2019

DOWNTOWN OFFICE STORY

EOY 2018 Market Analysis

Background

- This is the 35th year of this analysis with this methodology.
- This survey supplements, and does not replace other traditional market surveys: broker, owner, or third-party reports.
- It provides unique insight on the current competitive leasing environment based on analysis of primary data. The results ***assist owners, leasing agents and potential investors in making strategic marketing and investment decisions***.
- Buildings in the survey universe have proven the ability to compete for tenants in the downtown's top tier office buildings (henceforth classified as Tiers 1, 2 and 3)

Central Houston

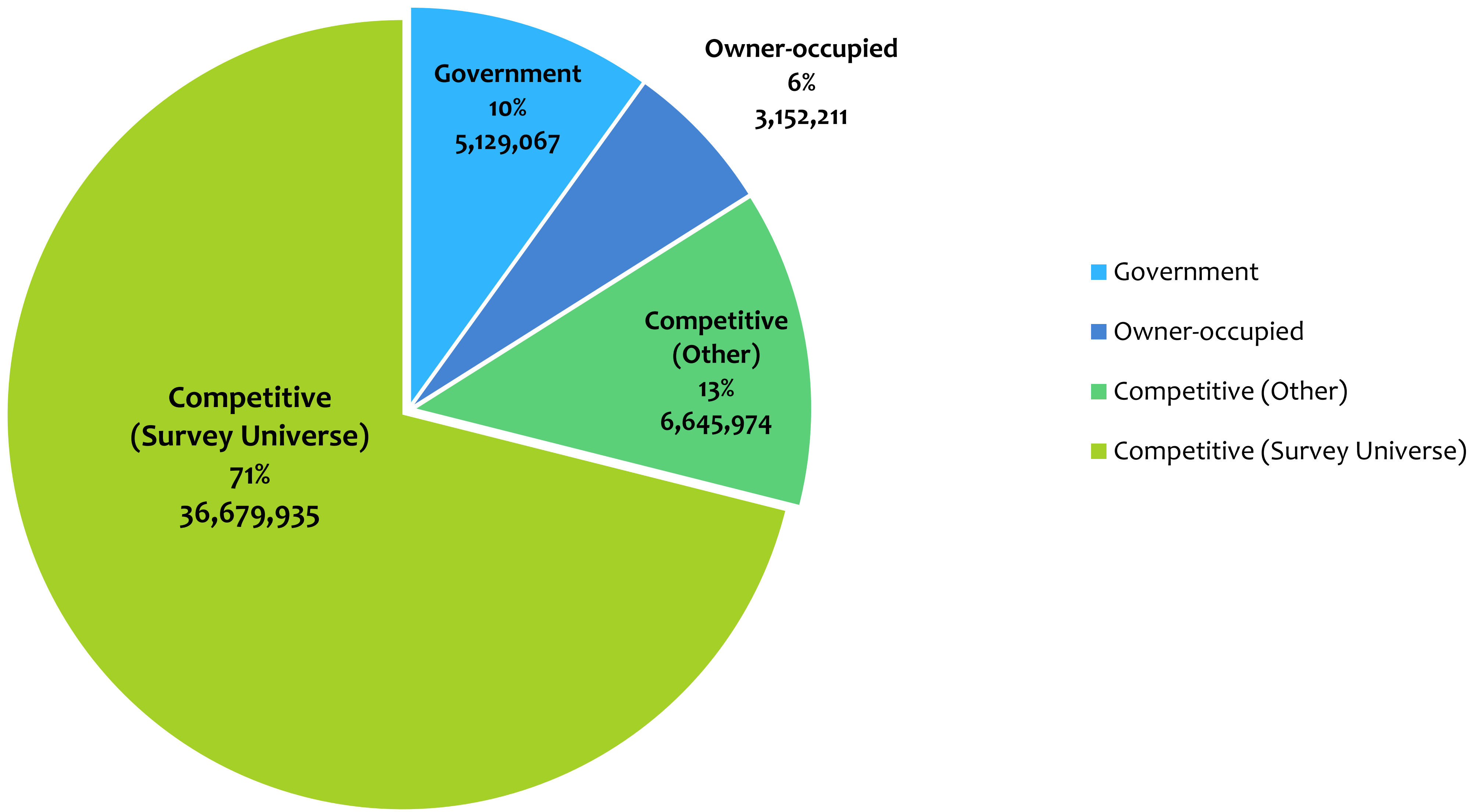
Definitions

- *Total* ***Office Inventory*** refers to the total office space in ALL Downtown buildings, irrespective of Class or Tier.
- The ***Survey universe*** refers to downtown's top tier office buildings. In this report, these buildings are classified as Tiers 1, 2 and 3
- ***Owner-occupied buildings*** are office buildings owned and fully/wholly occupied by the owner. In this survey, this includes Energy buildings (Chevron's 1500 Louisiana and 1400 Smith; Hilcorp's 1111 Travis) and the Partnership Tower
- ***Energy*** includes exploration and production, pipelines, utilities, chemical companies, and service companies such as KBR.
- ***FIRE:*** **F**inance, **I**nsurance, **R**eal **E**state
- ***"Other"*** includes companies such as Waste Management, United Airlines, and professional services firms including consulting firms, The Big Four, etc.
- ***Leased space****:* all space that is leased, whether or not it is occupied
- ***Space Being Marketed / Available***: Any office space being marketed, even if occupied and leased. If it is being marketed, it is competing against other space.
- ***Availability rate***: Direct office space being marketed divided by the total amount of office space in this survey universe.
- ***Leasing Activity***: Any lease signed during the year, no matter when occupancy is to take place.
  - CoStar's definition: "The volume of square footage that is committed to and signed under a lease obligation for a specific building or market in a given period of time. It includes direct leases, subleases and renewals of existing leases. It also includes any pre-leasing activity in planned, under construction or under renovation buildings."
- ***Absorption***: The aggregate of the difference in space being marketed at the beginning versus the end of the year within each building. For this study, absorption is tied to a change in space being marketed, not occupancy of a building.

Background: Office Inventory Distribution

- The survey universe includes only competitive office buildings; it does not include owner-occupied buildings.

TOTAL Office Inventory: 51.6 million-SF



*Total Office Inventory includes buildings under construction that are being marketed. | The **'Competitive' Office Story Survey Universe** space excludes 800 Bell.

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Survey Universe

- The survey universe includes only competitive office buildings; it does not include owner-occupied buildings

	# of Bldgs	Rentable SF
Tier 1	12	12,349,958
Tier 2	13	14,273,744
Tier 3	21	10,056,233
Total	46	36,679,935

*Inventory grew due to the addition of Texas Tower

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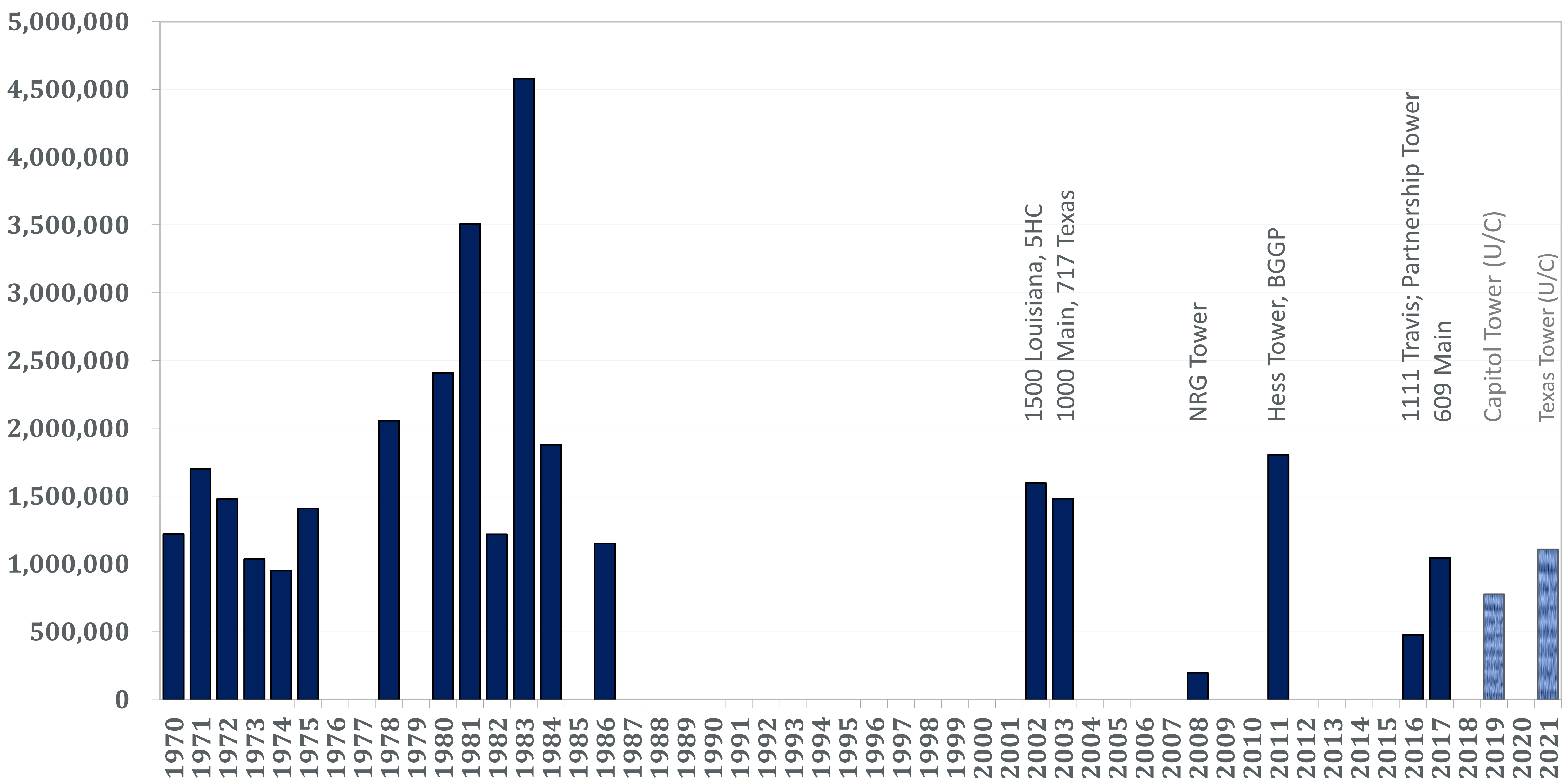
Building Deliveries

Square Feet Built per Year



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Building Renovations: Since 2010

Building	Year
Kinder Morgan Tower	2011
601 Travis	2011
919 Milam	2012
Pennzoil Place	2013
811 Louisiana / Two Shell	2015
1001 McKinney	2015
Esperson	2016
1000 Main	2016
1801 Smith (formerly 600 Jefferson)	2017
The Jones on Main – 708 Main & 712 Main	2017
One Allen - Motiva Plaza	2017
5 Houston Center	2018
1415 Louisiana	2019
Lyric Center	2019
1010 Lamar (Lamar Plaza)	Ongoing
LyondellBasell Tower	Ongoing
2 Houston Center	Ongoing
Fulbright Tower	Ongoing
4 Houston Center	Ongoing
717 Texas	Ongoing
Bank of America Center (700 Louisiana)	Ongoing
GreenStreet - 1201 Fannin / NRG Tower	Ongoing
Heritage Plaza	Ongoing
Two Allen	Ongoing
Three Allen	Ongoing
TOTAL Plaza	Ongoing
1001 Fannin	Planned
1100 Louisiana	Planned
600 Travis (JP Morgan Chase Tower)	Planned
910 Louisiana (One Shell Plaza)	Planned
One City Centre (1021 Main)	Planned

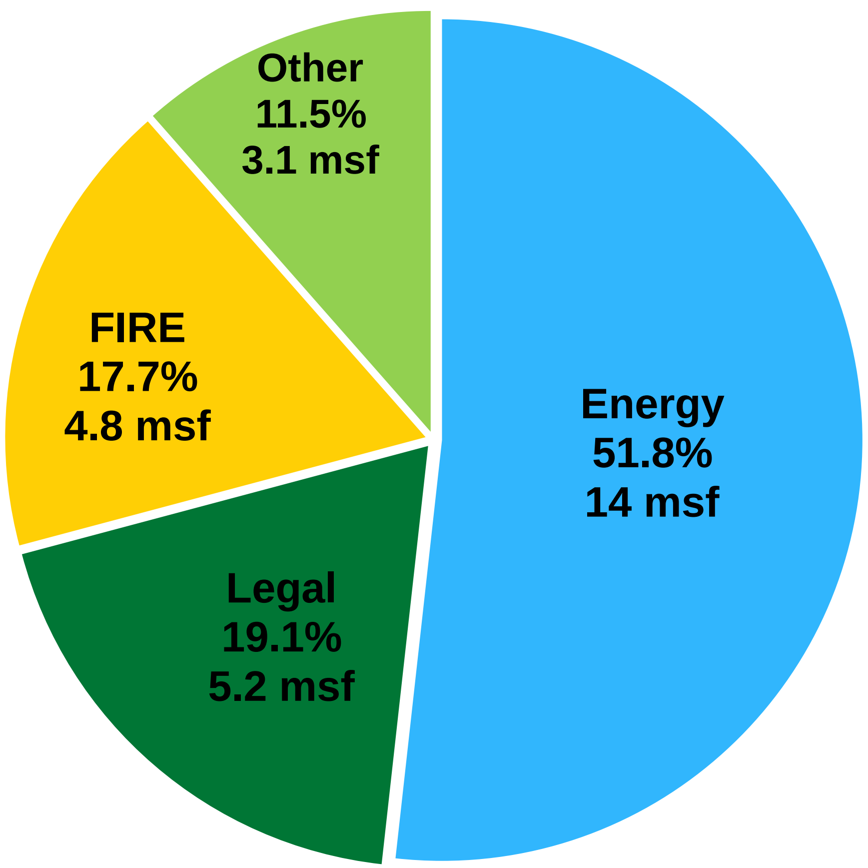
2014/15 Oil Downturn

Wave of renovations and reinvestments to *attract* & *retain* tenants, spurred by the **flight to quality**

Office Space Use by Industry

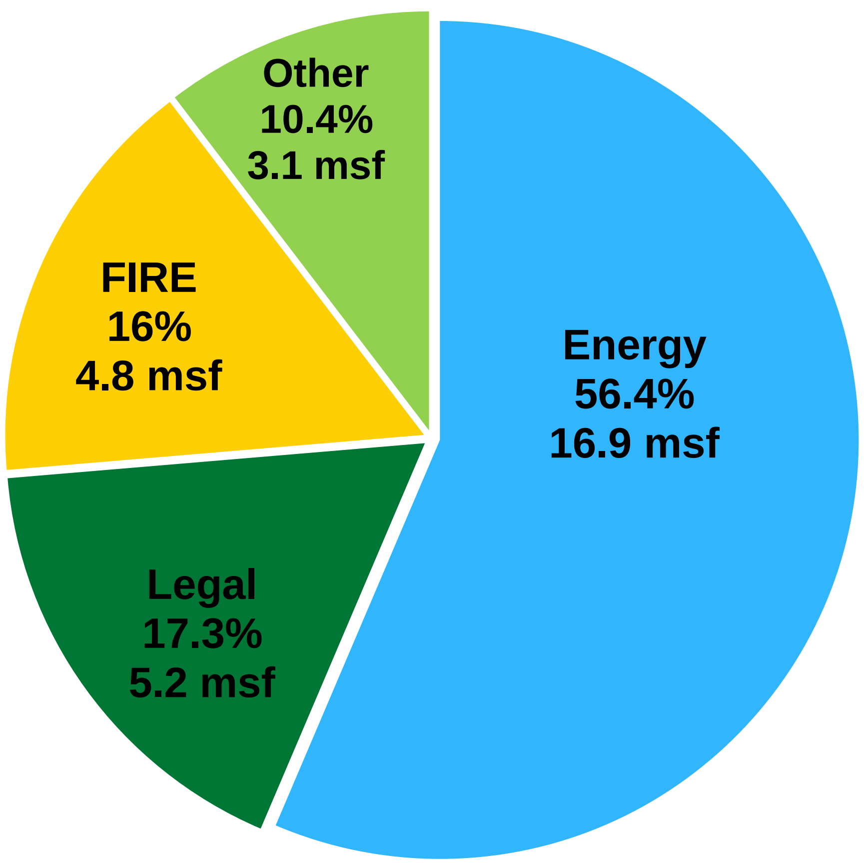
As of 1/1/2019

<u>Properties in the survey universe</u>



- Tiers 1, 2 and 3 office buildings in the survey universe have 27 million SF of *<u>leased</u>* space.
- Excludes owner-occupied buildings

