



# Office Submarket Report

## CBD Office

Denver Market

PREPARED BY



Alec Forbis



**OFFICE SUBMARKET REPORT**

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12 Mo Deliveries in SF

**672 K**

12 Mo Net Absorption in SF

**784 K**

Vacancy Rate

**14.9%**

12 Mo Rent Growth

**2.2%**

Denver's CBD has significant oil exposure, an aspect which was in clear view when the sublet availability rate spiked to the mid-4% range in 2016 (for comparison, the sublet availability rate in the Houston metro peaked in the high 3% range in 2016). Alongside a rebound in oil prices that accelerated during the second half of 2017, the submarket is at its healthiest in years: Moving into 18Q2, the availability rate was at a three-year low, and the sublet availability rate was at a five-year low. Rents have returned to growth, albeit modest, following a year-over-year loss in 2016.

Much of the product here is '70s and '80s vintage with smallish floor plates, yet recent renovations have brought nearly all of inventory to at least 3 Star quality, and the submarket generates some of the highest rents in the metro. The submarket received its first major speculative supply additions in decades in 16Q4 and 18Q1, respectively. These towers, containing nearly one million

SF of combined space, have been met with exceptionally strong demand from a host of high profile tenants.

Denver's Central Business District is the metro's financial hub and includes the headquarters of many of its larger companies. Containing just over 15% of the metro's stock (and about one-third of its 4 & 5 Star stock), the CBD is bounded by Lawrence and 20th streets to the north, Pennsylvania Street to the east, Colfax Avenue to the south, and Speer Boulevard to the west. It is serviced by several light-rail stops in the Regional Transit District (RTD) system and is positioned to benefit from the FasTracks extension that has increased access to the Southeast, DIA, and East Denver. The locale features many retail centers and hotels close to the Colorado Convention Center, which makes it pedestrian-friendly. With its pedestrian access to the convention center and relatively well-situated public transit, this submarket is unique in the metro.

## KEY INDICATORS

Current Quarter	RBA	Vacancy Rate	Gross Asking Rent	Availability Rate	Net Absorption SF	Deliveries SF	Under Construction
4 & 5 Star	21,490,519	17.1%	\$31.13	19.5%	(24,823)	0	101,118
3 Star	5,853,258	7.2%	\$28.86	8.7%	6,403	0	0
1 & 2 Star	432,626	10.6%	\$26.89	18.5%	1,510	0	0
<b>Submarket</b>	<b>27,776,403</b>	<b>14.9%</b>	<b>\$30.59</b>	<b>17.2%</b>	<b>(16,910)</b>	<b>0</b>	<b>101,118</b>
Annual Trends	12 Month	Historical Average	Forecast Average	Peak	When	Trough	When
Vacancy Change (YOY)	-0.8%	12.9%	15.1%	17.5%	2003 Q2	6.5%	2000 Q2
Net Absorption SF	784 K	(108,404)	217,296	1,300,200	2006 Q3	(1,442,152)	2002 Q1
Deliveries SF	672 K	62,112	273,544	672,000	2018 Q1	0	2017 Q4
Rent Growth	2.2%	1.6%	0.6%	18.2%	2007 Q1	-11.3%	2010 Q1
Sales Volume	\$689 M	\$483.7 M	N/A	\$1.9 B	2007 Q3	\$6.5 M	2010 Q2

Concerns over a meltdown akin to Houston's are overblown, but weakness in the energy sector has contributed to a significant deceleration downtown. Net absorption was negative in 15Q2, and would go on to be negative in seven out of the next eight quarters as oil downsizing hit the submarket.

However, the most recent indicators are exceptionally positive. In 18Q1, the availability rate fell to its lowest level since 14Q4 (when oil prices first dropped), and roughly 400 basis points below a mid-2016 peak. In another positive indicator in 18Q1, the sublet availability rate fell below 2% for the first time since mid-2013. In mid-2016, the sublet availability was as high as 4.5%, representing 1.2 million SF of sublet space on the market, well over half of which was related to conventional energy tenants giving up space. At the onset of 18Q2, there was about 500,000 of sublet space on the market.

The submarket will continue to be exposed to potential oil downturns: Conventional energy tenants represent about 15% of the leased office space. (The CBD is the only submarket in the metro where this industry comprises more than 5% of occupied space).

Large-block tenants were hit with new options when energy-tenant move-outs mounted in Denver's largest office submarket. Sabine Oil & Gas Corporation, which filed for Chapter 11 bankruptcy relief in July 2016, vacated 102,900 SF at the City Center. At 1001 17th St., Newfield Exploration Company vacated 135,712 SF, and WPX Energy put 98,769 SF back on the market. But most of that sublet space has been leased: Through 18Q1, roughly 125,000 SF at the 650,000 SF tower remained available, down from a peak of more than 350,000 SF in mid-2016.

And other recent leasing activity is encouraging. In June 2017, Marketo (a provider of marketing automation software) signed for just over 50,000 SF at City Center, taking two of the four floors vacated by Sabine Oil & Gas in mid-2015. SendGrid, Inc., recently signed for just over 100,000 SF, and Healthgrades has leased another 85,000 SF at 1801 California. Ibotta, the maker of a

popular shopping app, doubled its space at 1801 California, signing for another 38,000 SF floor in June 2017 (the company had leased 38,000 SF in late 2015). The 1.3 million SF building had just over 100,000 SF available at the start of 17Q4, down from just over 500,000 SF at year-end 2014.

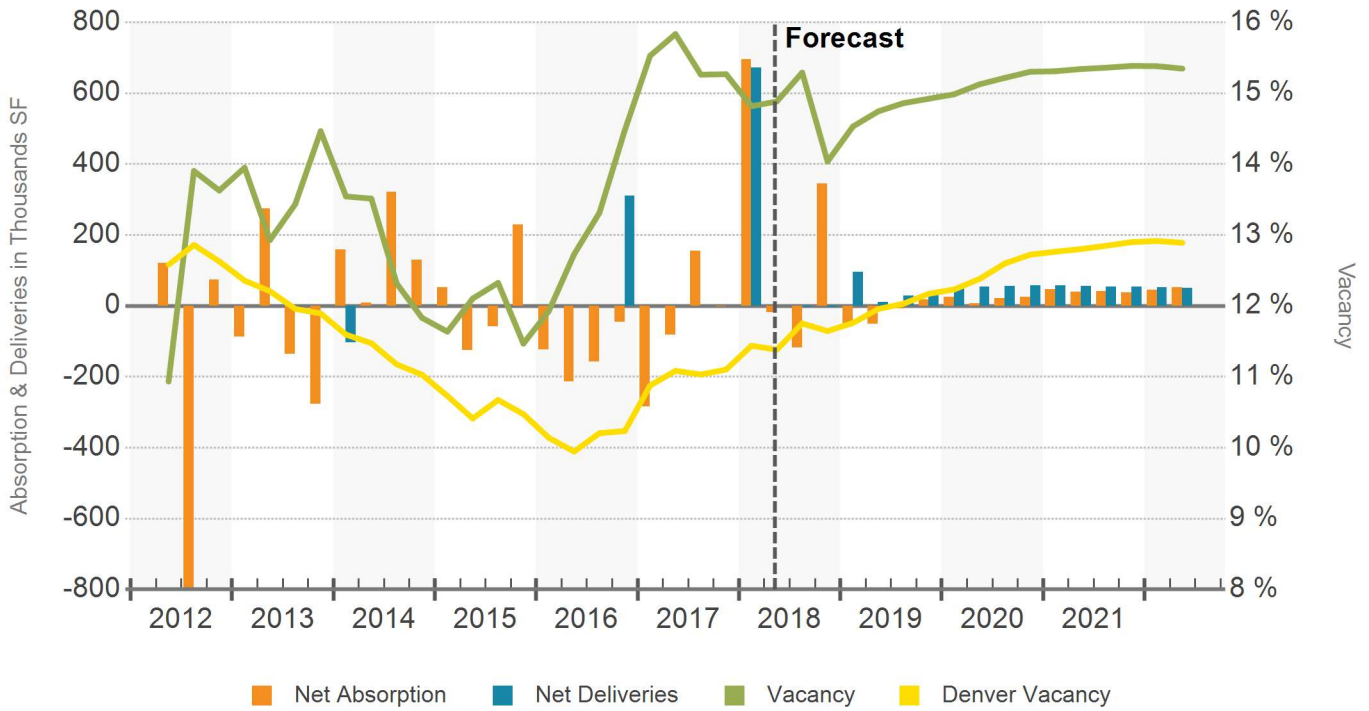
At 1401 Lawrence, a 311,000 SF tower that delivered in 16Q4, the final remaining 22,000 SF was leased by FirmSpace in February 2018. The space will be the Austin, TX-based co-working provider's first Denver location. Jagged Peak Energy leased 44,000 SF there in June 2017, and another 40,000 SF was leased by multiple tenants in 17Q3.

Hines' 670,000 SF 1144 Fifteenth development is set to deliver in early 2018 and secured its first major leases in late 2016. In 16Q4, Gates Corporation and Optiv Security leased 126,000 SF and 76,000 SF, respectively. In July 2017, reports stated that WeWork had signed an LOI for 65,000 SF–75,000 SF at the development, at which point WeWork's two existing locations reportedly had a combined occupancy rate of more than 90%. In November, however, the deal fizzled.

