.00%	7.00% - 13.00%
Average	7.18%	7.18%	7.29%	8.31%	9.34%
Change (Basis Points)		0	-11	-113	-216
RESIDUAL CAP RATE					
Range	4.50% - 10.50%	4.50% - 10.50%	4.50% - 10.50%	6.75% - 10.50%	7.00% - 12.00%
Average	7.34%	7.34%	7.41%	8.24%	9.23%
Change (Basis Points)		0	-7	-90	-189
MARKET RENT CHANGE^b					
Range	0.00% - 6.00%	0.00% - 6.00%	0.00% - 5.00%	(10.00%) - 4.00%	(10.00%) - 3.00%
Average	2.50%	2.42%	1.71%	0.08%	(0.92%)
Change (Basis Points)		+8	+79	+242	+342
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	2.75%	2.75%	2.63%	2.58%	2.75%
Change (Basis Points)		0	+12	+17	0
MARKETING TIME^c					
Range	2 - 12	2 - 12	2 - 12	2 - 18	2 - 18
Average	5.2	5.4	5.7	7.1	7.3
Change (▼, ▲, =)		▼	▼	▼	▼
a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months					

Suburban Maryland Office Market

Even though the Suburban Maryland office market ended 2015 on a positive note with a small year-over-year decrease in overall vacancy and positive net absorption, a few cash flow assumption changes this quarter suggest that investors are still being “vigilant” and “careful” in this market. First, the average discount rate increases ten basis points to 8.88%. Second, the average overall cap rate inches up to 7.28%. And lastly, the average initial-year market rent change rate falls 20 basis points to -0.20% – the first negative average for this market since year-end 2009.

Like nearby Northern Virginia, this market's performance is very

submarket specific. As a result, many investors are focused on two top locations for investments – Rockville and Bethesda/Chevy Chase. In Rockville, positive absorption occurred for the third consecutive quarter as the submarket continued its recovery, registering 109,100 square feet of absorption, bringing the 2015 total to 125,300 square feet. In Bethesda/Chevy Chase, absorption totaled 110,000 square feet in 2015, as per Cushman & Wakefield.

Office properties that sold recently in the Bethesda/Chevy Chase submarket include 7315 Wisconsin Avenue; 7550 Wisconsin Avenue; and 4520 East-West Highway. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	67.0%	▲
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	8	▼
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
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	7.25% – 10.00%	7.25% – 10.00%	7.00% – 10.00%	7.25% – 11.00%	7.25% – 10.00%
Average	8.88%	8.78%	8.68%	8.93%	8.47%
Change (Basis Points)		+ 10	+ 20	- 5	+ 41
OVERALL CAP RATE (OAR)^a					
Range	5.50% – 9.00%	5.50% – 9.00%	5.25% – 9.00%	5.50% – 9.00%	6.50% – 9.00%
Average	7.28%	7.23%	7.45%	7.63%	7.55%
Change (Basis Points)		+ 5	- 17	- 35	- 27
RESIDUAL CAP RATE					
Range	6.50% – 9.75%	6.50% – 9.75%	6.50% – 9.75%	6.50% – 9.75%	7.50% – 10.00%
Average	7.88%	7.93%	8.03%	8.18%	8.31%
Change (Basis Points)		- 5	- 15	- 30	- 43
MARKET RENT CHANGE^b					
Range	(2.00%) – 1.00%	(2.00%) – 1.00%	(2.00%) – 3.00%	(2.00%) – 3.00%	(2.00%) – 3.00%
Average	(0.10%)	0.10%	0.30%	0.83%	0.70%
Change (Basis Points)		- 20	- 40	- 93	- 80
EXPENSE CHANGE^b					
Range	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	2.00% – 3.00%	0.00% – 3.00%
Average	2.00%	2.25%	2.40%	2.83%	2.60%
Change (Basis Points)		- 25	- 40	- 83	- 60
MARKETING TIME^c					
Range	3 – 9	3 – 9	3 – 9	3 – 9	1 – 9
Average	5.7	6.4	6.1	5.9	5.0
Change (▼, ▲, =)		▼	▼	▼	▲

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Washington, DC Office Market

From a macro standpoint, the Washington, DC office market posted an overall vacancy rate of 11.6% in the fourth quarter of 2015, as per Cushman & Wakefield. On a micro level, however, four submarkets outperformed the market as a whole – the CBD, Capitol Hill, NoMA, and Southwest. “The District is very sub-market specific in terms of performance with leasing demand still strong for the right product in the right location,” says an investor.

Compared to the start of the year, overall vacancy rates are lower today for both the market as a whole and the four top-performing submarkets. Although declining vacancy rates

tend to bring about higher rental rates, our Survey participants hold their initial-year market rent change rate assumptions this quarter, ranging from 0.00% to 4.00% and averaging 1.42% (see Table 24). In addition, many continue to offer “large concession packages” to tenants. “Only a significant increase in leasing demand will truly turn current rental rates and lease terms in favor of landlords,” remarks a participant.

Job creation remains a key driver for this market’s success, and many investors are hopeful that the job growth seen here in 2015 will continue in the year ahead, adding to this market’s positive outlook. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 69.0% =

Range 60.0% to 75.0%

Months of Free Rent⁽¹⁾:

Average 6 =

Range 0 to 12

% of participants using 100.0% =

Market Conditions Favor:

Buyers 17.0% =

Sellers 67.0% =

Neither 16.0% =

* ▼, ▲, = change from prior quarter

(1) on a ten-year lease

Table 24

WASHINGTON, DC OFFICE MARKET

First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	5.50% – 8.00%	5.50% – 8.00%	5.50% – 8.00%	6.00% – 8.75%	7.00% – 10.00%
Average	6.81%	6.83%	6.73%	7.28%	7.92%
Change (Basis Points)		-2	+8	-47	-111
OVERALL CAP RATE (OAR)*					
Range	4.25% – 6.50%	4.25% – 6.50%	4.25% – 6.50%	4.25% – 8.00%	5.50% – 8.50%
Average	5.40%	5.40%	5.50%	5.75%	6.48%
Change (Basis Points)		0	-10	-35	-108
RESIDUAL CAP RATE					
Range	5.00% – 6.50%	5.00% – 6.50%	5.00% – 6.50%	5.25% – 8.25%	6.00% – 8.50%
Average	5.85%	5.85%	5.90%	6.38%	7.02%
Change (Basis Points)		0	-5	-53	-117
MARKET RENT CHANGE^b					
Range	0.00% – 4.00%	0.00% – 4.00%	0.00% – 4.00%	0.00% – 6.00%	0.00% – 4.00%
Average	1.42%	1.42%	1.70%	2.25%	2.14%
Change (Basis Points)		0	-28	-83	-72
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.50% – 3.00%	1.50% – 3.00%
Average	2.75%	2.75%	2.90%	2.96%	2.82%
Change (Basis Points)		0	-15	-21	-7
MARKETING TIME^c					
Range	2 – 6	2 – 6	2 – 6	2 – 9	2 – 12
Average	4.0	4.0	4.0	5.0	6.2
Change (▼, ▲, =)		=	=	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National Flex/R&D Market

The performance of the national flex/R&D market outshined that of the national warehouse market in the fourth quarter of 2015, posting net absorption of 4.4 million square feet, as per Reis. When combined with limited additions to supply, the vacancy rate for the national flex/R&D sector fell to 11.8% at the end of the year. By comparison, this figure was 12.8% a year earlier.

Despite the 100-basis-point decline in annual vacancy, average rental rates moved very little over the past year. According to Reis, the average was \$9.17 per square foot at year-end 2015 – very close to the \$9.02 per square foot average at

year-end 2014. Based on our Survey results, rent growth expectations for the following 12 months are also flat for this sector. As shown in Table 25, the average initial-year market rent change rate assumption for this market holds at 2.20% this quarter and is actually below the average from a year ago.

In fact, each key indicator for the national flex/R&D market holds steady this quarter, suggesting that investors are taking a wait-and-see approach with regard to fundamentals and future acquisitions. As one participant comments, “There is concern around a global slowdown negatively affecting this asset class.” ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	67.0%	=
Range	50.0% to 80.0%	

Months of Free Rent⁽¹⁾:

Average	4	=
Range	1 to 12	
% of participants using	100.0%	=

Market Conditions Favor:

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

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

Table 25
NATIONAL FLEX/R&D MARKET
First Quarter 2016

	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%	7.25% – 12.00%	7.50% – 13.00%	8.25% – 13.00%
Average	8.33%	8.33%	8.63%	9.29%	9.94%
Change (Basis Points)		0	-30	-96	-161
OVERALL CAP RATE (OAR)^a					
Range	5.75% – 9.00%	5.75% – 9.00%	6.00% – 10.00%	6.75% – 12.00%	7.25% – 12.00%
Average	7.15%	7.15%	7.45%	8.52%	8.90%
Change (Basis Points)		0	-30	-137	-175
RESIDUAL CAP RATE					
Range	6.00% – 9.00%	6.00% – 9.00%	6.50% – 10.00%	7.00% – 10.00%	7.25% – 10.50%
Average	7.40%	7.40%	7.75%	8.27%	8.85%
Change (Basis Points)		0	-35	-87	-145
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	2.20%	2.20%	2.40%	1.58%	0.67%
Change (Basis Points)		0	-20	+62	+153
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	2.00% – 3.00%	1.00% – 3.00%
Average	2.70%	2.70%	2.70%	2.92%	2.83%
Change (Basis Points)		0	0	-22	-13
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 18	2 – 18
Average	7.0	7.0	7.2	7.4	8.6
Change (▼, ▲, =)		=	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National Warehouse Market

Even though the national warehouse market continues to post positive fundamentals that favor landlords, our surveyed investors note a wide array of concerns with regard to this market's near-term performance. "New supply outpacing demand is a worry even with tenants expanding," says a participant. "Turbulent global economic conditions can negatively impact the U.S. economy, slowing absorption trends and driving up overall cap rates for warehouse assets," comments another.

Based on a year-end 2015 report by Reis, new construction is concentrated in a handful of markets led by Dallas (3.3 million square feet),

Chicago (2.8 million square feet), and Atlanta (2.2 million square feet). Although these three metros are reporting strong net absorption and declining vacancy, there is a greater likelihood of landlords in them offering more incentives in order to sign tenants. This quarter, free rent for the national warehouse market ranges up to six months on a ten-year lease and averages three months.

Over the next 12 months, our surveyed investors anticipate property values in this market increasing as much as 6.0%. With a couple of investors expecting property value declines of up to 5.0%, the average expected value appreciation is 2.7%. ♦

KEY 1Q16 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	90.0%	=

Market Conditions Favor:

Buyers	0.0%	=
Sellers	82.0%	=
Neither	18.0%	=

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

Table 26
NATIONAL WAREHOUSE MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	5.50% - 9.25%	5.50% - 9.25%	5.75% - 9.00%	5.75% - 10.00%	6.80% - 12.50%
Average	6.94%	6.99%	7.17%	7.62%	8.76%
Change (Basis Points)		-5	-23	-68	-182
OVERALL CAP RATE (OAR)^a					
Range	3.00% - 7.00%	3.00% - 7.00%	4.50% - 7.00%	5.00% - 10.00%	6.00% - 12.00%
Average	5.52%	5.48%	5.77%	6.63%	7.76%
Change (Basis Points)		+4	-25	-111	-224
RESIDUAL CAP RATE					
Range	4.75% - 8.50%	5.25% - 8.50%	5.50% - 7.25%	6.00% - 10.00%	6.50% - 12.00%
Average	6.28%	6.28%	6.38%	7.21%	8.10%
Change (Basis Points)		0	-10	-93	-182
MARKET RENT CHANGE^b					
Range	0.00% - 7.00%	0.00% - 7.00%	0.00% - 6.00%	0.00% - 4.00%	(10.00%) - 5.00%
Average	3.05%	3.00%	2.70%	1.91%	0.44%
Change (Basis Points)		+5	+35	+114	+261
EXPENSE CHANGE^b					
Range	3.00% - 3.00%	2.50% - 3.00%	2.50% - 3.00%	2.00% - 3.00%	(2.00%) - 3.00%
Average	3.00%	2.98%	2.98%	2.86%	2.62%
Change (Basis Points)		+2	+2	+14	+38
MARKETING TIME^c					
Range	1 - 12	2 - 12	2 - 12	2 - 18	2 - 18
Average	4.5	4.6	4.8	7.1	7.9
Change (▼, ▲, =)		▼	▼	▼	▼

^a Rate on unleveraged, all-cash transactions

^b Initial rate of change

^c In months

ENC Region Warehouse Market

Cash flow assumptions used by our Survey participants changed very little for the East North Central (ENC) region warehouse market this quarter, suggesting that investors foresee favorable ownership trends continuing for the near term. With a 13-basis-point decrease, this market's average residual cap rate posts the largest quarterly shift and signifies a more optimistic outlook for future values in this market. With that belief, however, comes some concern about overpaying for assets.

Our Survey reveals that asset pricing ranges from 80.0% to 120.0% of replacement cost and averages 96.9% of replacement cost in this market –

below both the Survey's national warehouse market (104.1%) and Pacific region warehouse market (99.6%).

"There are some deals to be found in this market," comments an investor.

