



# Yardi Matrix 2019 Storage Update



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# Today's Agenda

- Macroeconomic Outlook
- Self Storage Demand Drivers
- Trends in Storage Fundamentals
- Storage Supply Forecasts
- Storage Technology Trends



# The Yardi Matrix View

- **U.S. economy is in decent shape, with increasing cross-winds**
  - GDP growth in Q2 was OK (~2%), and we expect Q3 to be about the same, but with a lot more noise
  - U.S. oil production is keeping inflation low below 2% – and low inflation is a global phenomenon
  - The yield curve has been inverted since late May, despite the Fed cutting rates during the July 31st meeting
  - Trade announcements following the rate cuts have left us in the same position, or even worse off, than before
  - Economic growth in Europe and China is slowing
  - The U.S. service sector labor market is extremely tight, and wages continue to rise; Manufacturing less so
  - There is a highly elevated risk of recession mid 2021
- **Storage market faces short-term head winds, but long-term strength based on demographics**
  - Significant new supply continues to drive down street rates in most markets nationwide. Hardest hit are popular millennial markets like Charleston, Nashville, Denver and Portland
  - Demand is strong, but shifting to lower cost cities as population and migration growth increase in secondary markets
  - Opportunities remain in historically low penetration markets including Los Angeles, Chicago, Inland Empire and San Francisco, but regulatory issues dampen supply possibilities
  - The industry is broadening its service suite with automation and technology at the consumer and the enterprise level
  - New supply is flattening, but not drastically declining, **lease up pressures remain for the next 2-3 years in most markets**
  - *We are introducing a new storage supply forecast methodology with details provided later in this presentation*

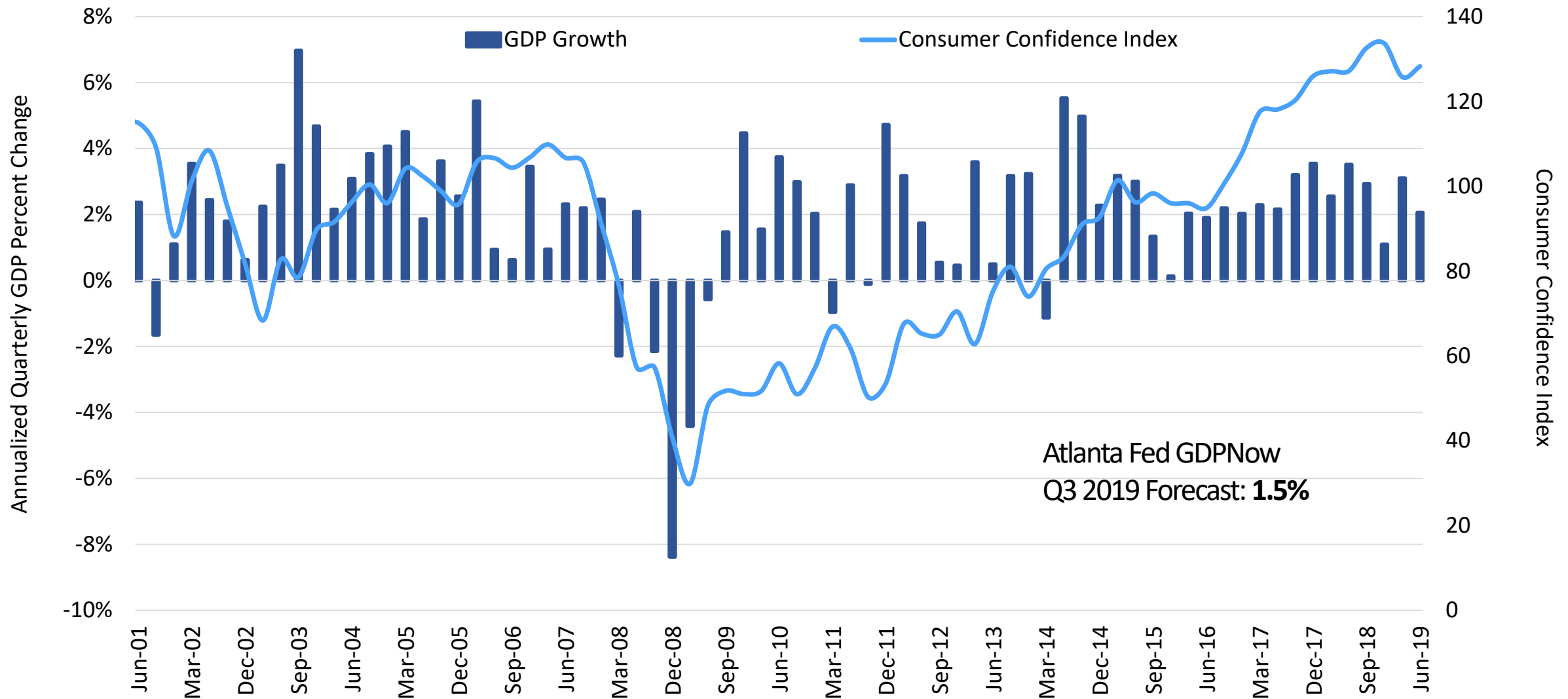
# The Yardi Matrix View – Outlook

- **Storage outlook – markets to focus on: the confluence of supply and demand**
  - Increasing number of retail bankruptcies and adaptive re-use may lead to potential storage conversion facilities
  - Currently, in place renters are accepting rent increases according to recent REIT releases; street rates likely to remain negative
  - Atlanta, Las Vegas, and Phoenix continue to benefit from strong domestic migration of both baby boomers and millennials, but the rates of growth are slowing
  - New York and Boston face new supply headwinds, but have historically low penetration, and long-term development opportunity remains despite demographics
  - Capital markets remain well balanced, and abundant capital exists for storage investment. Major CRE firms are diversifying their portfolios and growing their storage allocation
  - Given new supply, the likelihood of long lease ups may lead to distressed sales
  - Owners benefit from overflows in tight industrial market; small commercial operations use storage for inventory
  - Opportunity zones present an ability for investors and developers to take advantage of deferred capital gains
  - Targeting opportunity zones with strong demographic and investment landscapes is key
  - **The industry is in for a tough slog for an extended period of time – adding new technologies and services will have increasing importance**



# Macroeconomic Outlook

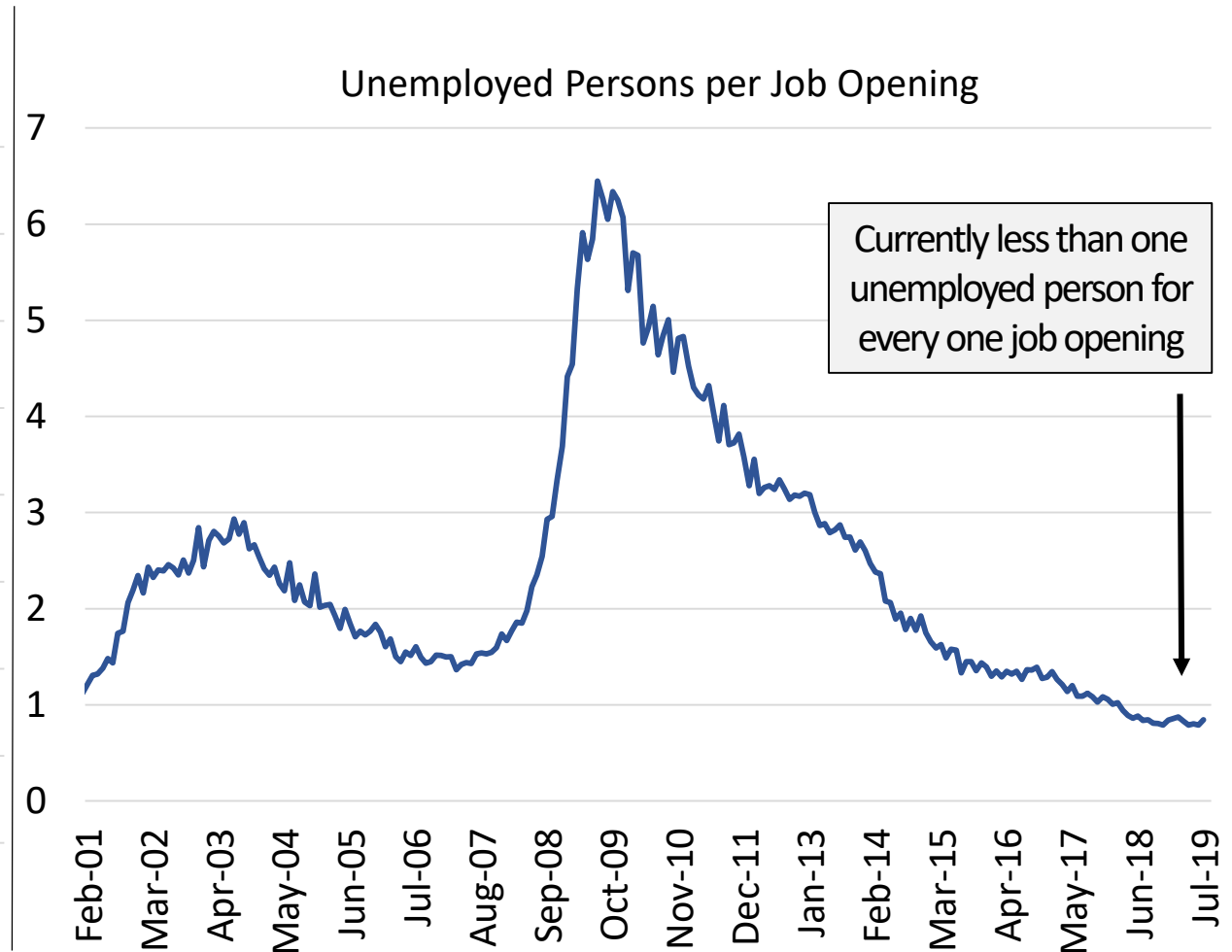
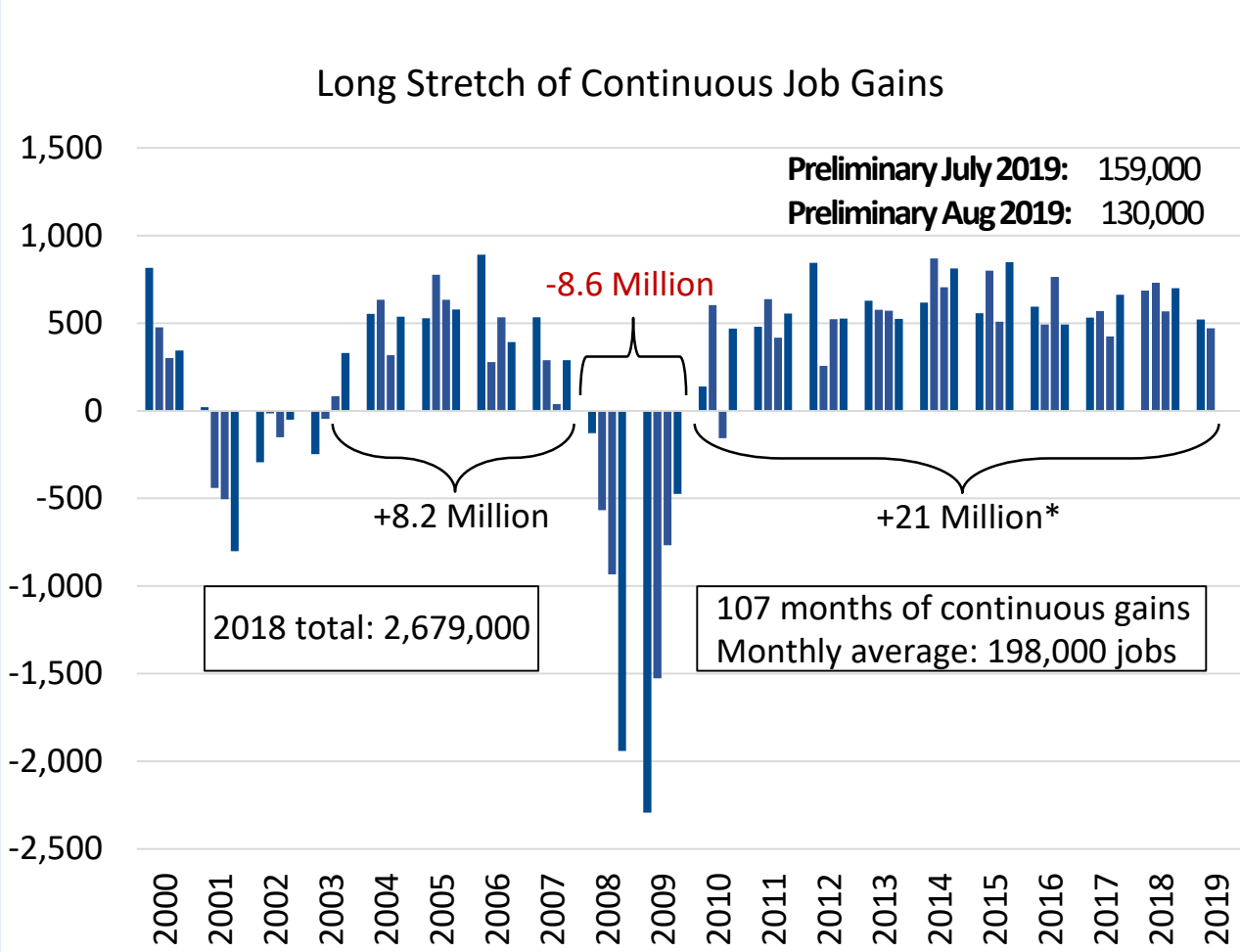
# U.S. Economic Growth is Decent, but Slowing