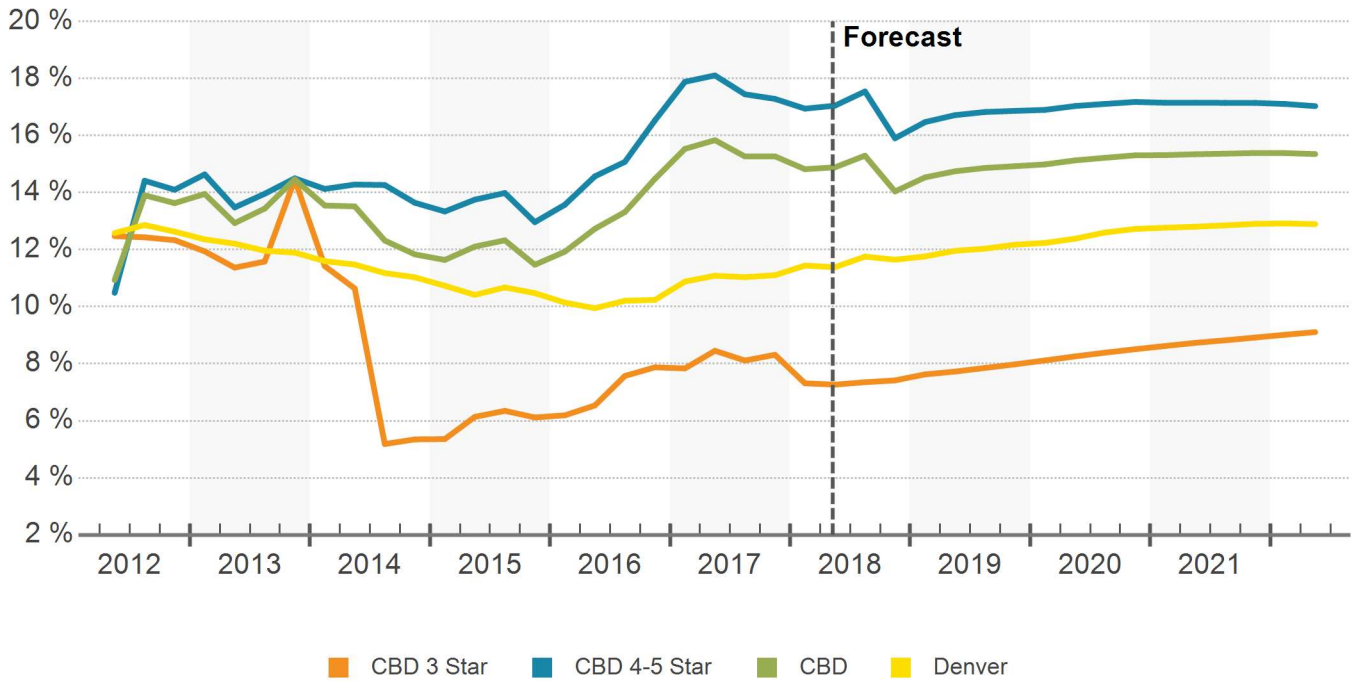
The space would have been WeWork's third in Denver: In 15Q4, the coworking giant opened its first Denver location, a 72,000 SF spot at the Triangle Building in LoDo. In 16Q1, WeWork opened a 50,000 SF operation at the LAB in the Platte River Submarket. Given that occupancy at WeWork's existing locations reportedly exceeded 90%, it will not be surprising if the firm announces plans for a Denver expansion at some other location.

During the final months of 2017, 1144 15th secured several additional high profile leases: Lawfirm Greenberg Taurig signed on for 30,000 SF, Unicom Capital signed on for 20,000 SF (taking the building's top floor), and, most notably, Chipotle signed on for 127,000 SF, taking five full floors of the building that will house its new headquarters. An even larger lease for 146,000 SF was signed in January 2018, and the tower was almost 80% leased upon delivering towards the end of 18Q1.

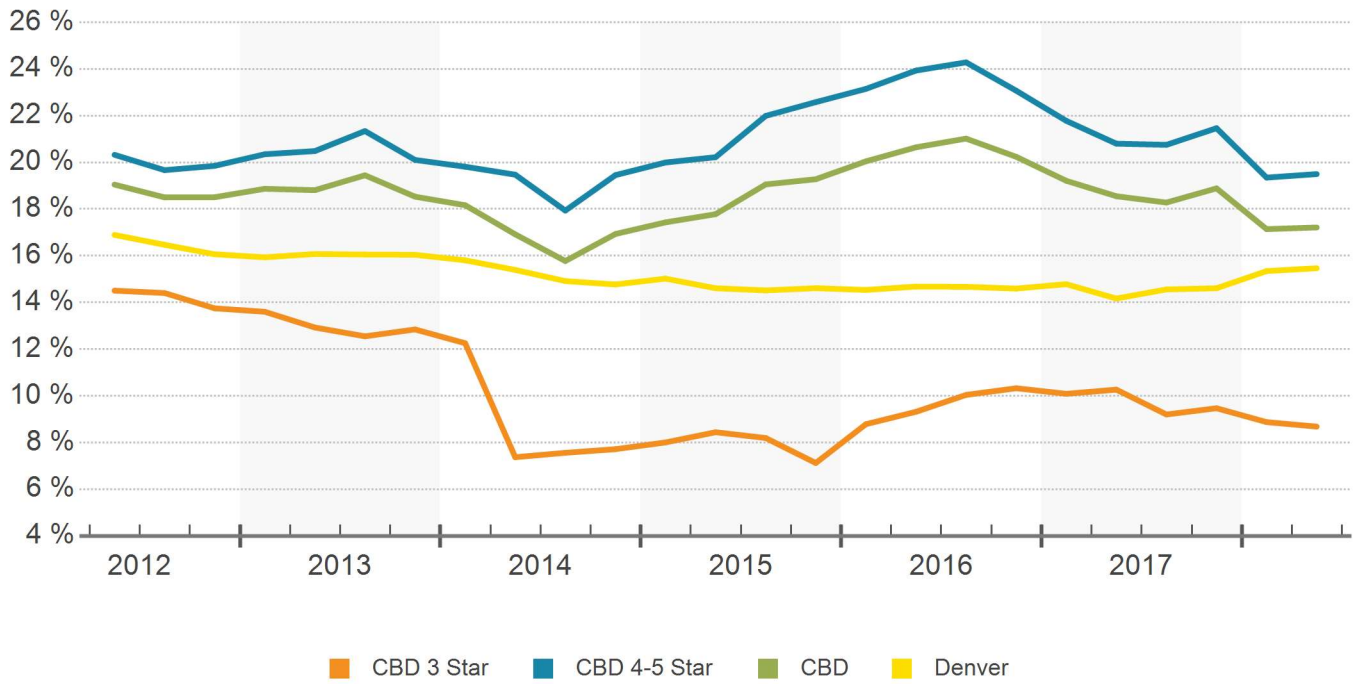
## NET ABSORPTION, NET DELIVERIES & VACANCY



## VACANCY RATE



## AVAILABILITY RATE



## 4 & 5 STAR MOST ACTIVE BUILDINGS IN SUBMARKET - PAST 12 MONTHS

Property Name/Address	Rating	RBA	Deals	SF	Vacancy (QTD)	Net Absorption SF (QTD)
<b>Tabor Center</b> 1200 17th St	★★★★★	571,772	7	284,090	26.0%	42,957
<b>Wells Fargo Center</b> 1700 Lincoln St	★★★★★	1,204,089	13	96,621	14.1%	25,934
<b>1125 Seventeenth Street</b> 1125 17th St	★★★★☆	499,975	7	73,741	9.5%	20,335
<b>Seventeenth Street Plaza</b> 1225 17th St	★★★★★	672,465	12	86,973	12.5%	14,950
<b>1999 Broadway</b> 1999 Broadway	★★★★☆	749,866	5	32,932	16.6%	6,397
<b>Trinity Place</b> 1801 Broadway	★★★★☆	195,753	6	15,897	23.6%	4,935
<b>1700 Broadway Office</b> 1700 Broadway	★★★★☆	394,174	5	17,845	8.6%	3,433
<b>The DC Building</b> 518 17th St	★★★★☆	246,016	8	23,614	37.0%	2,947
<b>1660 Lincoln</b> 1660 Lincoln St	★★★★☆	284,604	8	43,974	29.0%	2,687
<b>1875 Lawrence</b> 1875 Lawrence St	★★★★☆	194,013	4	19,573	24.0%	2,570
<b>410 17th St</b>	★★★★☆	434,740	4	25,733	19.7%	1,588
<b>555 17th Street</b> 555 17th St	★★★★☆	725,011	4	32,948	22.3%	0
<b>Johns Manville Plaza</b> 717 17th St	★★★★☆	693,565	8	155,919	15.3%	0
<b>Colorado State Bank</b> 1600 Broadway	★★★★☆	444,595	6	55,914	20.0%	0
<b>Colorado Plaza Tower II</b> 621 17th St	★★★★☆	391,667	4	4,176	36.2%	(289)
<b>Colorado Plaza Tower I</b> 633 17th St	★★★★☆	581,372	4	17,861	7.9%	(8,098)
<b>Dominion Towers</b> 600 17th St	★★★★☆	613,528	29	44,757	20.3%	(9,323)
<b>Independence Plaza</b> 1050 17th St	★★★★☆	567,286	10	74,442	11.5%	(23,206)
<b>Denver Place</b> 999 18th St	★★★★☆	909,685	16	82,438	16.5%	(29,372)
<b>1001 17th Street</b> 1001 17th St	★★★★☆	655,565	10	186,676	20.7%	(35,952)