Interestingly, however, our participants have a more favorable outlook with regard to value appreciation for this market than for the other two warehouse markets. Specifically, value appreciation ranges between 0.0% and 10.0% and averages 4.0% for this market; ranges between -5.0% and 6.0% and averages 2.7% for the national warehouse market; and ranges between 0.0% and 10.0% and averages 2.8% for the Pacific region warehouse market. ♦

KEY 1Q16 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 First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO
DISCOUNT RATE (IRR)*				
Range	5.75% – 7.50%	6.00% – 7.50%	6.25% – 8.00%	6.00% – 8.50%
Average	6.73%	6.78%	7.15%	7.35%
Change (Basis Points)		- 5	- 42	- 62
OVERALL CAP RATE (OAR)*				
Range	4.50% – 6.25%	4.50% – 6.25%	5.00% – 7.00%	5.75% – 7.50%
Average	5.48%	5.53%	6.05%	6.60%
Change (Basis Points)		- 5	- 57	- 112
RESIDUAL CAP RATE				
Range	5.50% – 7.00%	6.00% – 7.00%	5.75% – 7.75%	6.00% – 8.25%
Average	6.45%	6.58%	6.73%	7.08%
Change (Basis Points)		- 13	- 28	- 63
MARKET RENT CHANGE^b				
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%
Average	2.90%	2.90%	2.83%	2.25%
Change (Basis Points)		0	+ 7	+ 65
EXPENSE CHANGE^b				
Range	2.00% – 4.00%	2.00% – 4.00%	2.00% – 4.00%	2.50% – 5.00%
Average	3.00%	3.00%	2.92%	3.13%
Change (Basis Points)		0	+ 8	- 13
MARKETING TIME^c				
Range	2 – 9	2 – 9	2 – 9	2 – 18
Average	5.0	5.0	4.8	6.4
Change (▼, ▲, =)		=	▲	▼
a. Rate on unleveraged, all-cash transactions b. Initial rate of change c. In months				

Pacific Region Warehouse Market

With 80.0% of surveyed investors believing that underlying fundamentals favor sellers in the Pacific warehouse market, there is a concern that pricing is becoming overheated. "Strong investor appetite for West Coast warehouse assets from both foreign and domestic sources is pushing pricing well above replacement cost," attests an investor. Specifically, our Survey results reveal that prices in this market range from 80.0% to 110.0% of replacement cost and average 99.6% of replacement cost.

Paying above-market pricing at a time when there is the potential for continued interest rate increases and/or a slowdown in the warehouse

sector's recovery, reinforces investors' need to focus on acquiring "high-quality warehouse properties that will stand the test of time." As one investor notes, "The threat of higher overall cap rates doesn't change our strategy; it just solidifies our philosophy of buying quality."

In 2015, close to 29.0% of the warehouse properties sold in the United States were located on the West Coast – an increase of 58.0% from 2014, as per Real Capital Analytics. The most active West Coast city for warehouse trades was Los Angeles, where 461 warehouse assets sold for an average sale price of \$140.00 per square foot. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average 65.0% =

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

First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO
DISCOUNT RATE (IRR)^a				
Range	5.50% – 9.00%	5.50% – 9.00%	6.00% – 8.00%	6.50% – 8.50%
Average	6.80%	6.80%	7.04%	7.38%
Change (Basis Points)		0	-24	-58
OVERALL CAP RATE (OAR)^a				
Range	3.75% – 7.00%	3.75% – 7.00%	4.00% – 7.00%	5.50% – 7.00%
Average	5.28%	5.25%	5.54%	6.21%
Change (Basis Points)		+3	-26	-93
RESIDUAL CAP RATE				
Range	4.75% – 7.50%	4.75% – 7.50%	5.00% – 7.50%	5.50% – 8.00%
Average	5.90%	6.03%	6.19%	6.65%
Change (Basis Points)		-13	-29	-75
MARKET RENT CHANGE^b				
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 6.00%	0.00% – 3.00%
Average	2.40%	2.40%	3.25%	2.17%
Change (Basis Points)		0	-85	+23
EXPENSE CHANGE^b				
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%
Average	2.80%	2.80%	2.92%	2.88%
Change (Basis Points)		0	-12	-8
MARKETING TIME^c				
Range	1 – 6	1 – 6	1 – 6	1 – 18
Average	3.2	3.2	3.3	4.6
Change (▼, ▲, =)		=	▼	▼
a Rate on unleveraged, all-cash transactions b Initial rate of change c In months				

National Apartment Market

Despite a record year for sale transactions in the national apartment market in 2015, Survey participants warn that “pricing is getting ahead of value” and “capital has become more selective and pricing for weaker properties will not hold up.”

Total sales volume for apartment assets reached \$150.0 billion in 2015, surpassing the office, industrial, and retail sectors, as per Real Capital Analytics. Moreover, Survey results reveal that prices for apartment assets range from 90.0% to 130.0% of replacement cost and average 103.8% of replacement cost.

Along with concerns of lofty pricing, some investors question whether

rent growth in an environment of abundant new high-end supply will be able to “offset potential cap rate increases.” This quarter, both the average overall cap rate and the average initial-year market rent change rate assumptions hold steady, revealing a cautious outlook for this market.

Another sign of growing pressure on apartment rental rates is the quarterly increase in the percentage of investors offering incentives, such as free rent. The portion of investors increases from 60.0% to 70.0%; however, the average amount of free rent holds steady at approximately one month over a one-year lease term (see Key 1Q16 Survey Stats table.) ♦

KEY 1Q16 SURVEY STATS*

Total Vacancy Assumption:

Average	6.0%	=
Range	2.0% to 15.0%	

Months of Free Rent⁽¹⁾:

Average	0.8	=
Range	0 to 3	
% of participants using	60.0%	▲

Market Conditions Favor:

Buyers	0.0%	=
Sellers	70.0%	=
Neither	30.0%	=

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

Table 29
NATIONAL APARTMENT MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	5.00% – 10.00%	5.00% – 10.00%	5.50% – 10.00%	5.00% – 14.00%	5.25% – 14.00%
Average	7.28%	7.26%	7.33%	8.06%	8.78%
Change (Basis Points)		+ 2	– 5	– 78	– 150
OVERALL CAP RATE (OAR)*					
Range	3.50% – 8.00%	3.50% – 8.00%	3.50% – 8.00%	3.50% – 10.00%	4.00% – 10.00%
Average	5.35%	5.35%	5.36%	5.73%	6.29%
Change (Basis Points)		0	– 1	– 38	– 94
RESIDUAL CAP RATE					
Range	4.25% – 8.50%	4.25% – 8.50%	4.25% – 8.50%	4.25% – 9.75%	4.75% – 9.75%
Average	5.86%	5.84%	5.96%	6.22%	6.76%
Change (Basis Points)		+ 2	– 10	– 36	– 90
MARKET RENT CHANGE^b					
Range	0.00% – 6.00%	0.00% – 6.00%	0.00% – 8.00%	(2.00%) – 6.00%	(2.00%) – 5.00%
Average	3.18%	3.18%	2.83%	2.57%	1.34%
Change (Basis Points)		0	+ 35	+ 61	+ 184
EXPENSE CHANGE^b					
Range	2.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%	1.00% – 3.50%	0.00% – 4.00%
Average	2.91%	2.81%	2.74%	2.71%	2.46%
Change (Basis Points)		+ 10	+ 17	+ 20	+ 45
MARKETING TIME^c					
Range	1 – 9	1 – 9	1 – 9	0 – 18	0 – 18
Average	3.8	3.8	4.1	5.1	6.0
Change (▼, ▲, =)		=	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

Regional Apartment Markets

Investors in the Survey's three regional apartment markets have varied concerns, such as the growing supply of upscale apartments and the impact on rents in the Mid-Atlantic and Southeast regions, as well as the vast amount of equity chasing value-added opportunities in the Pacific region. "We are worried about some softness entering this area," states a participant focused on the Mid-Atlantic region. An investor in the Pacific region wonders "if there is a bit of a pricing bubble for value-added buys?"

Currently, pricing in the Southeast region apartment market parallels the nation, where the average price is 103.8% of replacement cost. Pricing in

the Mid-Atlantic region is the lowest of the three Survey apartment regions at 102.5% of replacement cost and is the highest in the Pacific region at 106.0%. Even though pricing is the highest in the Pacific region, investors foresee the greatest property value increases there in the coming year with an average expected appreciation of 4.6% – higher than the Mid-Atlantic region at 2.5% and the Southeast region at 2.1%.

In spite of escalating prices in all three regions, buyers remain eager to purchase apartment assets as evidenced by record sales in 2015. According to Real Capital Analytics, two of the top-five metros for total sales

included Los Angeles (ranked third) in the Pacific region and Atlanta (ranked fourth) in the Southeast. The Northern Virginia suburbs (Mid-Atlantic region) and Seattle (Pacific region) ranked fifth and sixth, respectively, in terms of sales volume.

Even with robust sales activity, only one region reveals a quarterly decline in its average overall cap rate. In the Pacific region, this key assumption falls 27 basis points. In contrast, it increases 11 basis points in the Mid-Atlantic region and holds steady in the Southeast region (see Tables 30 and 31). Over the next six months, investors foresee overall cap rates holding steady in each region. ♦

Table 30
SOUTHEAST REGION APARTMENT MARKET
First Quarter 2016

	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% – 10.50%	6.50% – 11.00%
Average	7.58%	7.58%	7.60%	7.90%	8.20%
Change (Basis Points)		0	-2	-32	-62
OVERALL CAP RATE (OAR)^a					
Range	3.75% – 7.00%	3.75% – 7.00%	3.75% – 7.25%	4.50% – 6.50%	5.00% – 7.50%
Average	5.30%	5.30%	5.45%	5.58%	6.29%
Change (Basis Points)		0	-15	-28	-99
RESIDUAL CAP RATE					
Range	4.50% – 7.00%	4.75% – 7.00%	5.00% – 7.00%	5.25% – 9.75%	5.50% – 9.75%
Average	5.78%	5.90%	6.10%	6.48%	7.04%
Change (Basis Points)		-12	-32	-70	-126
MARKET RENT CHANGE^b					
Range	1.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%	(10.00%) – 5.00%	(10.00%) – 3.00%
Average	3.05%	3.05%	2.95%	1.80%	0.29%
Change (Basis Points)		0	+10	+125	+276
EXPENSE CHANGE^b					
Range	2.00% – 3.00%	2.00% – 3.00%	2.00% – 3.00%	1.00% – 4.00%	1.00% – 3.00%
Average	2.80%	2.80%	2.80%	2.90%	2.42%
Change (Basis Points)		0	0	-10	+38
MARKETING TIME^c					
Range	1 – 6	1 – 6	1 – 6	1 – 18	1 – 18
Average	3.1	3.1	3.0	6.2	7.2
Change (▼, ▲, =)		=	▲	▼	▼

a Rate on unleveraged, all-cash transactions

b. Initial rate of change

c In months

Table 31

REGIONAL APARTMENT MARKETS

First Quarter 2016

	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)*										
Range	5.50% - 10.00%	5.50% - 10.00%	6.00% - 10.00%	5.00% - 14.00%	5.80% - 14.00%	5.50% - 9.00%	5.50% - 9.00%	5.50% - 10.00%	5.25% - 12.00%	6.00% - 12.50%
Average	7.75%	7.75%	7.96%	8.69%	9.65%	6.83%	6.83%	7.29%	8.00%	9.08%
Change (Basis Points)	0	-21	-94	-190	-190	0	-46	-117	-225	-225
OVERALL CAP RATE (OAR)*										
Range	4.00% - 7.50%	3.00% - 7.50%	4.00% - 7.50%	4.50% - 8.00%	4.50% - 8.00%	3.50% - 6.00%	3.50% - 6.00%	3.50% - 6.50%	3.50% - 7.00%	4.00% - 7.50%
Average	5.46%	5.35%	5.46%	5.67%	6.23%	4.50%	4.50%	4.77%	4.94%	5.85%
Change (Basis Points)	+11	0	-21	-77	-77	0	-27	-44	-135	-135
RESIDUAL CAP RATE										
Range	4.25% - 7.50%	4.25% - 7.50%	4.50% - 8.00%	5.00% - 9.75%	5.00% - 9.75%	3.75% - 6.00%	3.75% - 6.00%	4.00% - 7.00%	4.00% - 7.50%	4.50% - 8.50%
Average	5.69%	5.73%	5.85%	6.31%	6.85%	5.05%	5.05%	5.48%	5.56%	6.33%
Change (Basis Points)	-4	-16	-62	-116	-116	0	-43	-51	-128	-128
MARKET RENT CHANGE^b										
Range	0.00% - 4.00%	0.00% - 4.00%	0.00% - 5.00%	(5.00%) - 6.00%	(5.00%) - 4.00%	2.00% - 6.00%	1.00% - 6.00%	1.00% - 7.00%	0.00% - 10.00%	0.00% - 5.00%
Average	2.83%	2.83%	2.75%	2.63%	1.58%	4.20%	4.00%	4.04%	3.71%	1.92%
Change (Basis Points)	0	+8	+20	+125	+125	+20	+16	+49	+228	+228
EXPENSE CHANGE^b										
Range	1.00% - 3.00%	1.00% - 3.00%	1.00% - 3.00%	1.00% - 3.00%	1.00% - 3.00%	2.00% - 3.00%	2.00% - 3.00%	2.00% - 3.00%	2.00% - 3.00%	2.00% - 3.00%
Average	2.75%	2.75%	2.75%	2.75%	2.58%	2.83%	2.83%	2.88%	2.79%	2.71%
Change (Basis Points)	0	0	0	+17	+17	0	-5	+4	+12	+12
MARKETING TIME^c										
Range	2 - 9	2 - 9	2 - 9	1 - 18	1 - 18	1 - 9	1 - 9	1 - 9	1 - 12	1 - 12
Average	4.3	4.4	5.0	5.4	6.6	4.5	4.5	4.5	4.9	5.9
Change (▼, ▲, =)	▼	▼	▼	▼	▼	=	=	=	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

National Net Lease Market

Investors' strong appetite for assets in the national net lease market has increased competition and led to record-setting sales volume for net lease office, industrial, and retail properties. In 2015, the industrial sector posted a 30.0% increase in net lease sales over the prior year, according to Real Capital Analytics. The office and retail sectors each saw a 16.0% increase in total sales during the same time period.

Certain investors are concerned that pricing on a per-square-foot basis is getting frothy in this market. "There is too much money chasing too few high-quality deals," laments a participant. In 2015, the net lease

retail sector had the highest price per square foot at \$287.00, followed by the office sector at \$260.00 and the industrial sector at \$73.00. The average sale price per square foot in the retail sector showed the largest increase from 2014 to 2015.