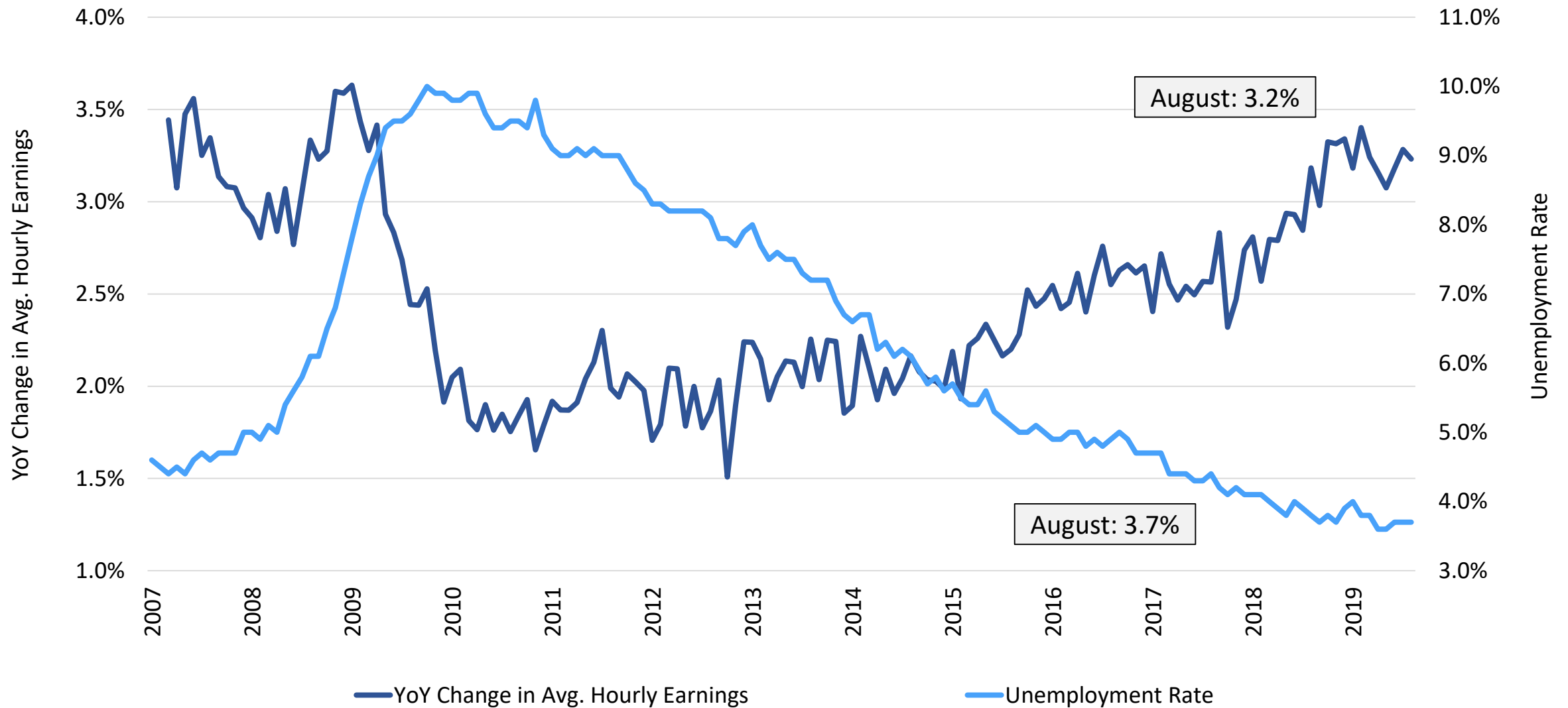
Source: Moody's Analytics; Bureau of Labor Statistics (BLS); S&P Dow Jones Indices LLC; CoreLogic, Inc; Federal Housing Agency (FHFA); Freddie Mac; Fannie Mae; U.S. Bureau of Economic Analysis (BEA); U.S. Board of Governors of the Federal Reserve System (FRB); Investing.com; Federal Reserve Bank of Atlanta

# Tight Labor Market, Pulling People Off the Sidelines

It is difficult to find labor at the right *price*, with the right *skills*, in the right *city*



# Wage Growth is Finally Emerging



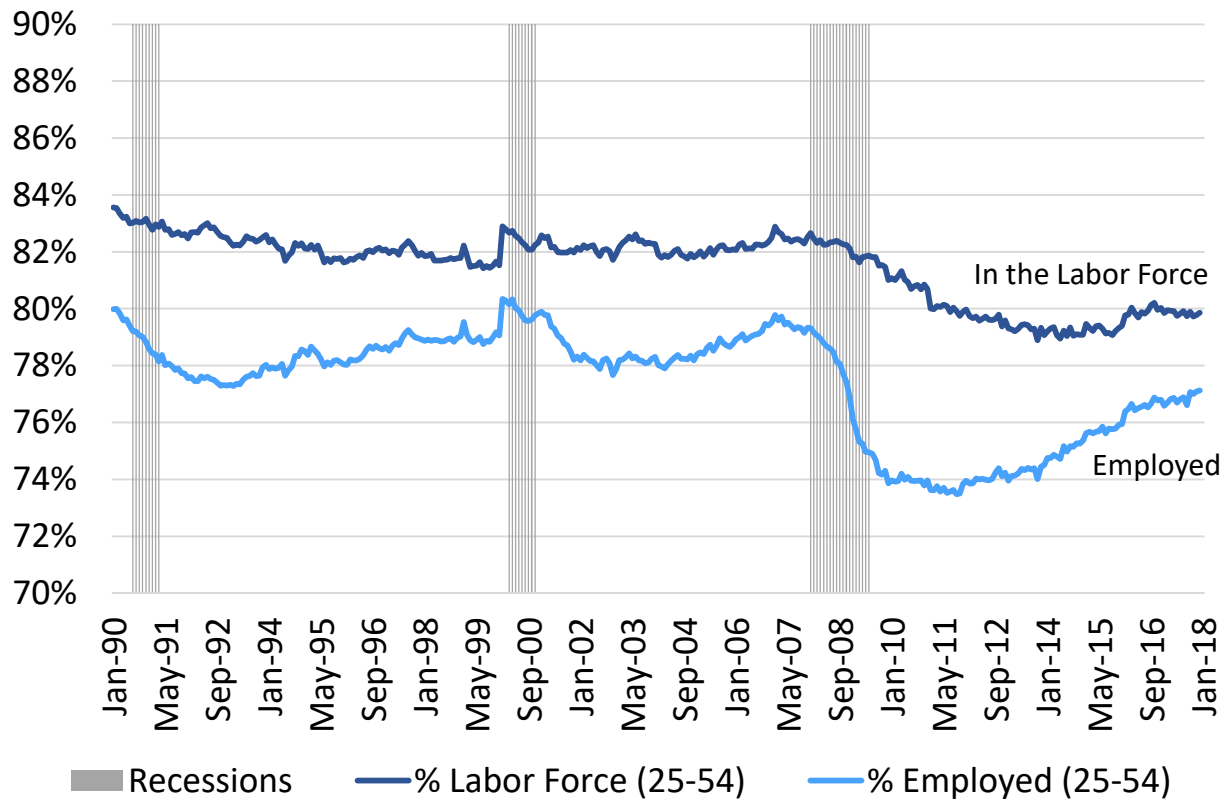
Source: Yardi® Matrix; Moody's Analytics; Bureau of Labor Statistics (BLS); Current Population Survey (CPS)