## 3 STAR MOST ACTIVE BUILDINGS IN SUBMARKET - PAST 12 MONTHS

Property Name/Address	Rating	RBA	Deals	SF	Vacancy (QTD)	Net Absorption SF (QTD)
<b>The Petroleum Building</b> 110 16th St	★ ★ ★ ★ ★	171,479	4	22,965	8.3%	10,050
<b>The Capitol Center</b> 225 E 16th Ave	★ ★ ★ ★ ★	133,436	4	24,393	42.1%	5,366
<b>The Spectrum Building</b> 1580 Lincoln St	★ ★ ★ ★ ★	119,155	5	15,975	23.5%	3,238
<b>Equitable Building</b> 730 17th St	★ ★ ★ ★ ★	173,417	6	14,172	11.9%	796
<b>475 17th St</b>	★ ★ ★ ★ ★	151,425	6	21,207	20.1%	0
<b>Level Office</b> 1630 Welton St	★ ★ ★ ★ ★	125,000	12	30,568	4.3%	0
<b>Sherman Plaza</b> 1888 Sherman St	★ ★ ★ ★ ★	63,803	8	18,131	1.5%	0
<b>Colorado Bldg</b> 1605-1615 California St	★ ★ ★ ★ ★	58,390	3	2,119	2.6%	0
<b>Masonic Bldg</b> 535 16th St	★ ★ ★ ★ ★	69,803	2	3,254	18.5%	0
<b>Logan Tower</b> 1580 Logan St	★ ★ ★ ★ ★	73,507	2	2,740	17.8%	0
<b>1515 Cleveland Pl</b>	★ ★ ★ ★ ★	53,807	1	24,975	33.7%	0
<b>Cable Building</b> 1801 Lawrence St	★ ★ ★ ★ ★	36,803	1	11,948	38.5%	0
<b>Denver Tower</b> 1905 Sherman St	★ ★ ★ ★ ★	55,856	2	3,335	15.8%	0
<b>1400 Glenarm Pl</b>	★ ★ ★ ★ ★	39,804	2	9,732	0%	0
<b>University Building</b> 910 16th St	★ ★ ★ ★ ★	104,234	12	7,622	35.6%	(471)
<b>450 Seventeenth Avenue</b> 450 E 17th Ave	★ ★ ★ ★ ★	61,200	1	2,907	7.7%	(592)
<b>ARRA New Custom House</b> 721 19th St	★ ★ ★ ★ ★	282,252	1	2,036	4.4%	(850)
<b>1900 Grant St</b>	★ ★ ★ ★ ★	136,118	2	9,867	24.3%	(2,346)
<b>Symes Building</b> 820 16th St	★ ★ ★ ★ ★	91,000	1	803	36.6%	(2,560)
<b>Denver Financial Center II</b> 1776 Lincoln St	★ ★ ★ ★ ★	94,800	1	9,479	14.9%	(7,677)

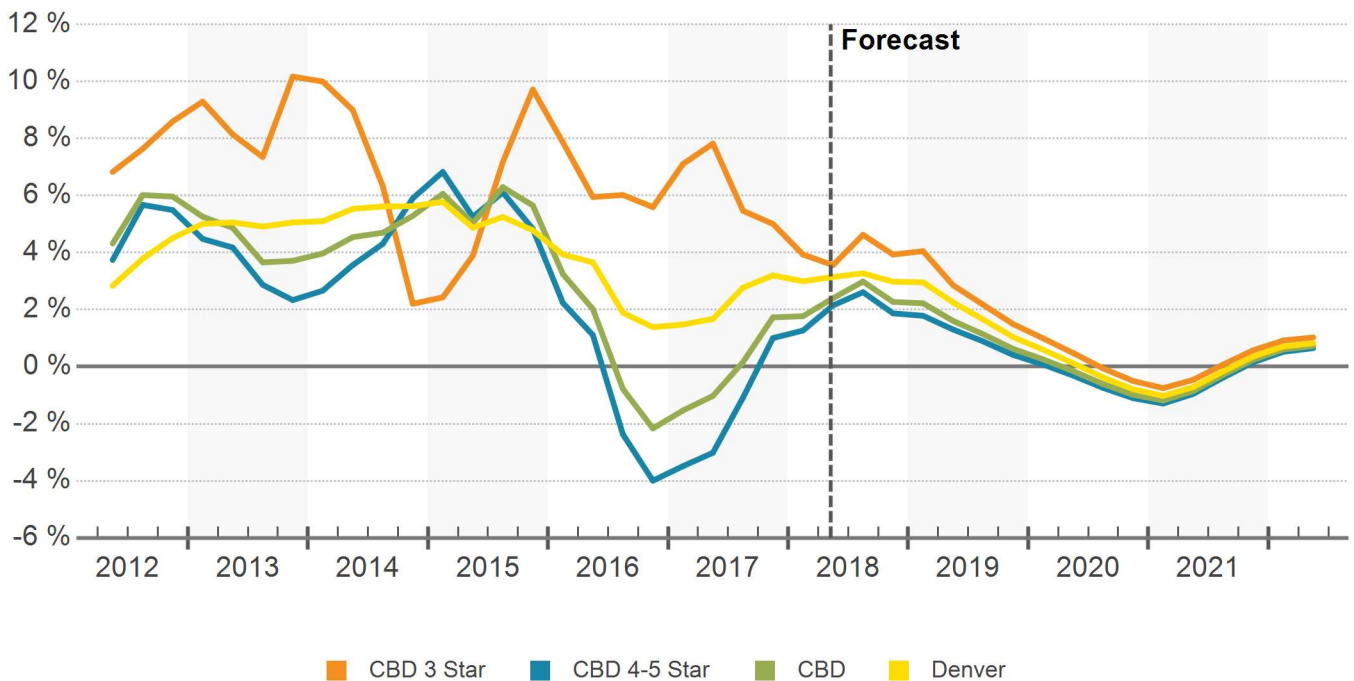


Following a three year stretch of phenomenal rent gains from 2013-2015, rents fell by about 2% in 2016, and increased by less than 2% in 2017. This slowdown coincides with an influx of new construction that began to hit the market in 2016, and also with an increase in sublet availability that accompanied the energy slowdown. And while leasing at recent construction has been nothing short of impressive, the sheer volume of competing options coming online—both in the submarket itself, and in competing submarkets like LoDo and Platte River—has clearly begun to pressure rents.

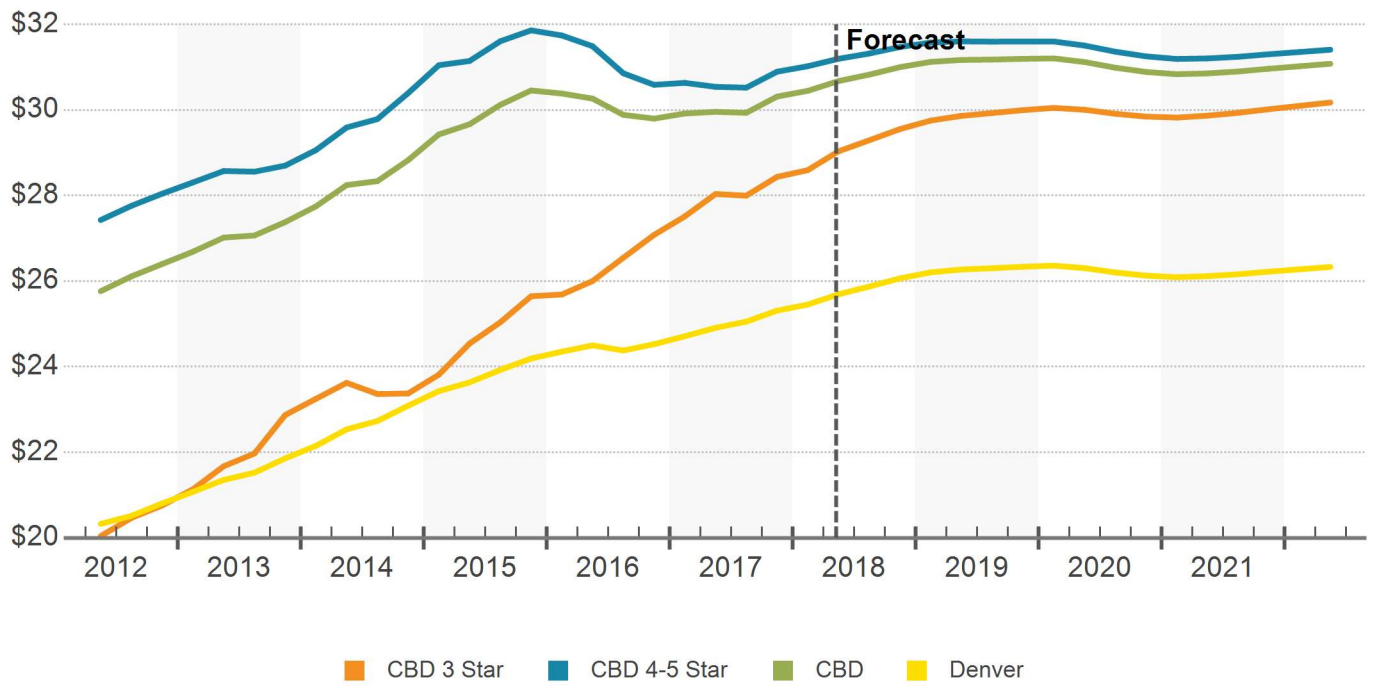
All classes of office space in the CBD posted gains exceeding 7% in each year from 2013-2015. From 2016 to 2017, 4 & 5 Star rents posted an average annual loss of about 2% in the CBD, while other tiers of office space retained strong growth rates.