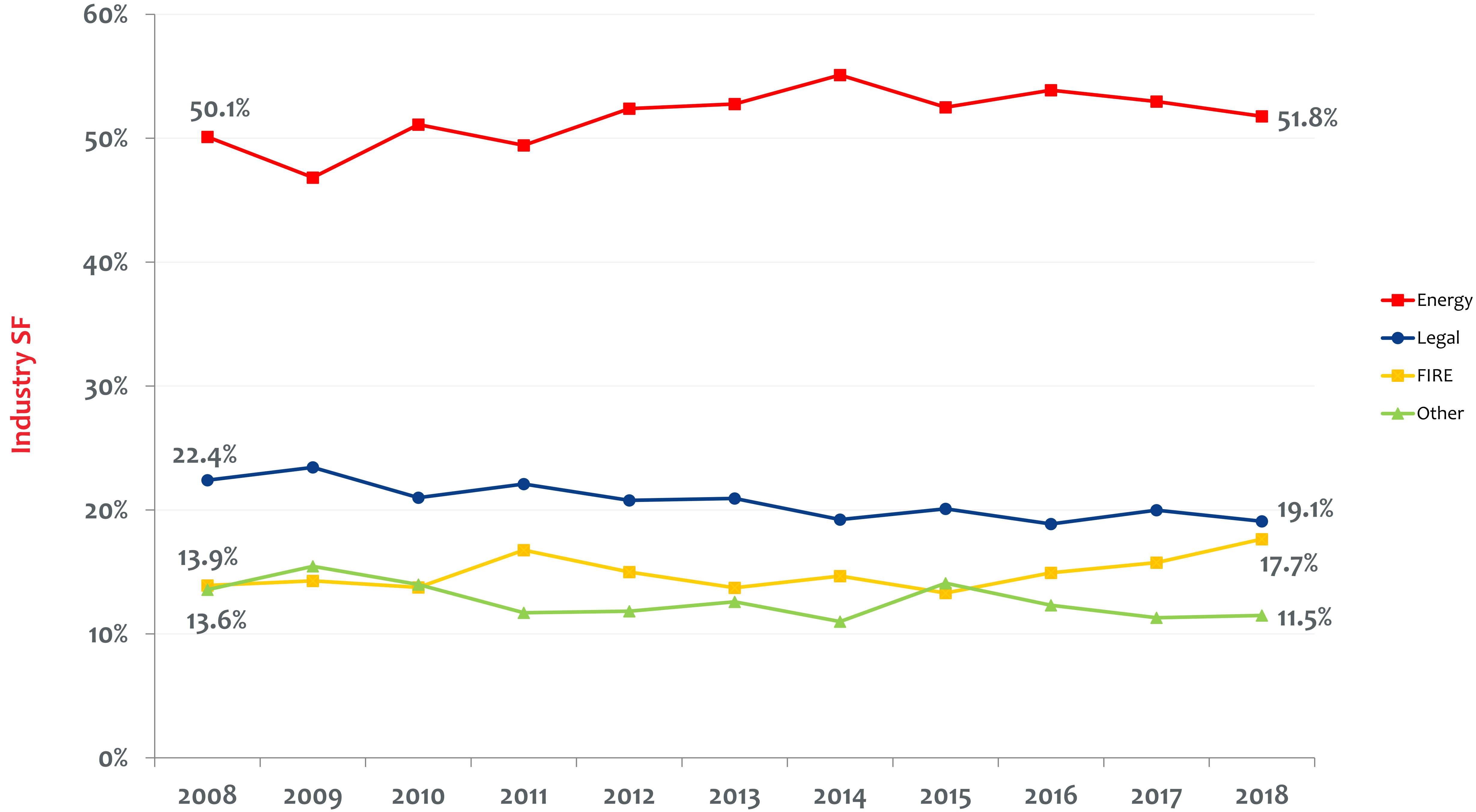
*<u>Properties in the survey universe, **including** owner-occupied buildings</u>*



- Tiers 1, 2 and 3 office buildings in the survey universe, in addition to owner-occupied buildings, have 29.9 million SF of *<u>leased</u>* space.
- Owner-occupied buildings: 1500 Louisiana, 1400 Smith, 1111 Travis, Partnership Tower

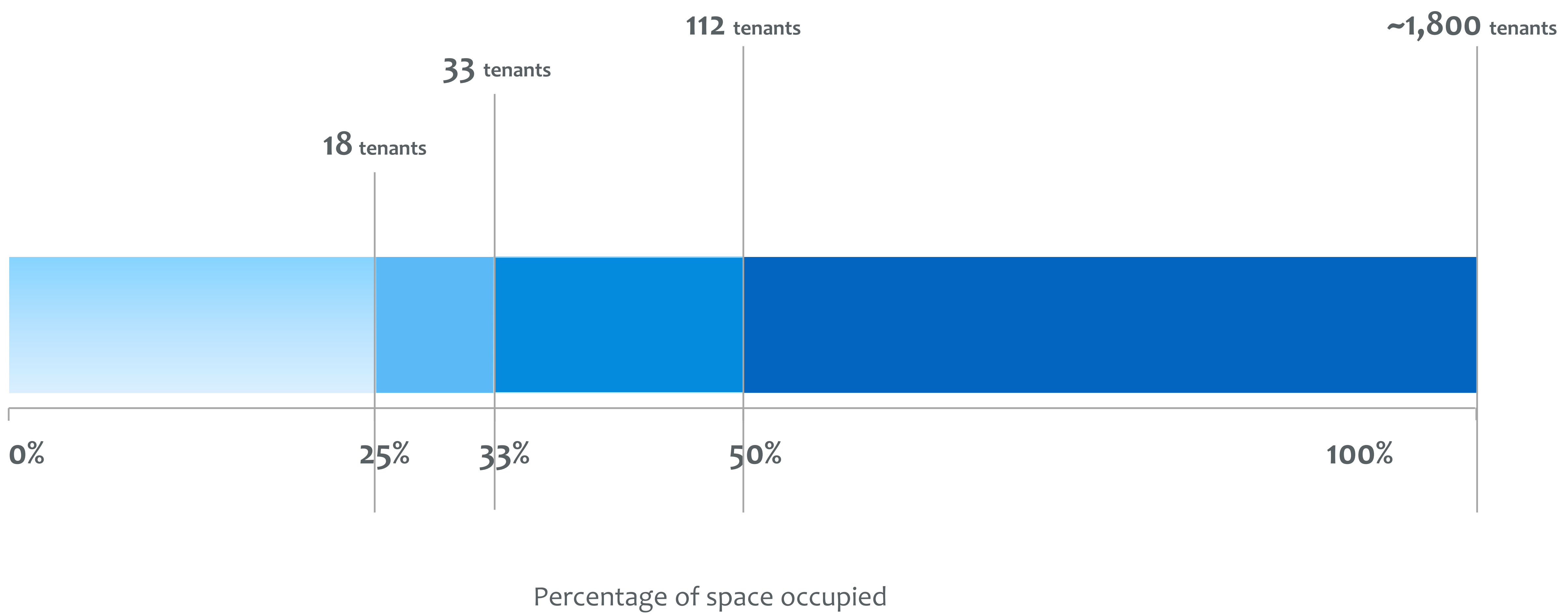
Trends in Office Building Use by Industry

Properties in the Survey Universe, 2008 - 2018



Tenants as a Proportion of Survey Universe

Tenants by % of space occupied



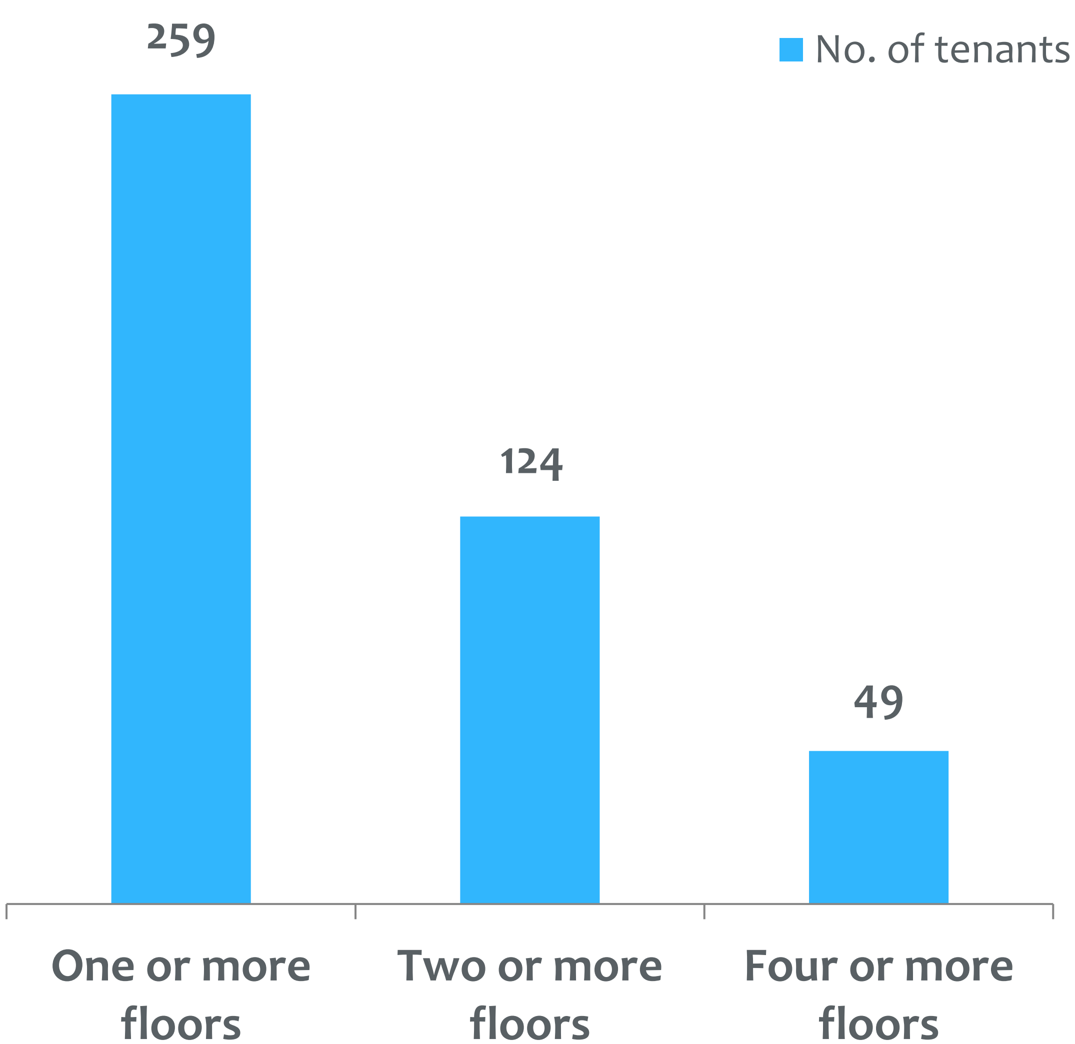
18 tenants occupied 25 percent of the space in 2018, same as in 2017

33 tenants occupied 33 percent of the space in 2018, up from 32 tenants in 2017

112 tenants occupied 50 percent of the space in 2018, down from 113 tenants in 2017

Large Tenants in Survey Universe

Tenants by number of floors

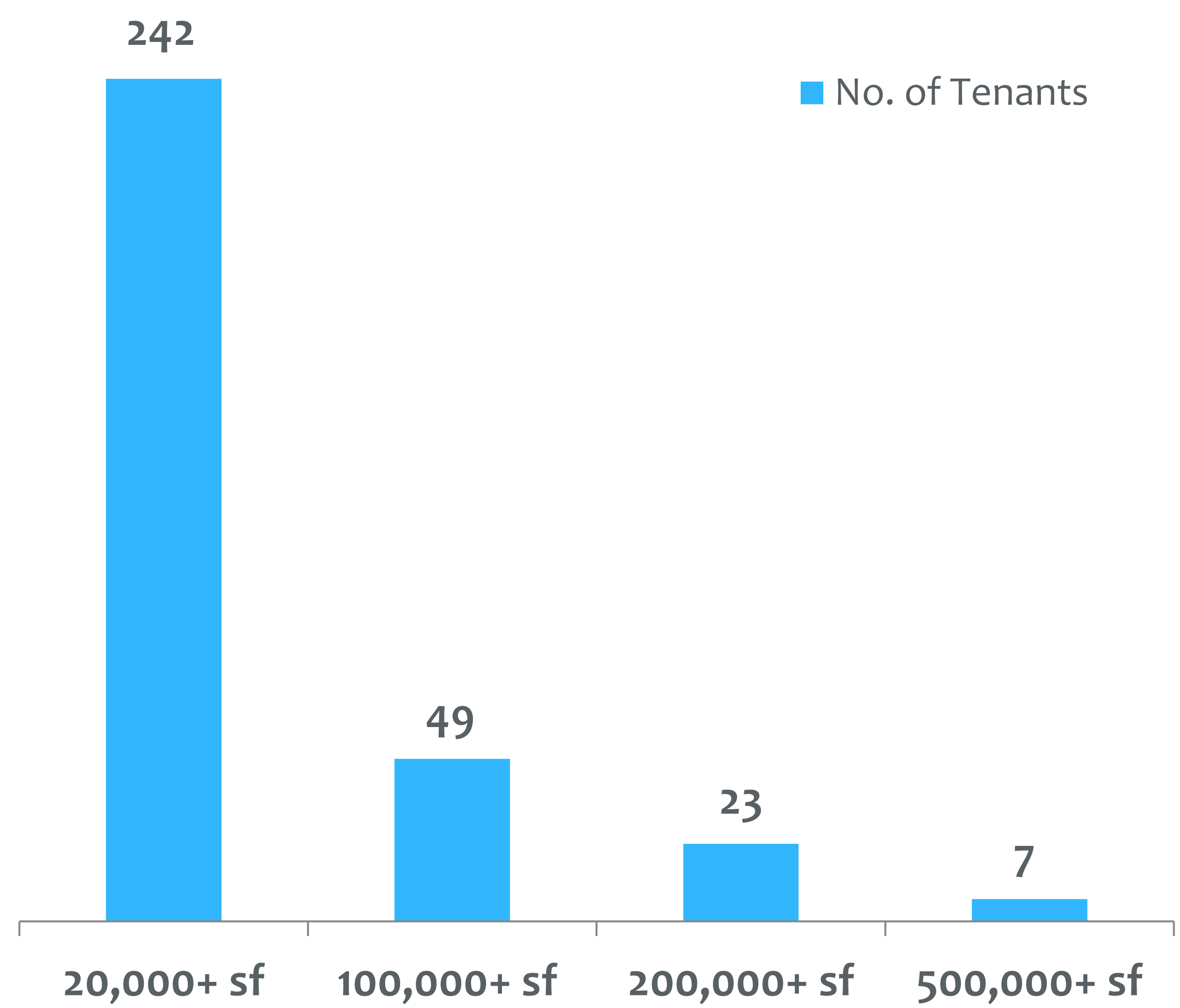


259 tenants occupied one or more floors (same as the year prior)

124 tenants occupied two or more floors (up from 118 tenants the year prior)

49 tenants occupied four or more floors (same as the year prior)

Tenants by square footage



242 tenants occupied 20,000-SF or more floors (down from 245 tenants the year prior)

49 tenants occupied 100,000-SF or more floors (up from 48 tenants the year prior)

23 tenants occupied 200,000-SF or more floors (down from 25 tenants the year prior)

7 tenants occupied 500,000-SF or more (same as the year prior)

Large Tenants in Survey Universe

Central Houston

Summary: 2018 vs. 2017

	EOY 2018	EOY 2017
Tenants by number of floors		
One or more floors	259	249
Two or more floors	124	118
Four or more floors	49	49
Tenants by square footage		
20,000+ sf	242	245
100,000+ sf	49	48
200,000+ sf	23	25
500,000+ sf	7	7
Tenants by % of survey universe		
25%	18	18
33%	33	32
50%	112	113

Summary Data

	Year Ending 2018*	Year Ending 2017
Survey Universe	**36,679,935**	**35,537,315**
Space Being Marketed (**Direct**)	9,514,888	7,758,499
Percent Being Marketed (**Direct**)	25.9%	22%
Space Being Marketed (**Sublease**)	1,435,971	1,819,523
Percent Being Marketed (**Sublease**)	3.9%	5.1%
Total Space Being Marketed	**10,950,859**	**9,578,022**
Percent Being Marketed (Total)	**29.9%**	**27%**
Leases Signed (Direct)	**5,314,762**	**4,720,602**
Change in Space Being Marketed (Direct)	(436,504)	(591,933)

