

TAX YEAR 2019

**MARKET ANALYTICS BOOK
FOR THE
DISTRICT OF COLUMBIA**

**OFFICE OF TAX AND REVENUE
REAL PROPERTY TAX ADMINISTRATION**

Table of Contents

Section	Page(s)
Offices	1-19
Hotels	20-22
Apartments	23-32
Retail	33
Land Sales	34
Maps	35-36

Tax Year 2019

Washington, DC Office Building

Capitalization Rate Study Methodology

Office capitalization rates were derived from arms-length market sales. The stabilized net operating income was derived within the Vision CAMA income capitalization worksheet. Annual Leasing Reports and Income & Expense Statements, from the population of office buildings in the District were reviewed, as well as published resources, to identify market rents and expenses for office buildings of various classifications and locations.

Market rents were applied to the net rentable area of the sales properties, with exceptions and/or adjustments for leases with longer remaining terms. Market expenses were compared to historical expenses of sales properties to determine the most appropriate expense deduction. A deduction was also made for reserve for replacement to account for upcoming replacement of short-lived building components which typically do not occur on an annual basis. Stabilized and trended actual performance of properties was utilized to derive adjustments for miscellaneous income and income items such as parking, storage, and miscellaneous income. Miscellaneous income does not include expense reimbursements.

All of these factors were utilized to derive an estimate of stabilized net operating income for each sale property. The indicated capitalization rate was calculated for each sale property by dividing the stabilized net operating income by the sales price. The population of sale properties, and their indicated capitalization rates, were analyzed to determine capitalization rate trends for office properties in the given tax year.

The results of this study are forwarded to the commercial appraisers, their supervisors and management. Other relevant data is considered and the base capitalization rates for the valuation model are chosen.

Non arms-length sales or sales without an adequate reported history of income and expenses are not included in the capitalization rate study.

TAX YEAR 2019

WASHINGTON, DC OFFICE BUILDING

EFFECTIVE RENT STUDY METHODOLOGY

All information utilized in developing the estimates of a market based effective rent is derived from the lease abstracts filed by office property owners, along with their income and expense information. A separate analysis is performed to develop an indicated effective market rent from each new office space lease in the District for the calendar year. The steps are generally as follows. For each lease, initial base rent, lease term, annual percentage rent increases and size of leased area are all utilized to develop an estimate of total income from base rent over the life of the lease. Secondly, If the tenant is responsible for the payment of any operating expenses during the term of the lease (not including excess expenses over an expense stop) an estimate is made of total rent via expense payments/reimbursements over the term of the lease. This is calculated utilizing the lease abstract, the expense history of the subject property and expected rate of expense increases going forward. This estimate of total expense reimbursement (not including expense stop reimbursements) is added to the total estimated base rent for the term. Concessions (usually in the form of free rent) are deducted from that total. The new total rent estimated is divided by the number of years of the lease and the square footage of the space leased to arrive at an average annual estimate of rent per square foot.

That figure is then adjusted, if necessary, for any amount of leasing costs to be paid by the property owner which fall outside of the typical range of lease-up costs for the market. These lease-up costs include tenant improvements and leasing commissions. This range is determined by a separate lease up cost study.

The result is an annualized per-square-foot number that represents the indicated effective rent for that lease. When this process is completed for all new leases available, the leases are stratified by submarket, including considerations of building class and location. For each group of leases an indicated effective rent is determined by multiple measures of central tendency, including average, median and weighted average. Because OTR is utilizing a previous year's data, those indications are then projected forward by one year, utilizing an estimate of percentage increases in market rent. This results in three measures of projected effective rent for a given class and submarket of office buildings.

The results of this study are forwarded to the commercial appraisers, their supervisors and management. Other relevant data is considered and the base rents for the valuation model are chosen.

Tax Year 2019

Washington, DC Office Building

Capitalization Rate Study Methodology

Office capitalization rates were derived from arms-length market sales. The stabilized net operating income was derived within the Vision CAMA income capitalization worksheet. Annual Leasing Reports and Income & Expense Statements, from the population of office buildings in the District were reviewed, as well as published resources, to identify market rents and expenses for office buildings of various classifications and locations.

Market rents were applied to the net rentable area of the sales properties, with exceptions and/or adjustments for leases with longer remaining terms. Market expenses were compared to historical expenses of sales properties to determine the most appropriate expense deduction. A deduction was also made for reserve for replacement to account for upcoming replacement of short-lived building components which typically do not occur on an annual basis. Stabilized and trended actual performance of properties was utilized to derive adjustments for miscellaneous income and income items such as parking, storage, and miscellaneous income. Miscellaneous income does not include expense reimbursements.

All of these factors were utilized to derive an estimate of stabilized net operating income for each sale property. The indicated capitalization rate was calculated for each sale property by dividing the stabilized net operating income by the sales price. The population of sale properties, and their indicated capitalization rates, were analyzed to determine capitalization rate trends for office properties in the given tax year.

The results of this study are forwarded to the commercial appraisers, their supervisors and management. Other relevant data is considered and the base capitalization rates for the valuation model are chosen.

Non arms-length sales or sales without an adequate reported history of income and expenses are not included in the capitalization rate study.

PLEASE ALLOW THIS EXAMPLE TO BE USED AS A GUIDE TO UNDERSTANDING YOUR APPRAISAL.

CBD, INC. Office Building

December 31, 2015

Potential Gross Income

Office: 198,000 sq. ft. X \$52 \$10,296,000
 Retail: 7,500 sq. ft. X \$65 487,500
 Parking 500,000
 Antenna Lease 30,000

1. Total Potential Gross Income \$ 11,313,500

2. less Vacancy & Collection Loss (7%) - 754,845

3. Effective Gross Income \$ 10,558,655

Expenses

Operating:

4 Office Area (24%, rounded) \$ 2,345,944

5. Retail Area (25%, rounded) 113,344

6. Parking & Antenna (25%, rounded) 132,500

7. Reserves for Replacements (2% of PGI) 226,270

8. Total Expenses - \$ 2,818,058

9. Net Operating Income \$7,740,597

10. Class 'A' Property Capitalization Rate **6.00 %**

11. Indicated Market Value \$129,009,950

SSL		9999 8888		Internal ID		183145		Sales Information			Commercial Data Elements			2017											
Location		9999 9TH ST NW		Sale Date		10-28-2013		Q/U		V/I		Sale Price		125,000,000		0 Typical									
Current Owner		CDB, INC		Year Built		2005		Total Appraised Parcel Value		129,009,950		Wall Height		12. 7.6098		INCOME VALUATION Washington, DC 12/31/2015 10:00:17 AM									
Washington DC		20002		Additional Owners:																					
ECONOMIC INCOME VALUATION																									
Leaseable Area Summary				Cap Rate				Income				Income Value				Notes									
Ground Level		7,500		Cap Code		OA1		Gross Income		11,313,500		Income Value		11		129,009,950									
Lower level		0		Cap Adjust		A		Vacancy Allowance		754,845		Other Adjust		0											
Upper Level		198,000		Cap Rate		10		Expense Allowance		2,818,057															
				Rent ID		NBHD		Net Income		7,740,597		Total Income Value		129,009,950											
Total Leaseable Area		205,500		001		10						Value per SF/Unit		628											
#	Bldg #	Sect #	Style	Adj Table	OCC	SF/Unit	Fir Lev	Base Rate	Use Adj	Loc Adj	Rent SF/Unit	Gross Rent	Vac %	Vac Allowance	EGI	EXP %	EXP /SF	Expenses	NOI						
1	1	1	OF OFFICE CL	3	0	198000	UL	52.00	3	3	52.00	10,296,000	3	0.07	720,720	9,575,280	3	0.24	2,345,944	4	7,229,336				
2	1	1	O OFF RETAI	3	7500	7500	GL	65.00	3	3	65.00	487,500	3	0.07	34,125	453,375	3	0.25	113,344	5	340,031				
3	1	1	O OFF PARKI	6	0	0	LL	0.00	3	3	500000.0	500,000.0	3	0.00	0	500,000	3	0.25	125,000	6	375,000				
4	1	1	O OFF MISC I	6	0	0	UL	0.00	3	3	30000.00	30,000	3	0.00	0	30,000	3	0.25	7,500	7	22,500				
5	1	1	O OFF RESE	6	0	0	GL	0.00	3	3	0	0	3	0.00	0	0	3	0.00	226,270	7	-226,270				
															1	2	3	8	9						
															11,313,500	754,845	10,558,655	2,818,058	7,740,597						
															205,500										

Tax Year 2019

Washington DC, Office Building

Base Capitalization Rates by Tax Year

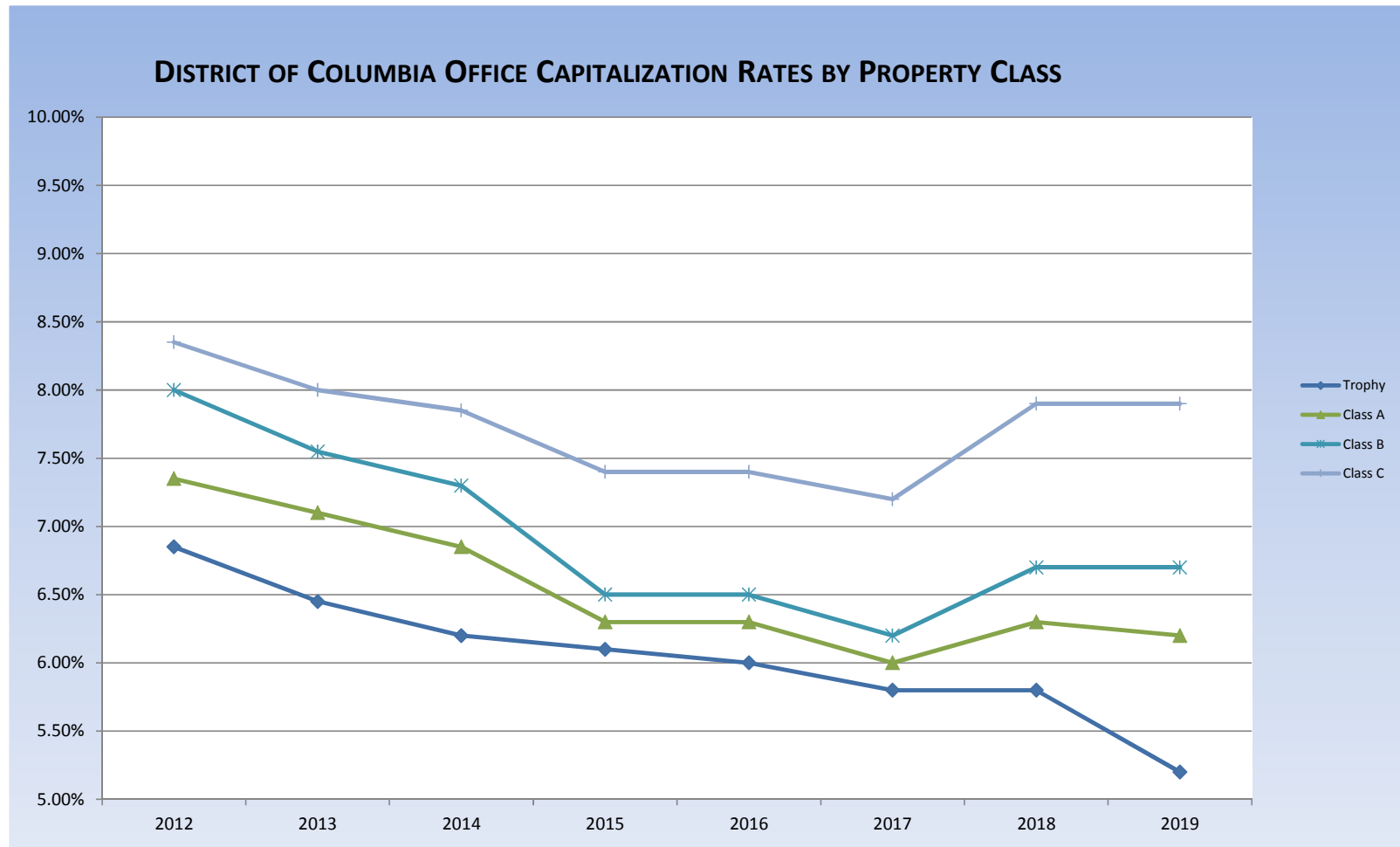
The base overall rates below are tax loaded.