Despite incessant investment demand, this market's key cash flow assumptions reveal limited quarterly shifts. The average overall cap rate slips just three basis points while the average initial-year market rent change rate holds steady. In the coming year, our investors collectively foresee net lease property values rising an average of 4.7% – the second highest forecast in our Survey. ♦

KEY 1Q16 SURVEY STATS*

Market Conditions Favor:

Buyers	0.0%	=
Sellers	100.0%	=

Months of Free Rent:

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

Portfolio Allocation:

Sale leasebacks	24.0%	▼
Net lease sales	36.0%	▼
1031 exchanges	16.0%	▲
Build to suit	24.0%	▲

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

Table 32
NATIONAL NET LEASE MARKET
First Quarter 2016

	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% – 9.00%	7.00% – 9.00%	7.00% – 9.00%
Average	8.00%	8.00%	7.69%	7.83%	8.13%
Change (Basis Points)		0	+ 31	+ 17	+ 13
OVERALL CAP RATE (OAR)^a					
Range	5.25% – 9.00%	5.50% – 9.00%	6.00% – 8.50%	6.00% – 8.75%	6.25% – 12.00%
Average	6.75%	6.78%	6.93%	7.15%	8.50%
Change (Basis Points)		- 3	- 18	- 40	- 175
RESIDUAL CAP RATE					
Range	6.00% – 9.00%	6.00% – 9.00%	7.00% – 9.00%	7.00% – 9.00%	7.00% – 12.00%
Average	7.63%	7.63%	7.81%	8.13%	9.00%
Change (Basis Points)		0	- 18	- 50	- 137
MARKET RENT CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	(3.00%) – 4.00%
Average	1.80%	1.80%	1.85%	1.35%	1.07%
Change (Basis Points)		0	- 5	+ 45	+ 73
EXPENSE CHANGE^b					
Range	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%	0.00% – 3.00%
Average	1.70%	1.70%	2.15%	1.90%	1.82%
Change (Basis Points)		0	- 45	- 20	- 12
MARKETING TIME^c					
Range	1 – 12	1 – 12	2 – 12	1 – 12	1 – 18
Average	4.4	4.4	4.5	4.3	6.1
Change (▼, ▲, =)		=	▼	▲	▼

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

National Medical Office Buildings Market

Even though surveyed investors cite several headwinds for this market in the coming year, the national medical office buildings (MOB) market posted record-high sales volume in 2015, exceeding \$11.2 billion – the highest annual level posted to date and nearly twice the level reported in 2007 at the prior cycle peak, as per Real Capital Analytics.

Amid this robust pace of sales, MOB buyers are concerned about the shift in underwriting for this market and the lack of new sources of capital. “REITs have become more conservative as they are selling below NAV (net asset value) and have very limited interest outside certain geo-

graphic areas and few new capital sources have come in to replace them,” explains an investor. In addition, investors warn that pricing is at “peak levels,” particularly for “good quality MOB product with strong tenancy.”

The challenges facing buyers are highlighted in this quarter’s investment criteria, which reveal limited movement (see Table 33). While investors hold mixed views on property value appreciation here, ranging from a decline of 5.0% to an increase of 10.0%, the overall average is a value increase of 1.3% in the coming year – down slightly from a year ago when the average forecast was 1.9%. ♦

KEY 1Q16 SURVEY STATS*

Tenant Retention Rate:

Average	78.0%	=
Range	60.0% to 90.0%	

Months of Free Rent⁽¹⁾:

Average	3	=
Range	1 to 6	
% of participants using	67.0%	=

Average Overall Cap Rates:

Market (as a whole)	6.83%	▼
On campus	6.47%	=
Off campus	7.19%	▼

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

Table 33
NATIONAL MEDICAL OFFICE BUILDINGS MARKET
First Quarter 2016

	CURRENT	LAST QUARTER	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	5.50% – 11.00%	5.50% – 11.00%	6.00% – 11.00%	6.00% – 13.00%	7.50% – 13.00%
Average	7.96%	7.91%	8.02%	8.94%	9.44%
Change (Basis Points)		+ 5	– 6	– 98	– 148
OVERALL CAP RATE (OAR)*					
Range	4.75% – 10.00%	4.75% – 10.00%	4.75% – 10.00%	5.50% – 11.00%	6.50% – 11.50%
Average	6.83%	6.84%	6.98%	7.82%	8.34%
Change (Basis Points)		– 1	– 15	– 99	– 151
RESIDUAL CAP RATE					
Range	5.50% – 10.50%	5.50% – 10.50%	5.50% – 10.50%	6.00% – 11.00%	7.00% – 12.00%
Average	7.13%	7.13%	7.33%	8.02%	8.51%
Change (Basis Points)		0	– 20	– 89	– 138
MARKET RENT CHANGE^b					
Range	0.00% – 4.00%	0.00% – 4.00%	0.00% – 3.00%	(5.00%) – 3.00%	0.00% – 3.00%
Average	2.31%	2.31%	1.92%	1.32%	1.10%
Change (Basis Points)		0	+ 39	+ 99	+ 121
EXPENSE CHANGE^b					
Range	1.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%	1.00% – 4.00%	0.00% – 4.00%
Average	2.34%	2.34%	2.46%	2.43%	2.33%
Change (Basis Points)		0	– 12	– 9	+ 1
MARKETING TIME^c					
Range	1 – 12	1 – 12	1 – 9	1 – 12	1 – 12
Average	4.4	4.4	4.4	4.9	5.9
Change (▼, ▲, =)		=	=	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National Lodging Highlights

The following is extracted from "Hospitality Directions US" updated January 2016, published by PwC Hospitality & Leisure.

The performance of the U.S. lodging sector was lackluster during the fourth quarter of 2015 with hotels struggling to meaningfully increase average daily rates (ADRs), even as occupancy levels continued to increase, albeit at a slower pace. The overarching question related to the lack of ADR growth, despite peak occupancy levels, raises concerns among industry participants. Overall, ADR for the industry was \$118.95 in the fourth quarter of 2015 – down from \$122.68 in the prior quarter. Within the industry, luxury hotels trailed other chain-scale segments in pricing power in the fourth quarter.

The U.S. economy's solid performance in the third quarter of 2015 has been overshadowed by a loss of momentum in the fourth quarter. According to Macroeconomic Advisers, GDP is expected to have grown by

only 0.5% during the fourth quarter of 2015, impacted by weak inventory investments and net exports, which appear to have been negatively affected by the strength of the U.S. dollar. Overall, GDP is now expected to increase at an annualized pace of about 2.4% in 2016 due to less economic momentum and less favorable financial conditions.

Helping to partially offset the lack of momentum in the U.S. economy and unfavorable financial conditions are strong fundamentals of employment, wages, and wealth – aided by solid housing price gains. At the same time, downside risks to the GDP forecast include sharper-than-expected slowing in China, a stronger-than-expected U.S. dollar, widening conflict in the Middle East, and a reduction in the pace of recovery in housing prices, among others.

DEMAND

Lodging demand trends are expected to remain strong in 2016, driven by a

number of factors, including continued economic growth and improving group demand. The pace of supply growth is expected to increase to 1.9%, reaching the industry's long-term average. As a result, PwC's outlook anticipates a marginal increase in U.S. occupancy to 65.7%; the highest since 1981.

With the industry's occupancy at a 35-year high, increased confidence among hotel operators and brands is expected to result in more meaningful ADR increases, albeit offset by the continued strength of the U.S. dollar, resulting in RevPAR growth of 5.5%.

SUPPLY

The supply pipeline continues to expand throughout the lodging industry with hotel additions for 2016 expected to be well above prior years. PwC's outlook forecasts lodging supply to increase 1.9% for the industry in 2016 – above the 1.1% growth recorded for 2015 and the highest annual change since 2009.

For 2016, the upscale chain-scale segment is forecast to see the greatest increase in supply, growing at 5.0%. On the other hand, the economy segment is expected to see a 0.4% decrease in supply in 2016.

OCCUPANCY

Occupancy for the U.S. lodging industry was 65.5% for 2015, a 1.7% increase from 2014, according to Smith Travel Research (STR). Occupancy improved in each chain-scale segment in 2015 with the midscale segment posting one of the largest gains at 2.1%.

For 2016, the U.S. lodging industry's occupancy is forecast to increase 0.2% – the lowest annual gain since

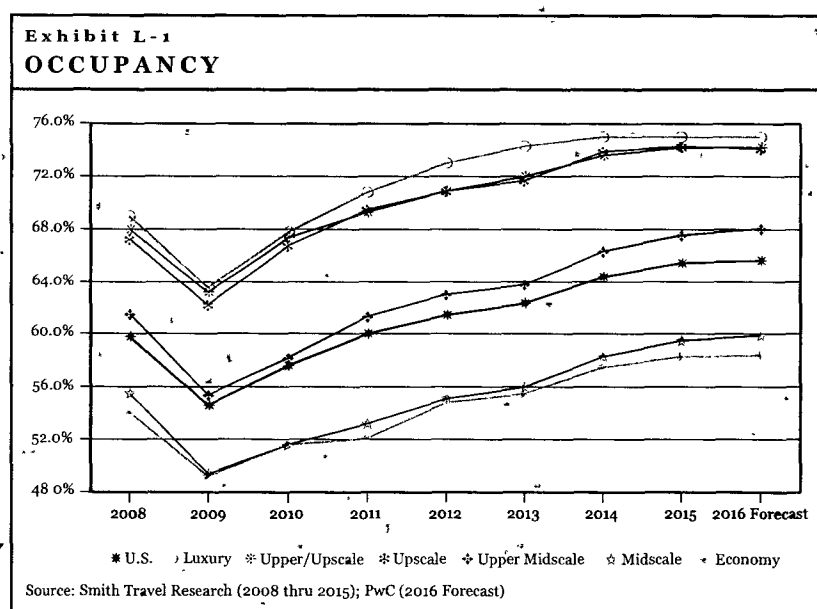
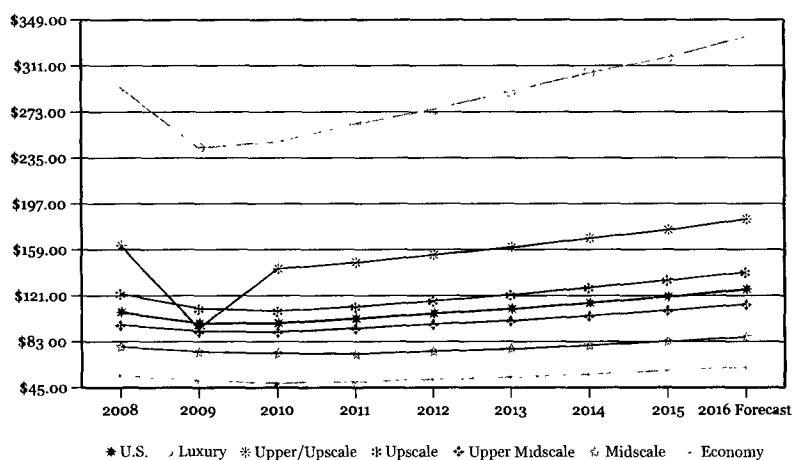


Exhibit L-2
AVERAGE DAILY RATE (ADR)



Source: Smith Travel Research (2008 thru 2015); PwC (2016 Forecast)

2009. As shown in Exhibit L-1, a few chain-scale segments are forecast to see declines in annual occupancy in 2016.

AVERAGE DAILY RATE (ADR)

ADR for the U.S. lodging industry was \$120.04 for 2016, a 4.4% increase from 2015, as per STR. ADR grew in each chain-scale segment during 2015 with the economy (+5.0%) and upscale (+4.9%) chain-scale segments both surpassing the industry average.

For 2016, ADR for the U.S. lodging industry is forecast to grow 5.2%, which represents the largest annual gain since 2007. As shown in Exhibit L-2, ADR growth is forecast for each chain-scale segment in 2016.

MANHATTAN

After uneven results throughout 2015, performance of Manhattan hotels notably declined in November and December, resulting in a RevPAR decrease of 3.0% in the fourth quarter of 2015. For the year, Manhattan's RevPAR declined for the first time since 2009. ADR was the main factor contributing to the declining RevPAR

performance in the fourth quarter, declining 3.3% and 3.7% in November and December, respectively. Overall, Manhattan hotels experienced both decreasing occupancy and ADR in 2015, resulting in a RevPAR decline of 2.3% for the year.

Five hotels opened recently in Manhattan. The 132-room Q&A Hotel in the Financial District opened in November, while the 261-room Four Points by Sheraton Financial District and the 36-room Riff Hotel opened in January. The 313-room INNSide New York NoMad and 20-room Sago Hotel opened in February.

INVESTMENT ACTIVITY

The U.S. hotel sector posted a 42.0% growth in investment activity for 2015 with sales totaling \$49.0 billion, according to Real Capital Analytics. The only other year where deal volume was higher was 2007, which saw more portfolio and entity-level deal volume than the entire market in 2015.

Limited-service hotel deals accounted for \$14.0 billion of the industry's sales volume in 2015 with full-service hotels accounting for the ma-

jority at \$35.0 billion – up 56.0% from a year earlier. Blackstone's \$6.0-billion buyout of Strategic Hotels in December contributed greatly to the sales volume for the full-service sector. Without it, however, volume would still be up, but only 13.0% from 2014.

Amid the industry's overall sales growth, a handful of markets posted declining volume in 2015. Houston, Hawaii, Philadelphia, Seattle, and Northern New Jersey each posted at least a 20.0% decline in annual sales.

The top-five markets in terms of sales volume for 2015 are shown in Table NLH-1. While three of the five metros had the distinction of also being in the top ten for 2014, Chicago and Orlando have both made impressive leaps during the past year. ♦

Table NLH-1

2015 HOTEL SALES VOLUME*

Top U.S. Metros

Metro	Total Volume (\$M)	Rank 2014
1. Manhattan	\$7,438	2
2. San Francisco	\$3,303	4
3. Chicago	\$2,447	14
4. Orlando	\$2,331	22
5. Miami	\$1,884	6

Source: Real Capital Analytics, Inc

Trends and forecasts have been extracted from *Hospitality Directions US*, published by PwC Hospitality & Leisure. Released January 2016, this report provides historical data and forecasts for the U.S. lodging industry and seven chain-scale segments with respect to ADR, supply, demand, occupancy, RevPAR, and revenue. For more information, email contact.hospitality@us.pwc.com.