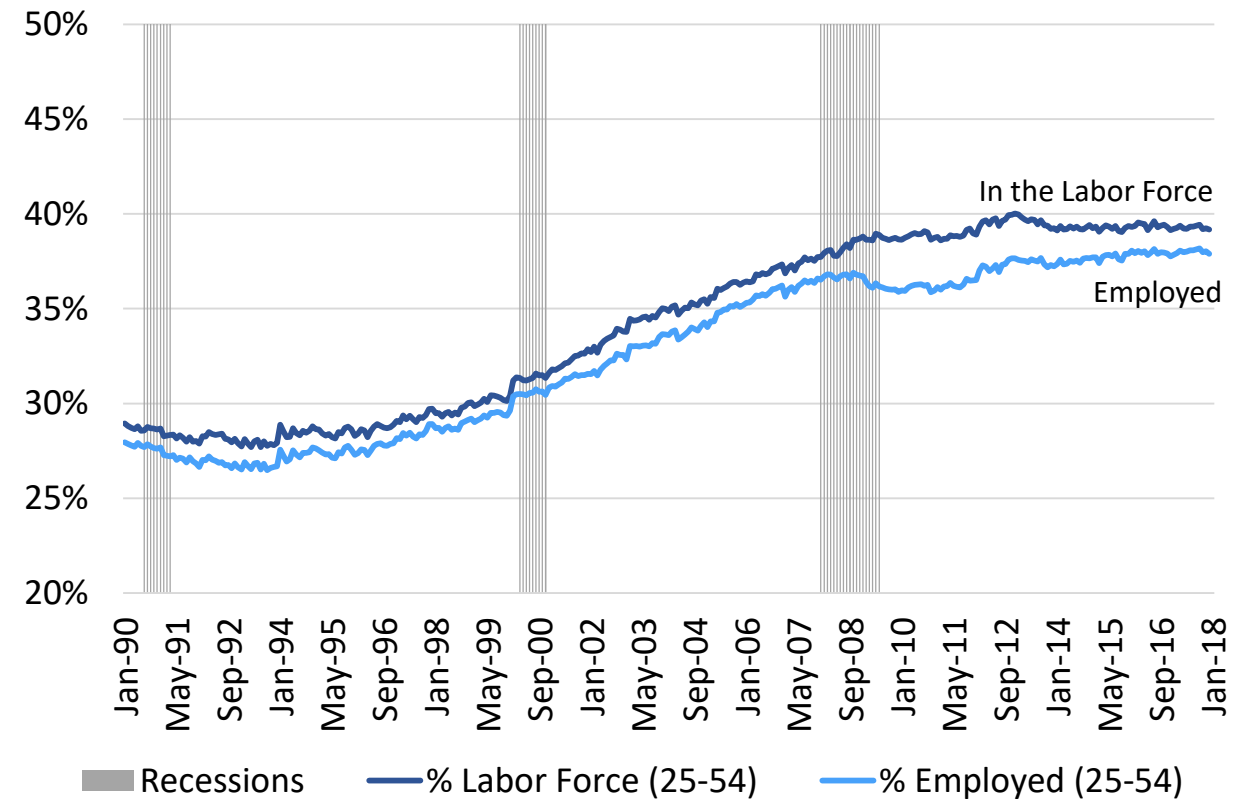
# Reserve Supply of Labor

- Another 2% of the prime-age population could get engaged – approximately 2.6 million people
- Participation rates for people age 55+ are rising – buoying the expansion

Share of Prime-Age Population (25-54) That Is...

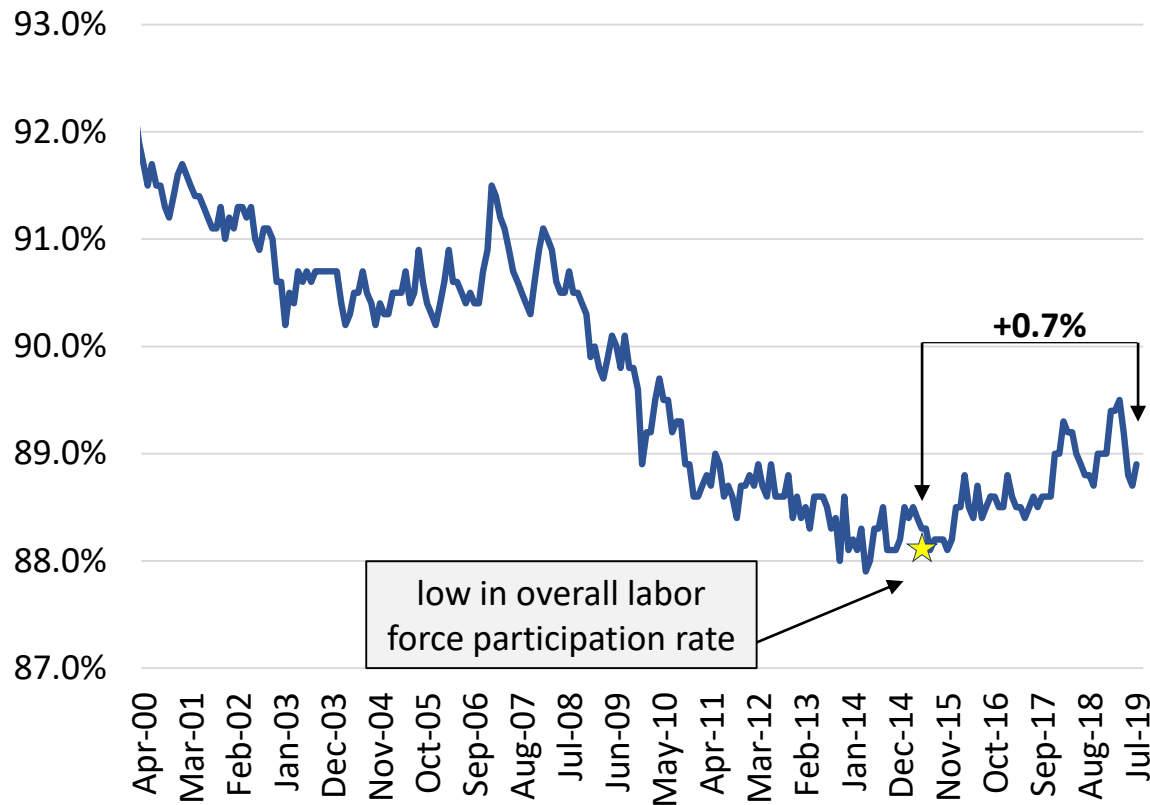


Share of Age 55+ Population That Is...