<u>Class</u>	<u>TY</u> <u>2012</u>	<u>TY</u> <u>2013</u>	<u>TY</u> <u>2014</u>	<u>TY</u> <u>2015</u>	<u>TY</u> <u>2016</u>	<u>TY</u> <u>2017</u>	<u>TY</u> <u>2018</u>	<u>TY</u> <u>2019</u>
Trophy	6.85%	6.45%	6.20%	6.10%	6.00%	5.80%	5.80%	5.20%
Class A	7.35%	7.10%	6.85%	6.30%	6.30%	6.00%	6.30%	6.20%
Class B	8.00%	7.55%	7.30%	6.50%	6.50%	6.20%	6.70%	6.70%
Class C	8.35%	8.00%	7.85%	7.40%	7.40%	7.20%	7.90%	7.90%

Tax Year 2019

Washington DC, Office Building

Base Capitalization Rates by Tax Year



Tax Year 2019

Washington, DC Office Building

Capitalization Rate Study Results

Building Class	SSL	Add'l Lots	Property Address	Sale Date	TY 2019 Indicated Capitalization	Sale Notes
Trophy	0317 0841	317-0842	1101 New York Ave NW	7/7/2017	4.96	LEASEHOLD ON SMALL PORTION OF LAND
Trophy	0185 0830	185-7000, 185-7002	900 16th St NW	7/5/2017	5.08	
Trophy	0107 0077		1875 K St NW	1/9/2017	5.50	1031 exchange for buyer only
A	0537 0810		425 3rd St SW	2/17/2017	5.78	
A	0538 0874		300 E St SW	7/6/2017	6.17	
A	0669 0166		64 New York Avenue	12/22/2017	5.73	Recent Resubdivision
A	0184 0856		1620 L St NW	3/22/2017	6.00	
A	0140 0095		1800 M St NW	10/16/2017	5.33	
A	0674 0854		1050 1st St NE	12/29/2017	5.66	
A	0162 0100		1155 Connecticut Ave NW	6/19/2017	5.49	
A	0100 0116	100-118, 100-119	1120 20th St NW, 1155 21st, 1133 21st	3/6/2017	6.80	3 Building Sale
A	0252 0079		1325 G St NW	4/28/2017	5.95	
A	0140 0090		1111 19th St NW	9/20/2017	5.23	Outstanding concessions
A	0626 0079		601 New Jersey Ave NW	12/15/2017	5.99	
A	0386 0001		901 D St SW	10/18/2017	10.41	High Vacancy Property-Appr 50% in Year prior to sale
A	0008 0811		600 New Hampshire Ave NW	4/5/2017	6.59	
A	0252 0060		1341 G St NW	4/28/2017	6.24	
A	0456 2063	456-2064 thr 2068	575 7th St NW	2/22/2017	6.29	Condo-portion of 2-5 floors otherwise owned
B	0214 0103		1133 15th St NW	10/4/2017	6.49	
B	0247 0092		1101 14th St NW	11/2/2017	6.19	
C	6172 0814		4049 S Capitol St NW	5/11/2017	7.98	
C	0494 0859		501 School St SW	7/12/2017	8.01	Unstabilized, Poor condition

*This is an overall loaded rate which includes the effective tax rate of 1.85%.

Class	Overall Rate-All Sales		Overall Rate-Stabilized		Overall Rate-Less Stabilized	
	AVERAGE	MEDIAN	AVERAGE	MEDIAN	AVERAGE	MEDIAN
TROPHY	5.18	5.08	5.18	5.08	N/A	N/A
A	6.24	5.99	6.21	5.87	6.37	6.29
B	6.34	6.34	6.34	6.34	N/A	N/A
C	8.00	8.00	7.98	7.98	8.01	8.01

Chosen Cap Rate
5.20
6.20
6.70
7.90

*Office sales which are determined to be arms-length transfers in which the income was the primary motivation for the purchase, are included in this analysis.

Tax Year 2019

Washington, DC Office Building

Sales Per Square Foot

Building Class	SSL	Add'l Lots	Property Address	Sale Date	Indicated Sales Price per Square Foot	Sale Notes
Trophy	0317 0841	317-0842	1101 New York Ave NW	7/7/2017	\$ 1,026	LEASEHOLD ON SMALL PORTION OF LAND
Trophy	0185 0830	185-7000, 185-7002	900 16th St NW	7/5/2017	\$ 1,230	
Trophy	0107 0077		1875 K St NW	1/9/2017	\$ 857	1031 exchange for buyer only
A	0537 0810		425 3rd St SW	2/17/2017	\$ 654	
A	0538 0874		300 E St SW	7/6/2017	\$ 593	
A	0669 0166		64 New York Avenue	12/22/2017	\$ 525	Recent Resubdivision
A	0184 0856		1620 L St NW	3/22/2017	\$ 587	
A	0140 0095		1800 M St NW	10/16/2017	\$ 780	
A	0674 0854		1050 1st St NE	12/29/2017	\$ 592	
A	0162 0100		1155 Connecticut Ave NW	6/19/2017	\$ 683	
A	0100 0116	100-118, 100-119	1120 20th St NW, 1155 21st, 1133 21st	3/6/2017	\$ 523	3 Building Sale
A	0252 0079		1325 G St NW	4/28/2017	\$ 660	
A	0140 0090		1111 19th St NW	9/20/2017	\$ 812	Outstanding concessions
A	0626 0079		601 New Jersey Ave NW	12/15/2017	\$ 676	
A	0386 0001		901 D St SW	10/18/2017	\$ 313	High Vacancy Property-Appr 50% in Year prior to sale
A	0008 0811		600 New Hampshire Ave NW	4/5/2017	\$ 474	
A	0252 0060		1341 G St NW	4/28/2017	\$ 537	
A	0456 2063	456-2064 thr 2068	575 7th St NW	2/22/2017	\$ 693	Condo-portion of 2-5 floors otherwise owned
B	0214 0103		1133 15th St NW	10/4/2017	\$ 489	
B	0247 0092		1101 14th St NW	11/2/2017	\$ 523	
C	6172 0814		4049 S Capitol St NW	5/11/2017	\$ 379	
C	0494 0859		501 School St SW	7/12/2017	\$ 247	Unstabilized, Poor condition

Class	Overall Rate-All Sales		Overall Rate-Stabilized		Overall Rate-Less Stabilized	
	AVERAGE	MEDIAN	AVERAGE	MEDIAN	AVERAGE	MEDIAN
TROPHY	\$ 1,037.78	\$ 1,026.40	\$ 1,037.78	\$ 1,026.40	N/A	N/A
A	\$ 606.91	\$ 593.37	\$ 616.64	\$ 623.89	\$ 567.98	\$ 537.34
B	\$ 505.91	\$ 505.91	\$ 505.91	\$ 505.91	N/A	N/A
C	\$ 313.00	\$ 313.00	\$ 378.95	\$ 378.95	\$ 247.05	\$ 247.05

*Office sales which are determined to be arms-length transfers in which the income was the primary motivation for the purchase, are included in this analysis.

Tax Year 2019

Washington, DC Office Building

Assessment to Sales Ratios

Class		Assessment to Sales Ratio	
		AVERAGE	MEDIAN
Trophy	All	99.62%	97.73%
A	All	101.29%	96.65%
B	All	94.65%	94.65%
C	All	101.23%	101.23%
All Classes	All	100.41%	96.93%

Tax Year 2019
Washington, DC Office Building
Market Rent Analysis for Above Grade Office Space

Property Type		Indicated Effective Rent from Study		Effective Rent Projected One Year Forward*		Chosen Rent	
		Effective Rent		Effective Rent		Effective Rent	
<u>Downtown</u>							
Trophy							
Average		\$72.60		\$73.33		\$71.00	
Median		\$69.83		\$70.52			
Weighted Average		\$74.01		\$74.75			
A							
Average		\$58.66		\$59.25		\$57.00	
Median		\$56.84		\$57.41			
Weighted Average		\$59.49		\$60.09			
B							
Average		\$49.16		\$49.65		\$47.00	
Median		\$47.47		\$47.94			
Weighted Average		\$47.05		\$47.53			
C							
Average		\$43.71		\$44.15		\$41.00	
Median		\$40.06		\$40.46			
Weighted Average		\$42.09		\$42.51			
<u>Outlying Areas</u>							
Trophy							
Average						\$ 62.00	
Median							
Weighted Average							
A							
Average		\$ 74.11	\$ 74.85	\$ 54.00			
Median		\$ 61.08	\$ 61.69				
Weighted Average		\$ 54.10	\$ 54.64				
B							
Average		\$ 50.60	\$ 51.10	\$ 44.00			
Median		\$ 46.47	\$ 46.93				
Weighted Average		\$ 47.06	\$ 47.53				
C							
Average		\$ 38.37	\$ 38.75	\$ 38.00			
Median		\$ 38.30	\$ 38.68				
Weighted Average		\$ 39.94	\$ 40.34				

*Rents projected forward by 1%

Tax Year 2019
Washington, DC Office Building
Lease-Up and Concession Analysis for Above Grade Office Space