This follows the metrowide trend: In Denver, 4 & 5 Star rents posted an average annual increase of less than 1% from 2016 to 2017, while other tiers of office space managed a 4% average annual increase. As recently as 2015, all tiers of office space were growing by north of 5% on a year-over-year basis.

## ASKING RENT GROWTH (YOY)



## GROSS ASKING RENT PER SQUARE FOOT



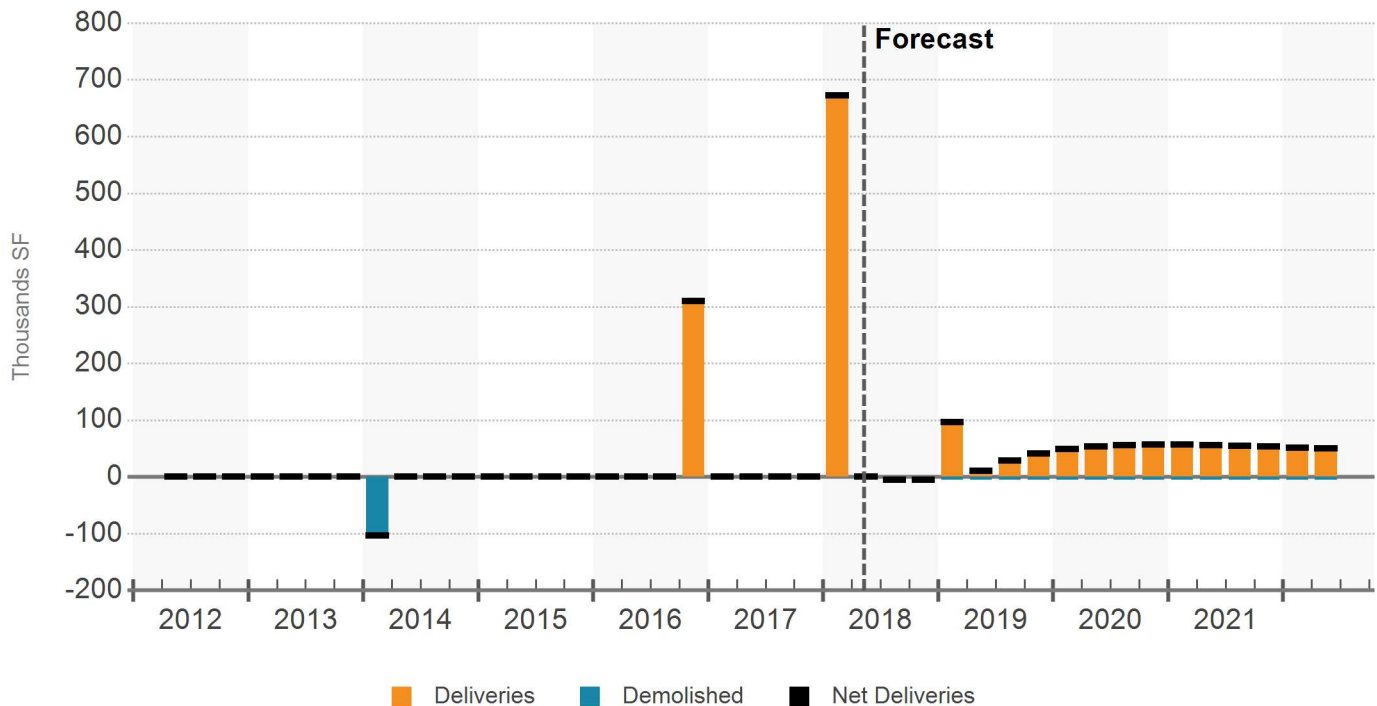
In 16Q4, Denver's Central Business District received its first major supply addition in three decades upon the delivery of 1401 Lawrence, a 311,000 SF 23-story tower. The building was nearly 75% leased upon delivering. Following a 44,000 SF lease signed by Jagged Peak Energy in June 2017, 40,000 SF that was subsequently leased (by multiple tenants) in 17Q3, and finally a 22,000 SF lease signed by a coworking provider in 18Q1, the office space in the building is now fully leased.

Hines's 670,000 SF speculative office development at 1144 15th is the most ambitious move in the CBD in decades. While the growth in the LoDo and Platte River submarkets represents a significant shift in office demand, 1144 15th lies on the border of the LoDo Submarket—an ideal location for a live/work/play environment, with proximity to transit and access to a knowledge-based economy's CBD. Furthermore, Denver has successfully fostered a culture of innovation, akin to

Silicon Valley's, that is attracting startups. Gates Corporation and Optiv Security signed on for roughly 200,000 SF combined in late 2016, and in July 2017 it was reported that WeWork had signed an LOI for about 70,000 SF although that deal fizzled. Around the start of 2018, Chipotle signed on for 127,000 SF (the tower will house its new headquarters). In the largest lease to date, a yet to be disclosed tenant signed on for 146,000 SF in 18Q1. With that lease, the building was almost 80% leased upon its late 18Q1 delivery.

In early 2017, Houston-based Developer Patrinely Group confirmed its intent to move forward with Block 162, a long-proposed office tower that has undergone numerous conceptual revisions over the last five years. The current iteration features a 600,000 SF office building that may break ground during the first half of 2018, with completion expected in the 2020-2021 timeframe.