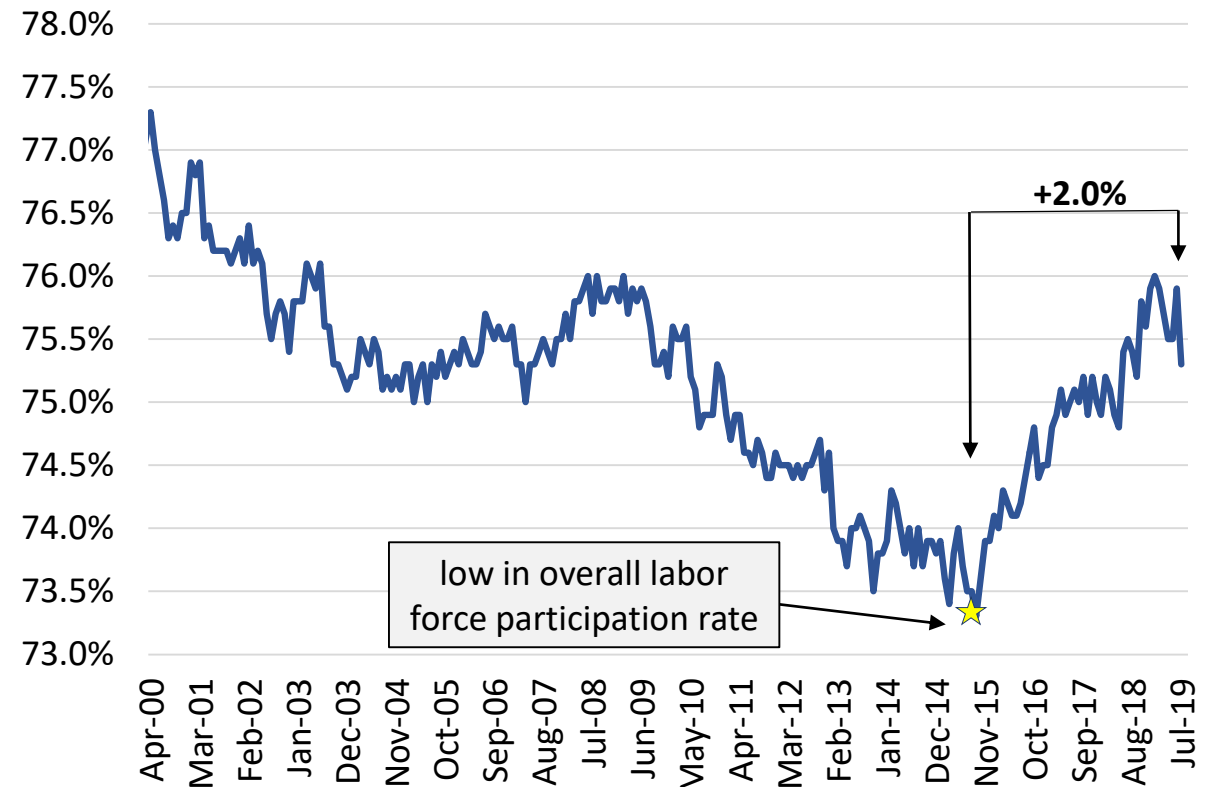


# The Increase in the Overall Labor Force Participation Rate Among 25-54 Year Olds is Driven by Women

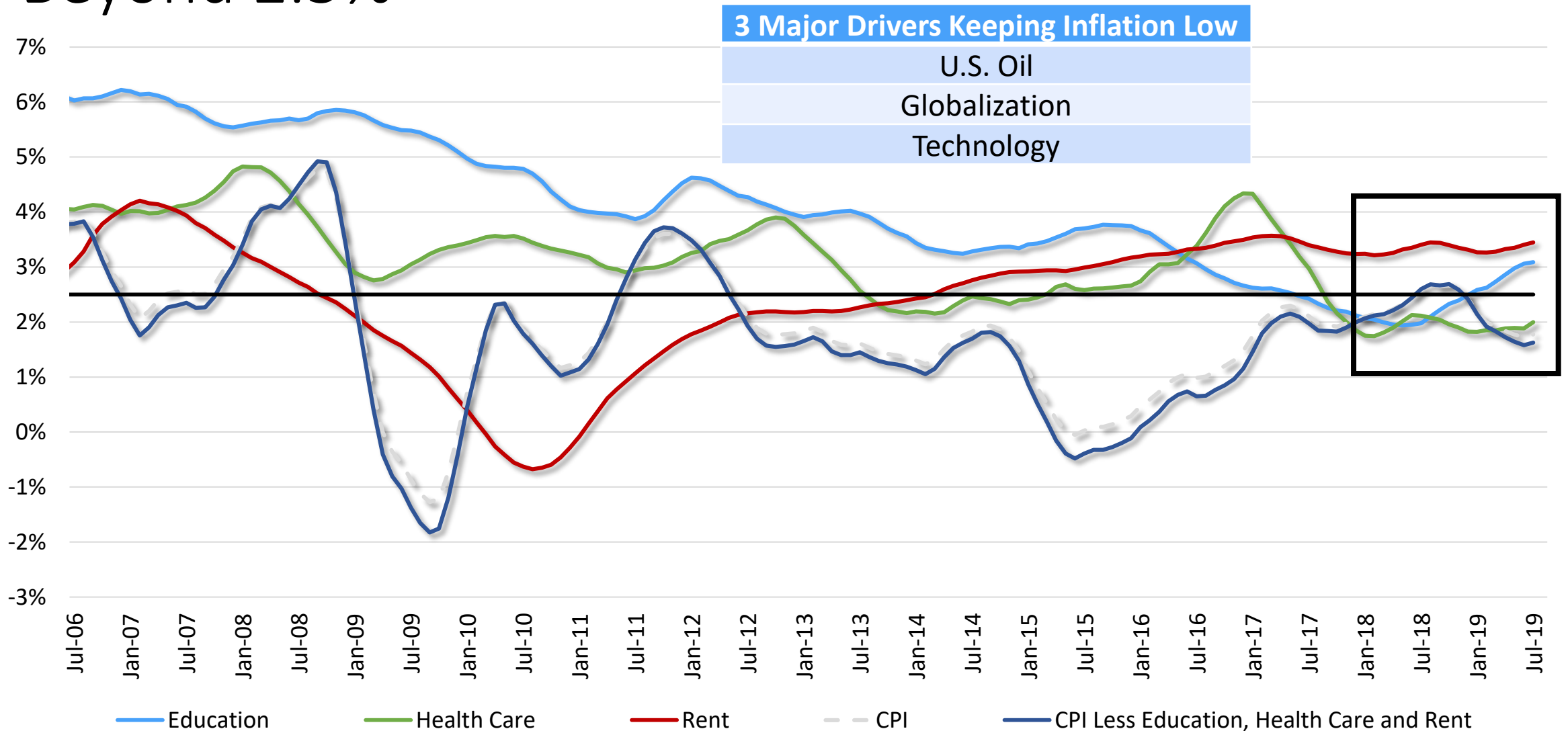
### Labor Force Participation Rate Male, Ages 25-54



### Labor Force Participation Rate Female, Ages 25-54



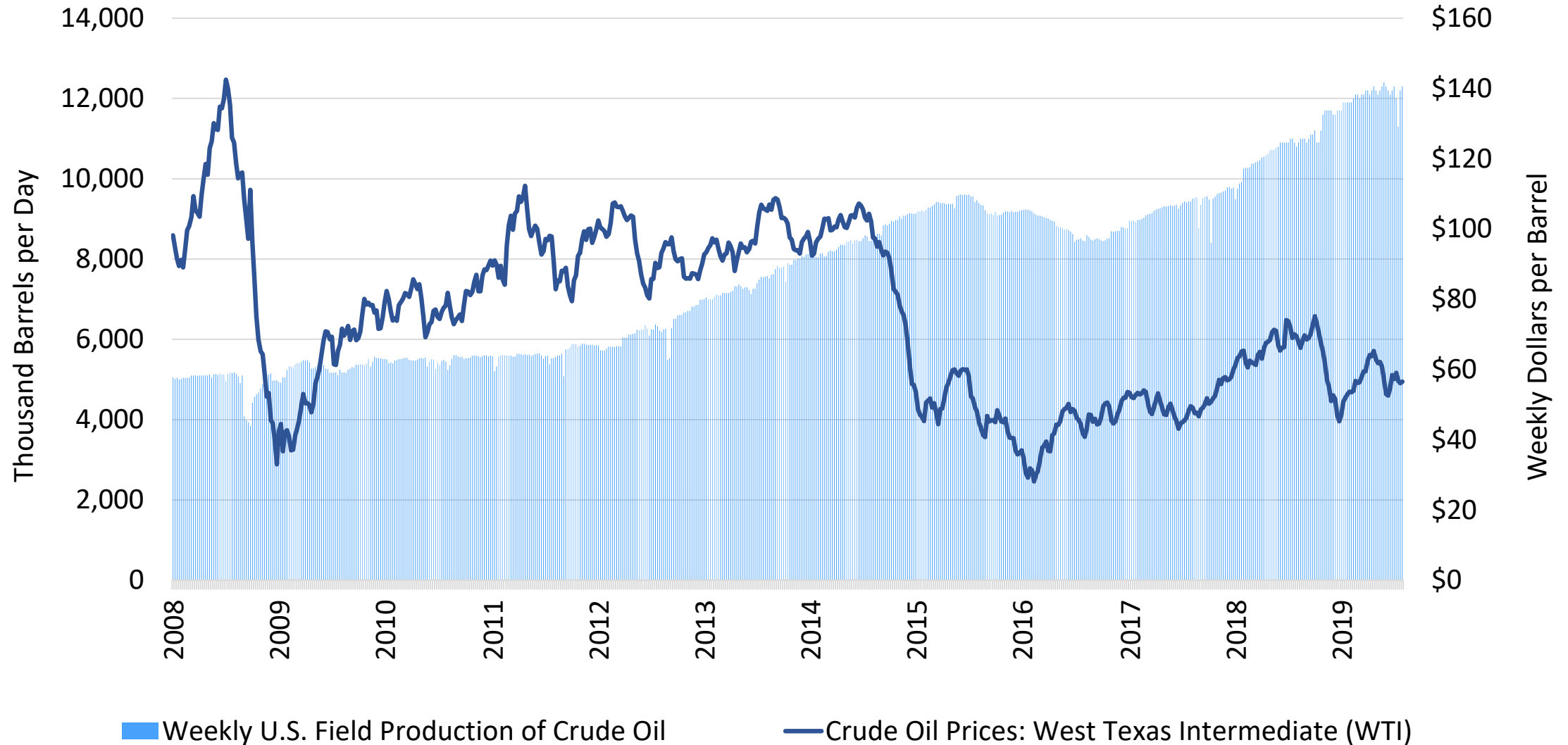
# Inflation is Less Than 2%, and is Unlikely to Break Out Beyond 2.5%