*The change in the Survey Universe was a result of the addition of Texas Tower

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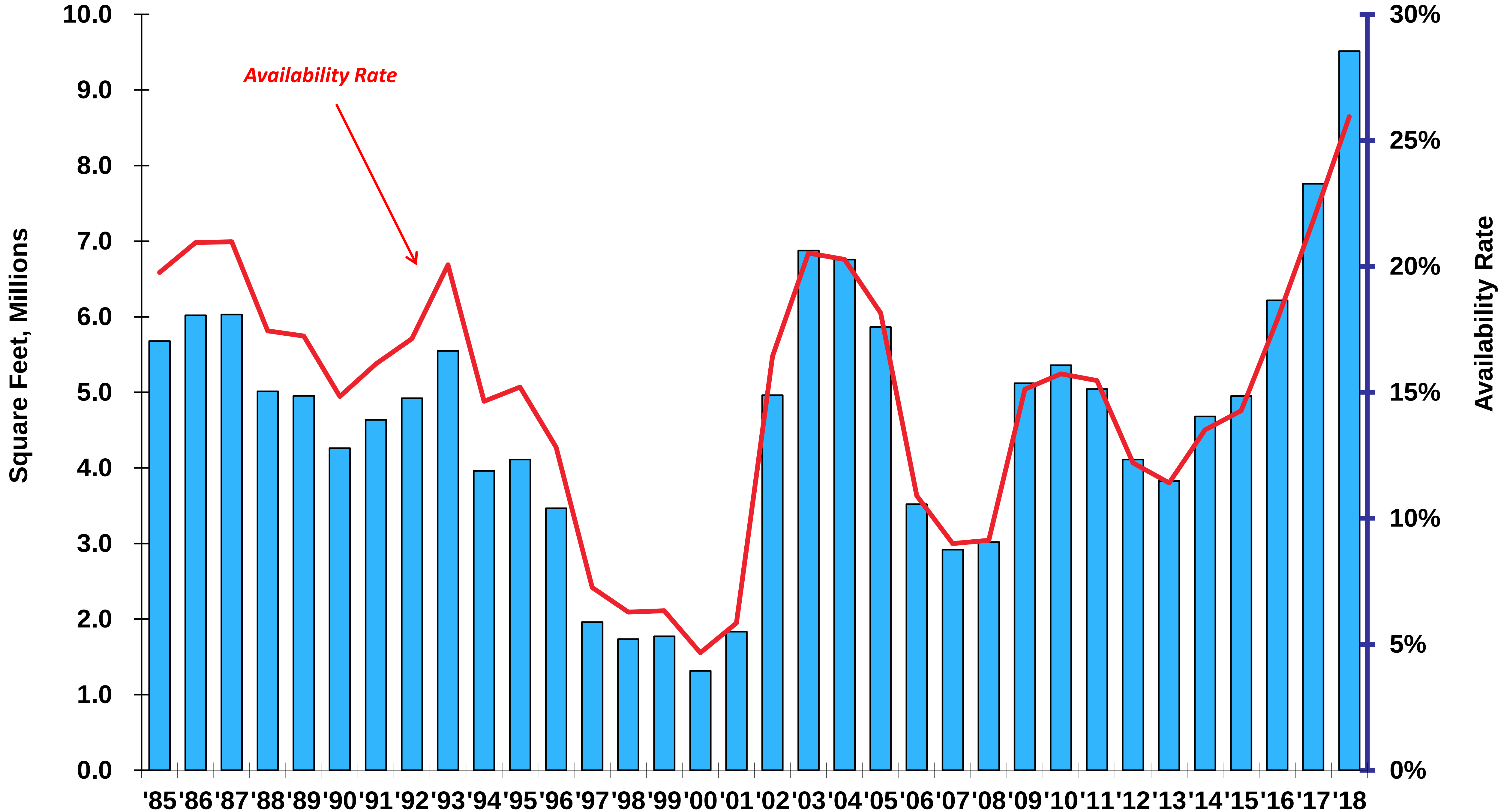
Historical Space Being Marketed, *By Size/Year*

As of 1/1/19



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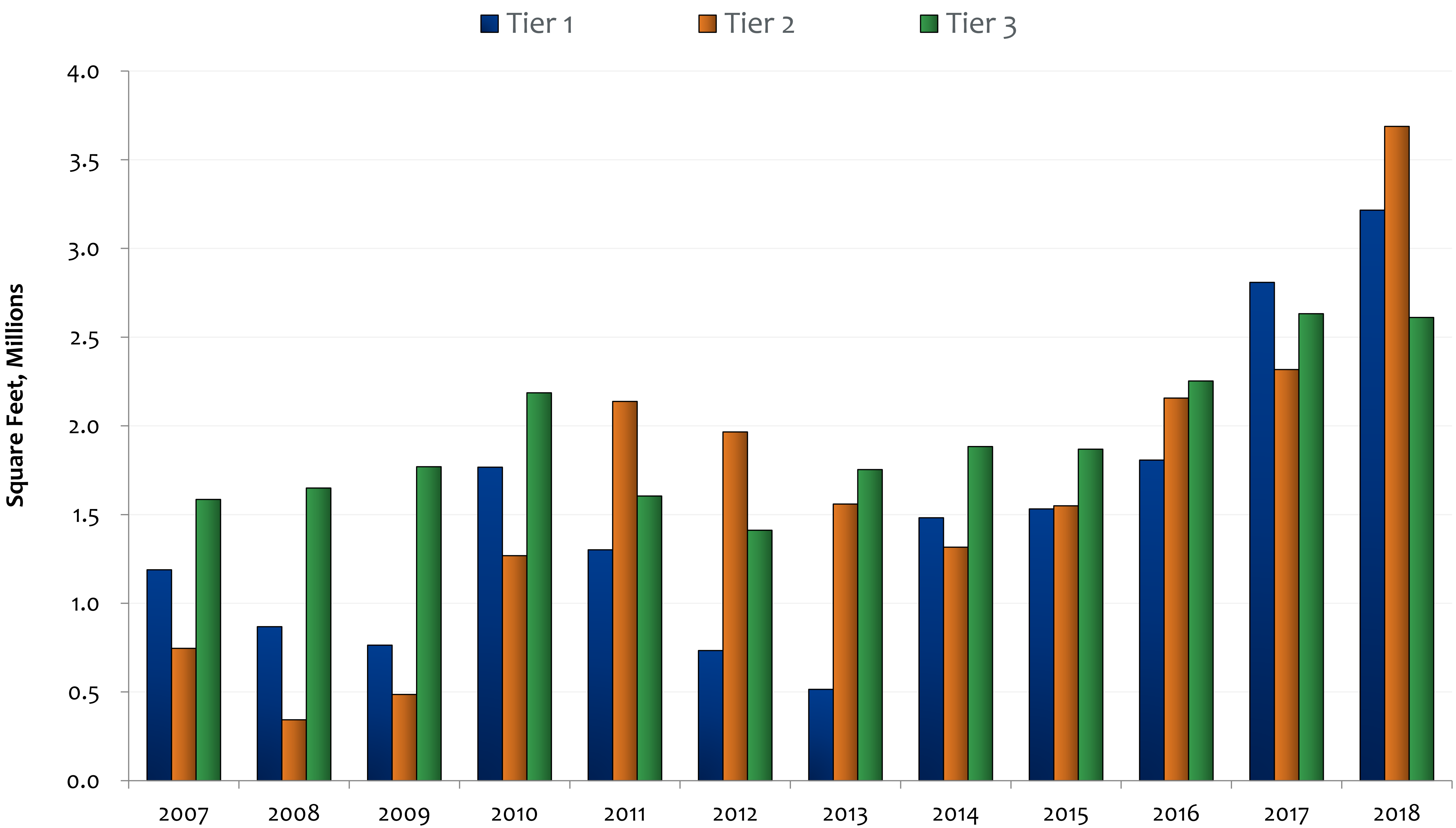
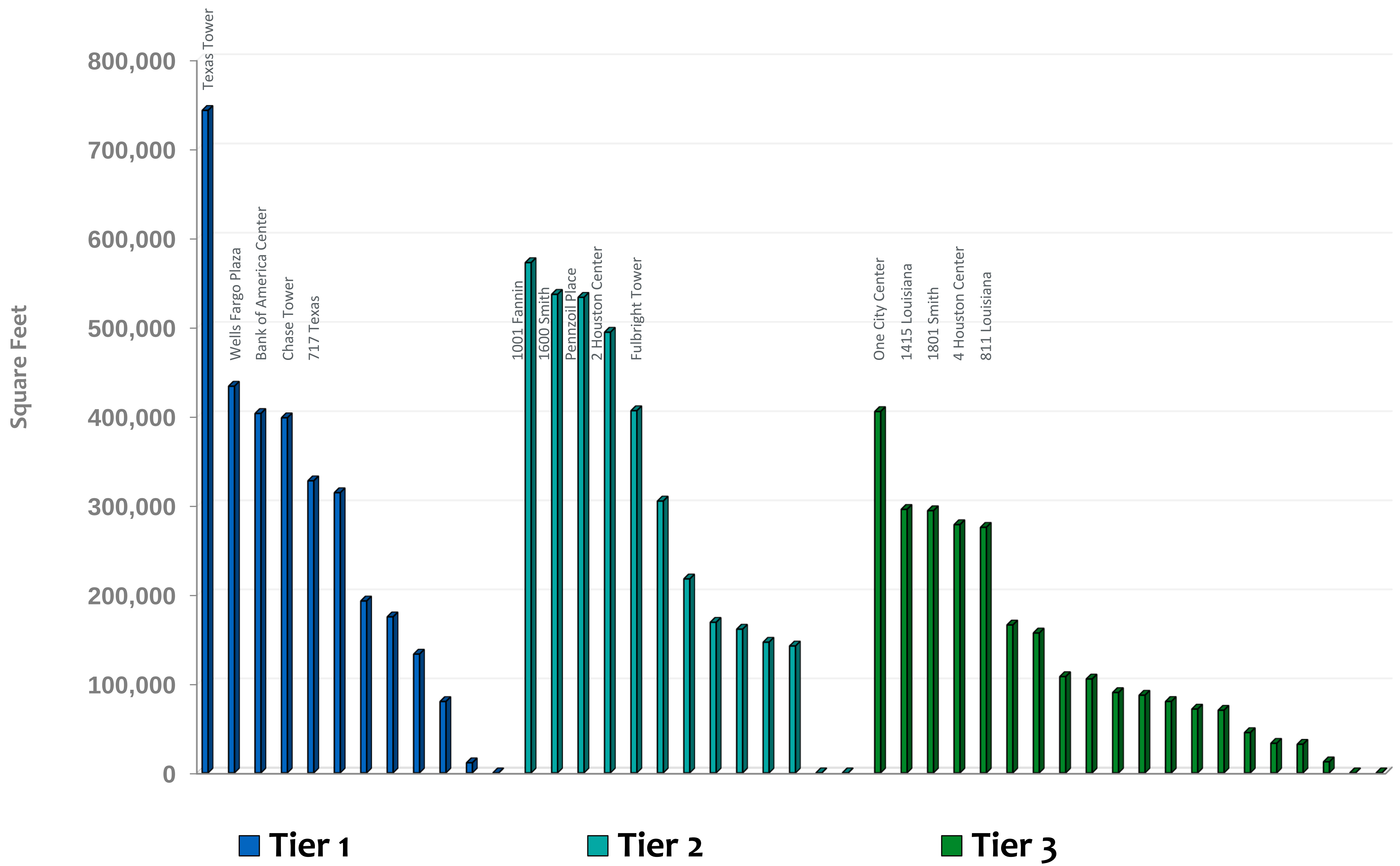
Historical Space Being Marketed, *By Tier*



DIRECT SPACE

Space Being Marketed by Building

As of 1/1/2019



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Large Blocks of Available Space

As of 1/1/2019

Tier	Building	Floors	SF	Avail	Former Tenant
1	Texas Tower (845 Texas)	12-30, 36-40	743,225	Oct. 2021	New
2	1600 Smith	5-19, 40-48	498,446	Immed.	United Airlines/Chevron
2	1001 Fannin	23-36, 41-43	479,389	Nov. 2021	Vinson & Elkins/Waste Management
2	One Shell Plaza	23-31, 41-46 (Fls. 23-26 are sublease)	372,970	Immed.	Shell
1	717 Texas	16-27	328,113	Immed.	Freeport McMoRan
2	2 Houston Center	4-10, 14-15	326,633	Immed.	Shell + Argent
2	1100 Louisiana	25-34, 36-38	294,759	Immed.	Enbridge
1	One City Centre	2-10,20-22,24-25	292,524	Jan. 2021	Waste Management
2	Fulbright Tower	2-3, 21-22, 25-27, 38-39,41-42	270,382	Immed.	Norton Rose / Pulse Network LLC
3	1801 Smith	2-5, 11-18	264,473	Immed.	United Airlines
3	1201 Fannin – NRG	1-11	261,965	Immed.	NRG
1	Wells Fargo Plaza	2-3, 30-35, 43-46	261,807	Immed.	Gardere
1	609 Main	25-33	255,911	Immed.	New
3	1415 Louisiana	3-5, 18-20, 25-28, 30-32, 37-38	225,027	Immed.	Eagle Rock, Sabine, Tandem Partners
3	811 Louisiana	10-16	220,529	Immed.	Shell
1	Hess Tower	8-14	215,887	Immed.	Hess
2	Pennzoil - South Tower	3-12	206,010	Immed.	Gensler, Proviti + new
2	Pennzoil - North Tower	6-12, 28-29	185,718	Immed.	Freeport + new
1	600 Travis	8-18 (Fls. 12-14 are sublease)	170,987	Immed.	Riviera Resources, Inc. (Linn Energy)
1	LyondellBassell Tower (1HC)	19-23, 26-27	162,923	Immed.	Merrill Lynch
1	Bank of America Center	4-6, 18-19, 51-52	157,004	Oct. 2019/ Immed.	Bank of America/ Piper Jaffray
1	1000 Main	19-23	144,394	Immed.	Shell/ Gen On (formerly Reliant)
1	811 Main (BG Group)	19-23	133,441	Immed.	Quorum Business Solutions
2	Kinder Morgan	24-27	125,281	Immed.	EP Energy
3	KBR Tower (601 Jefferson)	6-10	123,040	Immed.	KBR / Legacy
1	5 Houston Center	11-14	118,232	Immed.	Ernst & Young (relocated to higher floors)
		TOTAL:	**6,839,070**		

Red font indicates *sublease space*

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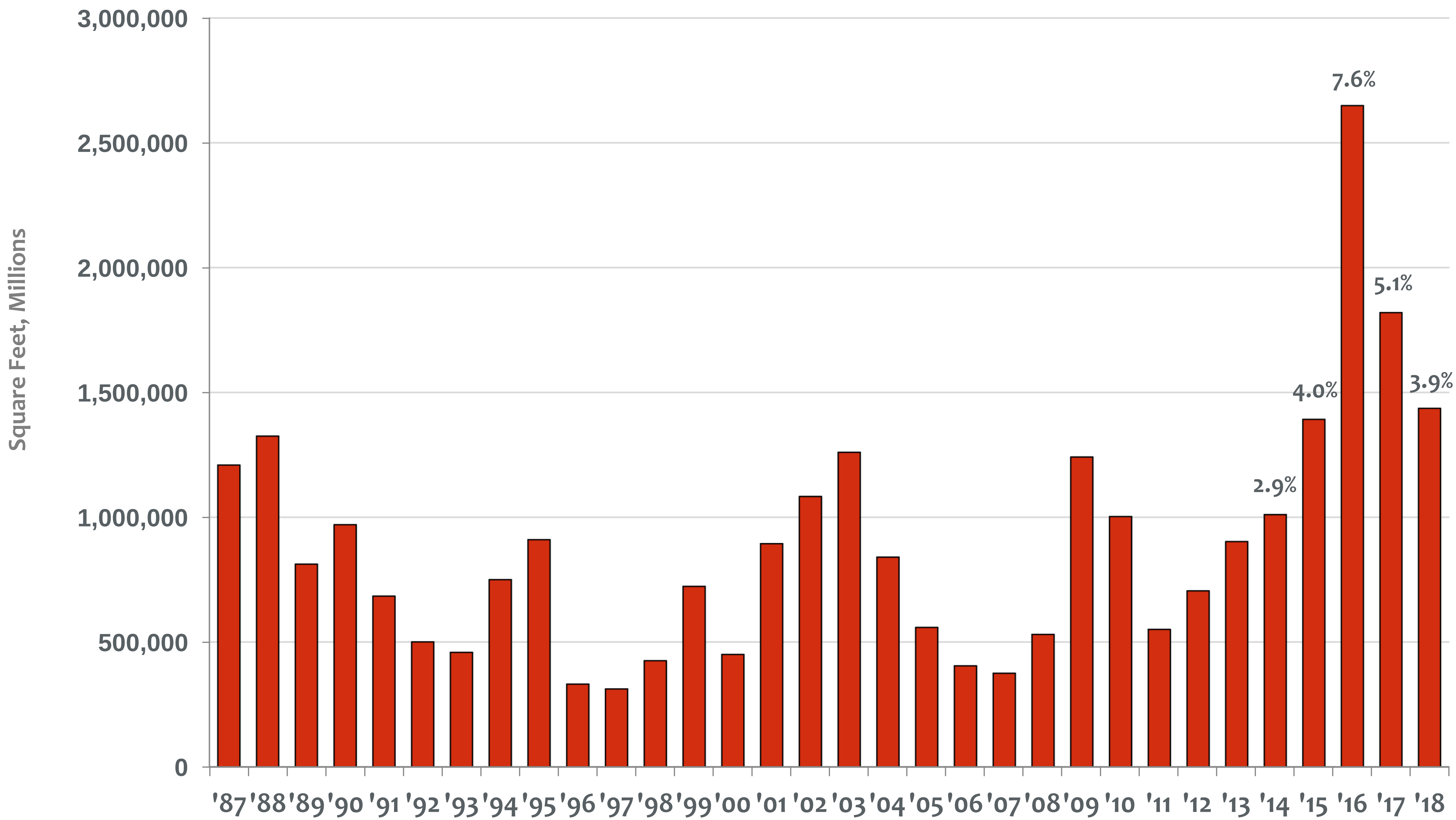
Full-Floor Sublease Spaces