## DELIVERIES & DEMOLITIONS



All-Time Annual Avg. SF

**52,372**

Delivered SF Past 4 Qtrs

**672,000**

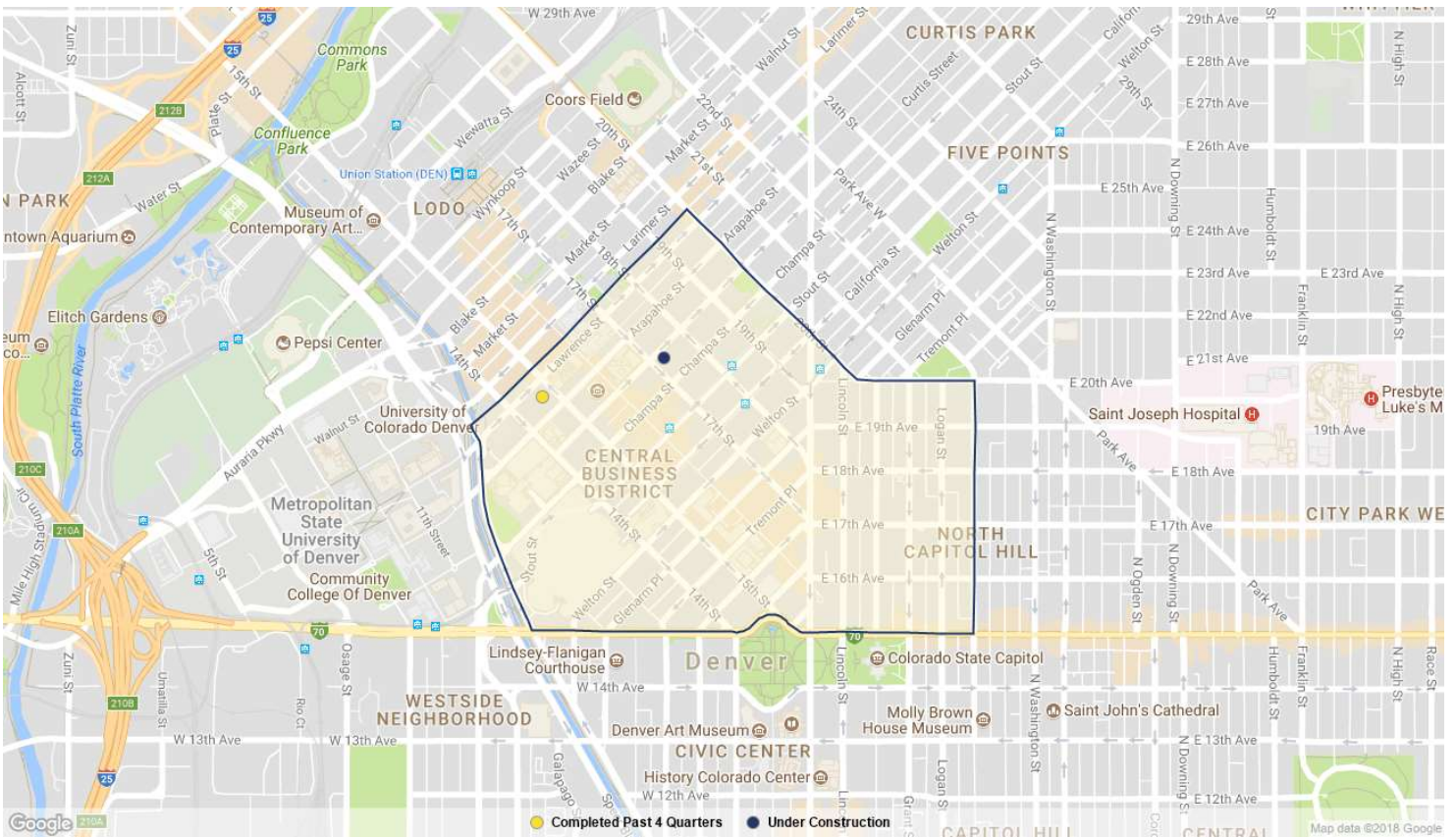
Delivered SF Next 4 Qtrs

**101,118**

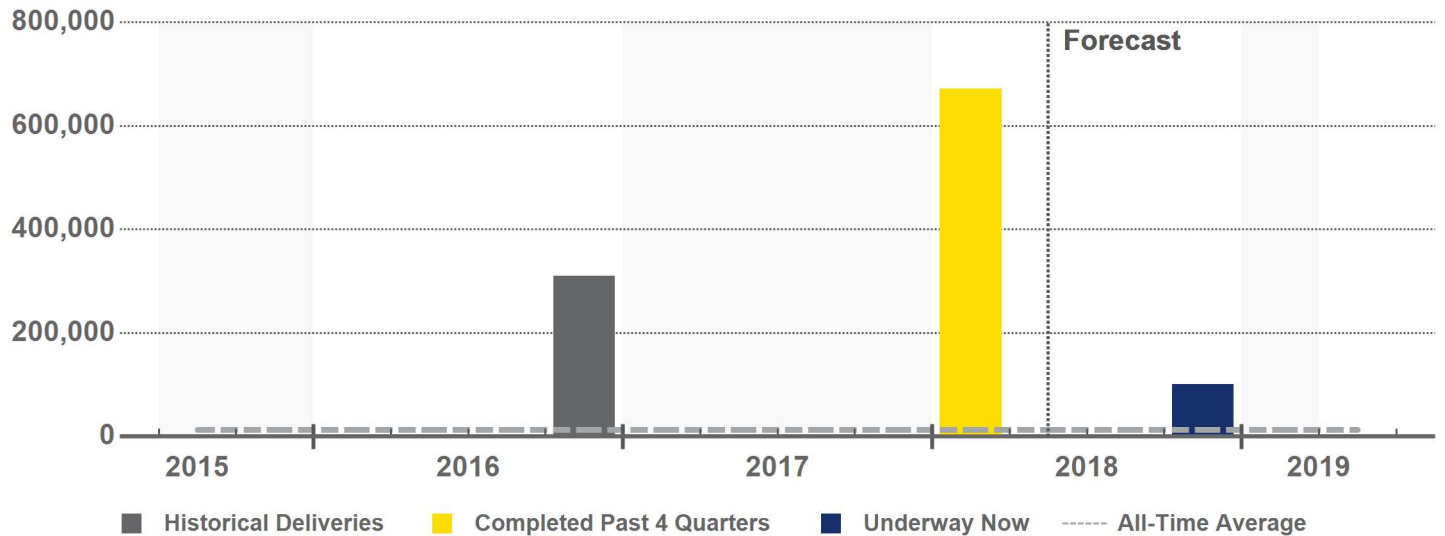
Proposed SF Next 4 Qtrs

**0**

**PAST 4 QUARTERS DELIVERIES, UNDER CONSTRUCTION, & PROPOSED**



**PAST & FUTURE DELIVERIES IN SQUARE FEET**



## RECENT DELIVERIES

Property Name/Address	Rating	Bldg SF	Stories	Start	Complete	Developer/Owner
1 <a href="#">1144 Fifteenth</a> 1144 15th St	★★★★★	672,000	40	Jun-2015	Mar-2018	Hines - Helios Hines Securities, Inc.

## UNDER CONSTRUCTION

Property Name/Address	Rating	Bldg SF	Stories	Start	Complete	Developer/Owner
1 <a href="#">Prism</a> 999 17th St	★★★★☆	101,118	9	Dec-2017	Dec-2018	Shea Properties Shea Properties

Overall, Denver's largest submarket is still an attractive investment vehicle. Sales volume in 2016 came in just shy of \$300 million, the most of any Denver submarket in 2016, but a slowdown from recent years. Sales volume was essentially limited to two massive deals in 2017.

In December, Chicago, IL-based Heitman acquired 1401 Lawrence, a 311,000 SF tower that delivered in 2016, and that was essentially fully leased at the time of the sale. Heitman paid approximately \$225 million for the trophy asset, which translates into a staggering (and record-breaking) \$723/SF.

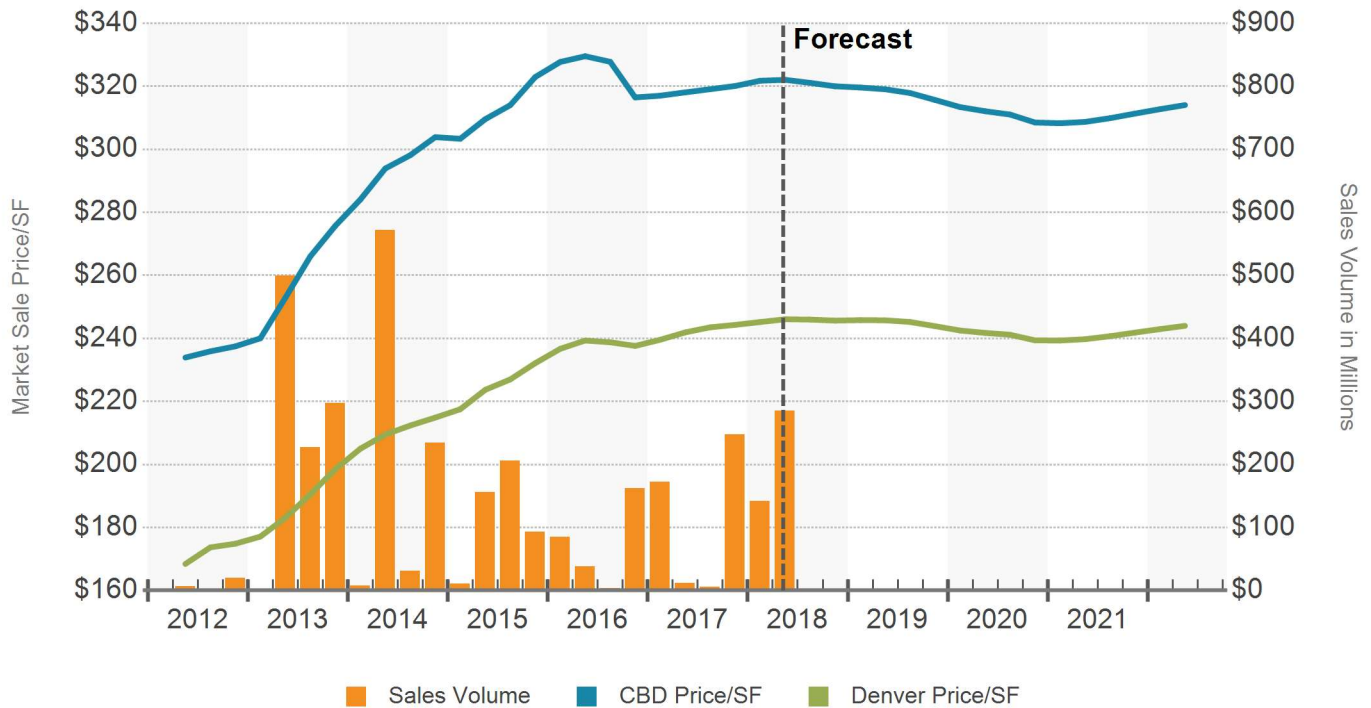
This cycle, the submarket saw the heaviest levels of investment from 2012-2014, when sales volume averaged roughly \$750 million. The slowdown since then almost certainly is due in part to oil prices, which initially fell in late-2014 and have remained subdued since (prices rebounded in late 2017, but remain far shy of recent peaks). Oil tenants represent roughly 15% of the

submarket's occupied stock, the highest percentage in the metro by more than a factor of three.

The headline trade of 2016 was Franklin Street Properties' December 2016 acquisition of the Dominion Towers for \$154.3 million (\$252/SF) at a 6.8% cap rate. The 615,000 SF asset, which consists of two interconnected towers, was built in 1982 and last renovated in 1996. Franklin Street plans to implement \$3 million of capital investments.

Also notable was Unico Properties' March 2016 acquisition of 1875 Lawrence for \$63.8 million. The 194,000 SF building was built in 1982 and last renovated in 2001, and traded for \$314/SF, one of the highest prices paid per-SF ever in the submarket. The deal closed at a 4.8% cap rate based on in-place net operating income, marking the first time since last cycle that a large office tower in the CBD traded for a sub-5% cap rate.