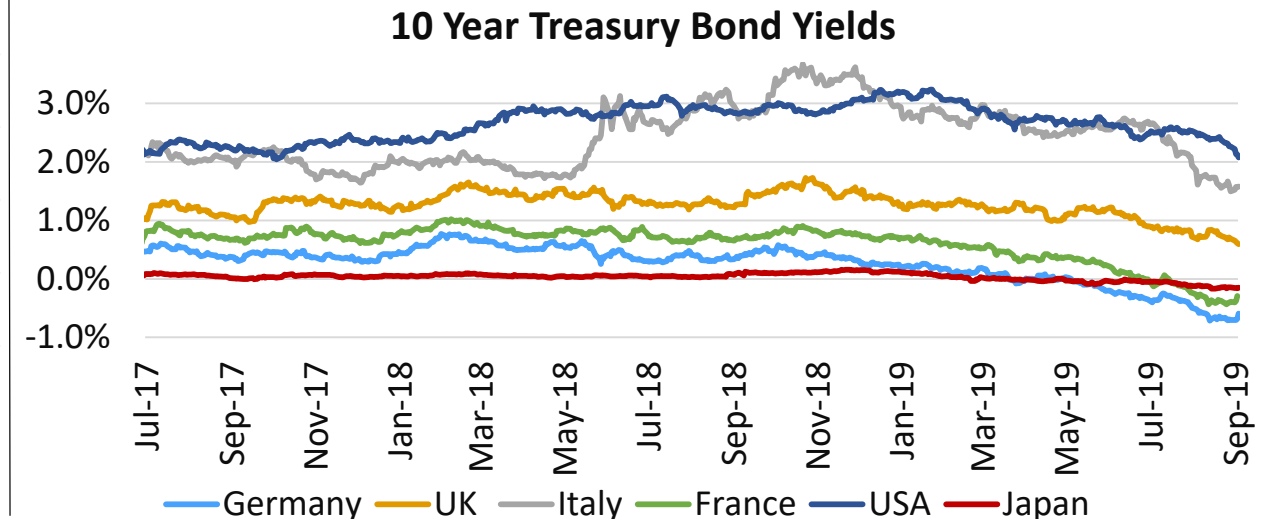
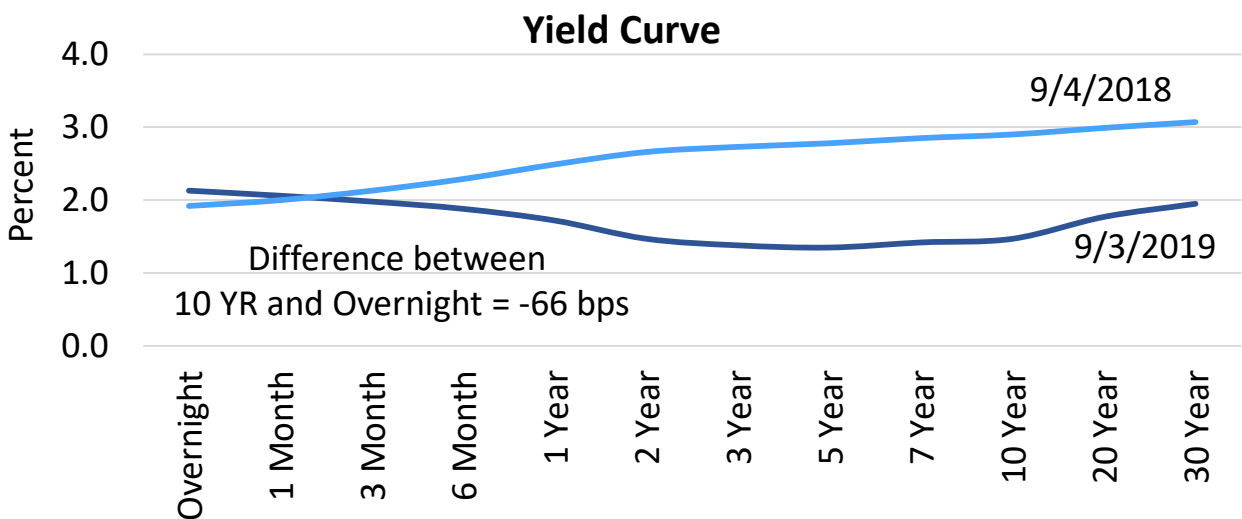
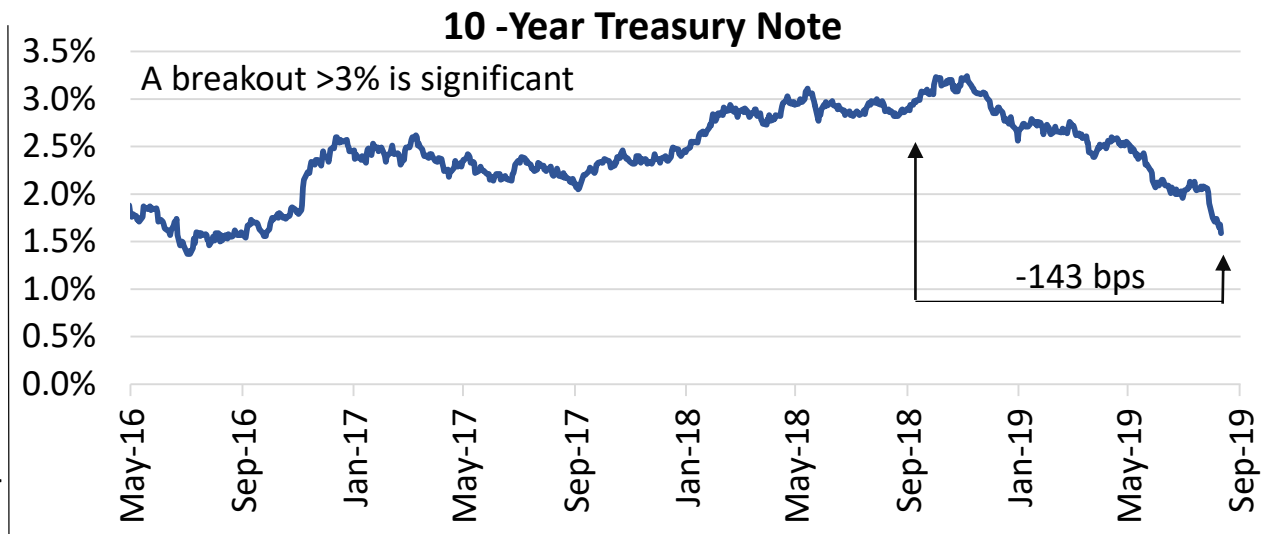
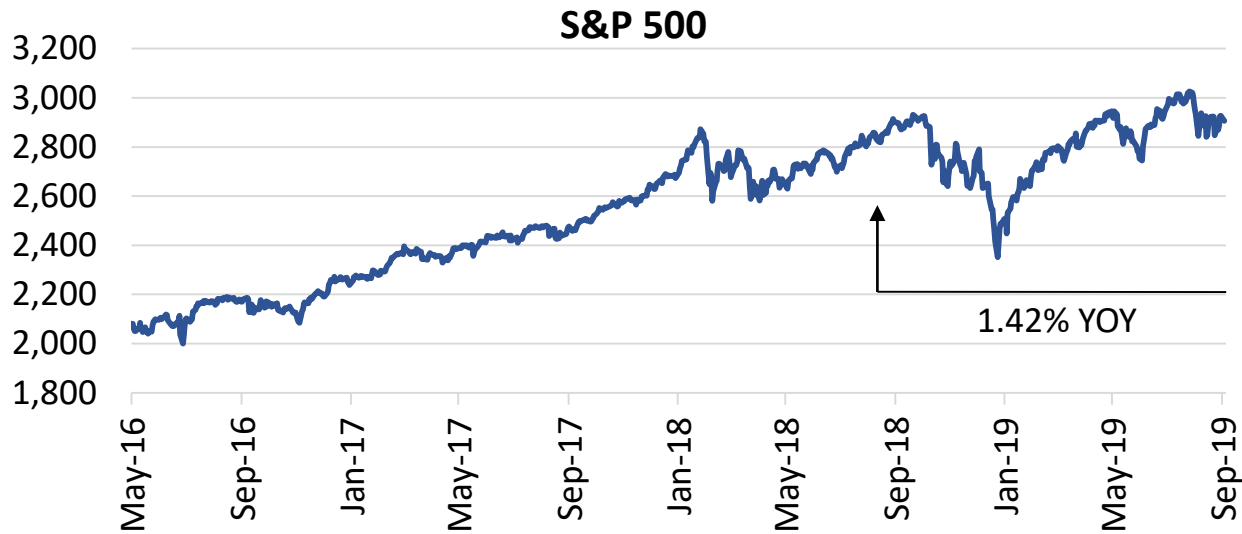
\*YOY 6 month moving avgs. CPI Less Health Care, Education and Rent is an estimate using BLS document "Math calculations to better utilize CPI data"

Source: Moody's Analytics; Bureau of Labor Statistics (BLS)

# Why is There No Inflation? U.S. Oil is Flooding the Market



# U.S. and International Financial Market



# U.S. Federal Policy Has Shifted from Pro-Growth to Neutral in an Attempt to Tilt Growth to Producers, Not Consumers

## Pro-Growth

- Tax Reform
- Regulatory Relief
- Executive Orders
  - Energy
  - Finance
  - Labor Costs



Generally Positive Progress

## Pro-Growth but Slow

- Infrastructure
- Education Reform
  - German Model
- Healthcare Reform



Progress in Tone, but Not Yet Substantive

## Anti-Growth

- Immigration Control
- Trade Renegotiation



Trade Negotiation is a Drag on Growth



# In Summary:

- GDP growth in Q2 was OK, and we expect Q3 will be about the same
- Low inflation is a global phenomenon – with oil production keeping it low in the U.S.
- The Fed cut rates during the July 31st meeting in an effort to keep the economy on track, but recent trade announcements are offsetting any benefits of the rate cut
- The labor market is extremely tight, and employment and wage growth are in excellent condition, particularly in office-using industries
- There is an elevated risk of recession mid 2021

# Self Storage Demand Drivers

# Job Growth is Happening in Secondary Cities

At this stage in the economy, companies are relocating and expanding in markets where their money will get them further

## Cognizant

- IT consulting firm announced in December 2018 that it expand Charlotte presence
- Cognizant will add 300 jobs and invest \$5 million in Charlotte over the next 5 years
- Salaries for the new positions will average around \$68,000

## KPMG

- Developing \$400 million, 55-acre learning, development and innovation campus in Lake Nona outside of Orlando
- Create 330 new jobs and 800,000 sq. ft. for meeting, classroom, residential and dining

Market	Emp. Growth 2019	Trend From Prior Year	Market	Emp. Growth 2019	Trend From Prior Year
Reno	6.0%	Accelerating	West Palm Beach	1.8%	Accelerating
Dallas	3.9%	Accelerating	Fort Lauderdale	1.8%	Accelerating
Orlando	3.6%	Stable	East Bay Area	1.8%	Stable
San Francisco	3.6%	Accelerating	Portland	1.7%	Decelerating
Seattle	3.5%	Accelerating	St. Louis	1.7%	Accelerating
Boise	3.2%	Decelerating	North Central Florida	1.6%	Decelerating
San Jose	3.0%	Accelerating	Orange County	1.6%	Decelerating
Houston	2.9%	Accelerating	Raleigh	1.5%	Decelerating
Phoenix	2.8%	Decelerating	Kansas City	1.5%	Accelerating
Charlotte	2.5%	Decelerating	Los Angeles	1.3%	Stable
Miami	2.5%	Accelerating	Chicago	1.2%	Accelerating
Inland Empire	2.4%	Decelerating	New York	1.2%	Decelerating
Austin	2.3%	Decelerating	Denver	1.2%	Decelerating
Jacksonville	2.3%	Decelerating	Washington DC	1.0%	Decelerating
Nashville	2.3%	Decelerating	Boston	0.8%	Decelerating
Salt Lake City	2.1%	Decelerating	Philadelphia	0.8%	Decelerating
Tampa	2.0%	Decelerating	Columbus	0.6%	Decelerating
Sacramento	2.0%	Decelerating	Milwaukee	0.6%	Decelerating
Atlanta	1.9%	Decelerating	Indianapolis	0.5%	Decelerating
San Diego	1.9%	Decelerating	Detroit	0.0%	Decelerating
Las Vegas	1.8%	Decelerating	Minneapolis	-0.3%	Decelerating