Property Type		Total Lease-ups per Foot per Annum				Months Free Rent per Year of Lease	Total Concessions per Square Foot per Annum
		Central Tendency		Typical Range			
Downtown							
Trophy							
Average		\$8.81	\$3.42	to	\$14.20	\$0.84	\$4.02
Median		\$9.34				\$0.92	\$4.04
A							
Average		\$7.00	\$1.33	to	\$12.68	\$0.67	\$2.94
Median		\$6.41				\$0.65	\$2.82
B							
Average		\$5.96	\$0.00	to	\$13.33	\$0.49	\$1.97
Median		\$4.39				\$0.50	\$1.78
C							
Average		\$3.17	\$0.00	to	\$6.50	\$0.20	\$0.60
Median		\$2.49				\$0.00	\$0.00
Outlying Areas							
Trophy							
Average		N/A				N/A	N/A
Median		N/A				N/A	N/A
A							
Average		\$6.27	\$2.34	to	\$10.20	\$0.86	\$2.70
Median		\$6.72				\$1.04	\$3.33
B							
Average		\$5.75	\$1.64	to	\$9.86	\$0.67	\$1.78
Median		\$5.39				\$0.66	\$1.60
C							
Average		\$4.19	\$0.50	to	\$7.88	\$0.45	\$1.24
Median		\$4.25				\$0.38	\$0.97

Tax Year 2019
Washington, DC Office Building
Market Rent Analysis for Above Grade Retail Space

Space Type	Indicated Effective Rent from Study	Effective Rent Projected One Year Forward*	Chosen Rent
	Effective Rent	Effective Rent	

CBD			
Average	\$64.34	\$64.99	\$65.00
Median	\$62.06	\$62.68	
Weighted Average	\$63.68	\$64.31	
Outlying Including some Downtown (Not CBD)			
Average	\$53.08	\$53.61	\$50.00
Median	\$49.97	\$50.47	
Weighted Average	\$48.14	\$48.62	

*Rents Projected Forward by 1%

Tax Year 2019
Washington, DC Office Building
Lease-Up and Concession Analysis for Above Grade Retail Space

Property Type		Total Lease-ups per Foot per Annum		Months Free Rent per Year of Lease	Total Concessions per Square Foot per Annum
		Central Tendency	Typical Range		
CBD	Average	\$4.20	\$0.00 to \$9.44	0.28	\$1.46
	Median	\$1.87		0.00	\$0.00
Outlying Including Downtown (Not CBD)	Average	\$2.67	\$0.00 to \$5.85	0.35	\$0.39
	Median	\$2.67		0.00	\$0.00

Tax Year 2019
Washington, DC Office Building
Market Rent Analysis for Below Grade Space

Property Type	Indicated Effective Rent from Study	Effective Rent Projected One Year Forward*	Chosen Rent
	Effective Rent	Effective Rent	

All			
Average	\$36.38	\$36.74	\$35.00
Median	\$35.20	\$35.56	\$50 for CBD Retail
Weighted Average	\$43.43	\$43.86	
Downtown			
Average	\$36.71	\$37.08	\$35.00
Median	\$35.20	\$35.56	\$50 for CBD Retail
Weighted Average	\$44.82	\$45.26	
Outlying			
Average	\$35.43	\$35.79	\$35.00
Median	\$35.58	\$35.94	
Weighted Average	\$37.94	\$38.32	

*Rents Projected Forward by 1%

Tax Year 2019
Washington, DC Office Building
Lease-Up and Concession Analysis for Below Grade Space

Property Type		Total Lease-ups per Foot per Annum		Months Free Rent per Year of Lease	Total Concessions per Square Foot per Annum
		Central Tendency	Typical Range		
<u>Downtown</u>					
Downtown					
Average		\$2.99	\$0.00 to \$7.51	0.33	\$1.09
Median		\$1.70		0.20	\$0.95
Outlying					
Average		\$2.90	\$0.89 to \$4.91	0.60	\$1.49
Median		\$2.88		0.37	\$1.00

Tax Year 2019

Washington, DC Office Building

CY 2016 Secondary Income Summary

		Storage Income		Parking Income		Other Income	RE Tax Reimb.	Other Reimb.
		Per Square Foot of Total NLA	Per Square Foot of Storage Space	Per Square Foot of Total NLA	Per Parking Space	Per Square Foot of Total NLA	Per Square Foot of Total NLA	Per Square Foot of Total NLA
All Trophy								
	Average	\$0.23	\$19.82	\$2.24	\$3,039.70	\$1.05	\$10.71	\$10.43
	Median	\$0.17	\$17.19	\$2.08	\$2,951.95	\$0.19	\$10.79	\$9.91
All Class A								
	Average	\$0.17	\$17.98	\$2.09	\$2,643.16	\$0.24	\$3.88	\$3.94
	Median	\$0.07	\$14.19	\$1.92	\$2,585.26	\$0.08	\$2.67	\$1.75
All Class B								
	Average	\$0.23	\$11.95	\$1.59	\$2,115.54	\$0.57	\$1.87	\$1.37
	Median	\$0.02	\$7.10	\$1.30	\$1,936.26	\$0.12	\$1.25	\$0.74
All Class C								
	Average	\$0.06	\$5.23	\$0.84	\$2,001.70	\$0.31	\$0.93	\$0.72
	Median	\$0.00	\$0.00	\$0.00	\$1,792.96	\$0.16	\$0.77	\$0.48
All Classes								
	Average	\$0.19	\$14.81	\$1.77	\$2,457.52	\$0.48	\$3.45	\$3.19
	Median	\$0.04	\$10.49	\$1.65	\$2,279.65	\$0.11	\$1.56	\$1.16

All figures are derived from the calendar year 2016 income and expense forms filed by property owners.
For purposes of this report, Net Rentable Area includes all finished leasable space (ie, office, retail, etc.)
For purposes of this report, Net Rentable Area does not include unfinished space such as storage and parking.

Tax Year 2019

Washington, DC Office Buildings

Reported Stabilized Vacancy Rates

Classification	Measure	Stabilized Vacancy Percentage
----------------	---------	-------------------------------

Trophy	Average	5.9834%
	Median	3.4563%
A	Average	6.1904%
	Median	0.9301%
B	Average	5.7186%
	Median	0.5370%
C	Average	4.1741%
	Median	0.0000%
All	Average	5.3903%
	Median	0.0522%

Tax Year 2019

Washington, DC Office Building

CY 2016 Expense and Vacancy Detail

(All results are derived from Calendar Year 2016 Income and Expense data as supplied by property owners via Income and Expense forms.)

		Stabilized Vacancy as a % of PGI	Total Mgmt and Admin		Total Utilities		Total Repairs, Maint., contracts	
			Per Square Foot of NLA	As % of Total Actual Income	Per Square Foot of NLA	As % of Total Actual Income	Per Square Foot of NLA	As % of Total Actual Income
All Trophy	Average	5.98%	\$3.95	5.63%	\$2.62	3.82%	\$6.63	9.60%
	Median	3.46%	\$3.65	5.56%	\$2.52	3.91%	\$6.44	8.96%
All Class A	Average	6.19%	\$3.09	5.88%	\$2.62	5.05%	\$5.98	11.33%
	Median	0.93%	\$2.72	5.22%	\$2.66	4.93%	\$5.75	10.73%
All Class B	Average	5.72%	\$3.45	7.89%	\$2.71	6.52%	\$6.09	14.50%
	Median	0.54%	\$2.81	6.58%	\$2.79	6.37%	\$5.86	13.68%
All Class C	Average	4.17%	\$3.90	8.03%	\$3.69	7.81%	\$8.15	17.98%
	Median	0.00%	\$2.34	6.42%	\$2.71	7.17%	\$5.64	16.84%
All Classes	Average	5.39%	\$3.42	6.94%	\$2.75	5.80%	\$6.28	13.10%
	Median	0.05%	\$2.85	5.85%	\$2.72	5.70%	\$5.93	12.07%

		Total Variable Expenses		Total Fixed Expense		Real Estate Tax Expense	
		Per Square Foot of NLA	As % of Total Actual Income	Per Square Foot of NLA	As % of Total Actual Income	Per Square Foot of NLA	As % of Total Actual Income
All Trophy	Average	\$13.23	19.05%	\$0.76	1.08%	\$13.63	19.56%
	Median	\$12.75	18.46%	\$0.54	0.82%	\$15.00	20.97%
All Class A	Average	\$11.67	22.26%	\$0.66	1.08%	\$9.78	18.62%
	Median	\$11.60	21.25%	\$0.46	0.91%	\$10.22	18.89%
All Class B	Average	\$12.18	28.91%	\$0.95	1.66%	\$6.93	16.39%
	Median	\$11.71	27.72%	\$0.55	1.27%	\$7.48	16.99%
All Class C	Average	\$15.27	33.82%	\$0.71	1.96%	\$4.67	13.64%
	Median	\$11.81	33.36%	\$0.50	1.33%	\$5.20	14.30%
All Classes	Average	\$12.37	25.84%	\$0.80	1.41%	\$8.47	17.32%
	Median	\$11.85	23.99%	\$0.52	1.05%	\$8.41	17.84%

All figures are from the calendar year 2016 income and expense forms filed by property owners.

For purposes of this report, Net Leaseable Area includes all finished leasable space (ie, office, retail, etc.) but not unfinished space such as storage and parking.

Tax Year 2019

Washington, DC Office Building

CY 2016 Expense Projections

(All results are derived from Calendar Year 2016 Income and Expense data as supplied by property owners via Income and Expense forms.)

		Total Reported Expenses				Total Projected Expenses			
		Per Square Foot of NLA	As % of Total Actual Income	As % of PGI	As % of EGI	Per Square Foot of NLA	As % of Total Actual Income	As % of PGI	As % of EGI
All Trophy	Average	\$13.96	20.13%	19.40%	20.86%	\$14.24	20.33%	19.60%	21.07%
	Median	\$13.62	19.65%	19.00%	20.43%	\$13.89	19.84%	19.19%	20.63%
All Class A	Average	\$12.28	23.34%	22.05%	23.70%	\$12.52	23.57%	22.26%	23.94%
	Median	\$12.09	22.32%	21.12%	22.71%	\$12.33	22.54%	21.33%	22.94%
All Class B	Average	\$12.97	30.57%	28.74%	30.90%	\$13.23	30.87%	29.03%	31.21%
	Median	\$12.40	29.29%	27.28%	29.33%	\$12.65	29.58%	27.55%	29.62%
All Class C	Average	\$16.44	35.79%	33.36%	35.87%	\$16.77	36.14%	33.69%	36.22%
	Median	\$12.64	35.29%	32.85%	35.32%	\$12.89	35.64%	33.17%	35.67%
All Classes	Average	\$13.12	27.25%	25.69%	27.62%	\$13.38	27.52%	25.94%	27.89%
	Median	\$12.49	25.40%	24.08%	25.90%	\$12.74	25.65%	24.32%	26.15%

All figures are based on the calendar year 2016 income and expense forms filed by property owners.