National Full-Service Lodging Segment

The two chain scales that comprise the national full-service lodging segment (upscale and upper midscale) are forecast to see the greatest increases in supply in 2016. With a projected increase of 5.0%, the upscale chain-scale segment leads the U.S. lodging industry, which is expected to realize a supply increase of 1.9%. Supply growth for the upper-midscale segment is projected at 3.6%. "Supply increases, combined with declining foreign travel, are a concern," remarks an investor.

Also of concern to some investors

are oil pricing trends. "We will avoid locations with strong correlations to the energy sector and oil pricing," shares an investor. In addition, investors continue to watch both U.S. and international economies. "As the first asset class negatively affected by a global slowdown, it's important to see early signs of decline," says another participant.

In the coming year, surveyed investors foresee property values in this segment appreciating an average of 1.6% – the lowest of the Survey's four hotel segments. ♦

**Table FSM-1
LODGING FORECASTS**

Segment	2016	Annual Change
Upscale		
Occupancy	74.1%	- 0.3%
ADR	\$140.46	+ 5.0%
RevPAR	\$104.11	+ 4.7%
Upper Midscale		
Occupancy	68.1%	+ 0.7%
ADR	\$113.97	+ 4.6%
RevPAR	\$77.62	+ 5.4%

Source: *Hospitality Directions US*, January 2016, published by PwC

**Table 34
NATIONAL FULL-SERVICE LODGING SEGMENT
First Quarter 2016**

	CURRENT	THIRD QUARTER 2015	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	8.50% - 13.00%	8.50% - 13.00%	8.75% - 13.00%	9.50% - 13.00%	9.50% - 12.00%
Average	10.48%	10.48%	10.69%	11.00%	10.95%
Change (Basis Points)		0	- 21	- 52	- 47
OVERALL CAP RATE (OAR)*					
Range	6.00% - 10.00%	6.00% - 10.00%	6.00% - 10.00%	6.00% - 10.00%	7.50% - 10.00%
Average	7.75%	7.60%	7.71%	8.02%	8.79%
Change (Basis Points)		+ 15	+ 4	- 27	- 104
RESIDUAL CAP RATE					
Range	7.00% - 10.00%	6.50% - 10.00%	6.50% - 10.00%	6.00% - 12.00%	8.00% - 12.00%
Average	8.38%	8.18%	8.31%	8.71%	9.79%
Change (Basis Points)		+ 20	+ 7	- 33	- 141
AVERAGE DAILY RATE^b					
Range	0.00% - 5.00%	0.00% - 7.00%	0.00% - 7.00%	0.00% - 8.00%	(1.00%) - 8.00%
Average	3.50%	4.00%	4.00%	4.00%	2.58%
Change (Basis Points)		- 50	- 50	- 50	+ 92
OPERATING EXPENSE^b					
Range	1.00% - 4.00%	1.00% - 4.00%	1.00% - 4.00%	1.00% - 4.00%	1.00% - 4.00%
Average	2.70%	2.80%	2.83%	2.96%	2.71%
Change (Basis Points)		- 10	- 13	- 26	- 1
MARKETING TIME^c					
Range	3 - 9	3 - 9	3 - 9	3 - 24	2 - 24
Average	6.9	6.9	6.6	9.1	9.2
Change (▼, ▲, =)		=	▲	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National Limited-Service Midscale & Economy Lodging Segment

Semiannual shifts in this market's key indicators suggest a guarded outlook among surveyed investors in the national limited-service midscale & economy lodging segment. First, its average overall cap rate moves up ten basis points to 8.88% as the high end of the range increases 25 basis points (see Table 35). Second, its initial-year average daily rent (ADR) change rate assumption decreases 35 basis points to reach 3.15% – the lowest average for this cash flow assumption since 2011.

As in the Survey's other lodging segments, top concerns noted by investors for this segment include volatility in the financial markets, too much supply growth, and "a noticeable slowdown in the U.S. economy, which will likely cause underwriting to become more conservative."

In terms of supply growth, the midscale segment is forecast to see a 1.2% increase in 2016 – just above that of the U.S. average of 1.9%. The economy segment's supply growth estimate for 2016 is a decline of 0.4%. ♦

Table ELM-1
LODGING FORECASTS

Segment	2016	Annual Change
Midscale		
Occupancy	59.9%	+ 0.6%
ADR	\$86.73	+ 4.3%
RevPAR	\$51.95	+ 4.9%
Economy		
Occupancy	58.4%	+ 0.2%
ADR	\$62.06	+ 5.2%
RevPAR	\$36.27	+ 5.5%

Source: *Hospitality Directions US*, January 2016; published by PwC

Table 35
NATIONAL LIMITED-SERVICE MIDSCALE & ECONOMY LODGING SEGMENT
First Quarter 2016

	CURRENT	THIRD QUARTER 2015	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	8.50% – 12.00%	8.50% – 12.00%	8.50% – 12.00%	9.00% – 13.00%	10.00% – 14.00%
Average	10.70%	10.53%	10.55%	10.81%	11.94%
Change (Basis Points)		+ 17	+ 15	– 11	– 124
OVERALL CAP RATE (OAR)^a					
Range	7.50% – 10.25%	7.50% – 10.00%	7.50% – 10.00%	8.00% – 12.00%	8.00% – 12.00%
Average	8.88%	8.78%	8.95%	9.70%	9.80%
Change (Basis Points)		+ 10	– 7	– 82	– 92
RESIDUAL CAP RATE					
Range	7.75% – 10.50%	7.75% – 10.50%	7.75% – 11.00%	8.00% – 11.00%	8.50% – 12.00%
Average	9.48%	9.50%	9.63%	9.65%	10.00%
Change (Basis Points)		– 2	– 15	– 17	– 52
AVERAGE DAILY RATE^b					
Range	2.00% – 4.00%	2.00% – 5.00%	2.00% – 5.00%	2.00% – 7.00%	(3.00%) – 7.00%
Average	3.15%	3.50%	3.40%	3.80%	2.60%
Change (Basis Points)		– 35	– 25	– 65	+ 55
OPERATING EXPENSE^b					
Range	2.50% – 3.00%	2.50% – 3.00%	1.00% – 3.00%	1.00% – 3.00%	1.00% – 3.00%
Average	2.95%	2.95%	2.75%	2.75%	2.70%
Change (Basis Points)		0	+ 20	+ 20	+ 25
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 12	2 – 12
Average	6.9	7.0	7.0	7.7	7.9
Change (▼, ▲, =)		▼	▼	▼	▼

a Rate on unleveraged, all-cash transactions

b Initial rate of change

c In months

National Luxury/Upper-Upscale Lodging Segment

Survey results suggest that investors remain positive about the near-term performance of the national luxury/upper-upscale segment, but are closely watching both consumer sentiment and business growth trends. As one participant notes, "Any negative sentiment will adversely impact the lodging market." In addition, many continue to monitor global security issues due to their direct negative impact on inbound U.S. travel.

Investors' favorable expectations for this market are noted in its average overall cap rate, which slips eight

basis points to 6.90% this quarter (see Table 36). At the same time, the low end of the range for this key cash flow assumption drops to 4.00%. In addition, this market's average daily rate (ADR) change rate assumption increases 25 basis points to 3.83% – its highest average in two years.

Over the next 12 months, surveyed investors foresee property values appreciating up to 10.0% in this market; the average expected value appreciation rate is 4.0% – the highest of the four hotel segments in our Survey. ♦

**Table LUM-1
LODGING FORECASTS**

Segment	2016	Annual Change
Luxury		
Occupancy	75.0%	- 0.5%
ADR	\$334.65	+ 5.3%
RevPAR	\$251.04	+ 4.8%
Upper Upscale		
Occupancy	74.2%	0.0%
ADR	\$184.27	+ 5.2%
RevPAR	\$136.68	+ 5.2%

Source: Hospitality Directions US, January 2016; published by PwC

**Table 36
NATIONAL LUXURY/UPPER-UPSCALE LODGING SEGMENT
First Quarter 2016**

	CURRENT	THIRD QUARTER 2015	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)^a					
Range	6.50% – 12.00%	7.25% – 12.00%	8.00% – 12.00%	9.00% – 13.00%	8.00% – 14.00%
Average	9.60%	9.69%	9.83%	10.50%	10.58%
Change (Basis Points)		- 9	- 23	- 90	- 98
OVERALL CAP RATE (OAR)^a					
Range	4.00% – 9.00%	4.75% – 9.00%	4.75% – 9.00%	6.00% – 10.00%	5.00% – 11.00%
Average	6.90%	6.98%	7.10%	8.03%	8.28%
Change (Basis Points)		- 8	- 20	- 113	- 138
RESIDUAL CAP RATE					
Range	5.50% – 10.00%	6.00% – 10.00%	5.75% – 10.00%	6.00% – 12.00%	6.00% – 12.00%
Average	7.27%	7.35%	7.38%	8.72%	9.05%
Change (Basis Points)		- 8	- 11	- 145	- 178
AVERAGE DAILY RATE^b					
Range	0.00% – 9.00%	0.00% – 9.00%	0.00% – 9.00%	0.00% – 7.00%	(2.00%) – 20.00%
Average	3.83%	3.58%	3.75%	3.31%	4.55%
Change (Basis Points)		+ 25	+ 8	+ 52	- 72
OPERATING EXPENSE^b					
Range	0.00% – 5.00%	0.00% – 5.00%	0.00% – 5.00%	0.00% – 4.00%	0.00% – 6.00%
Average	2.83%	2.83%	2.92%	2.63%	2.85%
Change (Basis Points)		0	- 9	+ 20	- 2
MARKETING TIME^c					
Range	3 – 12	3 – 12	3 – 12	2 – 20	2 – 20
Average	5.8	6.0	6.3	8.0	7.7
Change (▼, ▲, =)		▼	▼	▼	▼

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

National Select-Service Lodging Segment

While properties in the national select-service lodging segment remain prime acquisition targets for many buyers, their expectations of value appreciation have waned recently due to volatility in the financial markets and concerns about global economic instability. As shown in Table SSL-1, our Survey results forecast a 2.2% average value appreciation rate for the U.S. select-service lodging segment – down from 3.7% six months ago.

The anticipation of less value appreciation is making it difficult for

some sellers to achieve asking prices despite a still-competitive sales arena. “The capital markets have decided that this cycle has run its course, and the window is closing to sell at a high level despite a lack of evidence,” says an investor, who senses that this segment is slowly shifting in favor of buyers.

This quarter, 60.0% of surveyed investors believe market conditions favor sellers – down from 80.0% six months ago. The balance hold this market as equally favoring buyers and sellers. ♦

Table SSL-1

EXPECTED VALUE CHANGE*

Survey Lodging Markets

Segment	Range	Average
Full Service	0.0% to 4.0%	+ 1.6%
Limited-Service Midscale & Economy	0.0% to 5.0%	+ 2.8%
Luxury/Upper Upscale	0.0% to 10.0%	+ 4.0%
Select Service	0.0% to 4.0%	+ 2.2%

* Over the next 12 months

Source: PwC Real Estate Investor Survey

Table 37

NATIONAL SELECT-SERVICE LODGING SEGMENT

First Quarter 2016

	CURRENT	THIRD QUARTER 2015	1 YEAR AGO	3 YEARS AGO	5 YEARS AGO
DISCOUNT RATE (IRR)*					
Range	9.00% – 12.00%	9.00% – 12.00%	9.00% – 13.00%	9.00% – 15.00%	10.00% – 15.00%
Average	10.80%	10.90%	10.90%	11.10%	11.55%
Change (Basis Points)		- 10	- 10	- 30	- 75
OVERALL CAP RATE (OAR)*					
Range	6.50% – 10.75%	6.50% – 11.00%	5.00% – 11.00%	5.00% – 12.00%	5.00% – 12.00%
Average	8.43%	8.45%	8.20%	8.30%	8.40%
Change (Basis Points)		- 2	+ 23	+ 13	+ 3
RESIDUAL CAP RATE					
Range	7.50% – 11.00%	7.00% – 11.00%	6.00% – 11.00%	5.00% – 12.00%	6.00% – 12.00%
Average	8.95%	8.95%	8.65%	8.50%	10.05%
Change (Basis Points)		0	+ 30	+ 45	- 110
AVERAGE DAILY RATE^b					
Range	2.00% – 5.00%	2.00% – 7.00%	2.00% – 8.00%	1.00% – 8.00%	0.00% – 10.00%
Average	3.40%	3.70%	4.70%	4.80%	5.00%
Change (Basis Points)		- 30	- 130	- 140	- 160
OPERATING EXPENSE^b					
Range	2.00% – 4.00%	2.00% – 4.00%	2.00% – 4.00%	2.00% – 4.00%	1.00% – 3.00%
Average	2.75%	2.95%	2.95%	2.95%	2.50%
Change (Basis Points)		- 20	- 20	- 20	+ 25
MARKETING TIME^c					
Range	2 – 12	2 – 12	2 – 12	2 – 12	2 – 12
Average	6.0	6.0	6.6	6.9	6.7
Change (▼, ▲, =)		=	▼	▼	▼

a. Rate on unleveraged, all-cash transactions

b. Initial rate of change

c. In months

NATIONAL REGIONAL MALL MARKET—SELECT SURVEY RESPONSES (1) First Quarter 2016

	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		
PUBLIC REAL ESTATE COMPANY ♦ Forecast Period: 4 to 7 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	3.0% to 5.0%, Year 1; 2.0% to 5.0%, Year 2	2.0% to 5.0%	2.0% to 4.0%	4.00% to 9.00%	2.0% to 3.0%	6.00% to 12.00%	4.00% to 9.00%	4.00% to 9.00%	4.00% to 9.00%	9 to 24	60.0% to 80.0%	3.0% to 8.0%	\$0.10 to \$0.25	6 to 24		
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	3.0% to 5.0%, Year 1 to 3	3.0%	5.00% to 7.25%	5.00% to 7.25%	0.8% to 1.0%	5.50% to 7.75%	4.00% to 6.50%	4.00% to 6.50%	4.00% to 6.50%	4 to 6	70.0% to 75.0%	1.0% to 2.0%	\$0.15 to \$0.30	6		
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 50 to 100 basis points over the next six months.	0.0% to 1.0%, Year 1; 1.0% to 2.0%, Year 2	1.0% to 3.0%	1.0% to 3.0%	5.00% to 9.00%	0.5% to 1.0%	5.00% to 10.00%	4.50% to 9.00%	4.50% to 9.00%	4.50% to 9.00%	6 to 12	75.0% to 80.0%	3.0% to 8.0%	\$0.25 to \$0.50	6 to 12		
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	3.0% to 5.0%, Year 1 to 3	3.0%	4.25% to 9.00%	4.25% to 9.00%	1.0% to 3.0%	6.00% to 11.00%	4.00% to 9.00%	4.00% to 9.00%	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		
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.	1.5% to 4.8%, Year 1 & 2	2.0% to 3.5%	1.0% to 3.0%	4.00% to 7.50%	0.5% to 2.5%	5.50% to 7.50%	4.00% to 6.00%	4.00% to 6.00%	4.00% to 6.00%	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 January 2016. (1) relates to Class A+, A, B+, and B malls