\*Employment growth July '18-July '19

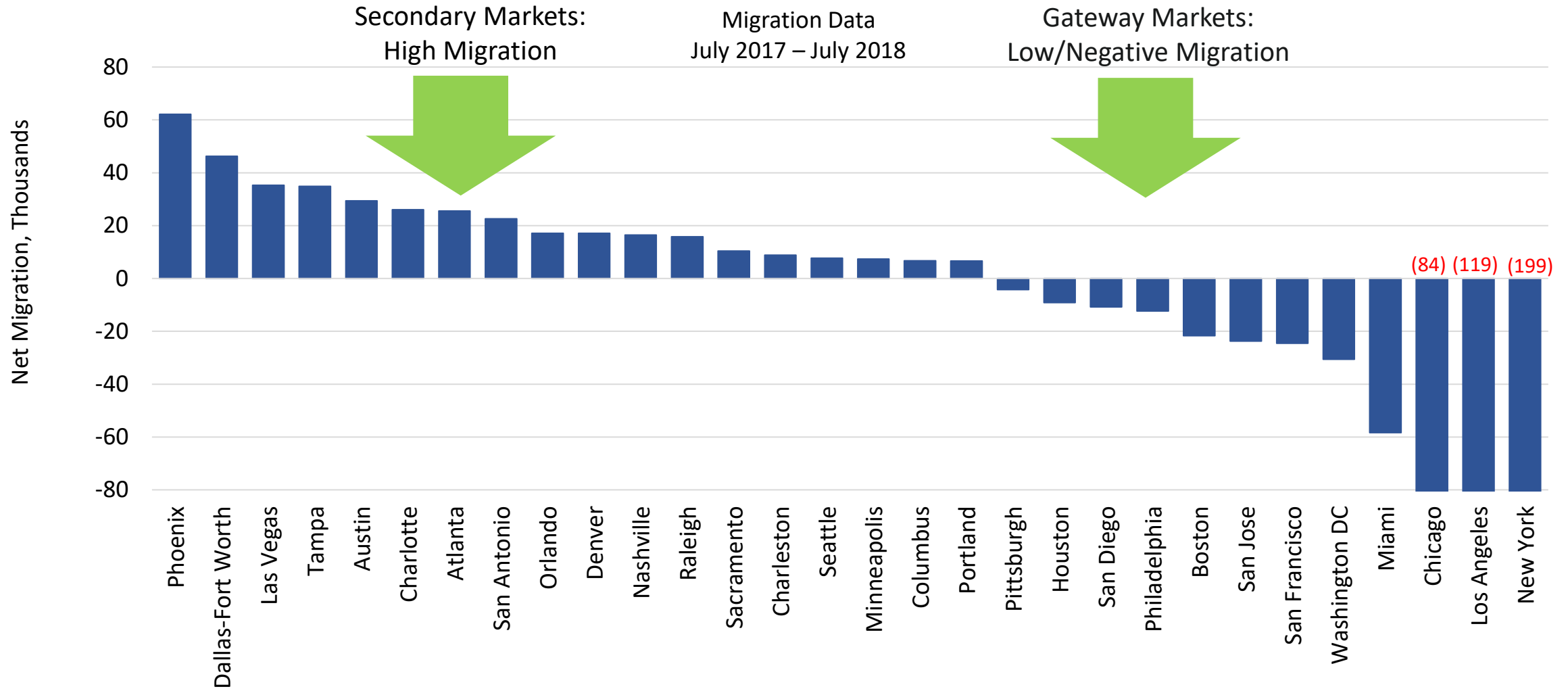
Source: Moody's Analytics; Bureau of Labor Statistics; kpmg.com; ncommerce.com

# Population Growth is in Secondary Markets

Market	2016 Pop. Growth	2017 Pop. Growth	2018 Pop. Growth	Overall Trend
Austin	3.0%	2.6%	2.5%	Decelerating
Orlando	2.7%	2.4%	2.4%	Steady
Las Vegas	2.0%	2.0%	2.2%	Accelerating
Raleigh	2.6%	2.3%	2.1%	Decelerating
Phoenix	2.1%	1.8%	2.0%	Accelerating
Dallas	2.2%	2.1%	1.8%	Decelerating
Charlotte	2.1%	2.0%	1.8%	Decelerating
Tampa	2.2%	1.9%	1.7%	Decelerating
Nashville	2.1%	1.8%	1.6%	Decelerating
Salt Lake City	1.7%	1.7%	1.4%	Decelerating
Denver	1.6%	1.2%	1.4%	Accelerating
Seattle	2.0%	1.8%	1.4%	Decelerating
Houston	2.0%	1.4%	1.3%	Decelerating
Atlanta	1.8%	1.5%	1.3%	Decelerating
Columbus	1.2%	1.5%	1.2%	Decelerating

Market	2016 Pop. Growth	2017 Pop. Growth	2018 Pop. Growth	Overall Trend
Indianapolis	1.0%	1.1%	1.1%	Steady
Sacramento	1.3%	1.2%	1.1%	Decelerating
Minneapolis	1.0%	1.1%	1.0%	Steady
Portland	1.9%	1.2%	0.9%	Decelerating
Washington DC	0.9%	1.0%	0.8%	Decelerating
Boston	0.8%	0.8%	0.6%	Decelerating
Miami	1.3%	0.8%	0.6%	Decelerating
San Diego	0.8%	0.5%	0.5%	Steady
San Francisco	0.7%	0.4%	0.3%	Decelerating
Philadelphia	0.2%	0.2%	0.3%	Steady
San Jose	0.7%	0.2%	0.3%	Steady
Detroit	0.1%	0.1%	0.1%	Steady
Los Angeles	0.2%	0.0%	-0.1%	Decelerating
New York	0.1%	-0.2%	-0.2%	Steady/Negative
Chicago	-0.2%	-0.2%	-0.2%	Steady/Negative

# Domestic Migration Trend is Out of Gateway Metros and Into Secondary Cities



# Estimating Average Demand Based on Metro Population and Domestic Migration

- Approximately half of storage customers are in the process of moving while the other half are longer-term users
  - Total metro population of 1.0 to 1.5 million will necessitate the building of one new store per year to meet needs for replacement and upgrade of older existing inventory
  - Approximately 5,000 new movers to an area will necessitate the building of one new storage facility per year to meet demand from domestic migration



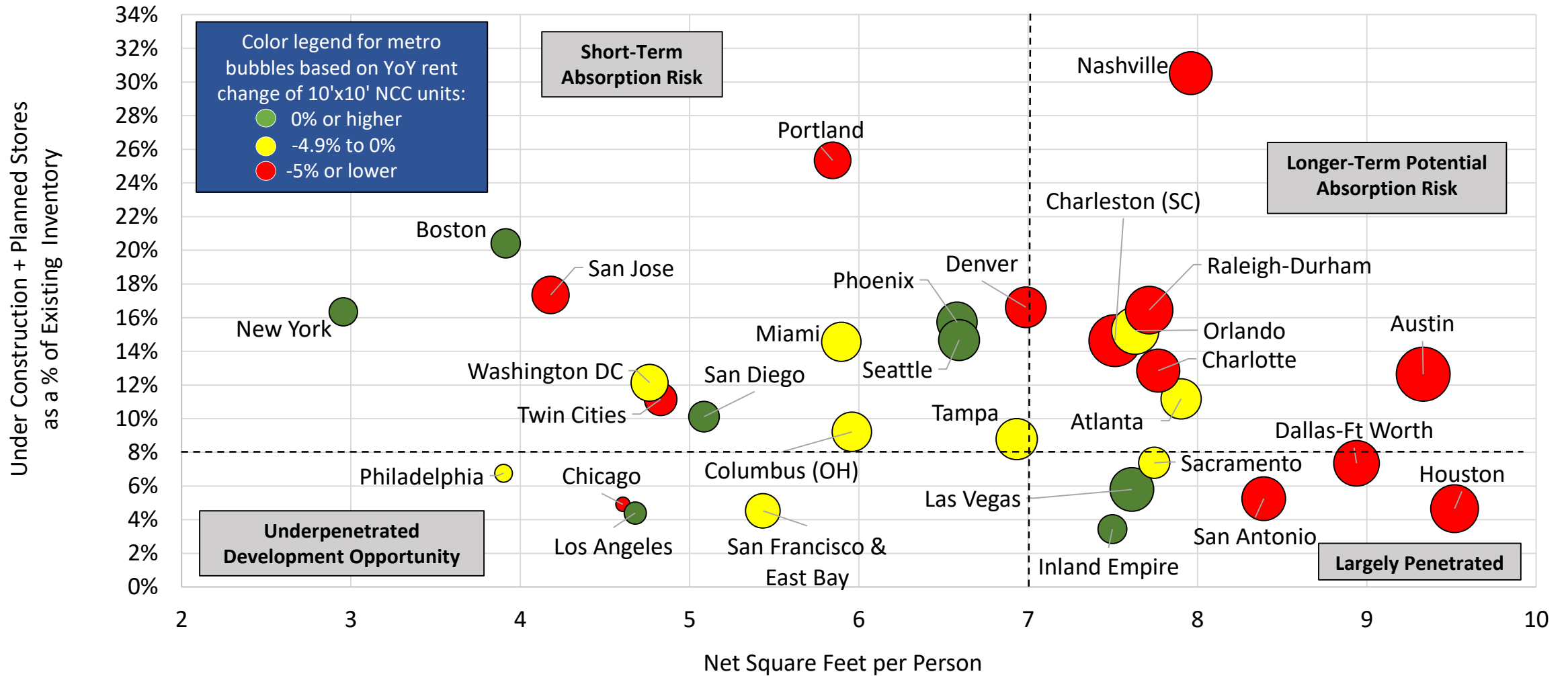
# There is Not Enough Demand to Absorb New Supply, Even in Low New Supply Markets

Market	Population 2018	Domestic Migration 2017-2018	Forecast New Stores 2019	Estimated Demand	Supply - Demand Difference
Phoenix	4,858,000	62,169	31	17	14
Portland	2,478,810	6,657	16	4	12
Denver	2,932,415	17,145	18	6	12
Nashville	1,931,000	16,439	16	5	11
Dallas-Fort Worth	5,007,000	46,316	21	14	7
Las Vegas	2,231,647	35,318	5	9	(4)