For purposes of this report, Net Leaseable Area includes all finished leasable space (ie, office, retail, etc.) but not unfinished space such as storage and parking.
 Calendar year 2016 income for each property was projected forward by 1%. Calendar year 2016 expense for each property was projected forward by 2%.

Tax Year 2019 Washington, DC Hotel Properties Sales Listing

SSL	Multi Lot	Other Lots	Hotel Name	Address			Zip Code	Recorded Sale Date	Recorded Sale Price	Number of Rooms	Full Sales Price	Full Sales Price per Room	Sale Notes
0377 0846	Y		Courtyard Marriott	900	F St	NW	20004	3/21/2017	\$ 80,750,000	188	\$ 82,000,000	\$436,170	1
0514 0869	Y		Homewood Suites	465	New York Ave	NW	20001	2/9/2017	\$ 50,447,000	163	\$ 67,200,000	\$412,270	1
0671 0027			Capitol Point Hyatt Place	33	New York Ave	NE	20002	6/26/2017	\$ 51,350,000	200	\$ 56,700,000	\$283,500	1
2528 0307			Normandy	2118	Wyoming Ave	NW	20008	7/18/2017	\$ 15,500,000	75	\$ 22,500,000	\$300,000	1
2537 0801	Y		Taft Bridge Inn	2007	Wyoming Ave	NW	20009	2/27/2017	\$ 3,324,000	12	\$ 3,324,000	\$277,000	2
0701 0872	Y		*Residence Inn by Marriott	1233	1st St	SE	20003	3/16/2017	\$ 42,911,000	170	\$ 42,911,000	\$252,418	2
0248 0812			**Hamilton Hotel DC	1001	14th St	NW	20005	9/12/2017	\$ 152,150,000	318	\$ 152,150,000	\$478,459	1
0214 0854			***The Madison	1177	15th St	NW	20005	9/22/2017	\$ 72,500,000	353	\$ 111,800,000	\$316,714	1

* Per CoStar, sale price quoted was believed not to include any FF&E

**Hotel removed affiliation with IHG and removed the Crown Plaza brand after sale

***Hotel to be rebranded after sale-from Loews to Hilton

Sale Notes	1		Going Concern
	2		Real Estate Only

Tax Year 2019

Washington, DC Hotel Properties

Key Performance Data

		Key Data						On Annual Basis													
								NET OPERATING INCOME		Base Mgmt Fee		Incentive Mgmt Fee		Franchise Fee		Replacement Reserves		Real Estate Taxes		FF and E Value	
Hotel Class	Measure	Number of Hotels	Total # Guest Rooms	# Parking Spaces	Average Daily Room Rate	Occupancy Rate	RevPAR	As % of Total Revenue	Per Room	As % of Total Revenue	Per Room	As % of Total Revenue	Per Room	As % of ROOM Revenue	Per Room	As % of Total Revenue	Per Room	As % of Total Revenue	Per Room	As % of Total Revenue	Per Room
All	Total	160	29,170																		
	Average		247.20	83.70	\$207.21	77.99%	\$165.90	36.62%	\$26,567	2.55%	\$2,074	0.37%	\$301	2.17%	\$1,211	2.65%	\$2,219	5.55%	\$4,005	16.86%	\$12,332
	Median		196.00	45.00	\$199.50	80.00%	\$161.30	39.42%	\$27,999	2.97%	\$1,875	0.00%	\$0	0.00%	\$0	3.80%	\$2,208	5.28%	\$3,792	10.65%	\$8,157
Luxury	Total	21	4,903																		
	Average		306.44	54.18	\$373.00	72.25%	\$266.53	23.05%	\$35,750	2.64%	\$4,105	0.61%	\$781	0.82%	\$821	2.97%	\$4,569	5.85%	\$7,222	24.71%	\$37,066
	Median		281.50	23.00	\$353.50	74.19%	\$265.73	26.85%	\$37,439	2.97%	\$3,736	0.00%	\$0	0.00%	\$0	4.00%	\$4,244	5.22%	\$6,346	14.47%	\$20,663
Upper Upscale	Total	54	15,266																		
	Average		324.81	99.26	\$203.89	79.57%	\$168.26	36.20%	\$28,113	2.83%	\$2,225	0.45%	\$378	0.78%	\$537	3.08%	\$2,560	4.86%	\$3,818	13.34%	\$9,985
	Median		230.00	45.00	\$206.00	81.50%	\$165.22	38.51%	\$28,457	2.97%	\$2,189	0.00%	\$0	0.00%	\$0	4.00%	\$2,765	4.96%	\$3,603	9.56%	\$8,209
Upscale	Total	35	5,587																		
	Average		174.59	48.21	\$184.20	77.10%	\$152.09	41.42%	\$25,333	2.79%	\$1,712	0.03%	\$18	3.09%	\$1,755	2.19%	\$1,323	6.45%	\$3,787	14.21%	\$7,648
	Median		178.50	51.00	\$199.00	79.34%	\$157.65	49.00%	\$29,957	3.00%	\$1,853	0.00%	\$0	2.19%	\$655	3.00%	\$1,550	5.99%	\$4,110	8.88%	\$5,466
Upper Midscale	Total	14	1,849																		
	Average		184.90	97.00	\$170.57	79.67%	\$138.79	43.52%	\$25,548	2.24%	\$1,309	0.25%	\$132	5.34%	\$3,003	4.08%	\$2,403	6.17%	\$3,466	14.28%	\$7,834
	Median		147.00	64.50	\$169.33	82.20%	\$129.40	44.73%	\$22,661	2.93%	\$1,518	0.00%	\$0	5.48%	\$2,480	3.90%	\$2,366	6.25%	\$3,443	11.49%	\$4,955
Midscale	Total	7	748																		
	Average		124.67	203.00	\$105.26	71.17%	\$90.24	34.00%	\$14,491	1.55%	\$701	0.39%	\$166	3.81%	\$1,307	0.53%	\$64	5.50%	\$1,927	29.08%	\$4,842
	Median		105.00	110.00	\$117.29	76.00%	\$98.31	32.77%	\$16,208	0.62%	\$239	0.00%	\$0	4.90%	\$1,549	0.00%	\$0	3.96%	\$1,545	0.00%	\$0
Economy	Total	7	764																		
	Average		127.33	74.50	\$88.67	88.50%	\$81.43	48.43%	\$14,854	1.10%	\$431	1.19%	\$416	4.83%	\$1,634	1.26%	\$326	3.07%	\$895	27.83%	\$5,857
	Median		113.50	46.50	\$92.00	91.50%	\$93.50	42.89%	\$11,910	0.00%	\$0	0.00%	\$0	5.52%	\$1,813	0.00%	\$0	2.93%	\$793	27.34%	\$5,465

Based on data provided by hotel property owners for the calendar year 2016 reporting period.
Duplicate Data, Incomplete Filings and Filings for Unstabilized Properties were not included in this analysis.

Tax Year 2019 Washington, DC Hotel Cap Rate Matrix

Segment	OTR TY 2018 Adjusted	OTR TY 2019 Unadjusted.	OTR TY2019 Adjusted	Change
Ultra Luxury	6.80	6.45	6.80	No Change
Luxury	6.95	6.60	6.95	No Change
Full Service	7.15	6.80	7.15	No Change
Select Service	7.80	7.45	7.80	No Change
Limited Service	7.85	7.50	7.85	No Change
Economy and Motel	7.85	7.50	7.85	No Change

*Includes Extended Stay Hotels within the appropriate Class Range

The 35 basis point difference between unadjusted and adjusted rate is the net result of adding the effective tax rate (+1.85) and reducing the unadjusted rate to remove FFE and BEV (-1.50) thereby producing loaded cap rate for the real estate only.

Tax Year 2019 Washington, DC Apartment Capitalization Rate Study

Apartment Type	Indicated Cap Rate		Range
	Median	Average	
HR1	4.67%	4.67%	4.67 - 4.67
HR2	4.81%	4.67%	3.89 - 5.17
HR3	N/A	N/A	N/A
LR1	5.30%	5.25%	4.84 - 5.59
LR2	6.01%	5.84%	3.66 - 7.06
LR3	6.72%	6.79%	5.47 - 7.75

OTR Chosen Base Cap Rates	
Apartment Type	Cap Rate
HR1	4.80
HR2	5.00
HR3	6.60
LR1	5.40
LR2	6.10
LR3	7.00

Apartment Type	Key
HR1	High Rise Area 1
HR2	High Rise Area 2
HR3	High Rise Area 3
LR2	Low Rise Area 2
LR3	Low Rise Area 3