NATIONAL POWER CENTER MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	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			
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.	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 to 9				
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% to 3.0% Year 1, 3.0% Year 2	3.0%	3.0%	5.50% to 6.75%	1.0% to 2.0%	6.00% to 7.00%	5.00% to 6.50%	6 to 12	65.0% to 75.0%	5.0% to 8.0%	Does not use	2 to 4				
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.	3.0% Years 1 to 3	3.0%	3.0%	6.25% to 6.50%	1.5% to 2.0%	6.50% to 6.75%	5.50% to 6.25%	6 to 12	65.0% to 70.0%	5.0% to 8.0%	\$0.20 to \$0.30	2 to 4				
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 5.0% in year 5	0.0% to 5.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	7.00% to 9.00%	2.0% to 2.0%	8.00% to 10.00%	6.00% to 7.00%	5 to 8	60.0% to 75.0%	5.0% to 10.0%	\$0.20	4 to 6				
PENSION FUND ♦ Forecast Period: 10 to 15 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.	1.0% to 3.0%	2.0% to 3.0%	1.0% to 3.0%	5.00% to 8.00%	2.0% to 3.0%	9.00% to 10.00%	6.00% to 8.00%	6 to 12	55.0% to 85.0%	1.0% to 2.0%	\$0.15 to \$0.25	9 to 18				

Source: Personal survey conducted by PwC during January 2016

pwc

NATIONAL STRIP SHOPPING CENTER MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		TENANT RETENTION		UNDERLYING VACANCY & CREDIT LOSS		REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	MONTHS VACANT	MONTHS VACANT	MONTHS VACANT	MONTHS VACANT	MONTHS VACANT	MONTHS VACANT	MONTHS VACANT	PER SQUARE FOOT	MONTHS
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%	6.75% 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%	7.00% to 7.25%	6 to 8	65.0% to 70.0%	5.0% to 10.0%	\$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 10.75%	7.00% to 9.50%	8.00% to 10.75%	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 25 to 50 basis points over the next six months.	2.0% to 3.0%	3.0%	3.0% to 4.0%	6.25% to 7.00%	4.0% to 5.0%	6.25% to 7.50%	5.00% to 9.00%	6.25% to 7.50%	9 to 18	65.0% to 75.0%	3.0% to 7.0%	\$0.25 to \$0.50	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 7.00%	1.0% to 3.0%	6.25% to 9.00%	5.00% to 7.00%	6.25% to 9.00%	6 to 15	60.0% to 75.0%	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%	5.75% to 6.25%	1.0% to 3.0%	6.00% to 6.75%	4.75% to 5.75%	6.00% to 6.75%	6 to 9	65.0% to 75.0%	4.0% to 7.0%	Does not use	2 to 3					

Source: Personal survey conducted by PwC during January 2016

NATIONAL CBD OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		UNDERLYING PER VACANCY & CREDIT LOSS		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	SQUARE FOOT	MONTHS		
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 7.0% in year 1, 6.0% in year 2, and 5.0% in year 3	0.0% to 7.0%	2.0% to 4.0%	1.0% to 3.0%	4.75% to 6.50%	0.5% to 2.5%	5.50% to 7.00%	3.50% to 6.50%	6 to 12	50.0% to 75.0%	3.0% to 7.5%	\$0.20 to \$0.50	3 to 9				
PENSION FUND ♦ Forecast Period: 10 to 15 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	1.0% to 2.0%	2.0% to 3.0%	1.0% to 3.0%	5.00% to 7.00%	2.0% to 3.0%	8.00% to 10.00%	5.25% to 7.00%	6 to 12	60.0% to 75.0%	1.0% to 2.0%	\$0.10 to \$0.20	9 to 15				
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; may use a rent spike of 6.0% in years 2 and 3.	2.0% to 6.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	6.00% to 7.00%	1.0% to 1.5%	5.75% to 7.00%	4.50% 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; uses 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 6.00%	1.0% to 4.0%	5.75% to 6.50%	4.50% to 5.75%	6 to 8	65.0% to 75.0%	3.0% to 7.0%	\$0.15 to \$0.30	2 to 4				
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 7.00%	1.0% to 2.0%	5.50% to 7.00%	5.50% to 7.50%	6 to 9	65.0% to 85.0%	1.0% to 5.0%	\$0.25 to \$0.50	3 to 9				
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; may use a rent spike of 7.0% in years 1 and 2 and 5.0% in year 3.	3.0% to 7.0%	3.0%	3.0%	5.00% to 7.50%	1.0% to 3.0%	6.00% to 8.50%	3.50% to 6.00%	6 to 12	65.0% to 75.0%	0.0% to 7.0%	\$0.10 to \$0.25	6 to 12				

Source: Personal survey conducted by PwC during January 2016



NATIONAL SUBURBAN OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		TENANT RETENTION		UNDERLYING VACANCY & PER SQUARE FOOT		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	MONTHS TO	MONTHS TO	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
REAL ESTATE ADVISOR ♦ Forecast Period: 5 to 10 years Uses DCF and face rents; prefers 24-hour cities across the country; uses a rent spike of 5.0% in year 2 and 4.0% in year 3; uses effective rents in DCF analysis.	3.0% to 5.0%	2.0% to 3.0%	2.0% to 3.0%	5.50% to 7.50%	1.0% to 2.0%	6.25% to 8.25%	4.50% to 7.00%	65.0% to 75.0%	6 to 18	3 to 8	1.0% to 3.0%	65.0% to 75.0%	1.0% to 3.0%	\$0.20 to \$0.40	3 to 8				
LIFE INSURANCE COMPANY ♦ Forecast Period: 8 to 12 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 3.0%	2.0% to 3.0%	1.5% to 3.0%	6.50% to 9.50%	1.0% to 2.5%	6.00% to 9.00%	5.00% to 8.50%	50.0% to 67.0%	6 to 12	3 to 6	7.0% to 15.0%	50.0% to 67.0%	7.0% to 15.0%	\$0.20 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; uses a rent spike of 6.0% in year 4.	3.0%	3.0%	3.0%	6.00% to 7.00%	1.0% to 3.0%	6.50% to 7.50%	5.50% to 6.50%	50.0% to 65.0%	6 to 12	3 to 6	3.0%	50.0% to 65.0%	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 5.0%	2.0% to 3.0%	2.0% to 3.0%	6.50% to 8.00%	1.0% to 1.0%	5.75% to 7.00%	5.00% to 7.50%	55.0% to 70.0%	9 to 12	3 to 6	5.0% to 9.0%	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%	6.00% to 7.50%	1.0% to 3.0%	7.00% to 8.25%	5.00% to 7.50%	65.0% to 75.0%	9 to 12	6 to 12	0.0% to 3.0%	65.0% to 75.0%	0.0% to 3.0%	\$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; does not use rent spikes.	0.0% to 5.0%	2.0% to 4.0%	1.0% to 3.0%	5.50% to 8.50%	0.5% to 2.5%	6.25% to 9.00%	4.50% to 7.50%	50.0% to 75.0%	6 to 14	6 to 9	5.0% to 8.0%	50.0% to 75.0%	5.0% to 8.0%	\$0.20 to \$0.50	6 to 9				

Source: Personal survey conducted by PwC during January 2016

ATLANTA OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	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		
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 hold steady over the next six months	3.0% to 5.0%	2.8% to 3.5%	2.8% to 3.5%	6.00% to 8.00% (CBD); 7.00% to 8.00% (suburbs)	1.5% to 3.0%	6.00% to 8.00% (CBD); 7.00% to 8.50% (suburbs)	5.75% to 7.50% (CBD); 7.00% to 8.50% (suburbs)	5.75% to 7.50% (CBD); 7.00% to 8.50% (suburbs)	6 to 9	60.0% to 75.0%	4.0% to 6.0%	\$0.15 to \$0.25	2 to 3			
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.	3.0% to 4.0% Years 1 & 2	3.0%	3.0%	6.75% to 8.00% (CBD); 7.50% to 9.00% (suburbs)	2.0% to 3.0%	7.50% to 8.75% (CBD); 8.00% to 9.50% (suburbs)	5.25% to 7.50% (CBD); 6.00% to 8.50% (suburbs)	5.25% to 7.50% (CBD); 6.00% to 8.50% (suburbs)	6 to 10	60.0% to 65.0%	8.0% to 10.0%	\$0.20 to \$0.25	8 to 12			
INVESTMENT BANKER ♦ Forecast Period: 5 to 10 years Prefers DCF analysis; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use a rent spike of 7.5% in year 5, expects overall cap rates to hold steady over the next six months	4.0% to 7.0% Years 1 & 2	1.5% to 2.5%	1.5% to 2.5%	6.75% to 7.25% (CBD); 6.25% to 7.50% (suburbs)	1.0% to 2.0%	7.00% to 8.75% (CBD); 7.50% to 9.00% (suburbs)	6.00% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	6.00% to 7.50% (CBD); 6.50% to 8.00% (suburbs)	5 to 8	75.0% to 80.0%	5.0% to 7.0%	\$0.10 to \$0.25	2 to 3			
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; uses face rents and reflects concessions when they are scheduled to occur.	3.0% to 4.0% Years 1 & 2	0.0% to 1.0%	2.0% to 3.0%	6.00% to 8.00% (CBD); 6.50% to 8.00% (suburbs)	1.0% to 1.5%	9.00% to 10.00% in both CBD & suburbs	7.00% to 8.50% (CBD); 7.00% to 8.50% (suburbs)	7.00% to 8.50% (CBD); 7.00% to 8.50% (suburbs)	6 to 10	65.0% to 70.0%	10.0%	\$0.20 to \$0.40	3 to 4			
LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years Uses DCF, direct capitalization, and sales comparison approach; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; does not use rent spikes; expects overall cap rates to hold steady over the next six months	0.0% to 3.0% Years 1 & 2	2.5% to 3.0%	3.0%	6.50% to 9.00% (CBD); 6.75% to 9.25% (suburbs)	1.0% to 2.0%	7.25% to 9.25% (CBD); 7.50% to 9.25% (suburbs)	6.50% to 9.00% (CBD); 6.75% to 9.25% (suburbs)	6.50% to 9.00% (CBD); 6.75% to 9.25% (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 January 2016.



BOSTON OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		UNDERLYING PER VACANCY & CREDIT LOSS		REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	MONTHS VACANT	UNDERLYING PER VACANCY & CREDIT LOSS	FOOT		
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.	2.0% to 3.0%	3.0%	3.0%	6.00% to 7.50% (CBD); 6.50% to 8.25% (suburbs)	2.0% to 3.0%	6.50% to 7.75% (CBD); 7.00% to 8.50% (suburbs)	4.50% to 7.00% (CBD); 5.00% to 7.25% (suburbs)	6.50% to 7.75% (CBD); 7.00% to 8.50% (suburbs)	4.50% to 7.00% (CBD); 5.00% to 7.25% (suburbs)	6 to 8	65.0% to 70.0%	6 to 8	4.0% to 6.0%	\$0.20 to \$0.25	6 to 12	
* PENSION FUND ADVISOR ♦ Forecast Period: 3 to 6 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.	0.0% to 2.0%	3.0% to 4.0%	2.0% to 4.0%	7.00% (CBD), (suburbs)	1.0% to 3.0%	9.00% (CBD), (suburbs)	7.00% (CBD), (suburbs)	9.00% (CBD), (suburbs)	7.00% (CBD), (suburbs)	6 to 12	50.0% to 80.0%	6 to 12	4.0% to 10.0%	\$0.15 to \$0.50	2 to 6	
REAL ESTATE ADVISOR ♦ Forecast Period: 10 to 12 years Uses DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; may use rent spikes of 7.0% in years 1 and 2 and 5.0% in year 3.	4.0% to 7.0%	3.0%		5.00% to 5.50% (CBD); 6.75% to 7.50% (suburbs)	1.0% to 3.0%	6.00% to 6.50% (CBD); 7.25% to 7.75% (suburbs)	4.00% to 4.75% (CBD); 6.00% to 6.25% (suburbs)	6.00% to 6.50% (CBD); 7.25% to 7.75% (suburbs)	4.00% to 4.75% (CBD); 6.00% to 6.25% (suburbs)	6 to 9	65.0% to 70.0%	6 to 12	1.5% to 3.0%	\$0.20 to \$0.75	6 to 12	
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.	3.0%	2.5% to 3.0%	2.5% to 3.0%	5.75% to 6.50% (CBD); 7.00% to 7.50% (suburbs)	2.0% to 2.5%	7.00% to 7.50% (CBD); 8.00% to 8.50% (suburbs)	5.50% to 6.50% (CBD); 7.00% to 7.50% (suburbs)	7.00% to 7.50% (CBD); 8.00% to 8.50% (suburbs)	5.50% to 6.50% (CBD); 7.00% to 7.50% (suburbs)	5 to 9	65.0% to 70.0%	5 to 9	5.0% to 7.0%	\$0.15 to \$0.20	3 to 6	
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.	5.0%	3.0%	3.0%	5.50% to 6.00% (CBD); 7.00% to 7.50% (suburbs)	1.3%	7.00% to 7.50% (CBD); 8.00% to 8.50% (suburbs)	4.25% to 4.75% (CBD); 6.25% to 7.25% (suburbs)	7.00% to 7.50% (CBD); 8.00% to 8.50% (suburbs)	4.25% to 4.75% (CBD); 6.25% to 7.25% (suburbs)	7 to 8	70.0% to 70.0%	7 to 8	4.0% to 7.0%	Does not use	4 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 face rents and reflects concessions when they are scheduled to occur; does not use rent spikes.	5.0% to 7.0%	3.0% to 3.0%	3.0% to 3.0%	5.50% to 6.25% (CBD); 6.75% to 8.00% (suburbs)	1.0% to 3.0%	6.00% to 6.50% (CBD); 7.00% to 8.00% (suburbs)	4.00% to 5.00% (CBD); 5.00% to 6.00% (suburbs)	6.00% to 6.50% (CBD); 7.00% to 8.00% (suburbs)	4.00% to 5.00% (CBD); 5.00% to 6.00% (suburbs)	7 to 10	65.0% to 70.0%	7 to 10	5.0% to 8.0%	\$0.20 to \$0.50	4 to 7	