Sorted by Termination date, with term as of 1/1/2019

Tier	Building	Description	Expiration	SF
2	Two Allen Center	5 (Devon)	Jan. 2020	27,759
2	Three Allen Center	3, 6 (Devon)	Jan. 2020	41,951
1	600 Travis	12-14 Riviera Resources (Linn Energy)	Jan. 2020	63,744
3	1201 Fannin – NRG	1-11 (NRG)	Dec. 2020	261,965
2	1100 Louisiana	55 (Vitol)	Apr. 2021	19,491
1	601 Travis	14 (Vistra Energy (Dynegy))	Apr. 2022	62,261
3	919 Milam	6-7 (Valerus Compression)	Jun. 2023	44,276
2	Kinder Morgan	24-27 (EP Energy)	Aug. 2025	125,281
1	1000 Main	31 (Shell)	Dec. 2025	29,675
2	One Shell Plaza	23-26, 41-46 (Shell)	Dec. 2025	247,146
1	Hess Tower	8-14 (Hess)	Jun. 2026	215,887
2	1001 Fannin	6 (Enervest, Ltd)	Nov. 2026	26,897
1	600 Travis	24 (Locke Lord)	Jan. 2027	21,588
3	KBR Tower (601 Jefferson)	6-10 (KBR)	Jun. 2030	123,040
			TOTAL:	**1,310,961**

Historical Sublease Available

As of 1/1/19



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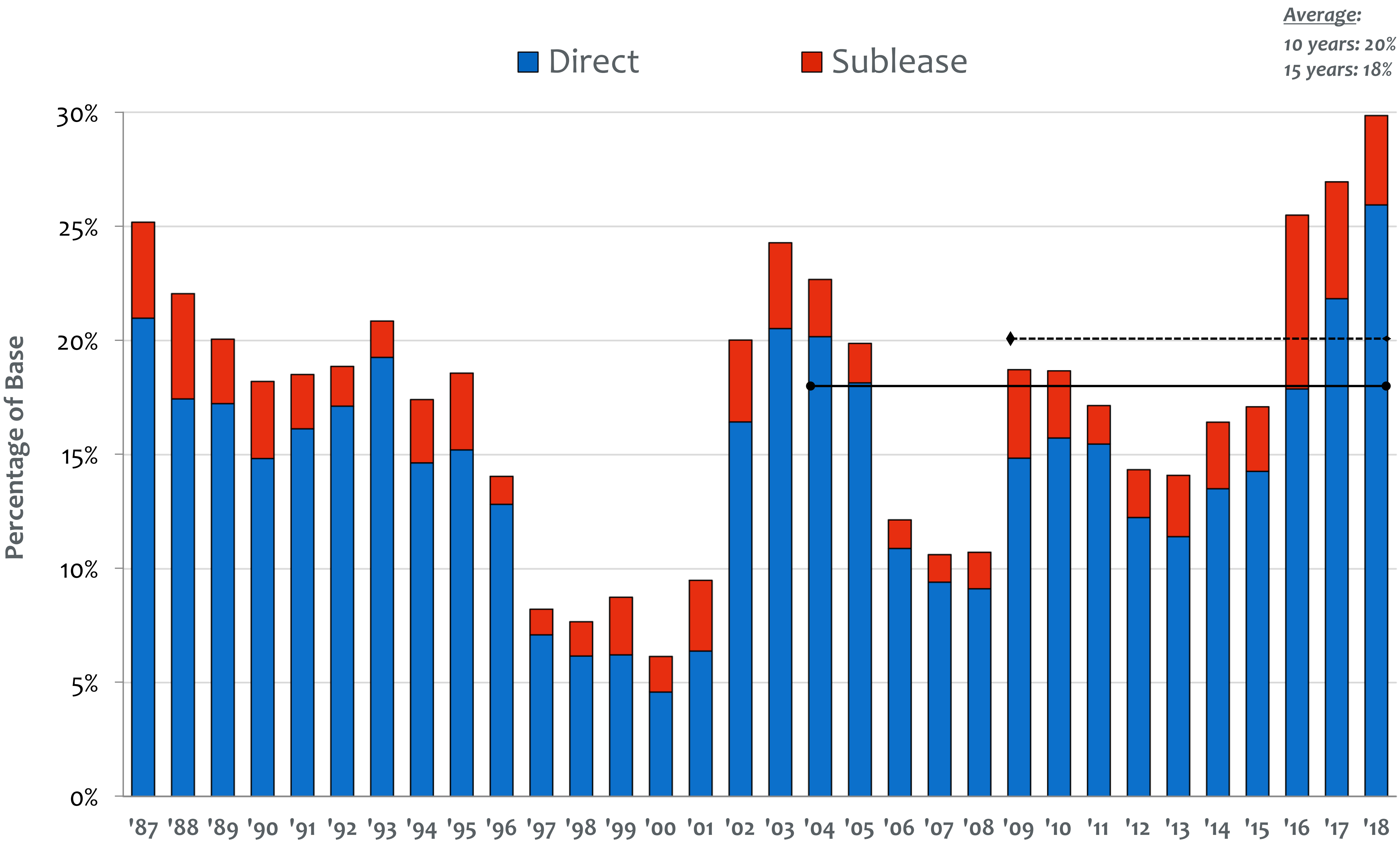
Historical Space Being Marketed



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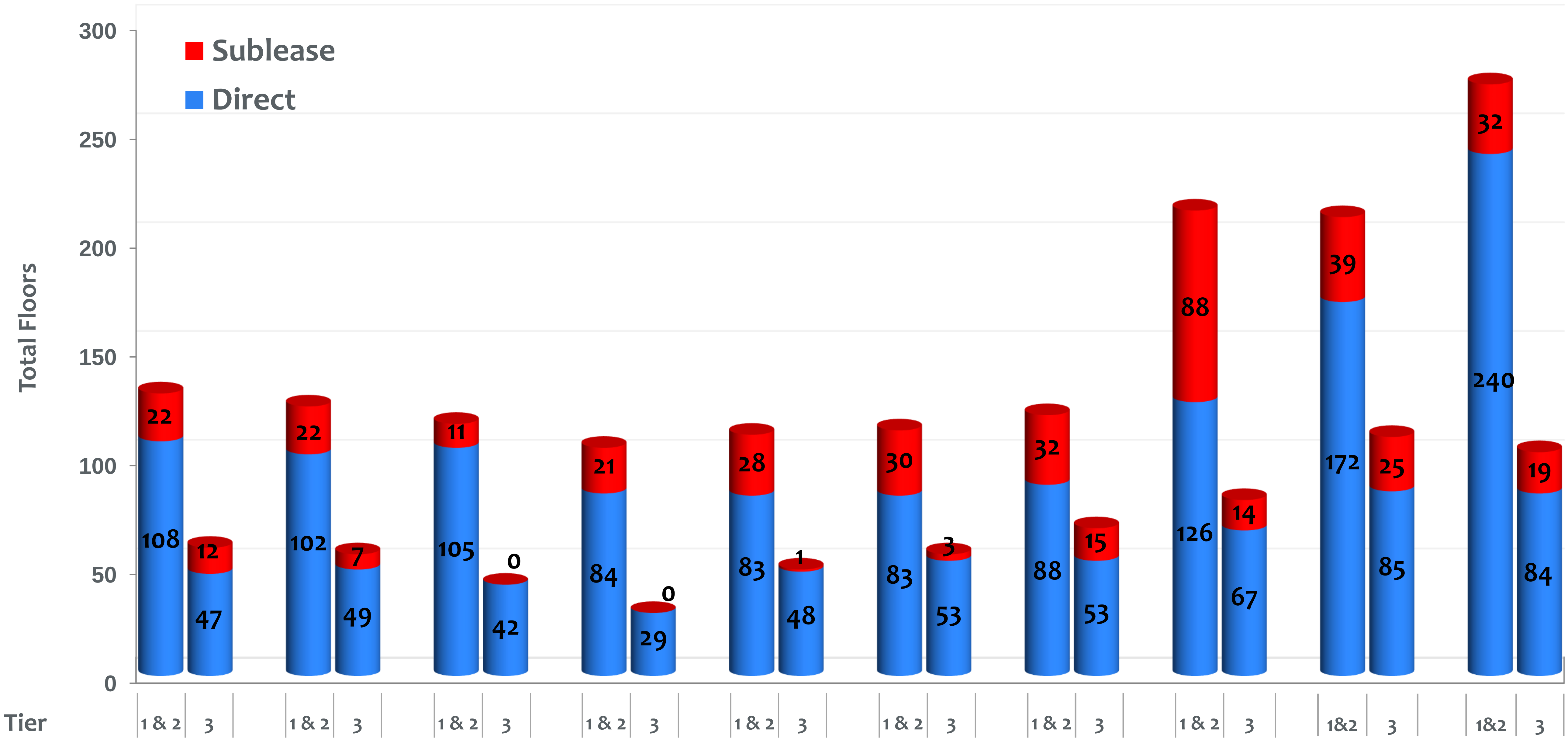
Full Floors Available

As of 1/1/2019



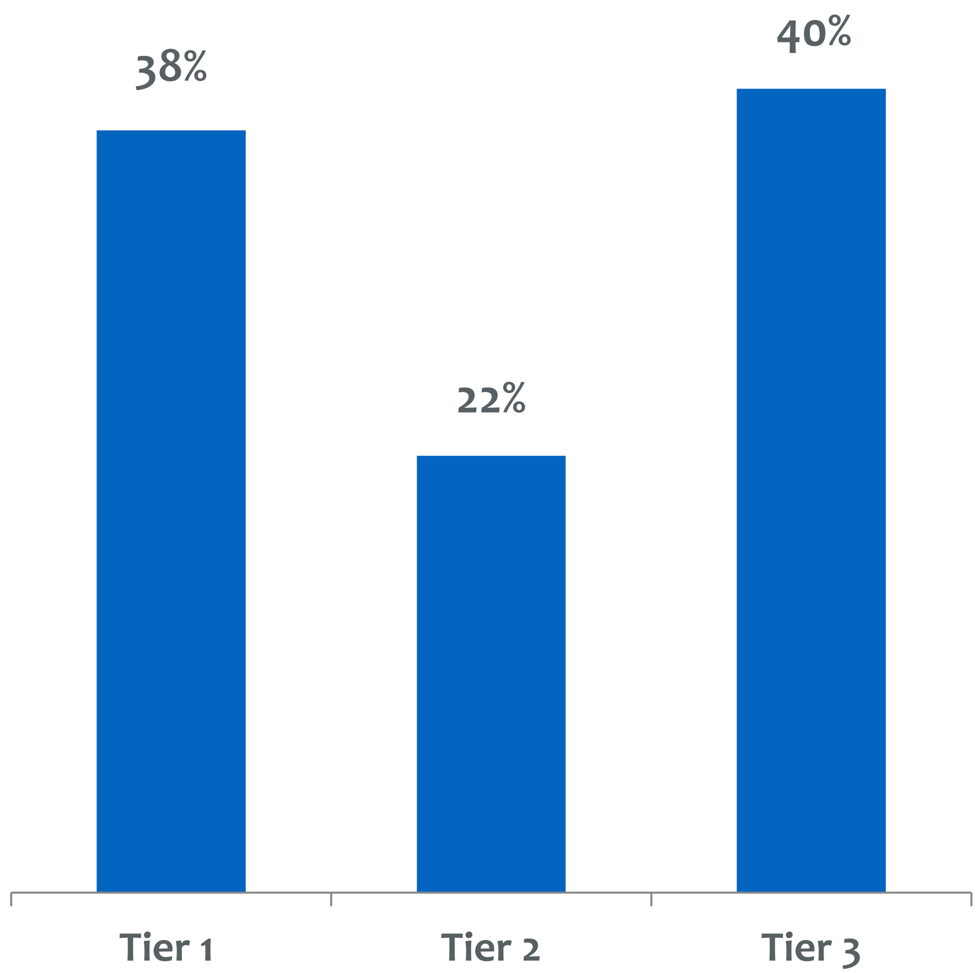
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Floors	189	180	158	134	160	169	188	295	321	375