See Maps for delineation of apartment cap rate areas

LIHTC Affordable Housing
Add .15 basis points to selected cap rates above

Building Class	SSL	ADDRESS	SALE DATE	2019 Indicated Cap Rates
HR1	0028-2378-2574	950 24TH Street NW	10/20/2017	4.67%
HR2	914-54,55, 983-855	518 9th, 816 E, 1114 F Street NE	7/12/2017	3.89%
HR2	0526 0026	1011 4TH St NW	10/5/2017	4.46%
HR2	1077 0130	1600 PENNSYLVANIA AVE SE	2/17/2017	5.17%
HR2	2674 0854	3237 Hiatt Pl NW	12/6/2016	5.15%
LR1	0509E 0806	1643 NEW JERSEY AVE NW	6/12/2017	5.30%
LR1	2548 0043	1807 BILTMORE ST NW	8/7/2017	5.06%
LR1	0510 0052	1542 NEW JERSEY AVE NE	1/17/2017	5.44%
LR1	2545 0279	2426 19TH ST NW	7/24/2017	4.84%
LR1	1358 0886	4560 MacArthur BLVD NW	5/31/2017	5.59%
LR2	0734 0046,858	411 2ND ST NE	5/30/2017	5.97%
LR2	3689 0800	4811 N Capitol St NE	7/27/2017	5.92%
LR2	3208 0849	5400-5408 5th St NW	8/11/2017	6.01%
LR2	2591 0194	1674 IRVING ST NW	9/19/2017	5.83%
LR2	4202 0191	1800 Newton St. NE	6/19/2017	6.06%
LR2	2595 0810	3115 MOUNT PLEASANT ST NW	12/27/2016	7.06%
LR2	2956 0022	7440 Georgia Ave NW	11/23/2016	6.64%
LR2	PAR 00870448	5735 14th St NW	11/16/2016	6.28%
LR2	2842 0112	1111 Lamont St NW	1/31/2017	4.37%
LR2	3301 0051	310 Hamilton St NW	3/16/2017	6.24%
LR2	3304 0829	301 Delafield Pl NW	4/20/2017	6.10%
LR2	3326 0087	220 Hamilton St NW	3/24/2017	6.65%
LR2	2947 80,92-97	multi address	3/15/2017	5.46%
LR2	3056 0806	2833 Georgia Ave NW	6/9/2017	3.66%
LR2	4207 0033	1820 IVING ST NE	4/18/2017	5.04%
LR2	0763 0015	317 3RD ST SE	4/18/2017	6.76%
LR2	3884 0806	1000 PERRY ST NE	10/25/2017	5.60%
LR2	3151 0813	710 JEFFERSON ST NW	11/21/2017	6.18%
LR2	0995 0831	716 11TH ST SE	11/13/2017	5.03%
LR3	5483 0034	724 31ST ST SE	8/3/2017	5.47%
LR3	5585 0813	1603 28TH ST SE	7/28/2017	7.50%
LR3	6208 0053	4240 6TH ST SE	8/1/2017	6.31%
LR3	5077 0805	4013 GAULT PL SE	8/30/2017	6.39%
LR3	6003E 0812	3105 WACLARK PL SE	9/25/2017	6.67%
LR3	6207 0036-38,40	4291-97 6th ST SE, 4232-4258 4th ST SE	9/18/2017	5.87%
LR3	5626 0816	1719 27TH ST SE	9/25/2017	7.66%
LR3	5199 0024	5201 SHERIFF RD NE	7/25/2017	7.40%
LR3	5810 0014	1401 BANGOR ST SE	12/1/2016	6.40%
LR3	5434 0814	3501-3513 MINNESOTA AVE SE	12/28/2016	6.46%
LR3	5261 0033	0425 60TH ST NE	1/5/2017	7.49%
LR3	5431 0802	0325 34TH ST SE	1/13/2017	7.08%
LR3	5332 0003	4907 A ST SE	3/23/2017	7.57%
LR3	5363 0135	4730 SOUTHERN AVE SE	4/10/2017	7.17%
LR3	5445 0053	3312 E ST SE	4/10/2017	7.52%
LR3	5485 0803	3236 Minnesota Av SE	1/9/2017	7.75%
LR3	6152 0808	3930 1st SE	2/16/2017	6.51%
LR3	6152 0812	104 ATLANTIC ST SE	4/20/2017	6.60%
LR3	5084; 293-294,806,295	4111,4125,4117 Ames St NE; 15 41st St NE	6/30/2017	7.02%
LR3	5729 0071	2847 GAINESVILLE ST SE	5/11/2017	6.01%
LR3	5741 0831&832	2400-2410 HARTFORD ST SE	5/17/2017	5.50%
LR3	5924 0803	913 BELLEVUE ST SE	5/8/2017	6.77%
LR3	6169 0040	4020 1ST STREET SE	11/17/2017	5.68%
LR3	5624 0814	2440 S STREET SE	11/22/2017	6.62%
LR3	5580 0050	2650 Q STREET SE	10/27/2017	7.34%
LR3	5153 0107	1035 48TH STREET NE	11/6/2017	7.69%

Building Class	SSL	ADDRESS	TY 2018 Assessed	TY 2019 Assessed	Sold Date	Sale Price	TY 18 ASR*	TY19 ASR**
HR1	0028-2378-2574	950 24TH Street NW	\$ 114,306,120	\$ 109,094,440	10/20/2017	\$ 111,950,000	102.10%	97.45%
HR2	914-54,55, 983-855	518 9th, 816 E, 1114 F Street NE	\$ 22,261,870	\$ 24,354,020	7/12/2017	\$ 33,980,000	65.51%	71.67%
HR2	0526 0026	1011 4TH St NW	\$ 35,759,920	\$ 47,114,420	10/5/2017	\$ 50,500,000	70.81%	93.30%
HR2	1077 0130	1600 PENNSYLVANIA AVE SE	\$ 24,440,230	\$ 24,984,540	2/17/2017	\$ 26,500,000	92.23%	94.28%
HR2	2674 0854	3237 Hiatt PI NW	\$ 3,704,680	\$ 3,516,100	12/6/2016	\$ 3,625,000	102.20%	97.00%
LR1	0509E 0806	1643 NEW JERSEY AVE NW	\$ 1,350,670	\$ 1,350,670	6/12/2017	\$ 1,430,000	94.45%	94.45%
LR1	2548 0043	1807 BILTMORE ST NW	\$ 1,566,700	\$ 1,828,190	8/7/2017	\$ 1,950,000	80.34%	93.75%
LR1	0510 0052	1542 NEW JERSEY AVE NE	\$ 2,134,490	\$ 2,112,980	1/17/2017	\$ 1,900,000	112.34%	111.21%
LR1	2545 0279	2426 19TH ST NW	\$ 3,526,890	\$ 9,337,830	7/24/2017	\$ 9,425,000	37.42%	99.08%
LR1	1358 0886	4560 MacArthur BLVD NW	\$ 1,875,790	\$ 1,881,350	5/31/2017	\$ 2,000,000	93.79%	94.07%
LR2	0734 0046,858	411 2ND ST NE	\$ 4,677,800	\$ 4,892,540	5/30/2017	\$ 5,000,000	93.56%	97.85%
LR2	3689 0800	4811 N Capitol St NE	\$ 4,726,320	\$ 4,995,430	7/27/2017	\$ 5,145,000	91.86%	97.09%
LR2	3208 0849	5400-5408 5th St NW	\$ 870,050	\$ 1,055,430	8/11/2017	\$ 999,000	87.09%	105.65%
LR2	2591 0194	1674 IRVING ST NW	\$ 1,241,720	\$ 1,291,030	9/19/2017	\$ 1,400,000	88.69%	92.22%
LR2	4202 0191	1800 Newton St. NE	\$ 1,014,790	\$ 998,840	6/19/2017	\$ 1,000,000	101.48%	99.88%
LR2	2595 0810	3115 MOUNT PLEASANT ST NW	\$ 3,800,000	\$ 3,800,000	12/27/2016	\$ 3,800,000	100.00%	100.00%
LR2	PAR 00870448	5735 14th St NW	\$ 939,360	\$ 887,890	11/16/2016	\$ 925,000	101.55%	95.99%
LR2	2842 0112	1111 Lamont St NW	\$ 2,108,610	\$ 2,216,790	1/31/2017	\$ 3,250,000	64.88%	68.21%
LR2	3301 0051	310 Hamilton St NW	\$ 1,365,486	\$ 1,487,300	3/16/2017	\$ 1,402,475	97.36%	106.05%
LR2	3304 0829	301 Delafield PI NW	\$ 2,115,430	\$ 1,982,770	4/20/2017	\$ 2,108,295	100.34%	94.05%
LR2	3326 0087	220 Hamilton St NW	\$ 3,578,160	\$ 3,381,870	3/24/2017	\$ 3,295,000	108.59%	102.64%
LR2	2947 80,92-97	multi address	\$ 12,494,850	\$ 12,870,730	3/15/2017	\$ 14,000,000	89.25%	91.93%
LR2	3056 0806	2833 Georgia Ave NW	\$ 2,093,720	\$ 3,459,270	6/9/2017	\$ 3,500,000	59.82%	98.84%
LR2	4207 0033	1820 IVING ST NE	\$ 1,748,360	\$ 1,411,700	4/18/2017	\$ 1,710,000	102.24%	82.56%
LR2	0763 0015	317 3RD ST SE	\$ 3,097,900	\$ 3,215,250	4/18/2017	\$ 2,900,000	106.82%	110.87%
LR2	3884 0806	1000 PERRY ST NE	\$ 1,725,200	\$ 1,404,590	10/25/2017	\$ 1,725,200	100.00%	81.42%
LR2	3151 0813	710 JEFFERSON ST NW	\$ 1,302,130	\$ 1,302,130	11/21/2017	\$ 1,525,000	85.39%	85.39%
LR2	0995 0831	716 11TH ST SE	\$ 988,440	\$ 1,146,360	11/13/2017	\$ 1,410,000	70.10%	81.30%
LR3	5483 0034	724 31ST ST SE	\$ 430,680	\$ 603,500	8/3/2017	\$ 615,000	70.03%	98.13%
LR3	5585 0813	1603 28TH ST SE	\$ 554,580	\$ 575,300	7/28/2017	\$ 575,000	96.45%	100.05%
LR3	6208 0053	4240 6TH ST SE	\$ 445,750	\$ 462,760	8/1/2017	\$ 550,000	81.05%	84.14%
LR3	5077 0805	4013 GAULT PL SE	\$ 683,760	\$ 724,800	8/30/2017	\$ 850,000	80.44%	85.27%
LR3	6003E 0812	3105 WACLARK PL SE	\$ 559,460	\$ 627,110	9/25/2017	\$ 705,000	79.36%	88.95%
LR3	6207 0036-38,40	4291-97 6th ST SE, 4232-4258 4th ST SE	\$ 7,019,310	\$ 8,080,750	9/18/2017	\$ 10,100,000	69.50%	80.01%
LR3	5626 0816	1719 27TH ST SE	\$ 605,480	\$ 628,540	9/25/2017	\$ 615,000	98.45%	102.20%
LR3	5199 0024	5201 SHERIFF RD NE	\$ 765,740	\$ 980,710	7/25/2017	\$ 925,000	82.78%	106.02%
LR3	5810 0014	1401 BANGOR ST SE	\$ 451,590	\$ 584,100	6/5/2017	\$ 605,000	74.64%	96.55%
LR3	5434 0814	3501-3513 MINNESOTA AVE SE	\$ 3,177,720	\$ 3,177,720	12/28/2016	\$ 3,150,000	100.88%	100.88%
LR3	5261 0033	0425 60TH ST NE	\$ 718,770	\$ 734,970	1/5/2017	\$ 722,150	99.53%	101.78%
LR3	5431 0802	0325 34TH ST SE	\$ 775,300	\$ 810,390	1/13/2017	\$ 858,975	90.26%	94.34%
LR3	5332 0003	4907 A ST SE	\$ 1,191,030	\$ 1,387,340	3/23/2017	\$ 1,375,000	86.62%	100.90%
LR3	5363 0135	4730 SOUTHERN AVE SE	\$ 894,750	\$ 884,630	4/10/2017	\$ 960,000	93.20%	92.15%
LR3	5445 0053	3312 E ST SE	\$ 803,990	\$ 764,810	4/10/2017	\$ 720,000	111.67%	106.22%
LR3	5485 0803	3236 Minnesota Av SE	\$ 586,090	\$ 609,330	1/9/2017	\$ 590,000	99.34%	103.28%
LR3	6152 0808	3930 1st SE	\$ 454,960	\$ 581,770	2/16/2017	\$ 580,000	78.44%	100.31%
LR3	6152 0812	104 ATLANTIC ST SE	\$ 415,230	\$ 432,660	4/20/2017	\$ 500,000	83.05%	86.53%
LR3	5084; 293-294,806,295	4111,4125,4117 Ames St NE; 15 41st St NE	\$ 3,595,250	\$ 4,807,830	6/30/2017	\$ 4,704,000	76.43%	102.21%
LR3	5729 0071	2847 GAINESVILLE ST SE	\$ 917,960	\$ 952,290	5/11/2017	\$ 1,163,929	78.87%	81.82%
LR3	5741 0831&832	2400-2410 HARTFORD ST SE	\$ 4,628,430	\$ 4,720,990	5/17/2017	\$ 5,450,000	84.93%	86.62%
LR3	5924 0803	913 BELLEVUE ST SE	\$ 973,250	\$ 1,042,510	5/8/2017	\$ 1,300,000	74.87%	80.19%
LR3	6169 0040	4020 1ST STREET SE	\$ 1,736,420	\$ 1,807,940	11/17/2017	\$ 1,725,000	100.66%	104.81%
LR3	5624 0814	2440 S STREET SE	\$ 693,960	\$ 724,640	11/22/2017	\$ 831,000	83.51%	87.20%
LR3	5580 0050	2650 Q STREET SE	\$ 886,100	\$ 926,870	10/27/2017	\$ 960,000	92.30%	96.55%
LR3	5153 0107	1035 48TH STREET NE	\$ 659,740	\$ 793,390	11/6/2017	\$ 780,000	84.58%	101.72%
* Compares Recent Sales Price to the OTR assessment from the previous tax year.						AVERAGE	88.00%	94.57%
** Compares Recent Sales Price to the proposed OTR assessment for the current tax year.						MEDIAN	89.75%	96.55%