# Trends in Storage Fundamentals

# Street Rates Were Negative in Most Markets Last Year

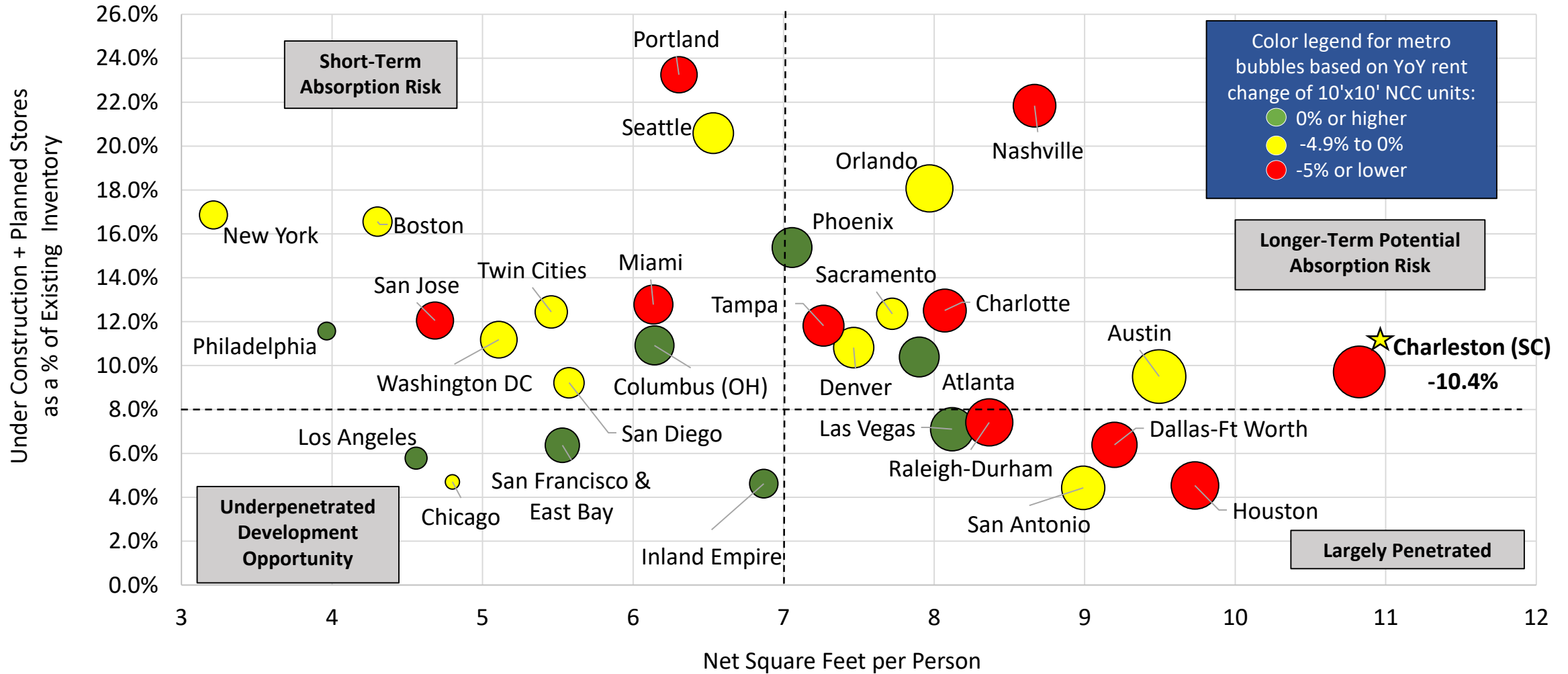
**2018 Snapshot: Aug 2018 Supply, July 2018 Rent Growth**  
 (Bubble size represents 2017 population growth rate)



\*August 2018 supply data, July 2018 rent growth data  
 Source: Yardi® Matrix

# The Trend in Street Rates Has Improved

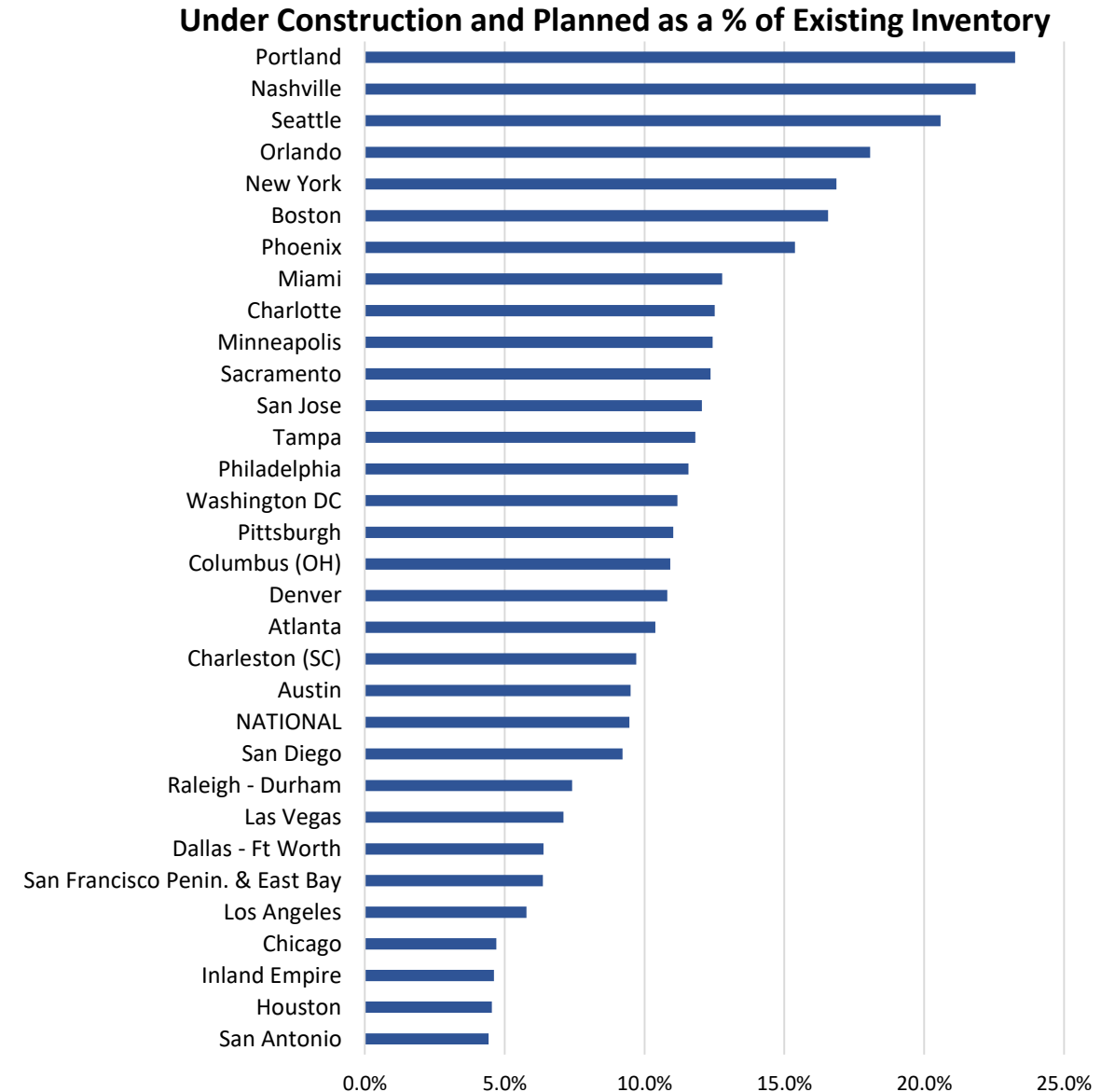
**2019 Snapshot: Aug 2019 Supply, July 2019 Rent Growth**  
 (Bubble size represents 2017 population growth rate)



\*August 2019 supply data, July 2019 rent growth data  
 Source: Yardi® Matrix

# New Supply Heaviest in Domestic Migration Favorites

Metro	UC + Planned % of Completed Jul 2019	Metro	UC + Planned % of Completed Jul 2019
Portland	23.3%	Columbus (OH)	10.9%
Nashville	21.8%	Denver	10.8%
Seattle	20.6%	Atlanta	10.4%
Orlando	18.1%	Charleston (SC)	9.7%
New York	16.9%	Austin	9.5%
Boston	16.6%	<b>NATIONAL</b>	<b>9.5%</b>
Phoenix	15.4%	San Diego	9.2%
Miami	12.8%	Raleigh - Durham	7.4%
Charlotte	12.5%	Las Vegas	7.1%
Minneapolis	12.4%	Dallas - Ft Worth	6.4%
Sacramento	12.4%	SF & East Bay	6.4%
San Jose	12.1%	Los Angeles	5.8%
Tampa	11.8%	Chicago	4.7%
Philadelphia	11.6%	Inland Empire	4.6%
Washington DC	11.2%	Houston	4.5%
Pittsburgh	11.0%	San Antonio	4.4%

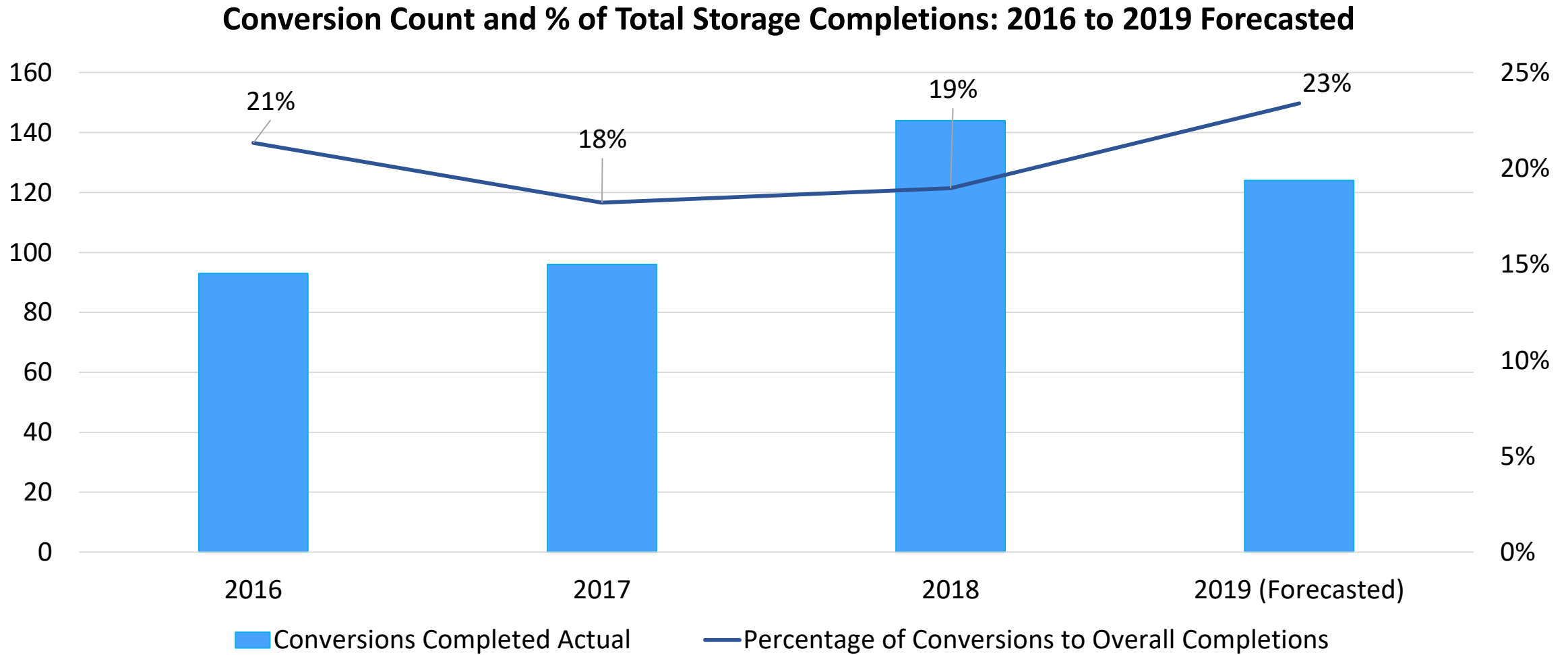


\*Drawn from our national database of 27,368 stores, including 2,111 projects in the new supply pipeline as well as 25,257 completed stores