Historical Leasing Activity

In millions of SF

New to Downtown Tenants

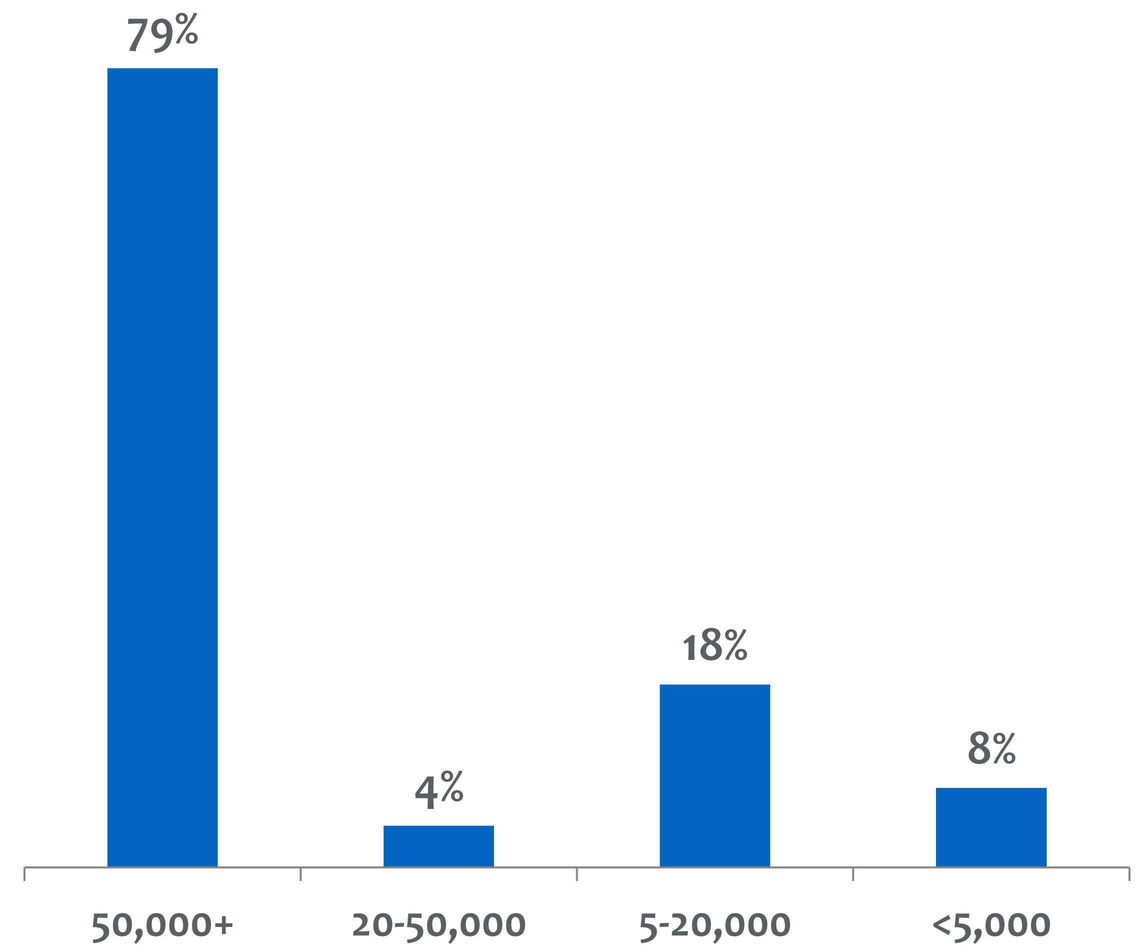
By Tier



Tier 1	Tier 2	Tier 3
261,042-SF	149,633-SF	275,351-SF
6 Bdgs	4 Bdgs	10 Bdgs

~686,000-SF in **20 buildings**

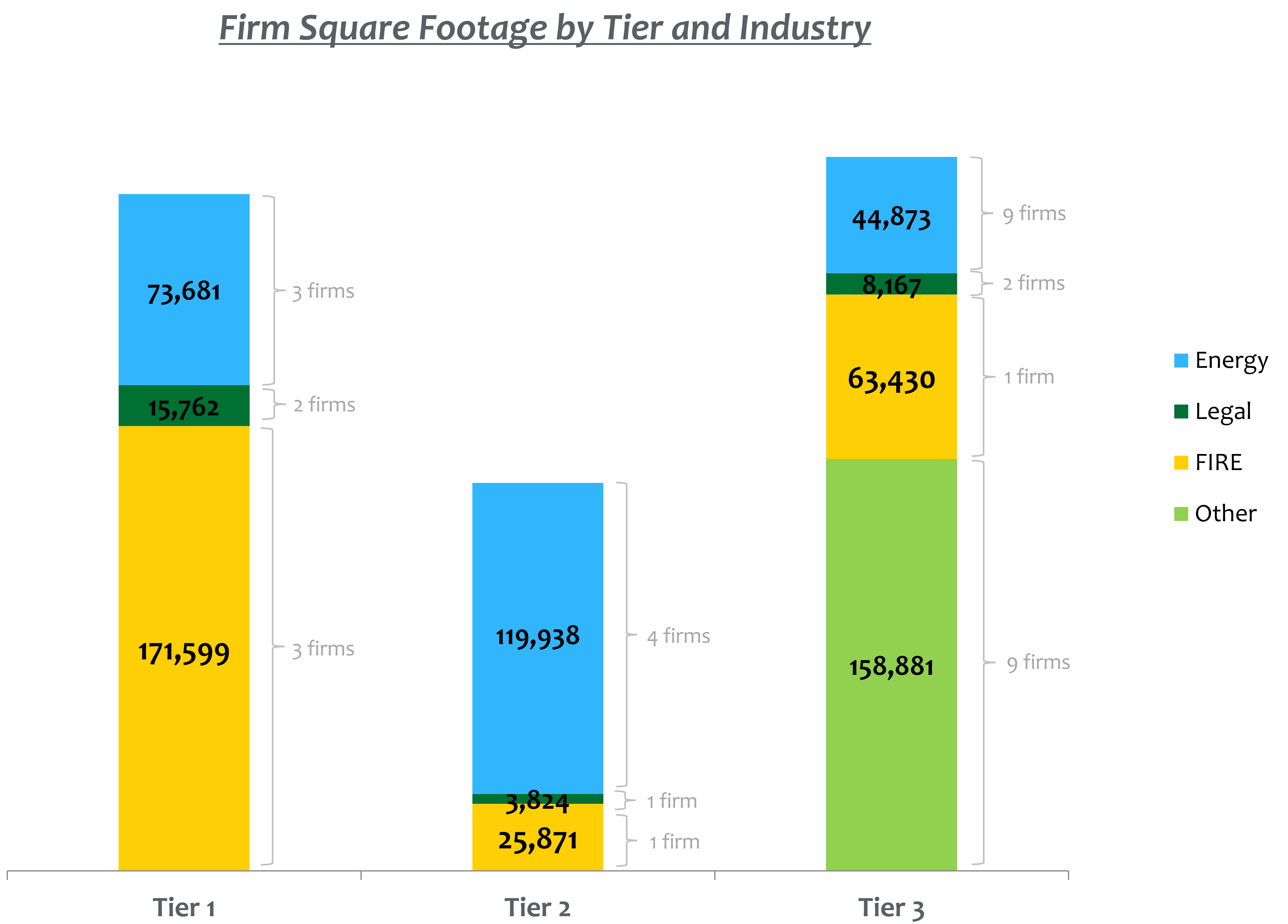
By Square Footage



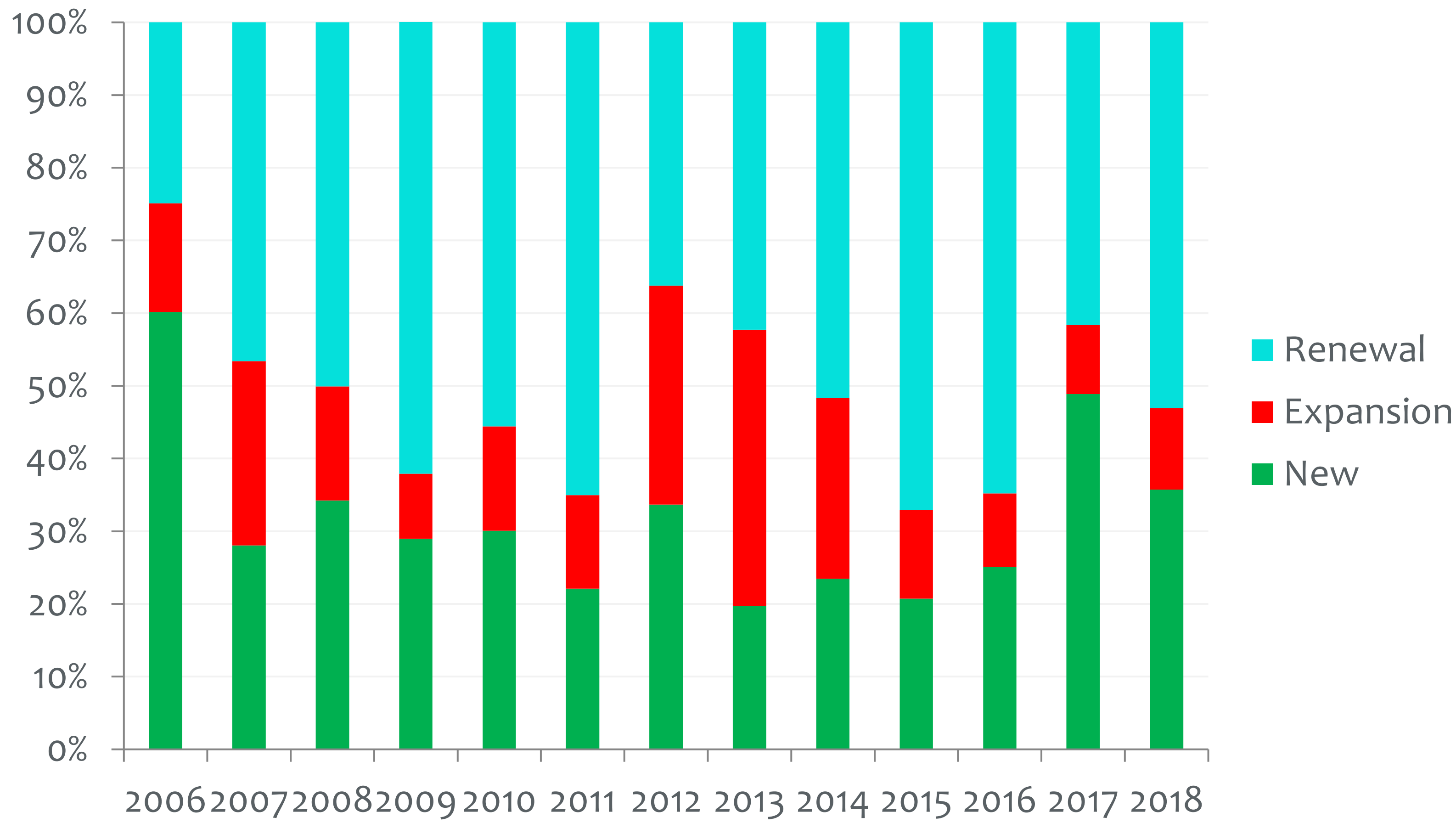
50,000+	20-50,000	5-20,000	<5,000
497,021-SF	25,871-SF	113,757-SF	49,377-SF
5 Leases	1 Lease	12 Leases	17 Leases

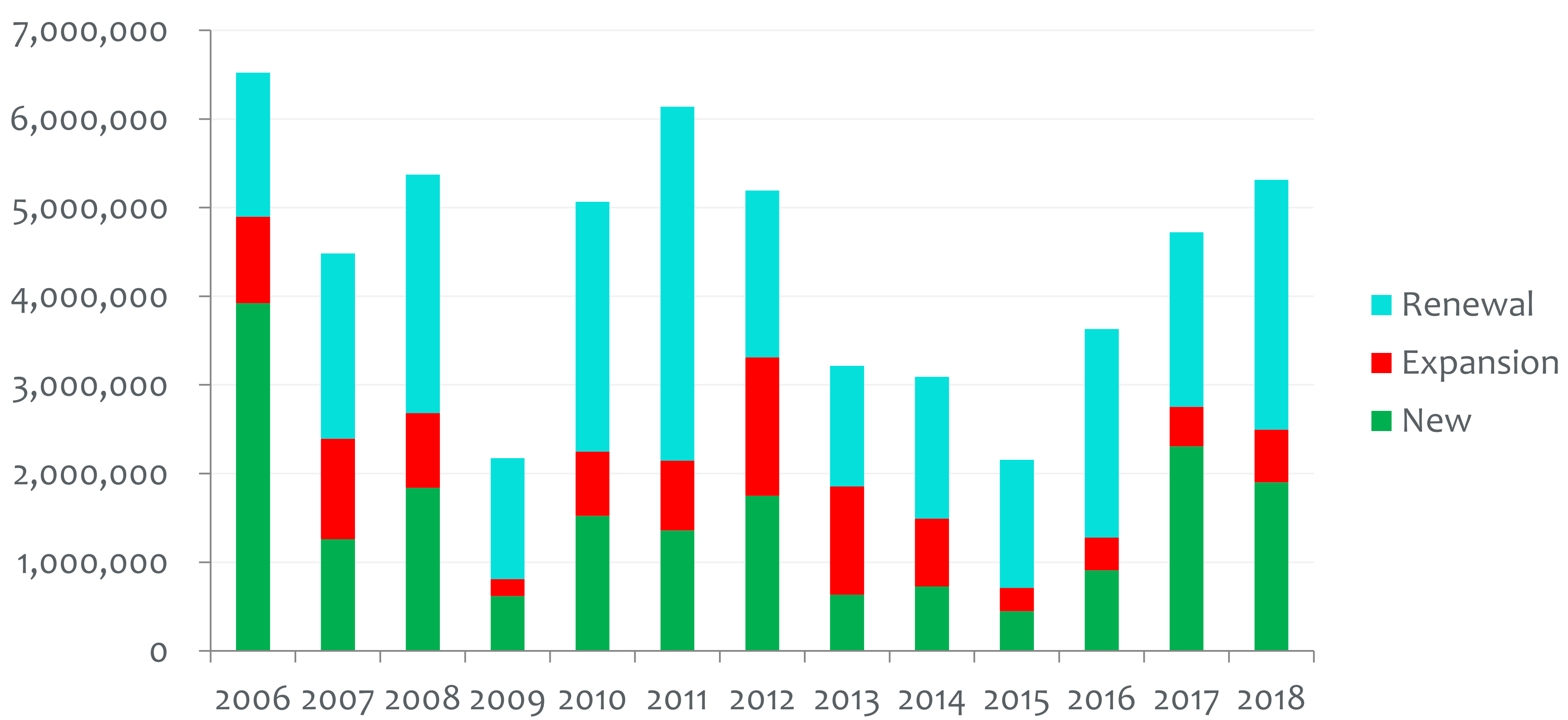
35 Leases

New to Downtown Tenants



Leasing by Transaction Type





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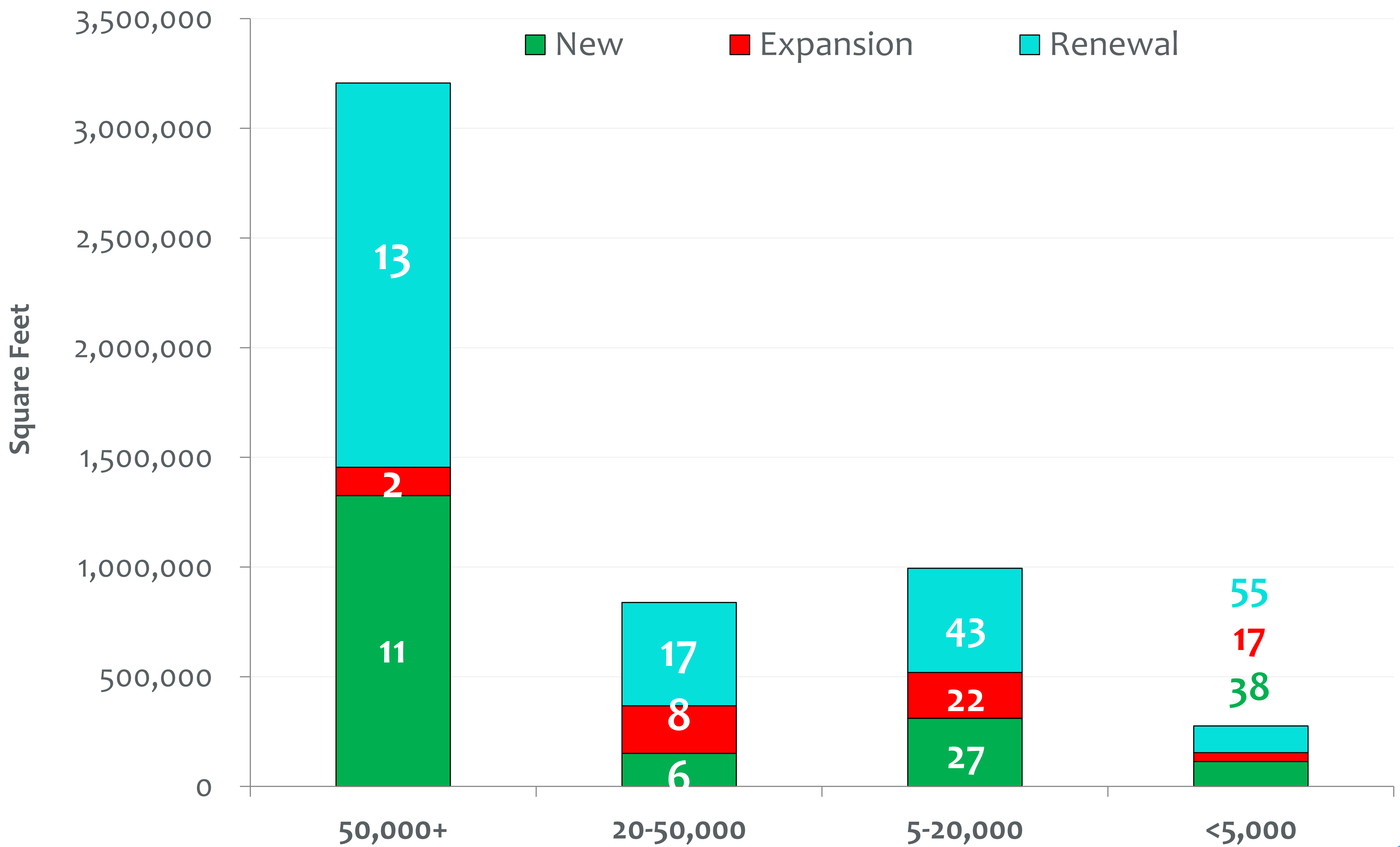
Lease Transactions [249], *by Size & Type*



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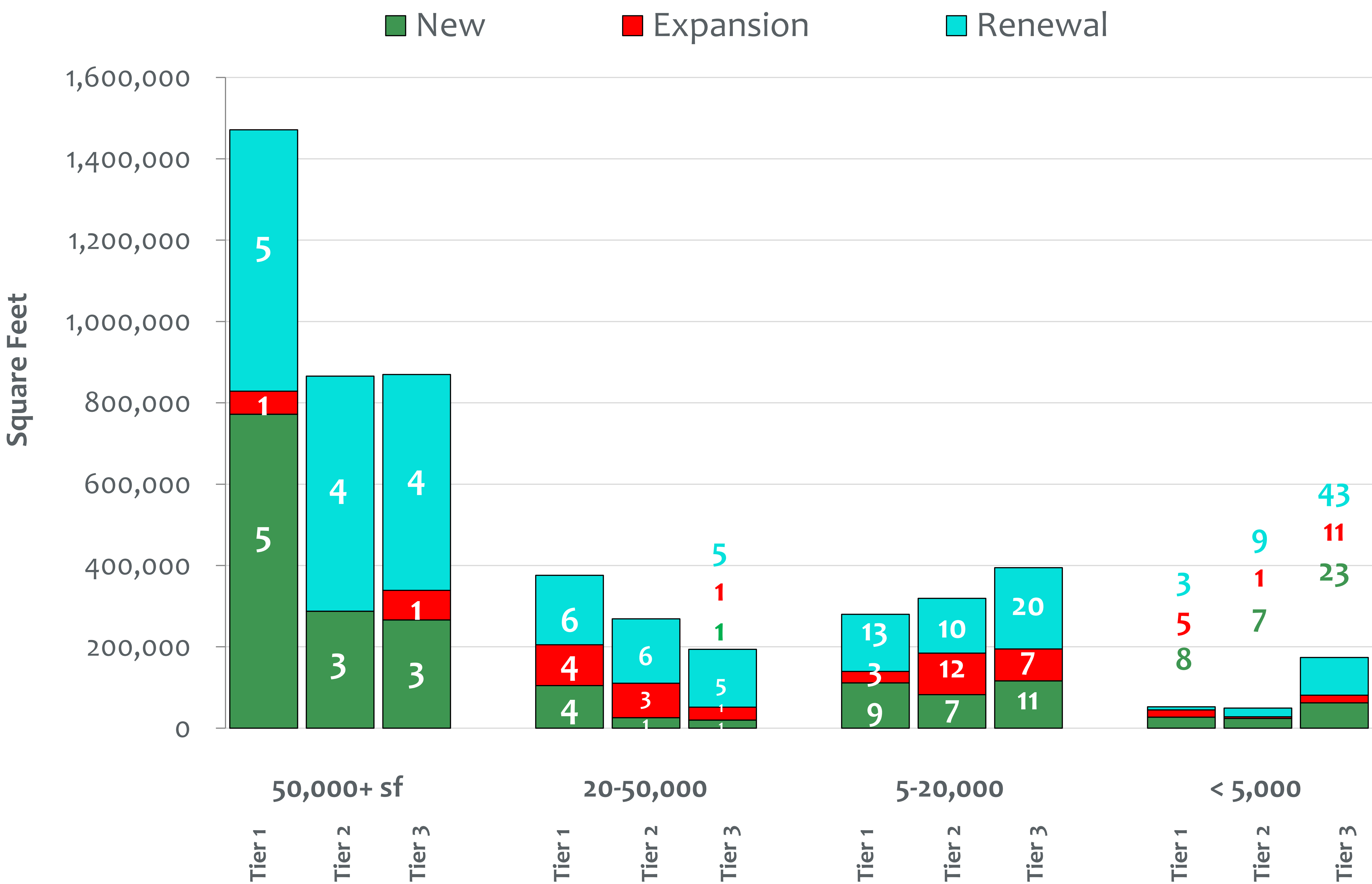
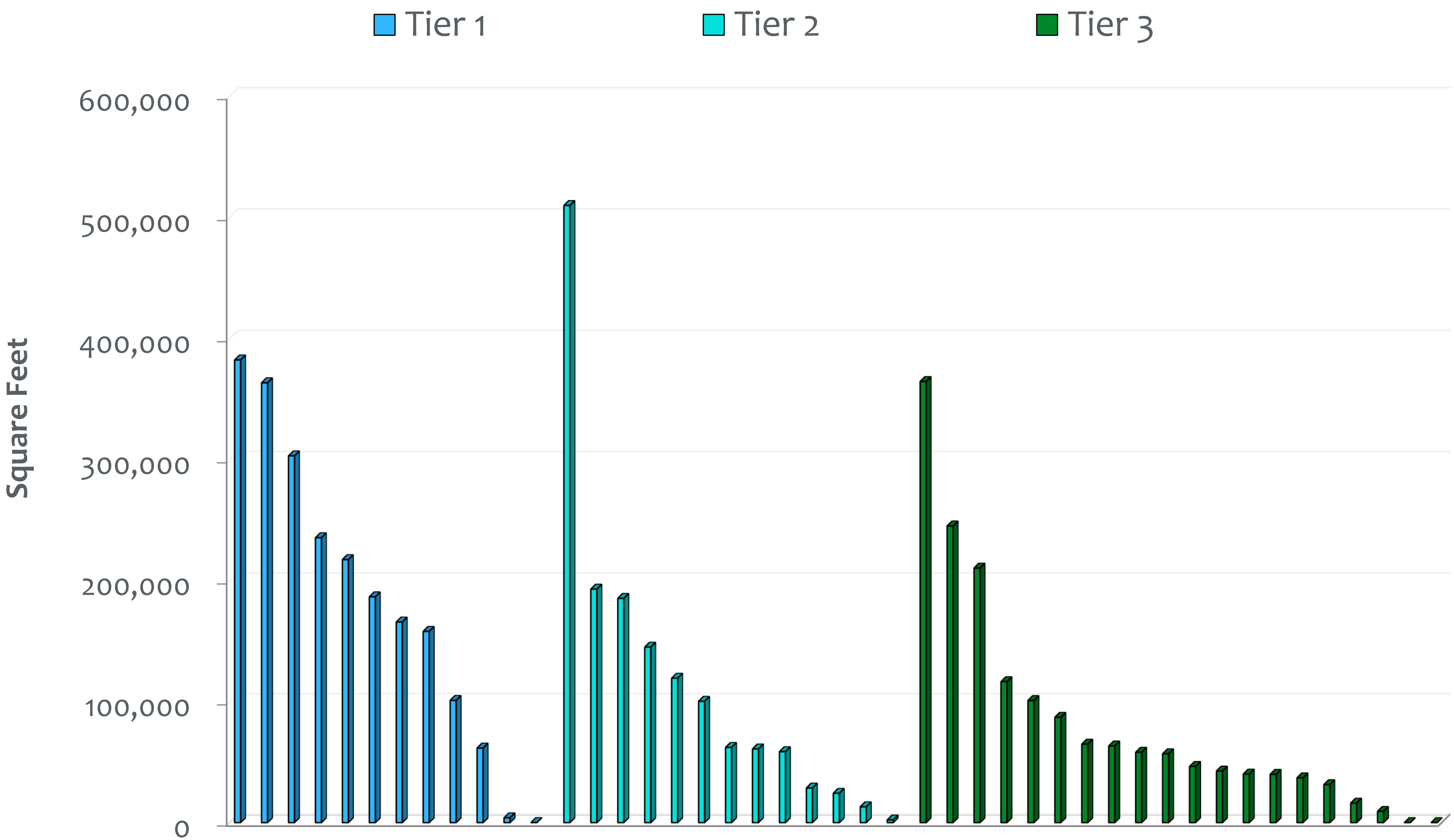
Lease Transactions, *by Tier*