Tax Year 2019
Washington, DC Apartment
Assessment to Sales Ratios

Tax Year 2019

Washington, DC Apartment Building

Stabilized Expense Study

Based on Calendar Year 2016 Income and Expense Reporting

<u>Stabilized Expenses as a Percentage of Effective Gross Income</u>	<u>Capitol Hill</u>	<u>CBD</u>	<u>Georgetown</u>	<u>Northeast</u>	<u>Old City #2</u>	<u>Southeast</u>	<u>Southwest</u>	<u>Uptown East</u>	<u>Uptown West</u>
AVERAGE	38.39%	38.38%	37.97%	48.62%	37.58%	47.11%	40.63%	46.26%	39.85%
MEDIAN	36.13%	36.29%	36.34%	50.23%	36.71%	48.65%	43.40%	47.11%	39.84%
<u>Stabilized Expenses Per Unit</u>	<u>Capitol Hill</u>	<u>CBD</u>	<u>Georgetown</u>	<u>Northeast</u>	<u>Old City #2</u>	<u>Southeast</u>	<u>Southwest</u>	<u>Uptown East</u>	<u>Uptown West</u>
AVERAGE	\$6,151	\$8,748	\$8,809	\$13,200	\$8,244	\$6,697	\$9,506	\$6,860	\$8,064
MEDIAN	\$5,809	\$7,667	\$8,121	\$6,551	\$7,088	\$5,958	\$9,506	\$6,518	\$7,751

Tax Year 2019

Washington, DC Apartment Building

Projected-Stabilized Expenses

Based on Calendar Year 2016 Income and Expense Reporting-Projected forward One Year

<u>Stabilized Expenses as a Percentage of Effective Gross Income</u>	<u>Capitol Hill</u>	<u>CBD</u>	<u>Georgetown</u>	<u>Northeast</u>	<u>Old City #2</u>	<u>Southeast</u>	<u>Southwest</u>	<u>Uptown East</u>	<u>Uptown West</u>
AVERAGE	39.35%	39.34%	38.92%	49.84%	38.52%	48.29%	41.65%	47.41%	40.84%
MEDIAN	37.04%	37.20%	37.25%	51.49%	37.63%	49.86%	44.48%	48.29%	40.84%
<u>Stabilized Expenses Per Unit</u>	<u>Capitol Hill</u>	<u>CBD</u>	<u>Georgetown</u>	<u>Northeast</u>	<u>Old City #2</u>	<u>Southeast</u>	<u>Southwest</u>	<u>Uptown East</u>	<u>Uptown West</u>
AVERAGE	\$6,305	\$8,966	\$9,029	\$13,530	\$8,450	\$6,865	\$9,743	\$7,031	\$8,266
MEDIAN	\$5,954	\$7,859	\$8,324	\$6,715	\$7,265	\$6,107	\$9,743	\$6,681	\$7,945

*Calendar Year 2016 expenses projected forward 2.5% based on PWC Real Estate Investor Survey-3rd Quarter 2017

Tax Year 2019

Washington, DC Apartment Building Stabilized Vacancy Study

Stabilized Loss for Vacancy, Collection, Concession and Employee Quarters	<u>Capitol Hill</u>	<u>CBD</u>	<u>Georgetown</u>	<u>Northeast</u>	<u>Old City #2</u>	<u>Southeast</u>	<u>Southwest</u>	<u>Uptown East</u>	<u>Uptown West</u>
AVERAGE	6.22%	4.81%	4.35%	6.52%	5.92%	7.62%	8.96%	5.86%	6.09%
MEDIAN	5.49%	4.83%	3.29%	5.36%	4.50%	6.70%	9.32%	4.29%	4.83%

Market Rent Apartments vs Non-Market Rent Apartments

The apartment data analysis which precedes this page is related to market rent apartments. Adjustments are made for those apartment projects which feature units required to be leased at something other than market rent, or feature some other form of subsidy to the tenant or property owner. This is true regardless of the specific funding program these units may fall under. Adjustments based on non-market conditions are notated with an “S” within the Vision CAMA worksheet and generally apply to unit rents and vacancy. In absence of complete and accurate income and expense information for these non-market units, these adjustments will account for typical differences between market rents and non-market rents

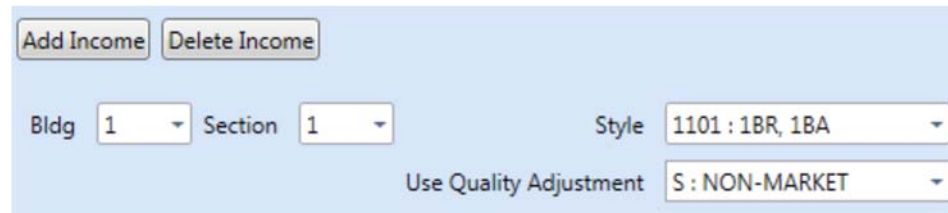
The level of income for non-market units can vary significantly as compared to market rent, thus, wherever possible, actual income derived from non-market units, as opposed to any market based factor, is utilized within the income model. See the following pages for more detail.

Guidelines for Non-Market Multifamily (Apartment) Assessment

Various affordable multi-family residential properties benefit from some public funding programs. The funding programs mostly impose restrictions that run with the land for a determined period in exchange for some restricted rent or other subsidy.

There are many categories of low-income multifamily housing with many or different complex capital financial structures, which makes its valuation a challenge. Examples of low-income (affordable) housing development includes, Section 202 housing, Section 221, Section 8 certificate and voucher program, Hope VI program, Low Income Housing Tax Credit (LIHTC) etc.

In simplifying the valuation/assessment process of low-income housing, and for OTR purposes, apartment units in low-income multifamily development under any kind of government program are referred to as “**non-market**” unit; denoted by “**S: NON-MARKET**” in Vision CAMA program.




The screenshot shows a software interface with a light blue background. At the top, there are two buttons: 'Add Income' and 'Delete Income'. Below these, there are four dropdown menus. The first is labeled 'Bldg' with the value '1'. The second is labeled 'Section' with the value '1'. The third is labeled 'Style' with the value '1101 : 1BR, 1BA'. The fourth is labeled 'Use Quality Adjustment' with the value 'S : NON-MARKET'.

Valuation Methodology

Income approach is generally accepted as the most reliable valuation method of appraising low-income multifamily housing developments. The sales comparison approach is less applicable due to limited or total lack of truly comparable sales, because of different income characteristics and government restrictions imposed on these properties. Also, these developments are sometimes too old, to make conclusion of market value via cost approach reliable.

The objective of this guide line is to focus on estimating market value of “non-market” apartments using Vision CAMA income model for consistency and consideration to existing restrictions by the government program in the housing development.

When the unit-mix consists of market and non-market units – The appraiser will use  to populate the unit-mix in the income model table.

Sample Apartment Units-Mix.

S = Non-Market Units

Bldg	Section	Style	DescriptionXX	Use	Locati	Tenants	Area
1	1	1101	1BR, 1BA	3	3	0	45
1	1	2101	2BR, 1BA	3	3	0	20
1	1	3201	3BR, 2BA	3	3	0	
1	1	5000	APT MISC INCOME	3	3	0	
1	1	1101	1BR, 1BA	S	3	0	
1	1	2101	2BR, 1BA	S	S	0	

Market = 80 units
Non-Market = 20 units
Total = 100 units

Style: 2101 : 2BR, 1BA

Use Quality Adjustment: S : NON-MARKET

The income model automatically adjusts market rent when “S: NON-MARKET” is selected under Use Quality Adjustment.

Bldg	Section	Style	DescriptionXX	Use	Locati	Tenants	Area	Market Rent	Floor	Adjusted Rent	Gross Rent
1	1	1101	1BR, 1BA	S	3	0	15	19440. UL	17496.		\$262,440.00

When the I&E report has the actual (received) rent for any non-market unit, the box in front of Gross Rent may be checked and there will be an override it with the actual rent. It should be noted that the override utilizing actual income is contingent upon consistent income and expense reporting and a minimum of three years of the income and expense forms required by OTR. When applicable, additional supporting information, such as third party audits (which are required by HUD), may be requested.

Style 2101 : 2BR, 1BA

Use Quality Adjustment S : NON-MARKET

Sub Areas 0

Gross Rent 125000 ☒

Actual Rent (override)

Actual Rent (override)

Bldg	Section	Style	DescriptionXX	Use	Locati	Tenants	Area	Floor	Gross Rent
1	1	2101	2BR, 1BA	S	S	0	5	28560. UL	25000 \$125,000.00

A non-market vacancy adjustment may be selected or applied to all non-market units

Debt/Vac Adjustment S : NON-MARKET Debt/Vac Amount 1563 ☐ Ovr

Bldg	Section	Style	DescriptionXX	Use	Locati	Tenants	Area	Floor	Gross Rent	Vacancy	Vac %	Vac Am
1	1	1101	1BR, 1BA	3	3	0	45	19440. 0	19440. \$874,800.00	3	0.0500	43,740
1	1	2101	2BR, 1BA	3	3	0	20	28560. 0	28560. \$571,200.00	3	0.0500	28,560
1	1	3201	3BR, 2BA	3	3	0	15	35280. 0	35280. \$529,200.00	3	0.0500	26,460
1	1	5000	APT MISC INCOME	3	3	0	0	0 0	0.00 \$62,800.00	3	0.0000	
1	1	1101	1BR, 1BA	S	3	0	15	19440. UL	17496. \$262,440.00	S	0.0125	3,281
1	1	2101	2BR, 1BA	S	S	0	5	28560. UL	25000 \$125,000.00	S	0.0125	1,563

Expenses and cap rate should be consistent for all the units unless otherwise determined by the appraiser based on verifiable data. The Office of Tax and Revenue recognizes the low-income aspect of affordable housing. We have adjusted the capitalization rate on LIHTC properties to account for these factors within the AMI program.