Source: Personal survey conducted by PwC during January 2016

CHARLOTTE OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	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		
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	0.0% to 3.0%	3.0%	1.0% to 3.0%	6.00% to 8.00% (CBD); 6.50% to 8.50% (suburbs)	0.5% to 1.0%	7.00% to 8.50% (CBD); 7.50% to 9.00% (suburbs)	6.00% to 8.00% (CBD); 6.50% to 8.50% (suburbs)	5.0% to 10.0%	65.0% to 75.0%	5 to 10	65.0% to 75.0%	\$0.10 to \$0.25	1 to 12		
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; may use a rent spike of 6.0% in year 4; sees overall cap rates holding steady over the next six months.	4.0% to 6.0%	1.8% to 2.8%	2.3% to 2.8%	6.50% to 7.50% (CBD); 7.00% to 7.75% (suburbs)	1.0% to 3.0%	7.75% to 10.00% (suburbs)	6.25% to 7.25% (CBD); 6.75% to 8.00% (suburbs)	5.0% to 7.5%	70.0% to 75.0%	4.5 to 9	70.0% to 75.0%	\$0.10 to \$0.25	2 to 4		
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 hold steady over the next six months; may use a rent spike of 4.0% in year 2, 5.0% in year 3, and 4.0% in year 4.	0.0% to 5.0%	2.8% to 3.0%	2.5% to 2.8%	6.50% to 7.50% (CBD); 7.00% to 8.50% (suburbs)	1.0% to 3.0%	7.50% to 11.00% (suburbs)	6.50% to 8.50% (CBD); 7.00% to 9.00% (suburbs)	5.0% to 10.0%	65.0% to 70.0%	5 to 8	65.0% to 70.0%	\$0.15 to \$0.50	3 to 6		
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; may use a rent spike of 5.0% in year 1 and 4.0% in year 2.	3.0% to 5.0%	2.5% to 3.0%	2.0% to 3.0%	6.75% to 8.00% (CBD); 7.25% to 8.50% (suburbs)	1.5% to 2.5%	8.00% to 10.50% (suburbs)	6.25% to 7.25% (CBD); 7.25% to 8.75% (suburbs)	7.0% to 10.0%	65.0% to 75.0%	9 to 12	65.0% to 75.0%	\$0.30 to \$0.50	4 to 7		
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 decrease 25 to 50 basis points over the next six months; no longer uses a rent spike.	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 9.00% (suburbs)	5.50% to 6.50% (CBD); 6.00% to 7.00% (suburbs)	3.0% to 6.0%	70.0% to 80.0%	4 to 9	70.0% to 80.0%	\$0.25 to \$0.50	2 to 4		

Source: Personal survey conducted by PwC during January 2016

pwc

CHICAGO OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES			RESIDUAL	DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS	UNDERLYING VACANCY & CREDIT LOSS	REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	PER SQUARE FOOT	MONTHS
LIFE INSURANCE COMPANY ♦ Forecast Period: 5 to 10 years										
	3.0% Years 1 & 2	2.5% to 3.0%	3.0%	6.50% to 8.00% (CBD); 7.50% to 9.00% (suburbs)	0.8% to 1.5%	7.50% to 8.50% (CBD); 8.00% to 9.00% (suburbs)	6 to 9	65.0% to 70.0%	\$0.25 to \$0.50	2 to 4
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.										
REAL ESTATE ADVISOR ♦ Forecast Period: 10 years										
	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 2.3%	7.00% to 10.00% (CBD); 8.00% to 11.00% (suburbs)	6 to 9	60.0% to 75.0%	\$0.25 to \$0.50	3 to 6
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.										
PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 10 years										
	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 11.00% (CBD); 10.00% to 11.00% (suburbs)	10 to 12	70.0% to 85.0%	Does not use	4 to 8
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.										
PRIVATE REAL ESTATE FIRM ♦ Forecast Period: 3 to 10 years										
	1.0% to 2.0%	2.0% to 3.0%	3.0%	6.00% to 8.00% (CBD); 8.50% to 9.50% (suburbs)	5.0%	9.00% to 12.00% (CBD); 10.00% to 12.00% (suburbs)	6 to 9	60.0% to 70.0%	\$0.15 to \$0.25	3 to 6
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.										
LIFE INSURANCE COMPANY ♦ Forecast Period: 10 years										
	4.5%	3.0%	3.0%	5.75% to 6.50% (CBD); 7.50% to 10.00% (suburbs)	1.0%	6.00% to 7.50% (CBD); 7.50% to 9.00% (suburbs)	9 to 12	65.0% to 75.0%	\$0.25 to \$1.00	2 to 6
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.										
INVESTMENT ADVISOR ♦ Forecast Period: 10 years										
	0.0% to 3.0%	3.0% to 4.0%	2.0% to 3.0%	5.50% to 6.00% (CBD); 8.00% to 10.00% (suburbs)	1.0% to 1.5%	6.00% to 8.25% (CBD); 7.00% to 11.00% (suburbs)	6 to 12	60.0% to 75.0%	\$0.20 to \$0.30	3 to 6
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 holding steady over the next six months.										

Source: Personal survey conducted by PwC during January 2016.

DALLAS OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL	DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		UNDERLYING VACANCY & CREDIT LOSS		REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	PER SQUARE FOOT	MONTHS			
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.	2.0% to 5.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	6.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	1.0% to 3.0%	6.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	5.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	65.0% to 75.0%	6 to 9	65.0% to 75.0%	\$0.10 to \$0.25	3 to 6			
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; believes that this market favors sellers; does not use rent spikes; expects overall cap rates to decrease 10 to 20 basis points over the next six months.	1.0% to 2.5% Years 1 & 2	3.0%	2.5% to 3.0%	7.00% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	2.0% to 2.5%	6.50% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	6.25% to 7.25% (CBD); 7.25% to 7.75% (suburbs)	70.0% to 75.0%	8 to 10	70.0% to 75.0%	\$0.25 to \$0.45	3			
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 are neutral.	0.0% to 2.0% Year 1, 1.0% to 3.0% Year 2	3.0%	3.0%	6.50% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	2.0% to 3.0%	7.50% to 8.50% (CBD); 8.00% to 9.00% (suburbs)	5.25% to 6.00% (CBD); 6.00% to 7.75% (suburbs)	65.0% to 70.0%	6 to 10	65.0% to 70.0%	\$0.20 to \$0.25	6 to 12			
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.	3.0% Years 1 & 2	3.0%		6.25% to 7.25% (CBD)	0.5% to 1.0%	7.25% to 8.50% (CBD)	5.50% to 6.00% (CBD)	65.0% to 75.0%	6 to 9	65.0% to 75.0%	\$0.15 to \$0.25	4 to 6			
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	6.0%	3.0%	3.0%	6.50% to 7.00% (CBD); 6.75% to 7.25% (suburbs)	1.0%	7.00% to 7.50% (CBD); 7.50% to 8.00% (suburbs)	5.50% to 7.00% (CBD); 7.00% to 7.75% (suburbs)	65.0% to 75.0%	9	65.0% to 75.0%	\$0.50	1 to 2			

Source: Personal survey conducted by PwC during January 2016

pwc

DENVER OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		REPLACEMENT MARKETING RESERVE	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	UNDERLYING PER VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS
PRIVATE INVESTMENT FIRM ♦ 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; does not use rent spikes.	3.0% to 4.0% Year 1; 3.0% Year 2	3.0%	3.0%	5.75% to 7.00% (CBD); 6.75% to 8.00% (suburbs)	0.5% to 3.0%	7.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	6.00% to 7.50% (CBD); 6.75% to 8.00% (suburbs)	50.0% to 75.0%	5.0% to 8.0%	\$0.10 to \$0.20	1 to 5		
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 increase 25 to 50 basis points over the next six months.	2.0% to 3.0% Years 1 & 2	2.0% to 3.0%	2.0% to 2.5%	6.00% to 7.00% (CBD); 7.50% to 8.00% (suburbs)	1.0% to 3.0%	6.75% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	5.00% to 6.50% (CBD); 6.50% to 7.50% (suburbs)	60.0% to 75.0%	7.0% to 8.0%	\$0.15 to \$0.25	2 to 4		
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	3.0% to 4.0%	3.0%	3.0%	6.50% to 7.00% (suburbs)	2.0% to 3.0%	7.00% to 8.00% (suburbs)	6.00% to 6.25% (suburbs)	60.0% to 70.0%	1.0% to 2.0%	\$0.20 to \$0.30	3 to 6		
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 favor sellers, does not use rent spikes.	3.0% to 4.0%	2.0% to 3.0%	2.0% to 3.0%	6.00% to 6.50% (CBD); 6.50% to 7.00% (suburbs)	1.5% to 2.0%	6.75% to 7.50% (suburbs)	5.50% to 6.25% (CBD); 6.25% to 6.50% (suburbs)	50.0% to 60.0%	5.0%	Does not use	4 to 6		
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.	3.0%	3.0%	3.0%	7.50% to 8.50% (CBD); 8.50% to 9.50% (suburbs)	3.0% to 5.0%	8.00% to 11.00% (suburbs)	5.00% to 7.00% (CBD); 7.00% to 9.00% (suburbs)	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 January 2016

HOUSTON OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	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			
REAL ESTATE ADVISORS ♦ Forecast Period: 3 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	(8.0%) to (6.0%) Year 1	2.5%	1.5% to 1.8%	6.00% to 6.50% (CBD), 6.25% to 6.75% (suburbs)	1.5% to 2.5%	6.50% to 7.00% (CBD), 7.50% to 8.00% (suburbs)	6.00% to 6.25% (CBD), 6.25% to 6.75% (suburbs)	6.00% to 6.25% (CBD); 6.25% to 6.75% (suburbs)	12 to 18	50.0% to 60.0%	5.0% to 10.0%	\$0.25				
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 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 3 and 4.	0.0% Year 1, 0.0% to 3.0% Year 2	3.0%	3.0%	6.50% to 7.50% (CBD), 7.00% to 8.00% (suburbs)	1.0% to 1.5%	8.00% to 9.00% (CBD), 9.00% to 11.00% (suburbs)	6.00% to 8.00% (CBD), 5.50% to 8.00% (suburbs)	6.00% to 8.00% (CBD); 5.50% to 8.00% (suburbs)	5 to 10	80.0%	5.0% to 10.0%	\$0.15 to \$0.30	3 to 6			
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.	0.0% Years 1 & 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), 6.75% to 8.00% (suburbs)	5.75% to 7.25% (CBD); 6.75% to 8.00% (suburbs)	8 to 10	65.0% to 70.0%	8.0% to 10.0%	\$0.20 to \$0.25	10 to 12			
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	0.0% to 3.0%	3.0%		7.25% to 7.50% (CBD)	1.0% to 2.0%	8.25% to 8.50% (CBD)	6.00% to 6.50% (CBD)	6.00% to 6.50% (CBD)	9 to 18	65.0% to 70.0%	1.0% to 5.0%	\$0.15 to \$0.20	6 to 12			
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 market conditions currently favor sellers; may use a rent spike of 5.0% in years 1 through 3	1.0% to 5.0% Years 1 to 3	2.0% to 3.0%	2.0% to 3.0%	7.00% to 9.50% (CBD), 7.50% to 10.75% (suburbs)	1.0% to 3.0%	8.00% to 11.50% (CBD), 9.00% to 10.75% (suburbs)	6.50% to 7.00% (CBD), 7.00% to 10.00% (suburbs)	6.50% to 7.00% (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 6			