## SALES VOLUME & MARKET SALE PRICE PER SF



# Sales Past 12 Months

CBD Office

Sale Comparables

**21**

Avg. Cap Rate

**5.5%**

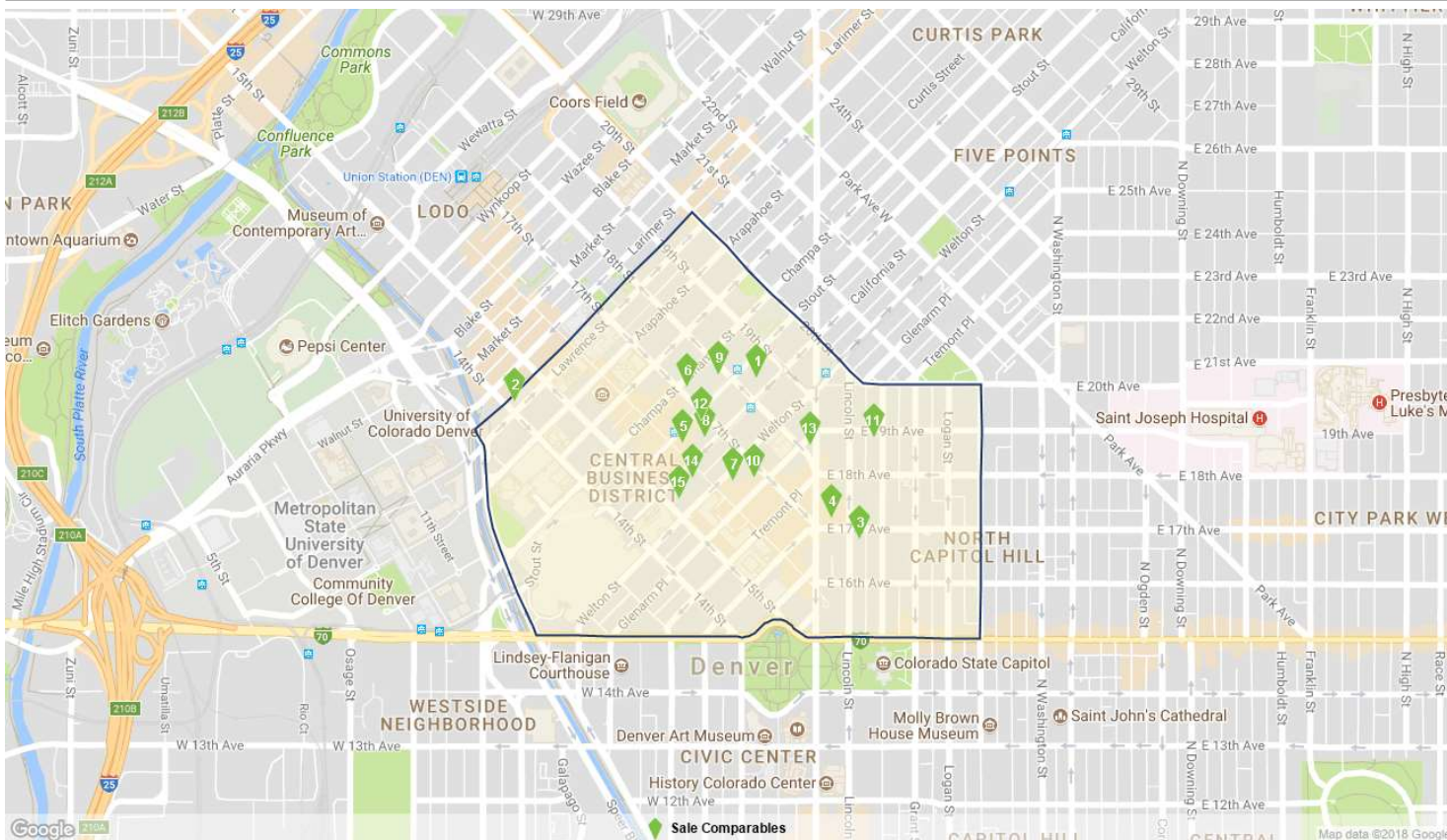
Avg. Price/SF

**\$372**

Avg. Vacancy At Sale

**13.7%**

## SALE COMPARABLE LOCATIONS



## SALE COMPARABLES SUMMARY STATISTICS

Sales Attributes	Low	Average	Median	High
Sale Price	\$5,150,000	\$75,976,889	\$19,000,000	\$285,000,000
Price Per SF	\$76	\$372	\$238	\$723
Cap Rate	5.0%	5.5%	5.5%	6.0%
Time Since Sale in Months	0.7	4.3	2.4	11.3
Property Attributes	Low	Average	Median	High
Building SF	17,706	285,776	152,469	1,315,428
Stories	3	18	15	54
Typical Floor SF	4,780	14,420	12,152	28,000
Vacancy Rate At Sale	0%	13.7%	8.4%	95.4%
Year Built	1889	1954	1973	2020
Star Rating	★ ★ ★ ★ ★	★ ★ ★ ★ ★ 3.3	★ ★ ★ ★ ★	★ ★ ★ ★ ★

# Sales Past 12 Months

CBD Office

## RECENT SIGNIFICANT SALES

Property Name - Address	Property				Sale			
	Rating	Yr Built	Bldg SF	Vacancy	Sale Date	Price	Price/SF	Cap Rate
<b>1</b> 1801 California 1801 California St	★★★★★	1982	1,315,428	7.3%	4/3/2018	\$285,000,000	\$425	-
<b>2</b> 1401 Lawrence St 1401 Lawrence St	★★★★★	2016	309,988	1.8%	12/21/2017	\$224,000,000	\$723	5.0%
<b>3</b> 1660 Lincoln 1660 Lincoln St	★★★★★	1972	284,604	30.0%	3/13/2018	\$67,200,000	\$236	-
<b>4</b> 1700 Broadway Office 1700 Broadway	★★★★★	1973	394,174	9.5%	3/7/2018	\$51,000,000	\$259	-
<b>5</b> Hudson's Bay Centre 1600 Stout St	★★★★★	1982	179,938	18.6%	3/7/2018	\$19,000,000	\$211	-
<b>6</b> Colorado Business Bank 821 17th St	★★★★★	1907	106,231	0%	10/17/2017	\$17,642,000	\$166	-
<b>7</b> Level Office 1630 Welton St	★★★★★	1982	125,000	70.7%	6/13/2017	\$9,500,000	\$76	-
<b>8</b> 1641 California St	★★★★★	1905	19,121	0%	11/16/2017	\$5,300,000	\$277	6.0%
<b>9</b> Ghost Bldg 800 18th St	★★★★★	1889	17,706	31.3%	8/7/2017	\$5,150,000	\$291	-
<b>10</b> The DC Building 518 17th St	★★★★★	1954	12,060	38.2%	2/28/2018	\$2,900,000	\$240	-
<b>11</b> One Sherman Place 140 E 19th Ave	★★★★★	1982	6,169	0%	1/31/2018	\$1,362,500	\$221	-
<b>12</b> Equitable Building 730 17th St	★★★★★	1892	2,866	15.7%	11/20/2017	\$573,000	\$200	-
<b>12</b> Equitable Building 730 17th St	★★★★★	1892	2,066	10.5%	6/14/2017	\$525,000	\$254	-
<b>13</b> Glenarm Place 1800 Glenarm Pl	★★★★★	1980	2,375	4.6%	5/30/2017	\$335,000	\$141	-
<b>14</b> The McClintock Bldg 622-640 16th St	★★★★★	1911	34,698	0%	4/17/2018	-	-	-
<b>15</b> Block 162 California St and 15th St	★★★★★	2020	607,731	95.4%	4/13/2018	-	-	-
<b>14</b> The McClintock Bldg 622-640 16th St	★★★★★	1911	34,698	0%	4/13/2018	-	-	-
<b>12</b> Equitable Building 730 17th St	★★★★★	1892	2,035	12.3%	2/26/2018	-	-	-
<b>12</b> Equitable Building 730 17th St	★★★★★	1892	792	12.3%	2/26/2018	-	-	-
<b>12</b> Equitable Building 730 17th St	★★★★★	1892	2,205	12.3%	2/26/2018	-	-	-



## OVERALL SUPPLY & DEMAND

Year	Inventory			Net Absorption		
	SF	SF Growth	% Growth	SF	% of Inv	Construction Ratio
2022	28,573,651	198,674	0.7%	206,901	0.7%	1.0
2021	28,374,977	219,362	0.8%	162,529	0.6%	1.3
2020	28,155,615	214,625	0.8%	75,526	0.3%	2.8
2019	27,940,990	174,604	0.6%	(97,188)	-0.3%	-
2018	27,766,386	661,983	2.4%	902,446	3.3%	0.7
YTD	27,776,403	672,000	2.5%	677,740	2.4%	1.0
2017	27,104,403	0	0%	(214,214)	-0.8%	-
2016	27,104,403	309,988	1.2%	(541,105)	-2.0%	-
2015	26,794,415	0	0%	97,298	0.4%	0
2014	26,794,415	(103,840)	-0.4%	616,502	2.3%	-
2013	26,898,255	0	0%	(224,961)	-0.8%	-
2012	26,898,255	0	0%	(406,794)	-1.5%	-
2011	26,898,255	0	0%	(54,519)	-0.2%	-
2010	26,898,255	0	0%	590,306	2.2%	0
2009	26,898,255	0	0%	(365,977)	-1.4%	-
2008	26,898,255	0	0%	(320,496)	-1.2%	-
2007	26,898,255	0	0%	642,078	2.4%	0
2006	26,898,255	374,738	1.4%	251,746	0.9%	1.5

## 4 & 5 STAR SUPPLY & DEMAND

Year	Inventory			Net Absorption		
	SF	SF Growth	% Growth	SF	% of Inv	Construction Ratio
2022	22,381,367	219,983	1.0%	245,596	1.1%	0.9
2021	22,161,384	240,399	1.1%	206,689	0.9%	1.2
2020	21,920,985	235,380	1.1%	126,979	0.6%	1.9
2019	21,685,605	195,086	0.9%	(43,905)	-0.2%	-
2018	21,490,519	672,000	3.2%	852,293	4.0%	0.8
YTD	21,490,519	672,000	3.2%	604,665	2.8%	1.1
2017	20,818,519	0	0%	(157,119)	-0.8%	-
2016	20,818,519	309,988	1.5%	(472,535)	-2.3%	-
2015	20,508,531	0	0%	139,403	0.7%	0
2014	20,508,531	0	0%	175,882	0.9%	0
2013	20,508,531	0	0%	(82,378)	-0.4%	-
2012	20,508,531	0	0%	(476,679)	-2.3%	-
2011	20,508,531	0	0%	41,560	0.2%	0
2010	20,508,531	0	0%	674,223	3.3%	0
2009	20,508,531	0	0%	(510,466)	-2.5%	-
2008	20,508,531	0	0%	(23,117)	-0.1%	-
2007	20,508,531	0	0%	502,738	2.5%	0
2006	20,508,531	340,538	1.7%	128,554	0.6%	2.6