Leases Signed *by Building*



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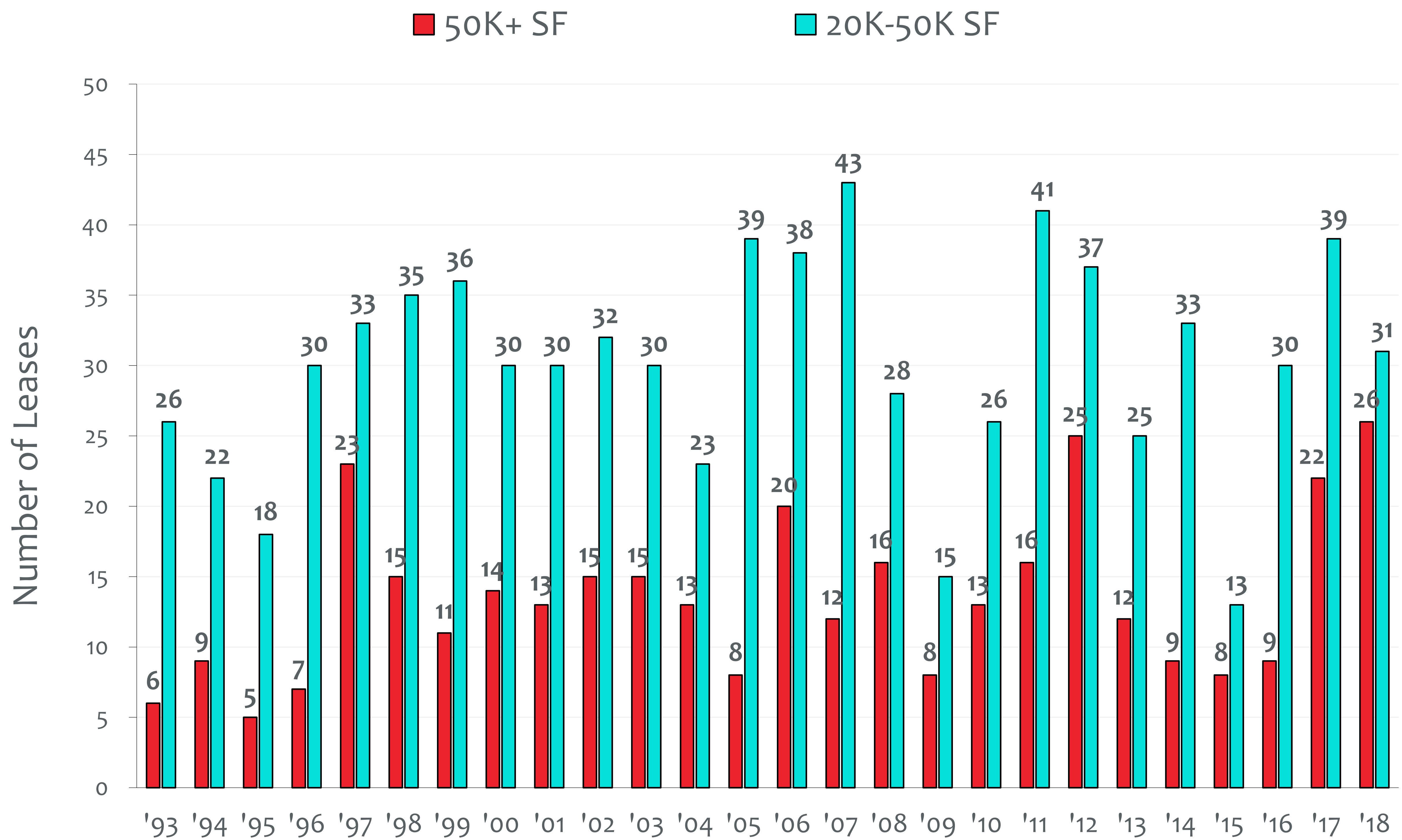
Number of *Large Transactions*



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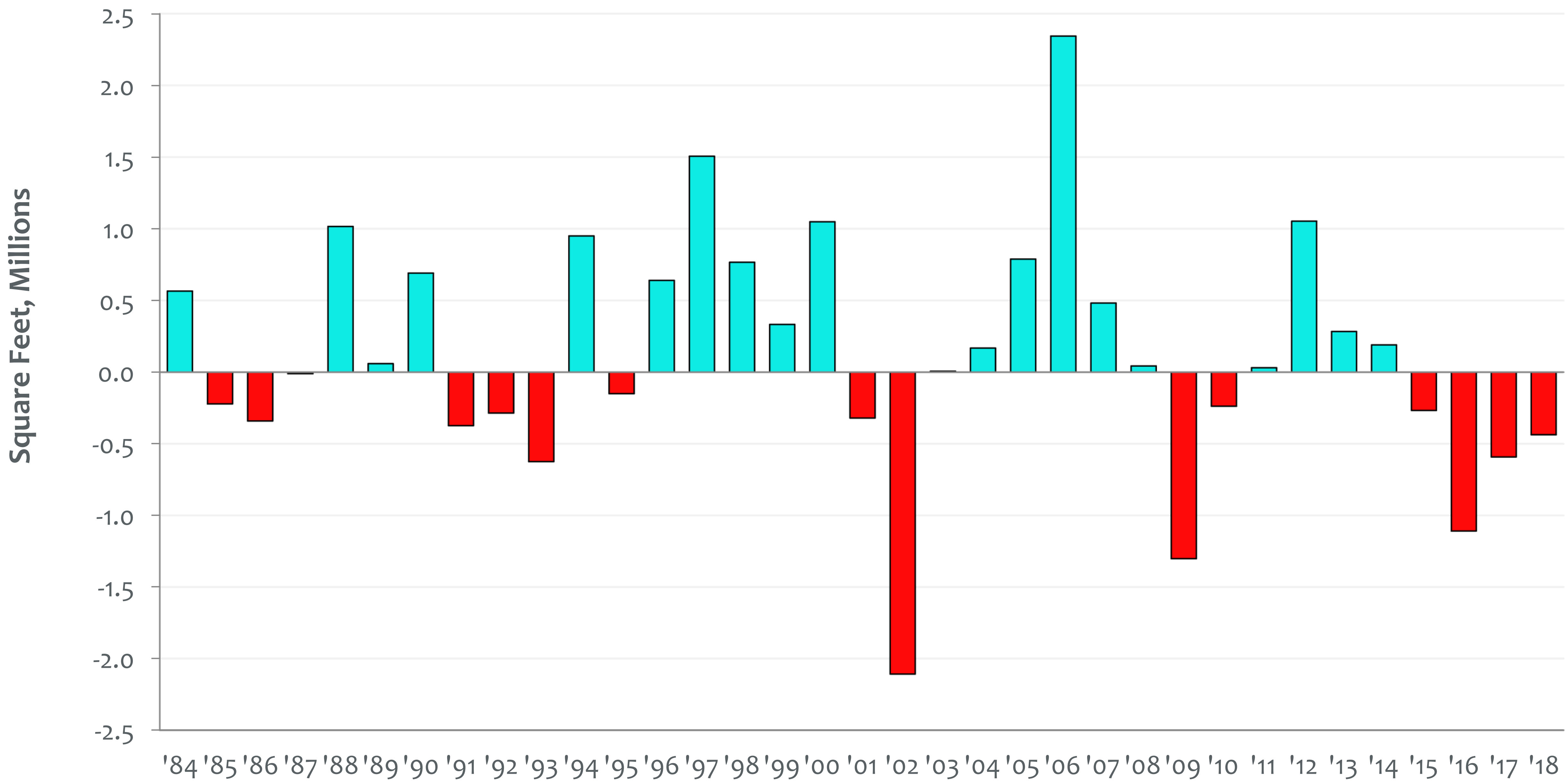
Historical *Change in Marketed Space*



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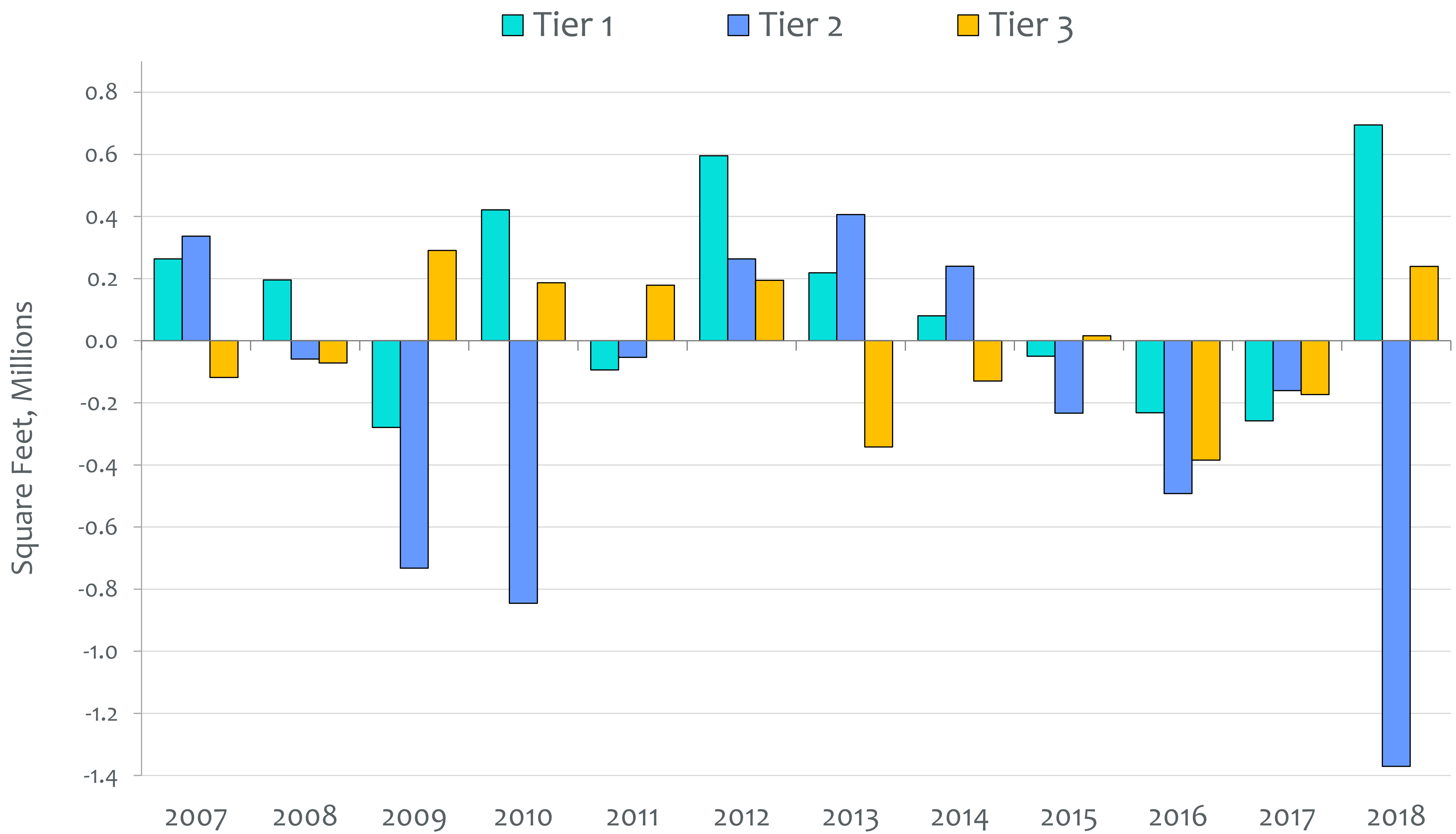
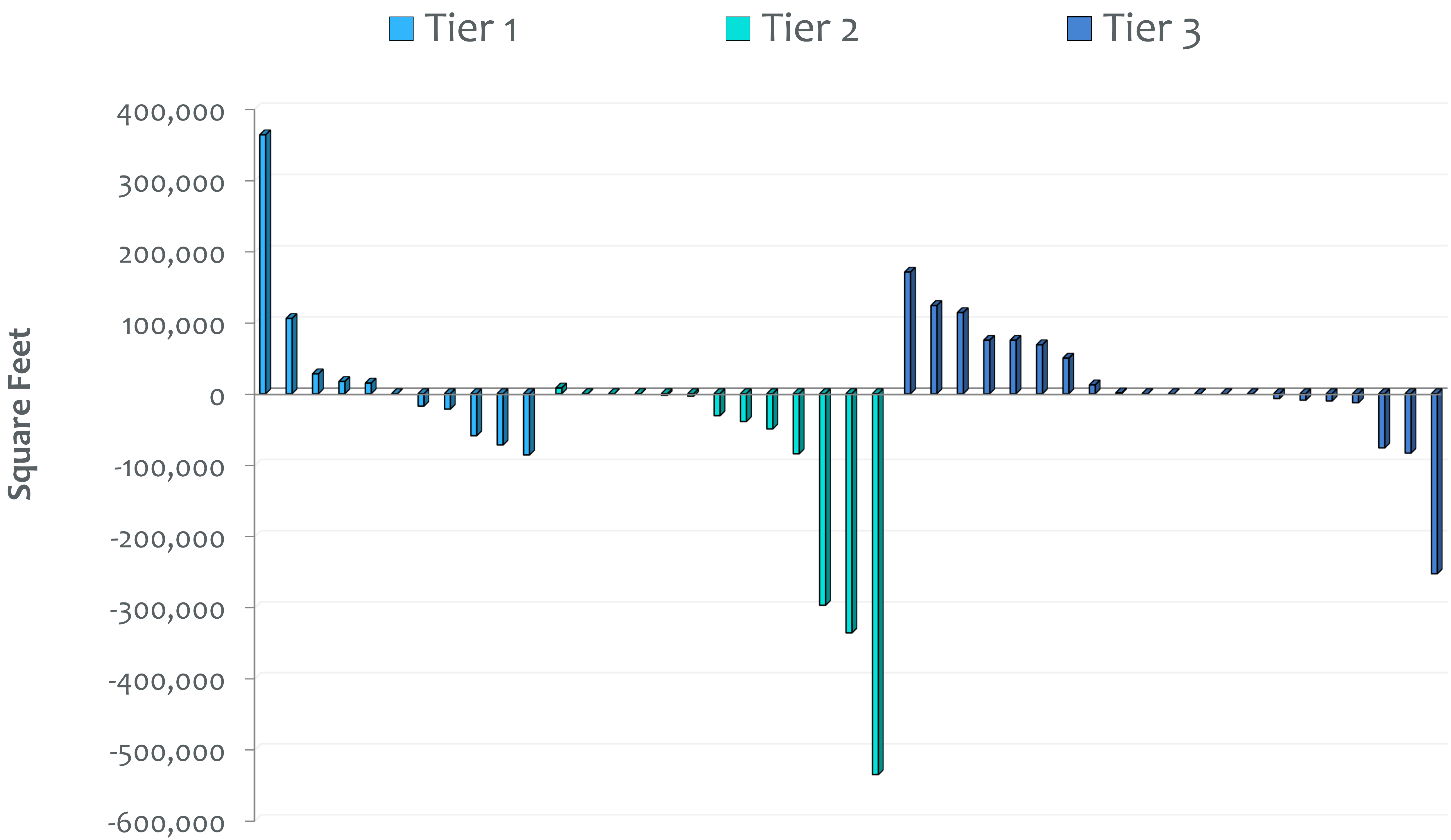
Absorption – *Building Tiers*