Expense Adjustment 3 : AVERAGE Expense Amount 59250 ☐ Ovr

Bldg	Section	Style	DescriptionXX	Use	Locati	Tenants	Area		Floor		Gross Rent	Vacancy	Vac %	Vac Amr	Expense	Exp %	Exp Amount
1	1	1101	1BR, 18A	3	3	0	45	19440.0	19440.0	\$874,800.00	3	0.0500	43,740	3	0.4800	398909	
1	1	2101	2BR, 18A	3	3	0	20	28560.0	28560.0	\$571,200.00	3	0.0500	28,560	3	0.4800	260467	
1	1	3201	3BR, 28A	3	3	0	15	35280.0	35280.0	\$529,200.00	3	0.0500	26,460	3	0.4800	241315	
1	1	5000	APT MISC INCOME	3	3	0	0	0	0	0.00	\$62,600.00	3	0.0000	3	0.4800	30048	
1	1	1101	1BR, 18A	S	3	0	15	19440.UL	17496.	\$262,440.00	S	0.0125	3,281	3	0.4800	124397	
1	1	2101	2BR, 18A	S	S	0	5	28560.UL	25000	\$125,000.00	S	0.0125	1,563	3	0.4800	59250	

Cap Code	HR2 : HIGH RISE 2	
Cap Adj	3 : AVERAGE	
Cap Rate	0.0550	<input type="checkbox"/> Ovr

Tax Year 2019

National Retail Market Statistics

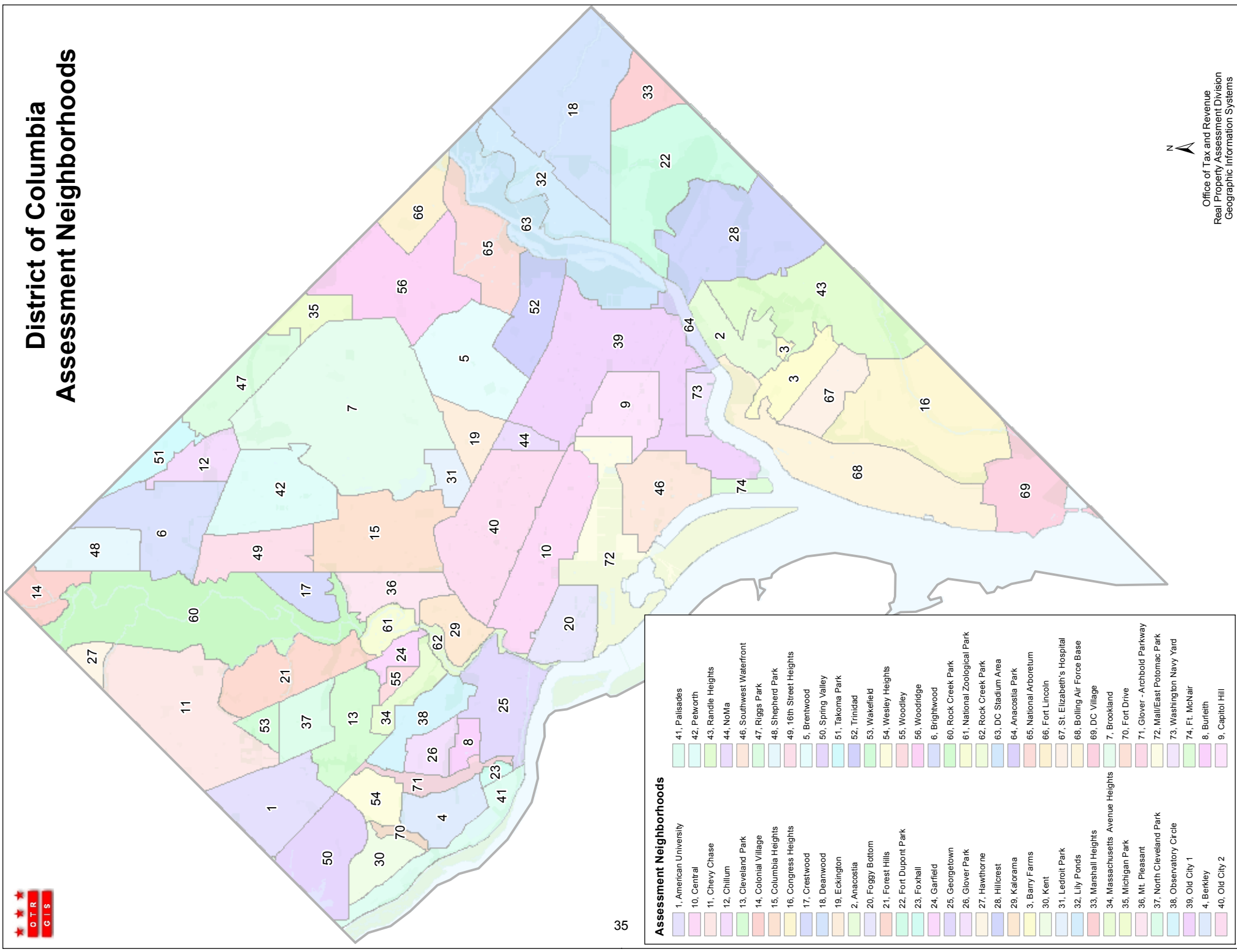
	Cap Rate*		Market Rent Change*		Expense Change*	
	Range	Average	Range	Average	Range	Average
National Regional Mall	4.00-10.00	6.23	1.00%-4.00%	2.50%	2.00%-5.00%	3.00%
National Power Center	5.25-8.00	6.4	0.00%-5.00%	1.97%	1.00%-5.00%	2.89%
National Strip Center	4.00-9.50	6.19	0.00%-3.00%	1.69%	0.00%-3.00%	2.67%

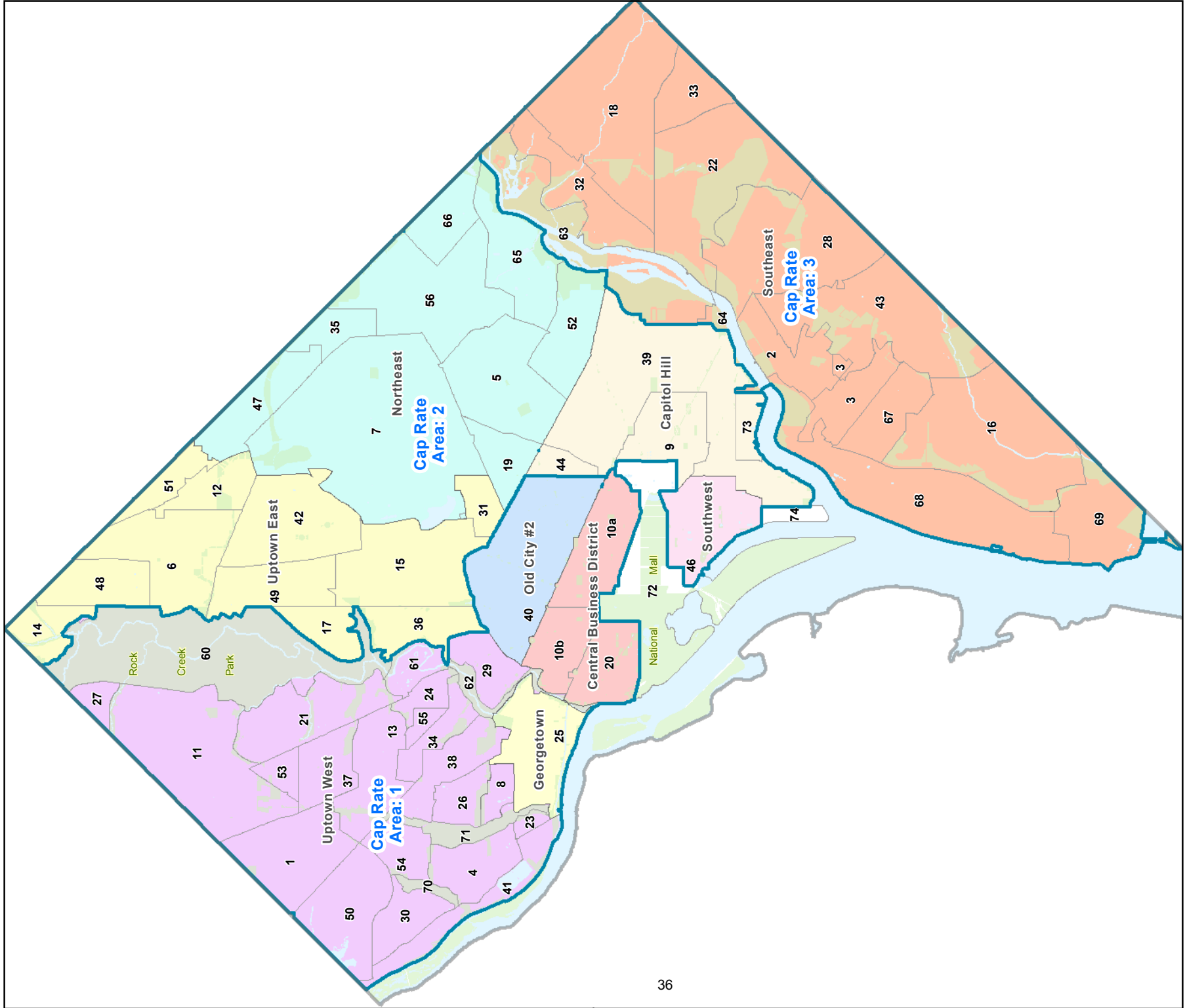
*Source: Pricewaterhouse Coopers--PWC Real Estate Investors Survey-3rd Quarter 2017
All data is national. PWC Cap Rates are unloaded.