# Supply & Demand Trends

CBD Office

## 3 STAR SUPPLY & DEMAND

Year	Inventory			Net Absorption		
	SF	SF Growth	% Growth	SF	% of Inv	Construction Ratio
2022	5,853,258	0	0%	(18,659)	-0.3%	-
2021	5,853,258	0	0%	(23,982)	-0.4%	-
2020	5,853,258	0	0%	(31,013)	-0.5%	-
2019	5,853,258	0	0%	(32,942)	-0.6%	-
2018	5,853,258	0	0%	52,539	0.9%	0
YTD	5,853,258	0	0%	64,965	1.1%	0
2017	5,853,258	0	0%	(25,762)	-0.4%	-
2016	5,853,258	0	0%	(102,848)	-1.8%	-
2015	5,853,258	0	0%	(44,949)	-0.8%	-
2014	5,853,258	(103,840)	-1.7%	444,336	7.6%	-
2013	5,957,098	0	0%	(126,716)	-2.1%	-
2012	5,957,098	0	0%	68,143	1.1%	0
2011	5,957,098	0	0%	(124,714)	-2.1%	-
2010	5,957,098	0	0%	(71,325)	-1.2%	-
2009	5,957,098	0	0%	157,071	2.6%	0
2008	5,957,098	0	0%	(295,944)	-5.0%	-
2007	5,957,098	0	0%	159,046	2.7%	0
2006	5,957,098	34,200	0.6%	81,411	1.4%	0.4

## 1 & 2 STAR SUPPLY & DEMAND

Year	Inventory			Net Absorption		
	SF	SF Growth	% Growth	SF	% of Inv	Construction Ratio
2022	339,026	(21,309)	-5.9%	(20,036)	-5.9%	-
2021	360,335	(21,037)	-5.5%	(20,178)	-5.6%	-
2020	381,372	(20,755)	-5.2%	(20,440)	-5.4%	-
2019	402,127	(20,482)	-4.8%	(20,341)	-5.1%	-
2018	422,609	(10,017)	-2.3%	(2,386)	-0.6%	-
YTD	432,626	0	0%	8,110	1.9%	0
2017	432,626	0	0%	(31,333)	-7.2%	-
2016	432,626	0	0%	34,278	7.9%	0
2015	432,626	0	0%	2,844	0.7%	0
2014	432,626	0	0%	(3,716)	-0.9%	-
2013	432,626	0	0%	(15,867)	-3.7%	-
2012	432,626	0	0%	1,742	0.4%	0
2011	432,626	0	0%	28,635	6.6%	0
2010	432,626	0	0%	(12,592)	-2.9%	-
2009	432,626	0	0%	(12,582)	-2.9%	-
2008	432,626	0	0%	(1,435)	-0.3%	-
2007	432,626	0	0%	(19,706)	-4.6%	-
2006	432,626	0	0%	41,781	9.7%	0

## OVERALL RENT & VACANCY

Year	Gross Asking Rent				Vacancy		
	Per SF	Index	% Growth	Vs Hist Peak	SF	Percent	Ppts Chg
2022	\$31.16	110	0.6%	2.3%	4,357,124	15.2%	-0.1%
2021	\$30.96	109	0.2%	1.6%	4,365,351	15.4%	0.1%
2020	\$30.89	109	-1.0%	1.4%	4,308,518	15.3%	0.4%
2019	\$31.19	110	0.6%	2.4%	4,169,419	14.9%	0.9%
2018	\$31.00	109	2.3%	1.8%	3,897,629	14.0%	-1.2%
YTD	\$30.59	108	0.9%	0.4%	4,132,358	14.9%	-0.4%
2017	\$30.31	107	1.7%	-0.5%	4,138,098	15.3%	0.8%
2016	\$29.80	105	-2.2%	-2.2%	3,923,884	14.5%	3.0%
2015	\$30.45	107	5.7%	0%	3,072,791	11.5%	-0.4%
2014	\$28.83	101	5.3%	-5.7%	3,170,089	11.8%	-2.6%
2013	\$27.38	96	3.7%	-11.2%	3,890,431	14.5%	0.8%
2012	\$26.40	93	6.0%	-15.4%	3,665,470	13.6%	1.5%
2011	\$24.91	88	1.5%	-22.2%	3,258,676	12.1%	0.2%
2010	\$24.54	86	-2.6%	-24.1%	3,204,157	11.9%	-2.2%
2009	\$25.20	89	-11.3%	-20.9%	3,794,463	14.1%	1.4%
2008	\$28.40	100	4.5%	-7.2%	3,428,486	12.7%	1.2%
2007	\$27.18	96	14.7%	-12.0%	3,107,990	11.6%	-2.4%
2006	\$23.70	83	16.8%	-28.5%	3,750,068	13.9%	0.3%

## 4 & 5 STAR RENT & VACANCY

Year	Gross Asking Rent				Vacancy		
	Per SF	Index	% Growth	Vs Hist Peak	SF	Percent	Ppts Chg
2022	\$31.48	102	0.6%	-1.2%	3,772,723	16.9%	-0.3%
2021	\$31.30	102	0.2%	-1.8%	3,798,336	17.1%	0%
2020	\$31.25	101	-1.1%	-1.9%	3,764,626	17.2%	0.3%
2019	\$31.60	103	0.4%	-0.8%	3,656,225	16.9%	1.0%
2018	\$31.47	102	1.9%	-1.2%	3,417,236	15.9%	-1.4%
YTD	\$31.13	101	0.8%	-2.3%	3,664,868	17.1%	-0.2%
2017	\$30.89	100	1.0%	-3.1%	3,597,533	17.3%	0.8%
2016	\$30.59	99	-4.0%	-4.2%	3,440,414	16.5%	3.6%
2015	\$31.86	103	4.8%	0%	2,657,891	13.0%	-0.7%
2014	\$30.39	99	5.9%	-4.8%	2,797,294	13.6%	-0.9%
2013	\$28.70	93	2.3%	-11.0%	2,973,176	14.5%	0.4%
2012	\$28.04	91	5.5%	-13.6%	2,890,798	14.1%	2.3%
2011	\$26.58	86	1.3%	-19.8%	2,414,119	11.8%	-0.2%
2010	\$26.25	85	-3.3%	-21.4%	2,455,679	12.0%	-3.3%
2009	\$27.15	88	-11.9%	-17.3%	3,129,902	15.3%	2.5%
2008	\$30.81	100	5.1%	-3.4%	2,619,436	12.8%	0.1%
2007	\$29.32	95	13.9%	-8.7%	2,596,319	12.7%	-2.5%
2006	\$25.74	84	17.9%	-23.8%	3,099,057	15.1%	0.8%

## 3 STAR RENT & VACANCY

Year	Gross Asking Rent				Vacancy		
	Per SF	Index	% Growth	Vs Hist Peak	SF	Percent	Ppts Chg
2022	\$30.29	150	0.9%	6.1%	540,633	9.2%	0.3%
2021	\$30.02	149	0.6%	5.3%	521,974	8.9%	0.4%
2020	\$29.84	148	-0.5%	4.7%	497,992	8.5%	0.5%
2019	\$29.99	149	1.5%	5.2%	466,979	8.0%	0.6%
2018	\$29.55	147	3.9%	3.8%	434,037	7.4%	-0.9%
YTD	\$28.86	143	1.5%	1.5%	421,614	7.2%	-1.1%
2017	\$28.43	141	5.0%	0%	486,579	8.3%	0.4%
2016	\$27.08	134	5.6%	-5.0%	460,817	7.9%	1.8%
2015	\$25.65	127	9.7%	-10.9%	357,969	6.1%	0.8%
2014	\$23.37	116	2.2%	-21.6%	313,020	5.3%	-9.1%
2013	\$22.87	113	10.2%	-24.3%	861,196	14.5%	2.1%
2012	\$20.76	103	8.6%	-37.0%	734,480	12.3%	-1.1%
2011	\$19.12	95	2.0%	-48.7%	802,623	13.5%	2.1%
2010	\$18.73	93	1.3%	-51.8%	677,909	11.4%	1.2%
2009	\$18.50	92	-8.2%	-53.7%	606,584	10.2%	-2.6%
2008	\$20.16	100	1.7%	-41.0%	763,655	12.8%	5.0%
2007	\$19.83	98	18.8%	-43.4%	467,711	7.9%	-2.7%
2006	\$16.69	83	11.7%	-70.4%	626,757	10.5%	-0.9%