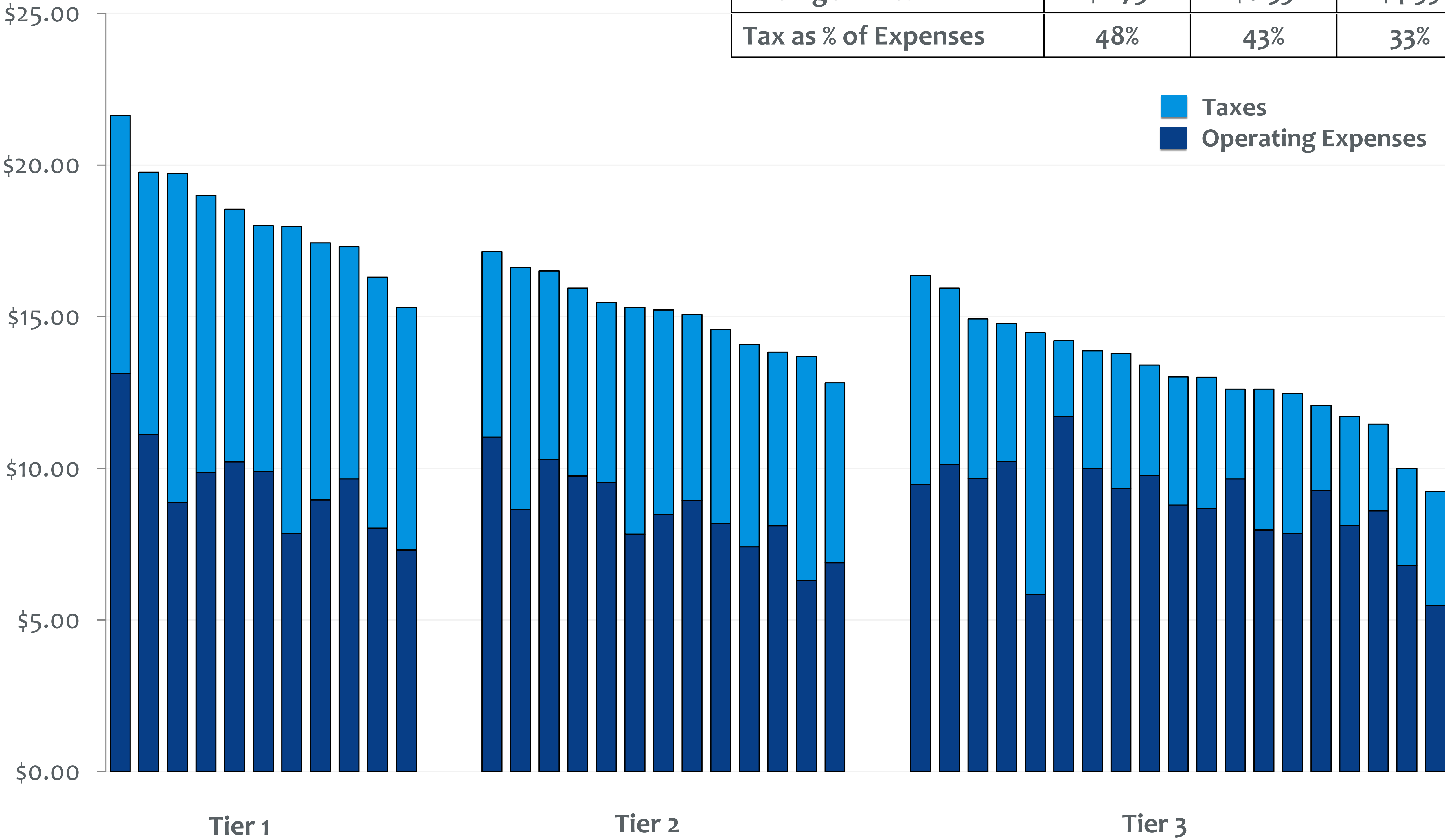


Absorption, *by Building*



Operating Expenses
2019 Projections

	Tier 1	Tier 2	Tier 3
Average Total Expenses	$18.27	$15.10	$13.15
Average Taxes	$8.73	$6.53	$4.35
Tax as % of Expenses	48%	43%	33%



Factors Affecting 2019+

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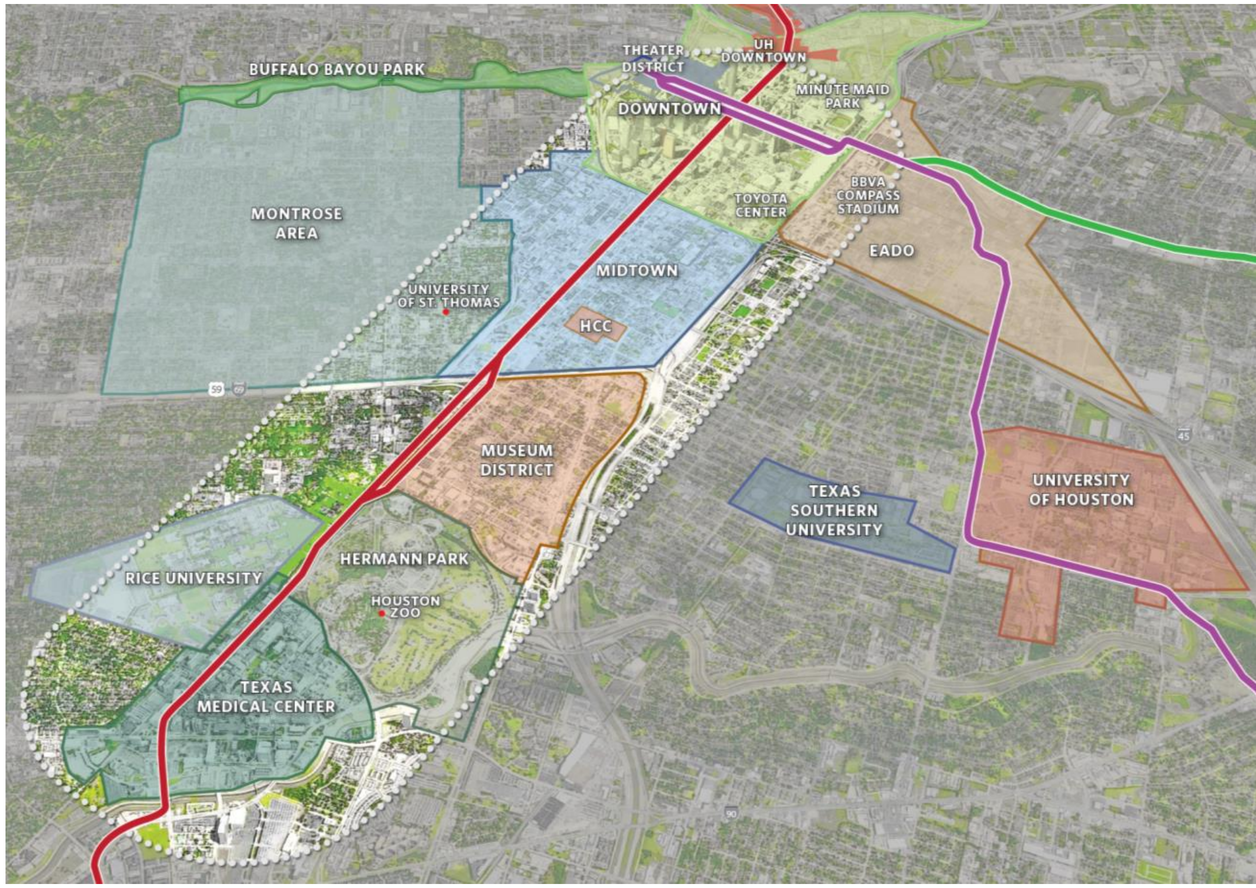
- **Signed Leases/ Future Absorption**:
  - 2 Houston Center (Direct Energy, 105,578-SF, new)
  - 2 Houston Center (LyondellBasell, 58,343-SF, expansion)
  - 2 Houston Center (Gensler, 44,777-SF, new)
  - 2 Houston Center (Vorys, Sater,Seymour and Pease, 22,627-SF, new)
  - Fulbright Tower (Enlink, 15,000-SF, expansion)
  - 609 Main (White & Case, 57,315-SF, new)
  - 609 Main (EnVen Energy Corp., 57,139-SF, new)
  - GreenStreet - 1201 Main (Life Time Work (Co-Working), 38,000-SF, new)

- **Major relocations & Other Activities**:
  - Texas Tower (Hines, moving HQ Downtown)
  - Capitol Tower (Skanska moving office to Downtown)
  - Robust expansion of Downtown’s innovation ecosystem

Houston's Innovation Corridor

- Houston's innovation economy continues to make strides towards becoming a top 10 startup ecosystem, including with the creation of the "Innovation Corridor".

- The four-mile-long *Innovation Corridor* extends from Downtown and Midtown through Rice University and the Texas Medical Center. It was created to foster and support technology, ideas, talent, and high-growth, high-impact startups.



- The *Innovation Corridor* helped kickstart major public-private initiatives to bolster the innovation economy, including two new developments:
  - MassChallenge, the world's largest startup accelerator, opened in Downtown, with a $2.5 million grant from the Downtown Redevelopment Authority, in conjunction with Central Houston, Inc. and the Downtown Management District.
  - Rice University led and financed the transformation of the old Sears building in Midtown into 'The Ion," an innovation hub slated for completion in 2020.

Downtown's Innovation Hub

- **Anchor Buildings**:
  - The Jones on Main / 708 Main [86,000 SF]
    - WeWork (Co-Working)
    - WeWork Labs (Incubator)
    - Bunker Labs (Veterans Incubator)
    - The Flatiron School (Coding School)
  - GreenStreet [420,000 SF mixed-use development]
    - Anchor Innovation Tenants:
      - MassChallenge (Accelerator)
      - Spaces (Co-Working)
      - Life Time Work (Co-Working)

- **Primary Partners:**

Downtown's Innovation Hub

- **6 Co-working spaces, totaling 327,000-SF**
- **New Co-working Additions (2018/19):**
    - Bond Collective, 26,000-SF lease at Pennzoil Place
    - SPACES, 63,000-SF lease in Midway's GreenStreet
    - Life Time Work, 38,000-SF in Midway's GreenStreet (2019/20)
- **Developers adding co-working/collaborative spaces to new and/or existing buildings**
    - Hines' new coworking concept in Texas Tower, "Hines Square"
    - Brookfield's new collaborative spaces in 2 Houston Center
    - Wedge Properties' planned co-working space in 1415 Louisiana
    - Skanska is considering co-working space in Capitol Tower

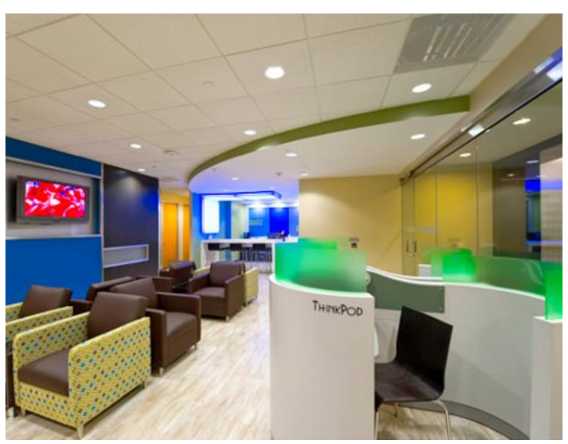
Co-Working and Collaborative Spaces

WeWork

- 708 Main

Station Houston

- 1301 Fannin



IWG
(formerly Regus)

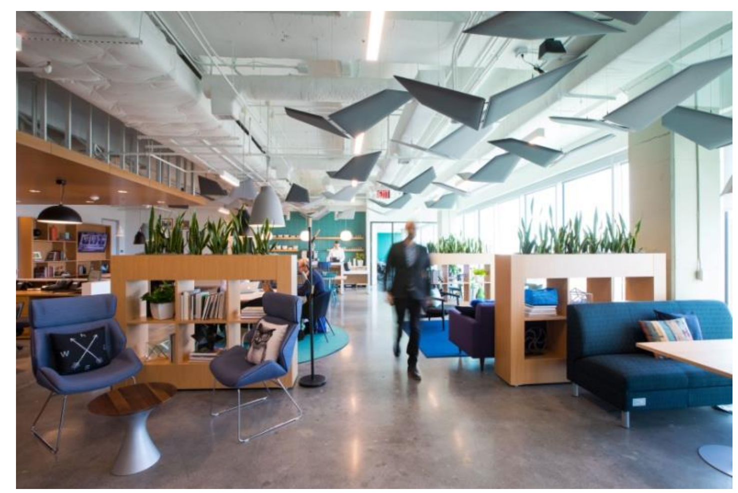
- 700 Milam
- 2 Allen Center
- 1001 Texas

Novel Coworking
(formerly Level Office)

- 720 Rusk
- 405 Main

Bond Collective

- Luxury Co-working
- Pennzoil Place – ST (711 Louisiana)
- ***Opening 3Q 2019***



Spaces

- GreenStreet (1021 Main)
- ***Opening 2019***

Life Time Work

- GreenStreet (1021 Main)
- ***Opening 2019/20***

Downtown Development:
2018 & 2019+

Central Houston

State of the Office Market

Current Office Inventory [160 bldgs.]	**51,686,341-SF**
Under Construction [2 bldgs.]	1,881,581-SF
Planned [3 bldgs.]	3,700,000-SF

OFFICE

Under Construction

Capitol Tower

- Skanska
- 35 stories
- 775,000-SF
- Est. Completion 2Q 2019

Texas Tower

- Hines and Ivanhoé Cambridge
- 47 stories
- 1.1 million SF
- Est. Completion: 4Q 2021

OFFICE

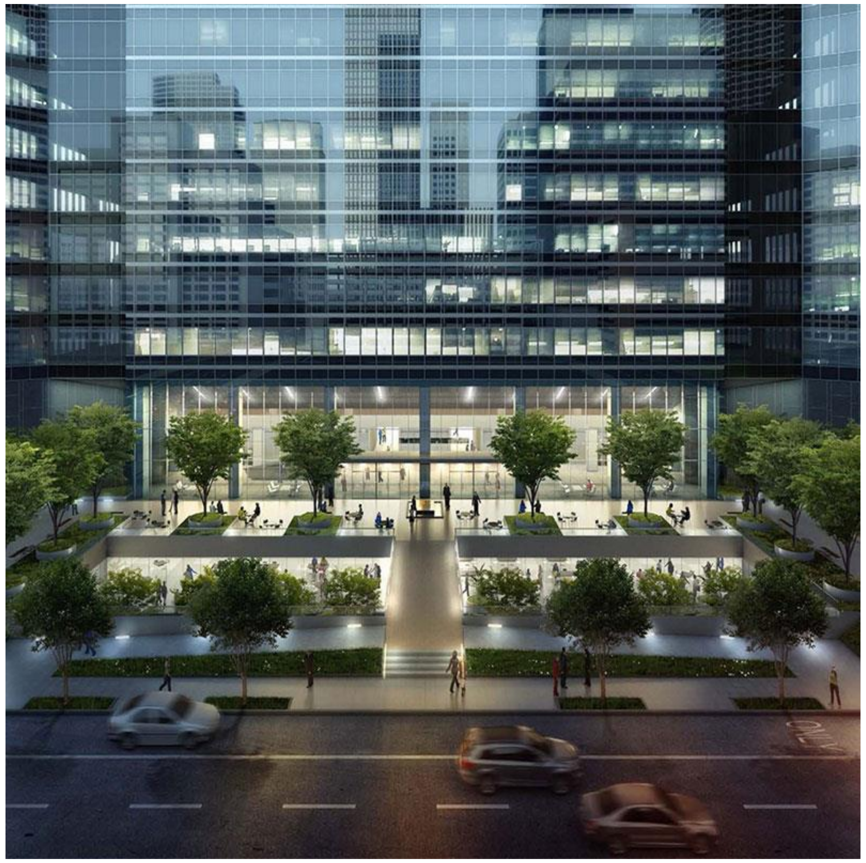
Proposed

Chevron Office Tower

- 50 stories
- 1.7 million SF

6 Houston Center

- 30 stories
- 600,000 SF
- Crescent



800 Bell Redevelopment

- 45 stories
- 1.4 million SF
- Shorenstein Properties

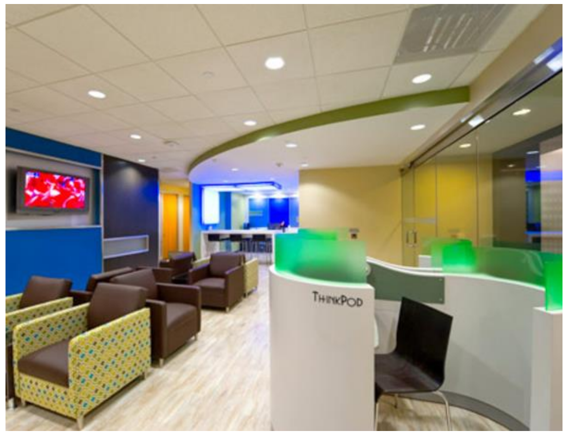
Co-Working and Collaborative Spaces

WeWork

- 708 Main

Station Houston

- 1301 Fannin



IWG
(formerly Regus)