Tax Year 2019 Washington, DC Land Sales

Legal Description	Property Address	Sale Date	Sale Price	Land Area SF	Price Per SF Land	Zoning	Submarket Name	Sale Condition	Property Zip Code	Property Type	Proposed Use
Sq. 1042 Lots 829, 7001, 7003 & 7005-7007	415 14th St SE	12/22/2016	\$ 37,000,000	119,694	\$ 309	MU-4	Capitol Hill	Redevelopment Project, Sale Leaseback	20024	Land	
Sq. 981 Lot 126	1114 H Str NE	5/19/2017	\$ 2,275,000	3,360	\$ 677	NC-16	Capitol Hill	1-story bank retail bldg for redevelopment	20018	Land	Fast Food ...
Sq. 3588 Lot 804	400 Florida Ave NE	10/12/2017	\$5,465,966	100,000	\$ 55	PUD/ C-3C	Capitol Hill	Consolidated PUD allows 8.0 FAR with Sq. 3588, Lots 4, 25 & 803.	20018	Land	Mixed-use with Hotel
Sq. 738 Lot 26	100 K Str SE	6/19/2017	\$ 1,900,000	2,186	\$ 453	D-5	Capitol Riverfront	2-story auto repair shop to be razed for new development	20018	Land	Fast Food ...
Sq. 929 Lot 7	801 Virginia Ave SE	3/30/2017	\$ 3,400,000	7,648	\$ 445	NC-6	Capitol Riverfront	Parking lot to be developed into 4-story mixed use bldg.	20002	Land	
Sq. 740 Lot 43	1000 1st St SE	12/2/2016	\$ 21,348,148	25,020	\$ 853	D-5	Capitol Riverfront		20018	Land	Commercial
Sq. W695 Lots 21, 802 & 7000	22 Eye St SE	2/8/2017	\$ 43,232,900	57,865	\$ 747	D-5	Capitol Riverfront	Redevelopment Project	20001	Land	
Sq. 74 Lot 842	2100 K St NW	4/3/2017	\$ 32,000,000	11,325	\$ 2,825	D-5	CBD		20019	Land	Multifamily
Sq. 70 Lots 815 & 176	2122-2124 N St NW	4/21/2017	\$2,161,350	4,356	\$ 496	R5B	CBD	Redevelopment Project	20019	Land	
Sq. 369 Lot 880	1126 9th St NW	1/18/2017	\$ 3,400,000	7,622	\$ 446	DD/ C2C	East End	Redevelopment Project	20011	Land	
Sq. 453 Lot 815	624 Eye St NW (2 Properties)	2/10/2017	\$ 4,700,000	6,098	\$ 771	DSR	East End	Assemblage, Redevelopment Project	20001	Land	Apartment Units ...
Sq. 399 Lots 50-55	801-811 N St NW	12/13/2016	\$ 5,500,000	7,840	\$ 701	C2A	East End	Redevelopment Project	20008	Land	Unknown
Sq. 253 Lots 53,54,55 & 817	1336-1342 G St NW (Part of Multi-Property Sale)	4/4/2017	\$19,827,280	10,013	\$ 1,980	C4	East End	Historical Site, Redevelopment Project	20020	Land	
PAR 84 lot 0065	1221 Kenilworth Ave NE	12/19/2016	\$ 2,400,000	23,653	\$ 101	PDR-1	NE Ind		20002	Land	Apartment Units - Condo
Sq. 3576 Lot 814	1500 Harry Thomas Way NE	6/15/2017	\$ 10,350,000	52,272	\$ 198	M	NoMa	Assemblage, Redevelopment Project	20002	Land	Apartment Units/Condo
Sq. 674 Lot 802	1001 N Capitol St NE	3/17/2017	\$3,200,000	4,212	\$ 760	D-5	NoMa	126 YEARS OLD St. philips church sold to Jamals Sanctuary LLC as redevelopment site	20011	Land	
Sq. 674 Lot 856	45 L St NE	9/19/2017	\$58,000,000	64,524	\$ 899	D-5	NoMa	Sentinel Square phase II development	20011	Land	Office
Sq. 4131 Lot 44,45 & 48	1617 Rhode Island Ave NE	3/17/2017	\$ 1,050,000	4,450	\$ 236	MU-4	Northeast	Old store bldg to be razed for new development	20019	Land	
Sq. 5123 Lot 30	4600 Minnesota Ave NE	4/19/2017	\$ 1,500,000	13,503	\$ 111	PDR-1	Northeast	Redevelopment Project	20019	Land	Industrial
Sq. 3569 Lot 68	1818 3RD Str NE	2/3/2017	\$ 1,600,000	8,030	\$ 199	RF-1	Northeast	Church building to be razed for new development	20019	Land	Multifamily
Sq. 3569 Lot 68	1818 3rd St NE	1/31/2017	\$ 1,600,000	7,840	\$ 204	RF-1	Northeast	Redevelopment Project	20019	Land	Multifamily
Sq. 4310 Lot 808	2911 Rhode Island Ave NE	6/8/2017	\$ 1,800,000	27,617	\$ 65	C2A	Northeast	Redevelopment Project	20019	Land	Multifamily
Sq. 3710 Lot 197 & 851	5600 2nd St NE (2 Properties)	3/13/2017	\$ 8,250,000	55,756	\$ 148	PDR-1	Northeast	Redevelopment Project	20019	Land	Multifamily
Sq. 5196 Lot 805	5127 Nannie Helen Burroughs Ave NE	8/23/2017	\$ 800,000	4,560	\$ 175	MU-3	Northeast	Assemblage, Redevelopment Project	20011	Land	
Sq. 5196 Lot 37	5119-5123 Nannie Helen Burroughs Ave NE	8/23/2017	\$ 1,700,000	7,440	\$ 228	MU-3	Northeast	Assemblage, Redevelopment Project	20002	Specialty	
Sq. 5261 Lot 27	414 61st Str NE	6/7/2017	\$ 85,500	2,850	\$ 30	MU-4	Northeast	Vacant lot		Mixed	
Sq. 5261 Lot 28	416 61st Str NE	6/7/2017	\$ 85,500	2,850	\$ 30	MU-4	Northeast	Vacant Lot	20012	Mixed	
Sq. 4268 Lot 6	1801 New York Ave NE	5/11/2017	\$ 66,000,000	642,457	\$ 103	MU-5B	Northeast	Old WaAssemblage	20009	Retail	
Sq. 4268 lot 2, 5, 6, 8, 10-12, 14, 800, 811, & 815 Par 153 lot 26, 83,105,113, 123, 150,152	1801 New York Ave NE	5/4/2017	\$66,000,000	642,458	\$ 103	MU-5B	Northeast	Assemblage	20009	Multi-Family	
Sq. 930 Lot 801, 823, & 824	816-820 Potomac Ave SE	1/18/2017	\$ 7,150,000	14,239	\$ 502	ES/ C-3-A	SE/Baltpark/Navy Yard MF	Assemblage of Shell Bldgs	20001	Land	
Sq. 5303 Lot	5300 Bass Pl SE	5/18/2017	\$ 532,500	15,999	\$ 33	R-3	Southeast		20001	Land	More details on deal, Maybe arm-length
Sq. 5553 Lot 26	2510 Pennsylvania Ave SE	3/16/2017	\$ 1,575,000	12,196	\$ 126	MU-4	Southeast	1031 Exchange: Buyer MED plans future redevelopment	20020	Flex	
Sq. 5612 Lot 830	1710 Good Hope Rd SE (2 Properties)	1/18/2017	\$ 2,700,000				SW/SE Ind	Redevelopment Project	20020	Land	
Sq. 1043 Lot 128	1351-1355 E St SE	2/28/2017	\$ 5,000,000	18,094	\$ 276	R5B	SW/SE Ind	FP&C Reviewed: Assemblage, Redevelopment Project	20007	Land	
Sq. 1043 Lots 156,157,818 & 819	1339-1349 E St SE	12/14/2016	\$ 6,300,000	23,091	\$ 273	R5B	SW/SE Ind	Assemblage, Bulk/Portfolio Sale ...	20001	Land	Apartment Units - Condo
Sq. 472 Lot 829	680 I Str SW	11/14/2016	\$ 9,500,000	28,043	\$ 339	RA2	SW/SE Ind	Riverside Church Site sold to PN Hoffman for new church and 170-unit apartment	20007	Land	Single Family Development
Sq. 508 Lot 70	440 Rhode Island Ave NW	3/31/2017	\$ 607,500	7,840	\$ 77	C2A	Uptown		20018	Land	
Sq. 5935 Lot 67	5702-5708 Georgia Ave NW	12/20/2016	\$ 1,125,000	8,712	\$ 129	MU-7	Uptown	Redevelopment Project	20003	Land	Multifamily ...
Sq. 3028 Lot 53	3817 Georgia Ave NW	3/7/2017	\$ 1,200,000	1,916	\$ 626	NC-8	Uptown	Bulk/Portfolio Sale, Estate/Probate Sale ...	20002	Land	Hotel
Sq. 2923 Lot 803	1201-1203 Jefferson St NW	4/11/2017	\$ 1,510,000	5,157	\$ 293	MU-4	Uptown	Redevelopment Project	20037	Land	Apartment Units - Condo
Sq. 3016 lots 39 to 42	4523-4527 NW Georgia Ave	3/6/2017	\$ 2,500,000	8,712	\$ 287	RF-1	Uptown	Bulk/Portfolio Sale, Redevelopment Project	20002	Land	Office
Sq. 2563 Lot 98	1731 Kalorama Rd NW	1/31/2017	\$ 2,925,000	7,270	\$ 402	RC-1	Uptown	Redevelopment Project	20002	Land	Multifamily ...
Sq. 5123 Lot 30	4600 Minnesota Ave NE (Part of Multi-Property Sale)	4/19/2017	\$866,715	13,504	\$ 64	PDR-1	Northeast		20019	Land	Industrial
Sq. 5123 Lot 30,34 & 37	4502 Meade St NE (Part of Multi-Property Sale)	4/19/2017	\$444,012	6,918	\$ 64	PDR-1	Northeast		20019	Land	
Sq. 5154 Lot 905	4726 Sheriff Rd NE	7/28/2017	\$ 500,000	10,238	\$ 49	MU-3	Northeast		20019	Land	
Sq. 5564 Lot 66	1401 22nd St SE	8/28/2017	\$4,300,000	20,517	\$ 210	PDR-1	Southeast	Redevelopment Project	20020	Land	Hold for Development ...
Sq. 3355 Lot 811	218 Vine St NW	8/9/2017	\$4,640,000	27,831	\$ 167	MU-4	Uptown	Irregular shape lot. Redevelopment Project	20012	Land	Apartment Units

District of Columbia Assessment Neighborhoods





RPAD Rent Curve SubMarkets and Cap Rate Areas

- 1, Central Business District
- 1, Georgetown
- 1, Old City #2
- 1, Uptown West
- 2, Capitol Hill
- 2, Uptown East
- 2, Northeast
- 2, Southwest
- 3, Southeast