## 1 & 2 STAR RENT & VACANCY

Year	Gross Asking Rent				Vacancy		
	Per SF	Index	% Growth	Vs Hist Peak	SF	Percent	Ppts Chg
2022	\$27.04	137	0.7%	-0.3%	43,768	12.9%	0.4%
2021	\$26.86	136	0.2%	-1.0%	45,041	12.5%	0.5%
2020	\$26.81	136	-1.2%	-1.2%	45,900	12.0%	0.5%
2019	\$27.13	138	0.2%	0%	46,215	11.5%	0.5%
2018	\$27.08	137	1.5%	-0.2%	46,356	11.0%	-1.5%
YTD	\$26.89	136	0.8%	-0.9%	45,876	10.6%	-1.9%
2017	\$26.68	135	-1.6%	-1.7%	53,986	12.5%	7.2%
2016	\$27.13	138	6.6%	0%	22,653	5.2%	-7.9%
2015	\$25.45	129	4.3%	-6.6%	56,931	13.2%	-0.7%
2014	\$24.41	124	8.4%	-11.1%	59,775	13.8%	0.9%
2013	\$22.52	114	9.1%	-20.4%	56,059	13.0%	3.7%
2012	\$20.65	105	3.1%	-31.4%	40,192	9.3%	-0.4%
2011	\$20.02	102	10.2%	-35.5%	41,934	9.7%	-6.6%
2010	\$18.17	92	-0.4%	-49.3%	70,569	16.3%	2.9%
2009	\$18.25	92	-7.5%	-48.7%	57,977	13.4%	2.9%
2008	\$19.73	100	-1.7%	-37.5%	45,395	10.5%	0.3%
2007	\$20.08	102	19.6%	-35.1%	43,960	10.2%	4.6%
2006	\$16.78	85	2.8%	-61.6%	24,254	5.6%	-9.7%

## OVERALL SALES

Year	Completed Transactions (1)						Market Pricing Trends (2)		
	Deals	Volume	Turnover	Avg Price	Avg Price/SF	Avg Cap Rate	Price/SF	Price Index	Cap Rate
2022	-	-	-	-	-	-	\$314.47	145	6.4%
2021	-	-	-	-	-	-	\$309.56	143	6.5%
2020	-	-	-	-	-	-	\$311.27	144	6.4%
2019	-	-	-	-	-	-	\$318.06	147	6.2%
2018	-	-	-	-	-	-	\$321.23	148	6.0%
YTD	13	\$426.5 M	7.0%	\$105,550,000	\$338.26	-	\$321.77	149	6.0%
2017	12	\$436.6 M	4.1%	\$61,763,143	\$394.22	5.5%	\$318.57	147	6.0%
2016	16	\$288.0 M	4.9%	\$34,946,562	\$217.11	6.2%	\$325.38	150	5.9%
2015	17	\$464.6 M	7.4%	\$65,956,972	\$233.64	6.7%	\$312.47	144	5.9%
2014	31	\$843.1 M	10.4%	\$59,718,901	\$303.67	6.2%	\$295.00	136	6.0%
2013	33	\$1,026 M	16.3%	\$72,846,714	\$237.17	7.0%	\$258.67	120	6.4%
2012	21	\$679.1 M	12.3%	\$96,746,429	\$209.38	6.2%	\$233.44	108	6.7%
2011	38	\$267.4 M	7.6%	\$44,143,000	\$151.75	8.7%	\$205.52	95	7.2%
2010	19	\$159.0 M	3.2%	\$31,689,120	\$218.79	6.4%	\$183.98	85	7.8%
2009	10	\$150.2 M	3.6%	\$48,036,667	\$176.89	-	\$173.33	80	8.4%
2008	13	\$336.5 M	6.5%	\$33,601,770	\$191.62	7.2%	\$216.33	100	7.5%
2007	43	\$1,796 M	39.4%	\$104,652,464	\$228.94	6.5%	\$225.19	104	7.0%

(1) Completed transaction data is based on actual arms-length sales transactions and levels are dependent on the mix of what happened to sell in the period.

(2) Market price trends data is based on the estimated price movement of all properties in the market, informed by actual transactions that have occurred.

## 4 & 5 STAR SALES

Year	Completed Transactions (1)						Market Pricing Trends (2)		
	Deals	Volume	Turnover	Avg Price	Avg Price/SF	Avg Cap Rate	Price/SF	Price Index	Cap Rate
2022	-	-	-	-	-	-	\$320.33	140	6.4%
2021	-	-	-	-	-	-	\$315.39	137	6.4%
2020	-	-	-	-	-	-	\$317.34	138	6.3%
2019	-	-	-	-	-	-	\$324.75	141	6.1%
2018	-	-	-	-	-	-	\$328.74	143	5.9%
YTD	7	\$425.1 M	8.7%	\$105,550,000	\$338.84	-	\$329.68	144	5.9%
2017	3	\$394.0 M	3.9%	\$196,850,000	\$485.06	5.0%	\$325.92	142	5.9%
2016	5	\$252.4 M	4.8%	\$83,350,000	\$251.32	5.8%	\$336.79	147	5.7%
2015	6	\$425.5 M	8.6%	\$85,039,760	\$242.50	6.0%	\$326.74	142	5.8%
2014	20	\$771.4 M	10.9%	\$109,879,945	\$347.04	5.5%	\$310.40	135	5.8%
2013	11	\$999.7 M	20.1%	\$124,818,750	\$242.49	6.5%	\$272.15	119	6.2%
2012	10	\$650.9 M	13.8%	\$162,535,000	\$230.58	6.4%	\$245.25	107	6.5%
2011	31	\$237.3 M	9.0%	\$117,600,000	\$151.08	-	\$216.10	94	7.0%
2010	6	\$149.6 M	2.8%	\$149,000,000	\$265.05	6.5%	\$194.44	85	7.6%
2009	1	\$134.2 M	3.3%	\$134,250,000	\$199.64	-	\$183.52	80	8.1%
2008	7	\$271.1 M	6.7%	\$54,217,669	\$197.93	-	\$229.54	100	7.2%
2007	19	\$1,756 M	50.1%	\$125,437,277	\$232.14	4.6%	\$239.05	104	6.8%

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(2) Market price trends data is based on the estimated price movement of all properties in the market, informed by actual transactions that have occurred.

## 3 STAR SALES

Year	Completed Transactions (1)						Market Pricing Trends (2)		
	Deals	Volume	Turnover	Avg Price	Avg Price/SF	Avg Cap Rate	Price/SF	Price Index	Cap Rate
2022	-	-	-	-	-	-	\$296.04	171	6.7%
2021	-	-	-	-	-	-	\$291.15	168	6.8%
2020	-	-	-	-	-	-	\$291.98	169	6.7%
2019	-	-	-	-	-	-	\$296.52	171	6.5%
2018	-	-	-	-	-	-	\$296.55	171	6.3%
YTD	4	\$1.4 M	0.2%	-	\$220.86	-	\$295.55	171	6.3%
2017	7	\$36.4 M	4.6%	\$10,814,000	\$133.82	6.0%	\$294.54	170	6.2%
2016	9	\$31.1 M	5.1%	\$6,543,124	\$103.13	6.6%	\$287.57	166	6.3%
2015	11	\$39.0 M	4.1%	\$18,250,000	\$167.11	7.1%	\$265.45	153	6.4%
2014	9	\$69.5 M	9.3%	\$10,946,667	\$128.38	6.9%	\$244.59	141	6.6%
2013	18	\$17.1 M	3.1%	\$3,966,331	\$123.18	8.4%	\$215.16	124	7.0%
2012	9	\$26.3 M	7.8%	\$12,592,500	\$66.42	8.1%	\$195.63	113	7.3%
2011	3	\$21.0 M	2.3%	\$20,660,882	\$155.49	8.7%	\$171.83	99	7.9%
2010	12	\$8.7 M	4.8%	\$2,898,533	\$54.59	6.2%	\$150.64	87	8.7%
2009	9	\$16.0 M	4.9%	\$4,930,000	\$90.32	-	\$140.53	81	9.3%
2008	4	\$54.0 M	5.5%	\$17,845,033	\$164.19	7.0%	\$173.00	100	8.3%
2007	24	\$40.0 M	5.3%	\$7,656,667	\$142.56	7.5%	\$179.91	104	7.8%

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(2) Market price trends data is based on the estimated price movement of all properties in the market, informed by actual transactions that have occurred.

## 1 & 2 STAR SALES

Year	Completed Transactions (1)						Market Pricing Trends (2)		
	Deals	Volume	Turnover	Avg Price	Avg Price/SF	Avg Cap Rate	Price/SF	Price Index	Cap Rate
2022	-	-	-	-	-	-	\$271.53	189	6.4%
2021	-	-	-	-	-	-	\$267.41	186	6.4%
2020	-	-	-	-	-	-	\$269.23	187	6.4%
2019	-	-	-	-	-	-	\$275.85	192	6.1%
2018	-	-	-	-	-	-	\$280.30	195	6.0%
YTD	2	\$0 M	16.0%	-	-	-	\$281.74	196	5.9%
2017	2	\$6.2 M	5.4%	\$3,100,000	\$266.20	-	\$277.36	193	6.0%
2016	2	\$4.5 M	4.8%	\$3,350,000	\$217.30	-	\$267.81	186	6.0%
2015	-	-	-	-	-	-	\$236.94	165	6.3%
2014	2	\$2.2 M	2.8%	\$1,225,000	\$181.25	-	\$208.89	145	6.6%
2013	4	\$9.4 M	16.4%	\$3,135,000	\$143.98	-	\$174.65	121	7.2%
2012	2	\$1.9 M	7.0%	\$1,900,000	\$76.92	3.8%	\$155.89	108	7.6%
2011	4	\$9.1 M	13.0%	\$2,999,039	\$161.50	8.7%	\$133.63	93	8.3%
2010	1	\$0.8 M	0.7%	\$750,000	\$232.20	-	\$113.10	79	9.3%
2009	-	-	-	-	-	-	\$108.32	75	9.8%
2008	2	\$11.4 M	13.3%	\$5,697,129	\$197.97	7.4%	\$143.79	100	8.4%
2007	-	-	-	-	-	-	\$146.13	102	8.0%

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