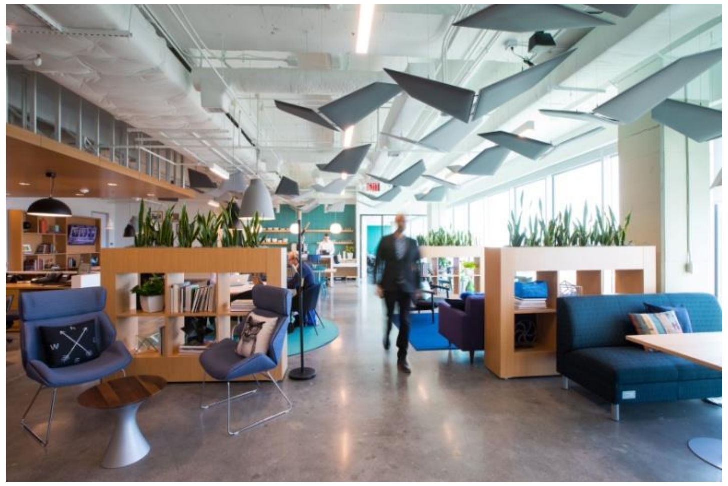
- 700 Milam
- 2 Allen Center
- 1001 Texas

Novel Coworking
(formerly Level Office)

- 720 Rusk
- 405 Main

Bond Collective

- Luxury Co-working
- Pennzoil Place – ST (711 Louisiana)
- ***Opening 3Q 2019***



Spaces

- GreenStreet (1021 Main)
- ***Opening 2019***

Life Time Work

- GreenStreet (1021 Main)
- ***Opening 2019/20***

State of the Hospitality Market

Current Hotel Rooms [25 bldgs]	7,803
Under Construction [3 bldgs]	564
Planned [1 bldg]	400+

Under Construction

Hyatt Place

- Redevelopment of 1114 Texas
- 16-stories, 150-keys
- Pride Management Inc.
- Est. completion 2Q 2019

AC Hotel by Marriott

- 10-stories, 194-keys
- Newcrestimage
- Est. completion 2Q 2019

Cambria Hotel

- Redevelopment of the Great Southwest building
- 21-stories, ~ 220-keys
- Choice Hotels International
- Est. completion: 3Q 2019

State of the Residential Market

Current Residential Units [41 bdgs.]	**6,086**
Under Construction [3 bdgs.]	873
Planned [4 bdgs.]	1,179
Completed 2018 [2]	314
Occupancy Rate (Q1 2019)	86.8%
Estimated Population	9,720

Completed 2018

1711 Caroline

- Leon Capital Group
- 5 stories
- 220 units
- Completed: March 2018

Marlowe

- Randall Davis
- 20 stories
- 94 condo units
- Completed: October 2018

Under Construction

Camden Downtown

- Camden Property Trust
- 21-stories, 271-units
- First block of a 2-phase 550-unit development
- Est. completion 4Q 2019

The Preston

- Hines
- 46 stories
- 373 units
- Est. Completion: 4Q 2022

Regalia at the Park

- DLC Residential
- 6-stories
- 229-units
- Est. completion: 2Q 2020

RESIDENTIAL

Planned

Block 98

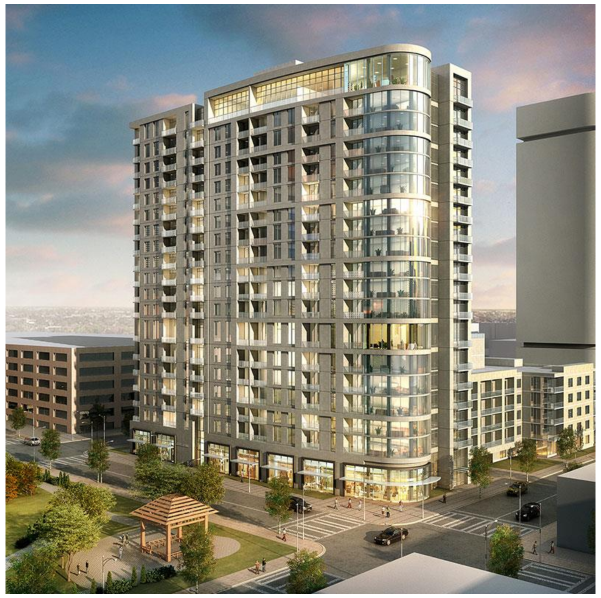
- Trammell Crow
- 40 stories, 314-units
- 12-story garage podium
- Est. completion: 2Q 2020

1810 Main

- Fairfield Residential
- 10 stories, 286-units
- Est. completion: 2Q 2020

Block 114

- Marquette Companies
- 24 stories, 304 units
- Est. Completion: 2Q 2020



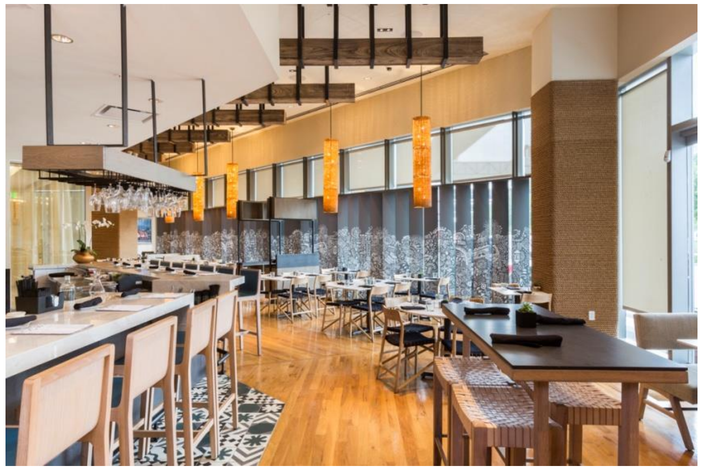
Block 330

- Camden Property Trust
- 21-story, 550-units
- 2-block, 2-phase devt.
- Est. completion: 2Q 2023

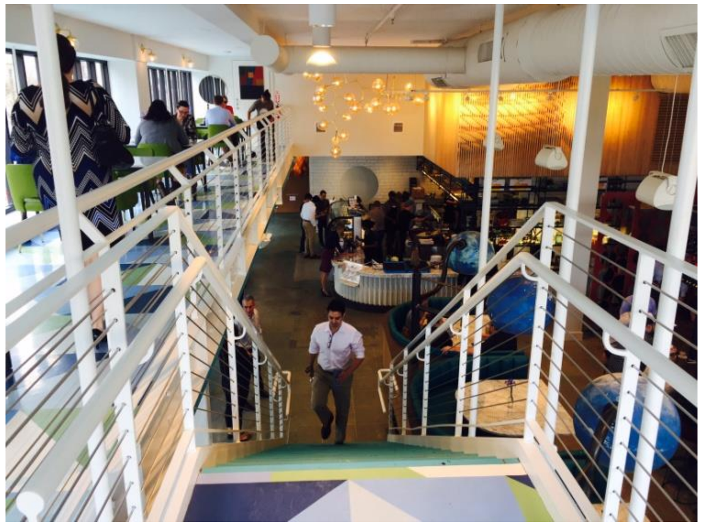
Central Houston

State of the Retail Market

Restaurants, Bars & Clubs	410+
Opened 2018	37
Opened 2019 & Planned (including 3 Food Halls)	32+

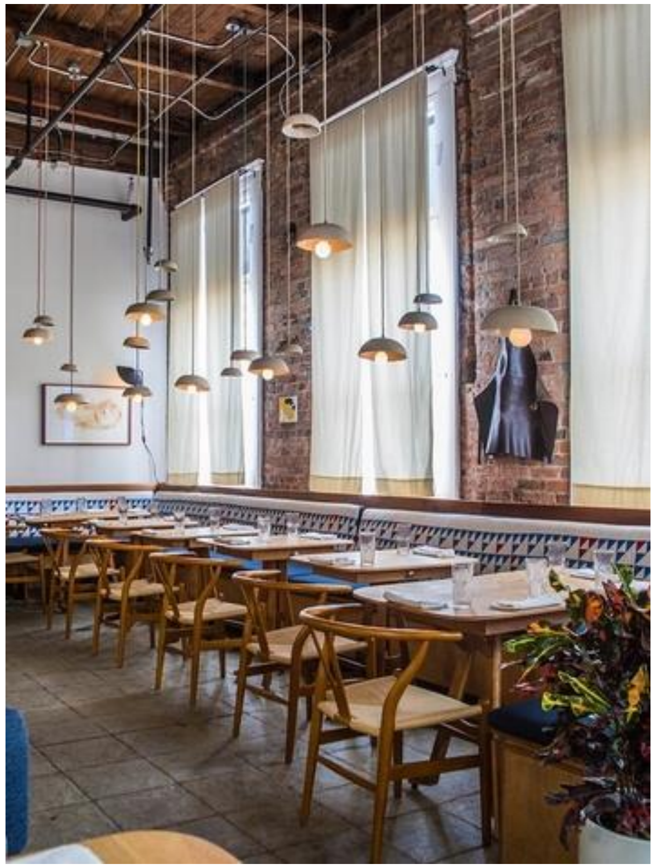


Xochi



Local Foods

Critically Acclaimed Restaurants



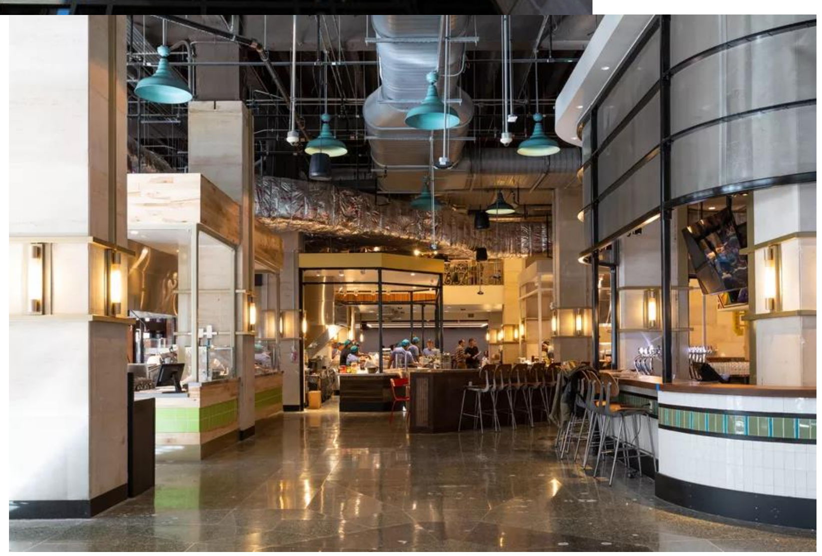
Theodore Rex

Potente

Oxbow7

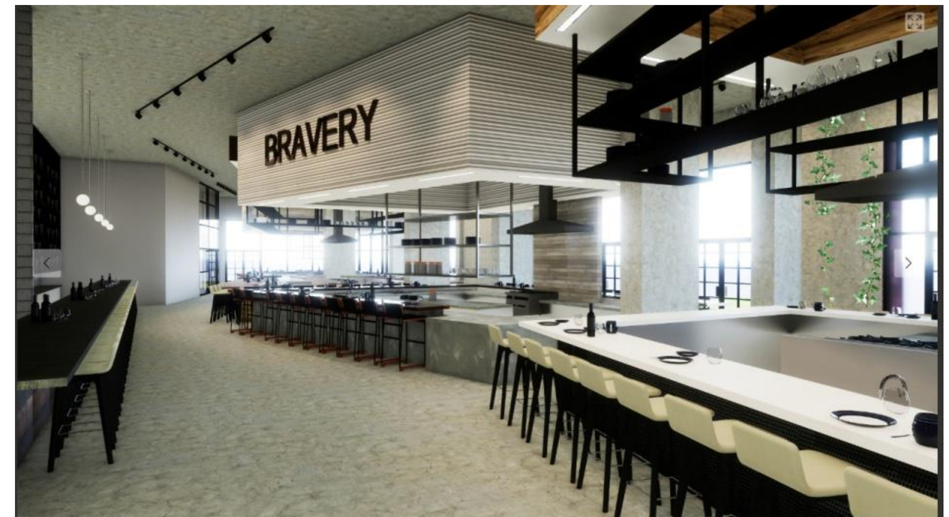
Food Halls: 4 New (5 Total)

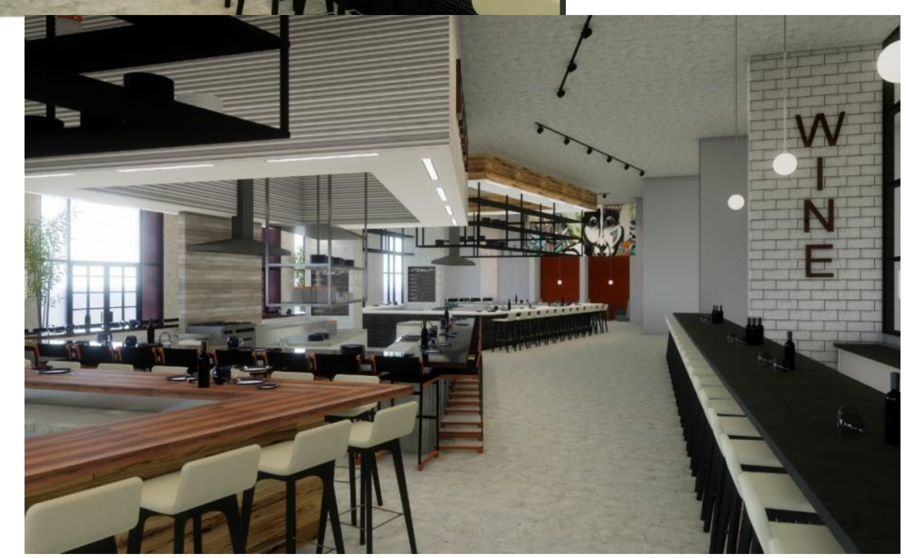
FINN HALL



- Premiere Food Hall
- The Jones on Main (712 Main)
- 10 food concepts, 2 bars, cocktail lounge
- ***Developer***: Midway/Lionstone Investments
- ***Opened***: December, 2018
- ***Website***: finnhallhtx.com
- ***Press***: New York Times, Food & Wine, CNN

BRAVERY CHEF HALL





- The World's First Chef Hall, 9,000-SF
- 409 Travis St (Aris Market Square)
- Five restaurant concepts, 3 bars
- ***Developer***: Anh *Mai, Lian Nguyen (duo behind Conservatory)*
- ***Est. Completion***: 4Q 2019
- ***Website***: Braverychefhall.com
- ***Press***: Travel & Leisure, Food & Wine, CNN, INSIDER

Food Halls: 4 New (5 Total)

UNDERSTORY

- 35,000-SF Culinary market, retail, public space
- 800 Capitol Street
- 7 food and beverage concepts, and a full-service restaurant
- ***Developer***: Skanska
- ***Est. Completion***: June 2019
- ***Website***: Understoryhouston.com
- ***Press***: Travel & Leisure, Food & Wine, CNN

LYRIC MARKET

- 31,000-SF Culinary Destination
- 411 Smith Street
- 20 chef-driven food concepts, speakeasy lounge, meeting and event spaces
- ***Developer***: U.S. Property Management
- ***Est. Completion***: 4Q 2019
- ***Website***: Lyricmarket.com/
- ***Press***: Travel & Leisure, Food & Wine, CNN, Zagat

CentralHouston

Kinder High School for the Performing and Visual Arts [Kinder HSPVA]

- Completed: August 2018
- 800 students moved in January 4, 2019

Central Houston

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