Source: Personal survey conducted by PwC during January 2016

pwc

LOS ANGELES OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		TENANT RETENTION		UNDERLYING VACANCY & CREDIT LOSS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	MONTHS VACANT	PER SQUARE FOOT	MONTHS	PER SQUARE FOOT	MONTHS	PER SQUARE FOOT	MONTHS	PER SQUARE FOOT	MONTHS	
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	3.0% to 7.0% Year 1 4.0% to 7.0% Year 2	3.0%	3.0%	5.00% to 6.00% (CBD); 5.50% to 6.50% (suburbs)	0.5% to 1.0%	5.50% to 7.00% (CBD); 5.00% to 6.00% (suburbs)	4.50% to 5.50% (CBD); 5.00% to 6.00% (suburbs)	6.00% to 7.00% (CBD); 5.50% to 6.50% (suburbs)	5.00% to 6.00% (CBD); 4.50% to 5.50% (suburbs)	6 to 9	70.0% to 80.0%	5.0% to 7.0%	1 to 3	\$0.15 to \$0.25						
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 8.0% in year 2 and 7.0% in year 3; believes market conditions equally favor buyers and sellers.	3.0% to 7.0% Year 1 4.0% to 7.0% Year 2	2.0% to 3.0%	2.0% to 3.0%	6.75% to 7.50% (CBD); 6.00% to 7.00% (suburbs)	1.0% to 1.5%	6.50% to 7.50% (CBD); 6.00% to 7.00% (suburbs)	5.50% to 6.50% (CBD); 5.00% to 6.00% (suburbs)	6.50% to 7.50% (CBD); 6.00% to 7.00% (suburbs)	5.50% to 6.50% (CBD); 5.00% to 6.00% (suburbs)	9 to 12	60.0% to 70.0%	5.0% to 8.0%	3 to 6	Does not use						
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 5.0% in year 5; expects overall cap rates to hold steady over the next six months	0.0% to 5.0%	2.0% to 3.0%	2.0% to 3.0%	7.00% to 8.00% (CBD); 7.00% to 8.00% (suburbs)	2.0%	6.00% to 7.00% (CBD); 5.50% to 6.50% (suburbs)	4.50% to 5.50% (CBD); 4.00% to 5.00% (suburbs)	5.00% to 6.00% (CBD); 4.50% to 5.50% (suburbs)	4.50% to 5.50% (CBD); 4.00% to 5.00% (suburbs)	4 to 6	65.0% to 75.0%	5.0% to 10.0%	4 to 6	\$0.15 to \$0.25						
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 hold steady over the next six months.	3.0% to 6.0% Year 1 3.0% to 5.0% Year 2	3.0%	2.5% to 3.5%	5.00% to 7.00% (CBD); 4.50% to 6.50% (suburbs)	1.0% to 2.0%	6.50% to 7.50% (CBD); 6.00% to 7.00% (suburbs)	4.50% to 5.50% (CBD); 4.00% to 5.00% (suburbs)	5.50% to 6.50% (CBD); 5.00% to 6.00% (suburbs)	4.50% to 5.50% (CBD); 4.00% to 5.00% (suburbs)	5 to 10	65.0% to 75.0%	1.0% to 1.0%	1 to 3	\$0.10 to \$0.15						
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.	3.0% to 4.0% Years 1 & 2	3.0%	2.0% to 3.0%	6.00% to 7.50% (CBD); 5.50% to 7.00% (suburbs)	2.0% to 3.0%	6.50% to 7.50% (CBD); 6.00% to 7.00% (suburbs)	4.50% to 5.50% (CBD); 4.00% to 5.00% (suburbs)	5.50% to 6.50% (CBD); 5.00% to 6.00% (suburbs)	4.50% to 5.50% (CBD); 4.00% to 5.00% (suburbs)	6 to 8	65.0% to 70.0%	4.0% to 6.0%	8 to 12	\$0.20 to \$0.25						

Source: Personal survey conducted by PwC during January 2016

MANHATTAN OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		UNDERLYING PER		REPLACEMENT MARKETING RESERVE	TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	VACANCY & CREDIT LOSS	SQUARE FOOT	MONTHS			
INVESTMENT BANKER ♦ Forecast Period: 11 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.	1.0% to 3.0%	1.0% to 3.0%	1.0% to 3.0%	5.50% to 7.00%	4.0%	6.50% to 8.50%	4.50% to 6.00%	3 to 12	65.0% to 75.0%	5.0% to 10.0%	\$0.15 to \$0.25	3 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; may use a rent spike of 10.0% in year 2	7.0%	3.0%	3.0%	5.00% to 5.50%	4.0%	6.00% to 7.00%	4.00% to 5.00%	7 to 8	70.0% to 75.0%	2.5% to 3.0%	Did not disclose	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 of 5.0% in years 1 through 3.	4.0% to 5.0%	3.0%	3.0%	5.00% to 5.50%	3.8% to 4.0%	5.75% to 6.25%	3.75% to 5.25%	6 to 12	60.0% to 70.0%	0.5% to 1.0%	\$0.10 to \$0.25	3 to 6				
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 2.0%	2.0% to 3.0%	1.0% to 3.0%	6.50% to 8.00%	2.0% to 3.0%	8.00% to 9.00%	6.50% to 8.00%	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	6.0% to 7.0%	3.0%	3.0% to 4.0%	5.25% to 6.00%	1.0% to 3.0%	5.50% to 6.25%	4.00% to 5.00%	5 to 7	65.0% to 75.0%	5.0% to 7.0%	\$0.25 to \$0.50	4 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%	6.25% to 7.25%	4.00% to 5.75%	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 January 2016



NORTHERN VIRGINIA OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES	RESIDUAL	DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS	UNDERLYING PER VACANCY & CREDIT LOSS	REPLACEMENT RESERVE	MARKETING TIME
MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	PER SQUARE FOOT
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 10 to 25 basis points over the next six months; does not use rent spikes.	0.0% to 2.0% Year 1: 1.0% to 2.0% Year 2	2.0% to 2.5%	7.00% to 8.50%	1.5% to 2.0%	7.50% to 8.50%	6 to 15	50.0% to 75.0%	\$0.25 to \$0.50
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	0.0% to 2.0% Year 1: 1.0% to 3.0% Year 2	2.5% to 3.0%	6.75% to 8.50%	1.0% to 3.0%	6.50% to 9.00%	9 to 12	60.0% to 70.0%	\$0.50 to \$0.75
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.	3.0% to 3.0% Years 1 & 2	3.0%	6.50% to 7.00%	2.0% to 3.0%	7.00% to 7.50%	6 to 9	60.0% to 70.0%	\$0.15 to \$0.25
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.	0.0% to 3.0% Year 1: 1.5% to 3.0% Year 2	3.0%	5.75% to 8.50%	1.0% to 4.0%	6.00% to 9.50%	6 to 9	5.25% to 8.00%	\$0.15 to \$0.25
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.	0.0% to 2.0% Years 1 & 2: 0.0% to 2.0% Year 3	0.0%	6.00% to 8.00%	2.0% to 2.5%	6.50% to 9.50%	8 to 12	5.00% to 8.50%	\$0.25 to \$0.50

Source: Personal survey conducted by PwC during January 2016.

PACIFIC NORTHWEST OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		TENANT RETENTION		UNDERLYING VACANCY & CREDIT LOSS		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI		CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT										
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	3.0% to 5.0%	3.0%	3.0%		5.00% to 6.00% (CBD); 5.50% to 6.50% (suburbs)	0.5% to 1.0%	5.50% to 7.00% (CBD); 6.00% to 7.50% (suburbs)	4.50% to 6.00% (CBD); 5.00% to 6.50% (suburbs)		6 to 9	70.0% to 80.0%						\$0.15 to \$0.25	1 to 3		
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	3.0% to 4.0% Years 1 & 2	3.0%	3.0%		5.75% to 6.25% (CBD); 6.25% to 7.25% (suburbs)	3.0% to 4.0%	6.50% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	5.25% to 6.00% (CBD); 6.00% to 7.00% (suburbs)		6 to 9	70.0% to 75.0%						\$0.15 to \$0.25	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; does not use rent spikes, expects overall cap rates to hold steady over the next six months	3.0%	3.0%	3.0%		5.75% to 6.50% (CBD); 6.50% to 7.25% (suburbs)	3.0% to 4.0%	6.50% to 7.25% (CBD); 7.25% to 8.50% (suburbs)	5.50% to 6.00% (CBD); 6.00% to 7.00% (suburbs)		6 to 9	70.0% to 75.0%						\$0.15 to \$0.25	3 to 6		
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	2.5% to 3.0%	2.5% to 3.0%	1.5% to 3.0%		5.00% to 8.00% (CBD); 8.00% to 9.00% (suburbs)	2.0% to 4.0%	8.00% to 10.00% (CBD); 10.00% to 11.00% (suburbs)	5.00% to 9.00% (CBD); 9.00% to 9.00% (suburbs)		6 to 12	50.0% to 75.0%						\$1.00 to \$2.00	6 to 12		
REAL ESTATE SERVICE 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; may use a rent spike of 10.0% in year 1 and 5.0% in year 2, expects overall cap rates to decrease up to 25 basis points over the next six months	5.0% to 10.0% Years 1 & 2	2.5% to 3.0%	2.5% to 3.0%		6.50% to 7.00% (CBD); 7.00% to 8.00% (suburbs)	1.0% to 3.0%	6.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	5.00% to 6.75% (CBD); 6.75% to 7.75% (suburbs)		6 to 9	70.0% to 75.0%						\$0.10 to \$0.20	2 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 capital replacement reserve; 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 7.50% (CBD)	2.5% to 3.0%	6.50% to 8.00% (CBD)	5.00% to 6.00% (CBD); 6.00% to 7.00% (suburbs)		6 to 12	65.0% to 70.0%						\$0.20 to \$0.50	1 to 3		

Source: Personal survey conducted by PwC during January 2016

pwc

PHILADELPHIA OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		UNDERLYING PER		REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	VACANCY & CREDIT LOSS	PER SQUARE FOOT			
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.	2.0% Year 1;															
	2.5% Year 2;	2.5%	2.5%	7.25% to 7.75% (CBD);	3.0%	8.50% to 9.00% (suburbs)	7.50% to 8.25% (CBD);	6.50% to 7.00% (CBD);	65.0% to 70.0%	7	65.0% to 70.0%	7.0% to 9.0%	\$0.25	4 to 6		
	2.5% Year 3		3.0%	8.25% to 8.75% (suburbs)	4.0%		7.75% to 8.25% (suburbs)	8.50% to 9.00% (suburbs)	70.0% to 75.0%	9	70.0% to 75.0%	9.0% to 10.0%				
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 decrease 20 to 40 basis points over the next six months; does not use rent spikes.	1.0% Year 1;															
	2.0% Year 2	3.0%	3.0%	6.00% to 7.00% (CBD);	2.0%	8.50% to 9.00% (suburbs)	7.00% to 8.25% (CBD);	6.00% to 7.25% (CBD);	65.0% to 70.0%	6	65.0% to 70.0%	5.0% to 6.0%	\$0.20	6 to 12		
			3.25%	7.00% to 8.00% (suburbs)			8.25% to 9.00% (suburbs)	7.25% to 8.25% (suburbs)	70.0% to 75.0%	8						
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.	3.0% Years 1 to 3	3.0%	3.0%	7.25% to 8.00% (CBD);	3.0%	8.00% to 8.75% (suburbs)	7.25% to 8.25% (CBD);	6.00% to 8.00% (CBD);	65.0% to 70.0%	6	65.0% to 70.0%	5.0% to 6.0%	\$0.25	3 to 5		
				8.00% to 8.75% (suburbs)			7.75% to 9.00% (suburbs)	7.25% to 8.25% (suburbs)	70.0% to 75.0%							
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.	1.0% to 3.0%	1.0% to 2.0%	2.0% to 2.5%	6.50% to 8.00% (CBD);	2.0% to 2.5%	7.50% to 9.00% (suburbs)	7.50% to 9.00% (suburbs)	6.00% to 8.00% (suburbs)	65.0% to 75.0%	6	65.0% to 75.0%	5.0% to 7.0%	\$0.25 to \$0.50	3 to 6		
				8.00% to 8.50% (suburbs)			8.00% to 8.50% (suburbs)	7.50% to 8.00% (suburbs)	70.0% to 75.0%	15						
PRIVATE EQUITY INVESTOR ♦ Forecast Period: 4 to 6 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% Year 1;	0.0% to 1.5%	0.0% to 0.0%	7.50% to 9.00% (CBD);	1.5% to 3.0%	9.00% to 10.00% (suburbs)	9.00% to 10.00% (suburbs)	7.50% to 9.00% (suburbs)	50.0% to 75.0%	6	50.0% to 75.0%	5.0% to 10.0%	\$0.15 to \$0.50	3 to 6		
	0.0% Year 2			9.00% to 10.00% (suburbs)	3.0%		10.00% to 11.00% (suburbs)	7.50% to 9.00% (suburbs)	70.0% to 75.0%	12						

Source: Personal survey conducted by PwC during January 2016

PHOENIX OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL		DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		UNDERLYING PER		REPLACEMENT RESERVE		MARKETING TIME	
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	VACANCY & CREDIT LOSS	SQUARE FOOT	MONTHS					
PRIVATE INVESTOR ♦ Forecast Period: 2 to 5 years Mainly uses DCF analysis; 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.	2.0% to 3.0% Year 1; 3.0% Year 2	3.0%	3.0%	9.00% (suburbs)	1.0% to 3.0%	10.00% to 12.00% (suburbs)	7.50% to 8.50% (suburbs)		9 to 12	60.0% to 70.0%	7.0% to 15.0%	\$0.20 to \$0.35	3 to 6					
LIFE INSURANCE COMPANY ♦ Forecast Period: 10 to 12 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, may use a rent spike of 6.0% in years 1 through 3.	3.0% to 6.0%	3.0%	3.0%	6.50% to 7.50% (CBD); 7.00% to 8.00% (suburbs)	1.0% to 2.0%	7.00% to 8.50% (suburbs)	6.00% to 8.00% (CBD); 7.00% to 8.50% (suburbs)		6 to 12	60.0% to 70.0%	0.0% to 2.0%	\$0.20 to \$0.25	3 to 6					
PUBLIC REIT ♦ Forecast Period: 5 to 8 years Uses all approaches to value; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve, believes that this market currently favors sellers; expects overall cap rates to hold steady over the next six months.	3.0% to 7.0% Year 1; 3.0% to 6.0% Year 2	1.0% to 3.0%	1.0% to 3.0%	5.50% to 7.00% (CBD); 6.50% to 7.50% (suburbs)	0.5% to 1.0%	7.00% to 10.00% (suburbs)	5.00% to 8.00% (CBD); 7.50% to 8.00% (suburbs)		6 to 9	60.0% to 75.0%	4.0% to 7.0%	\$0.10 to \$0.25	1 to 9					
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% to 5.0% in year 3.	3.0% to 5.0% Year 1; 3.0% to 4.0% Year 2	3.0%	3.0%	6.75% to 7.50% (suburbs)	1.0% to 3.0%	7.50% to 8.00% (suburbs)	6.00% to 6.50% (suburbs)		6 to 9	65.0% to 70.0%	7.0%	\$0.20 to \$0.25	4 to 6					
PRIVATE EQUITY FIRM ♦ Forecast Period: 5 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	3.0% to 5.0% Years 1 to 3	2.0% to 3.0%	2.0% to 3.0%	6.50% to 7.00% (CBD); 6.50% to 8.00% (suburbs)	1.0% to 2.0%	8.00% to 10.00% (CBD & suburbs)	6.00% to 7.00% (in both CBD & suburbs)		6 to 9	65.0% to 80.0%	5.0% to 7.0%	\$0.15 to \$0.20	2 to 6					

Source: Personal survey conducted by PwC during January 2016



SAN DIEGO OFFICE MARKET-SELECT SURVEY RESPONSES First Quarter 2016

	INITIAL-YEAR CHANGE RATES				DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)		VACANCY ASSUMPTIONS		TENANT RETENTION		UNDERLYING VACANCY & CREDIT LOSS		REPLACEMENT RESERVE		MARKETING TIME
	MARKET RENT	EXPENSES	CPI	RESIDUAL CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	MONTHS VACANT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
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 a rent spike of 5.0% in year 3 and 9.0% in year 4 in certain submarkets.	3.0% to 5.0% 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					
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; may use rent spikes in certain submarkets; expects overall cap rates to hold steady over the next six months; does not use rent spikes.	3.0% to 5.0% Years 1 to 3	3.0%	3.0%	6.25% to 8.25% (CBD); 6.75% to 8.75% (suburbs)	0.5% to 1.0%	7.00% to 9.00% in both CBD & suburbs	6.00% to 8.00% (CBD); 6.50% to 8.50% (suburbs)	5 to 10	70.0% to 80.0%	0.0% to 5.0%	\$0.00 to \$0.25	1 to 4					
PUBLIC REAL ESTATE COMPANY ♦ Forecast Period: 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, 7.0% in year 2, and 5.0% in year 3, believes market conditions equally favor buyers and sellers.	4.0% to 6.0% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	6.50% to 7.50% (CBD); 6.50% to 7.50% (suburbs)	1.0% to 1.5%	6.50% to 7.50% (CBD); 6.25% to 7.00% (suburbs)	5.50% to 7.00% in both CBD & suburbs	6 to 12	60.0% to 70.0%	4.0% to 8.0%	Does not use	3 to 6					
PENSION/CORE INVESTOR ♦ 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; expects overall cap rates to hold steady over the next six months.	2.0% to 3.0%	2.0% to 3.0%	2.5%	6.50% to 7.00% (CBD); 7.00% to 7.50% (suburbs)	1.5% to 2.0%	7.00% to 8.00% (CBD); 7.50% to 8.00% (suburbs)	6.00% to 7.00% (CBD); 6.50% to 7.00% (suburbs)	9	60.0% to 70.0%	5.0% to 6.0%	Does not use	6					
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.	3.0% to 4.0%	3.0%	3.0%	5.75% to 6.5% (suburbs)	1.0% to 2.0%	6.50% to 7.00% (CBD); 7.00% to 7.50% (suburbs)	5.25% to 6.50% (CBD); 5.75% to 7.00% (suburbs)	6 to 9	65.0% to 75.0%	1.0% to 1.0%	\$0.15 to \$0.20	3 to 6					

Source: Personal survey conducted by PwC during January 2016

SAN FRANCISCO OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	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			
INVESTMENT 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; does not use rent spikes	4.0% to 5.0% Years 1 & 2	3.0%	2.0% to 3.0%	5.00% to 6.00% (CBD), 6.00% to 7.00% (suburbs)	1.0% to 1.5%	5.75% to 6.50% (CBD), 6.50% to 7.50% (suburbs)	4.00% to 5.00% (CBD), 5.00% to 6.50% (suburbs)	6 to 9	65.0% to 75.0%	3.0% to 5.0%	\$0.20 to \$0.30	3 to 5				
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 25 to 50 basis points over the next six months.	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%	6.00% to 7.50% (CBD), 10.00% (suburbs)	5.00% to 7.00% (CBD), 8.00% to 10.00% (suburbs)	2 to 7	65.0% to 70.0%	5.0% to 10.0%	\$0.10 to \$0.30	2 to 6				
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.	3.0% to 4.0%	0.0% to 3.0%	3.0%	5.00% to 5.50% (CBD), 5.50% to 7.00% (suburbs)	3.0% to 3.5%	6.50% to 7.00% (CBD), 8.00% (suburbs)	4.50% to 5.50% (CBD), 8.00% to 9.00% (suburbs)	10	70.0% to 75.0%	3.0% to 4.5%	Does not use	4 to 6				
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; expects overall cap rates to hold steady over the next six months	3.0% to 5.0% Years 1 to 3	3.0%	3.0%	5.00% to 5.50% (CBD), 5.50% to 6.25% (suburbs)	0.5% to 1.0%	6.00% to 7.50% (CBD), 7.00% (suburbs)	3.50% to 5.50% (CBD), 5.00% to 6.50% (suburbs)	6 to 9	75.0% to 80.0%	2.5% to 5.0%	\$0.15 to \$0.25	1 to 3				
REAL ESTATE COMPANY ♦ Forecast Period: 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 5.0% in year 1	4.0% to 6.0%	2.0% to 3.0%	2.0% to 3.0%	6.00% to 6.50% (CBD), 6.50% to 7.00% (suburbs)	1.0% to 1.5%	5.75% to 6.25% (CBD), 6.75% (suburbs)	4.00% to 5.00% (CBD), 4.50% to 6.00% (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 January 2016



SEATTLE OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES	RESIDUAL	DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS	UNDERLYING VACANCY & CREDIT LOSS	REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	CAP RATE	SELLING EXPENSE	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	PER SQUARE FOOT	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%	5.00% to 6.00% (CBD); 3.0% to 6.50% (suburbs)	0.5% to 1.0%	5.50% to 7.00% (CBD); 6.00% to 7.50% (suburbs)	6 to 9	70.0% to 80.0%	\$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%	5.00% to 8.00% (CBD); 3.0% to 9.00% (suburbs)	2.0% to 4.0%	8.00% to 11.00% (CBD); 9.00% to (suburbs)	6 to 12	50.0% to 75.0%	\$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 hold steady over the next six months, may use a rent spike of 5.0% in year 5	3.0% to 5.0% Years 1 & 2	6.50% to 8.00% in both CBD & suburbs	2.0% to 3.0%	7.00% to 9.00% in both CBD & suburbs	4 to 6	65.0% to 75.0%	\$0.15 to \$0.25	4 to 6
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 5.0%	5.50% to 6.50% (CBD)	2.5% to 3.0%	5.75% to 7.50% (CBD)	5 to 7	55.0% to 70.0%	\$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 currently favor sellers, uses face rents and reflects concessions when they are scheduled to occur.	3.0% to 5.0%	5.25% to 6.75% (suburbs)	1.0% to 2.8%	6.00% to 7.50% (CBD); 6.25% to 7.00% (suburbs)	6 to 9	50.0% to 70.0%	\$0.05 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 currently favor sellers; no longer uses rent spikes.	3.0% to 4.5%	5.50% to 7.25% (suburbs)	3.0% to 4.0%	6.00% to 8.50% (CBD); 7.00% to (suburbs)	6 to 9	70.0% to 75.0%	\$0.15 to \$0.25	3 to 6

Source: Personal survey conducted by PwC during January 2016

SOUTHEAST FLORIDA OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL	DISCOUNT RATE (IRR)		OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS		UNDERLYING PER VACANCY & TENANT RETENTION CREDIT LOSS		REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	VACANCY & CREDIT LOSS	PER SQUARE FOOT	MONTHS	
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, may use a rent spike of 10.0% in year 2.	3.0% Year 1, 3.0% to 10.0% Year 2	2.5% to 3.0%	2.5% to 3.0%	6.50% to 7.50% (CBD); 7.50% to 8.50% (suburbs)	1.5% to 2.0%	8.50% to 9.50% (CBD); 9.50% to 10.00% (suburbs)	5.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	5.00% to 8.00% (CBD); 8.00% to 10.00% (suburbs)	9 to 12	60.0% to 75.0%	6.0% to 8.0%	\$0.50 to \$1.00	2 to 4	
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 decrease 50 to 100 basis points over the next six months, does not use rent spikes	4.0% to 6.0% Years 1 & 2	2.5% to 3.0%	2.5% to 3.0%	4.50% to 6.00% (CBD); 6.00% 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)	5.00% to 6.00% (CBD); 6.00% to 7.00% (suburbs)	4 to 8	50.0% to 80.0%	3.0% to 8.0%	\$0.25 to \$0.50	4 to 8	
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	1.0% to 5.0%	3.0%	3.0%	6.00% to 7.00% (CBD); 7.00% to 8.00% (suburbs)	1.0% to 3.0%	6.50% to 8.00% (CBD); 8.00% to 8.50% (suburbs)	6.00% to 8.00% (CBD); 8.00% to 8.50% (suburbs)	6.00% to 8.00% (CBD); 8.00% to 8.50% (suburbs)	6 to 12	65.0% to 75.0%	7.0% to 11.0%	\$0.10 to \$0.30	3 to 5	
PRIVATE EQUITY INVESTOR ♦ Forecast Period: 3 to 6 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.	0.0% to 2.0% Years 1 & 2	1.0% to 3.0%	1.0% to 3.0%	8.00% to 10.00% (CBD); 10.00% to 10.50% (suburbs)	1.0% to 2.5%	8.50% to 10.00% (CBD); 10.00% to 11.50% (suburbs)	8.00% to 9.50% (CBD); 9.50% to 10.00% (suburbs)	8.00% to 9.50% (CBD); 9.50% to 10.00% (suburbs)	6 to 12	40.0% to 70.0%	7.0% to 13.0%	\$0.20 to \$0.50	3 to 7	
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.	0.0% to 1.0% Year 1, 2.0% to 2.5% Year 2	3.0%	2.5% to 3.3%	7.50% to 8.50% (suburbs)	2.0%	8.00% to 9.50% (suburbs)	7.75% to 8.75% (suburbs)	7.75% to 8.75% (suburbs)	6 to 9	65.0%	5.0%	\$0.20	6 to 12	
PRIVATE ASSET MANAGEMENT ♦ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve is deducted; uses face rents and reflects concessions when they are scheduled to occur; expects overall cap rates to hold steady over the next six months	0.0% to 5.0%	3.0%	2.0% to 3.0%	5.50% to 7.00% (CBD); 7.00% to 8.25% (suburbs)	1.5% to 2.0%	6.75% to 8.25% (CBD); 8.25% to 9.00% (suburbs)	4.50% to 6.50% (CBD); 6.50% to 7.00% (suburbs)	4.50% to 6.50% (CBD); 6.50% to 7.00% (suburbs)	3 to 9	65.0% to 75.0%	5.0% to 7.0%	\$0.10 to \$0.25	2 to 6	

Source: Personal survey conducted by PwC during January 2016



SUBURBAN MARYLAND OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	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	PER SQUARE FOOT	MONTHS		
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%	1.0%	1.0% to 2.0%	7.00% to 8.50%	4.0% to 5.0%	10.00%	7.00% to 18.50%	9 to 12	70.0% to 80.0%	0.0%	Does not use	3 to 9		
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; no longer uses rent spikes.	(2.0%) to 0.0%	2.0% to 3.0%	2.0% to 3.0%	7.00% to 9.75%	2.0% to 3.0%	7.25% to 9.00%	6.75% to 9.00%	6 to 24	.60.0%	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%	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%	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 favor buyers; expects cap rates to increase 100 to 150 basis points over the next six months.	0.0% Years 1 & 2	3.0%	3.0%	8.25% to 9.25%	2.5% to 3.0%	8.50% to 9.50%	8.00% 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% Years 1 & 2	2.0% to 3.0%	2.0% to 3.0%	7.50%	3.0%	8.50% to 9.50%	6.00%	8 to 12	65.0%	1.0% to 3.0%	\$0.25	5		

Source: Personal survey conducted by PwC during January 2016

WASHINGTON, DC OFFICE MARKET-SELECT SURVEY RESPONSES

First Quarter 2016

	INITIAL-YEAR CHANGE RATES				RESIDUAL	DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS		UNDERLYING PER			REPLACEMENT RESERVE	MARKETING TIME
	MARKET RENT	EXPENSES	CPI	CAP RATE	SELLING EXPENSE	FREE & CLEAR	FREE & CLEAR	MONTHS VACANT	TENANT RETENTION	VACANCY	CREDIT LOSS	SQUARE FOOT		MONTHS
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	0.0% Year 1; 2.0% Year 2	3.0%	3.0%	5.50% to 6.00%	2.0%	5.75% to 6.25%	4.75% to 6.00%	3 to 9	65.0% to 75.0%	7.0% to 10.0%		\$0.15 to \$0.25	2 to 4	
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.	0.0% to 1.0% Year 1, 0.0% to 3.0% Year 2	2.0% to 3.0%	2.0% to 3.0%	5.25% to 6.50%	1.0% to 2.0%	5.50% to 7.00%	4.25% to 6.00%	6 to 18	60.0% to 70.0%	0.5% to 1.0%		\$0.25 to \$0.75	3 to 6	
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	3.0% to 4.0% Years 1 & 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	
PENSION FUND 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.	0.0% to 4.0%	3.0%	3.0%	5.00% to 6.50%	1.0% to 2.0%	5.75% to 7.00%	4.25% to 6.50%	6 to 9	70.0%	5.0%		\$0.25	3 to 6	
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	2.0% to 3.0%	3.0%	3.0%	6.00% to 6.50%	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 January 2016

pwc