Source: Yardi® Matrix, Data as of Jul 2019



# Conversions as a Percentage of Overall Deliveries are Increasing





# Retail to Storage Opportunities Growing & Selective

Retailer Closing: Store Address	Nearest Metro	Distance to Metro (Miles)	Is store in Opportunity Zone? (Y/N)	# of Facilities Within 5 Miles	5-Mile NRSF Per Capita if Property is Converted
Toys R US: 139-19 20 <sup>th</sup> Ave., College Point, NY	New York	-	N	40	1.7
Sears: 75 W Route 59 Ste 100 - Nanuet, NY	New York	21	N	7	2.2
Toys R US: 220 THF Blvd., Chesterfield, MO	St. Louis	24	N	2	2.3
Kmart: 987 Route 6 Mahopac, NY	New York	32	N	3	2.7
Kmart: 720 Clairton Blvd., Pleasant Hills, PA	Pittsburgh	10	N	23	2.8
Toys R US: 900 Ikea Drive, Elizabeth, NJ	New York	-	Y	26	3.1
Sears: 1401 N Montebello Blvd, Montebello, CA	Los Angeles	11	N	33	3.2
Kmart: 7101 Roosevelt Blvd., Philadelphia, PA	Philadelphia	-	N	29	3.3
Sears: 1111 Franklin Ave., Garden City, NY	New York	-	N	29	3.3
Shopko: 7401 Mineral Point Road, Madison, WI	Madison	-	N	9	3.4

# 10x10 Non-Climate Controlled Street Rates Decelerating in Markets With Heavy Development

Market	Growth in Street Rates Jul 17-Jul 18	Growth in Street Rates Jul 18-Jul 19	Change
San Antonio	-8.3%	-1.0%	7.3%
Minneapolis	-6.3%	-0.8%	5.5%
Denver	-8.5%	-4.7%	3.9%
Austin	-5.6%	-2.0%	3.6%
Charlotte	-9.1%	-5.6%	3.5%
Nashville	-8.1%	-5.3%	2.8%
Chicago	-4.6%	-1.9%	2.7%
Washington DC	-3.2%	-0.7%	2.6%
SF Penin. & East Bay	-2.0%	0.0%	2.0%
Philadelphia	-1.6%	0.0%	1.6%
Dallas - Ft Worth	-6.6%	-5.1%	1.6%
Sacramento	-2.9%	-1.5%	1.4%
Columbus (OH)	-1.1%	0.0%	1.1%
San Jose	-7.8%	-6.9%	0.9%
Orlando	-1.9%	-0.9%	0.9%

Market	Growth in Street Rates Jul 17-Jul 18	Growth in Street Rates Jul 18-Jul 19	Change
Raleigh - Durham	-7.8%	-7.4%	0.4%
Portland	-6.7%	-6.6%	0.2%
Los Angeles	0.0%	0.0%	0.0%
Houston	-5.3%	-5.6%	-0.3%
San Diego	0.6%	-1.3%	-1.9%
Inland Empire	3.7%	1.8%	-1.9%
Atlanta	-1.0%	-2.9%	-2.0%
Miami	-2.8%	-5.1%	-2.3%
Seattle	0.6%	-2.5%	-3.2%
Pittsburgh	-1.7%	-5.0%	-3.4%
Charleston (SC)	-6.2%	-10.4%	-4.2%
Boston	0.7%	-4.0%	-4.7%
Phoenix	5.0%	0.0%	-5.0%
Tampa	-1.7%	-6.9%	-5.2%
New York	4.1%	-1.1%	-5.3%
Las Vegas	12.1%	4.9%	-7.2%

# 10x10 Climate Controlled Rates Contracting Towards the Norm

Market	Growth in Street Rates Jul 17-Jul 18	Growth in Street Rates Jul 18-Jul 19	Change
Raleigh - Durham	-11.1%	-5.4%	5.8%
Columbus (OH)	-1.8%	1.8%	3.6%
Austin	-6.6%	-3.9%	2.7%
Charleston (SC)	-8.8%	-8.2%	0.6%
Los Angeles	-0.5%	-0.5%	0.0%
Orlando	-0.8%	-0.8%	0.0%
Denver	-6.1%	-6.5%	-0.4%
Portland	-6.3%	-6.7%	-0.4%
Seattle	-3.0%	-3.7%	-0.7%
Chicago	-0.8%	-1.6%	-0.8%
San Antonio	-2.4%	-3.3%	-0.9%
Dallas - Ft Worth	-4.0%	-5.0%	-1.0%
Charlotte	-4.1%	-5.2%	-1.0%
Philadelphia	0.0%	-1.3%	-1.3%
Sacramento	0.6%	-1.3%	-1.9%

Market	Growth in Street Rates Jul 17-Jul 18	Growth in Street Rates Jul 18-Jul 19	Change
Nashville	-2.8%	-5.0%	-2.2%
Washington DC	1.8%	-0.6%	-2.4%
Atlanta	-0.8%	-3.3%	-2.5%
Miami	-3.0%	-6.2%	-3.2%
Phoenix	2.4%	-0.8%	-3.2%
San Diego	3.7%	-1.2%	-4.9%
New York	1.5%	-3.4%	-4.9%
San Jose	-4.6%	-10.8%	-6.1%
Tampa	0.0%	-6.2%	-6.2%
Minneapolis	2.8%	-4.1%	-7.0%
SF Penin. & East Bay	3.6%	-3.4%	-7.0%
Pittsburgh	-3.1%	-10.4%	-7.2%
Houston	-2.5%	-10.3%	-7.8%
Boston	2.9%	-5.1%	-8.1%
Inland Empire	7.9%	-1.3%	-9.2%
Las Vegas	11.6%	0.9%	-10.6%

# Promotions Are Up Overall, Despite REIT's Pull Back Since Last Year

- From July 2018 to July 2019, there was **1.2% overall growth** in the number of promotions offered in rates collected
- Non-REITs saw a 5.3% increase in promotions in response to the new construction swell
- REITs saw a 1.1% decline in the number of promotions offered in rates collected
- Majority of rates (55.2%) from REITs still have promotions

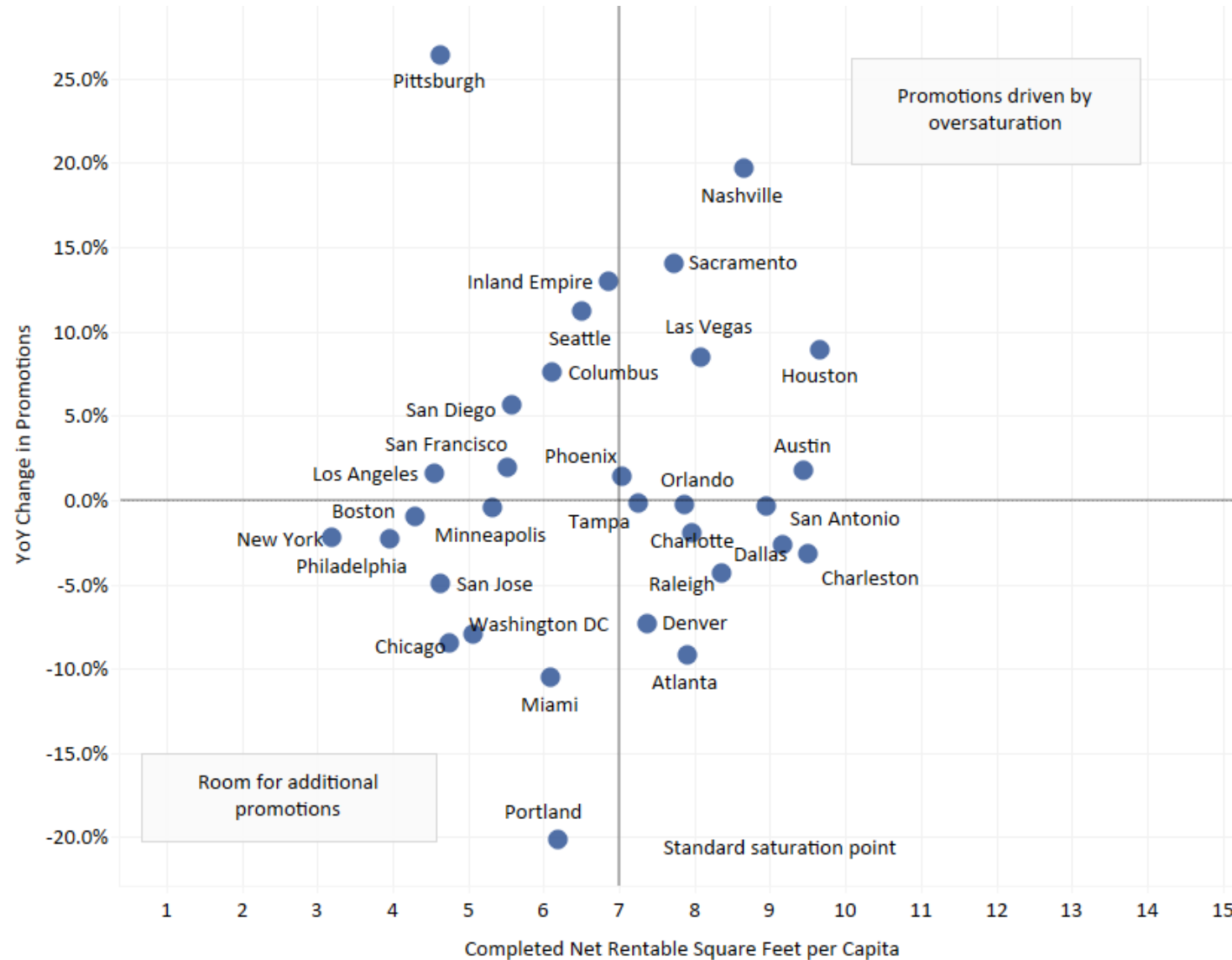
**Public Storage:** “In terms of other levers that we utilized in order to drive that move-in performance, advertising clearly being one of them. And a little bit less in promotional discounts.”

**Extra Space:** “We have changed our rental, our discount policy such that we do not discount at certain levels of occupancy.”

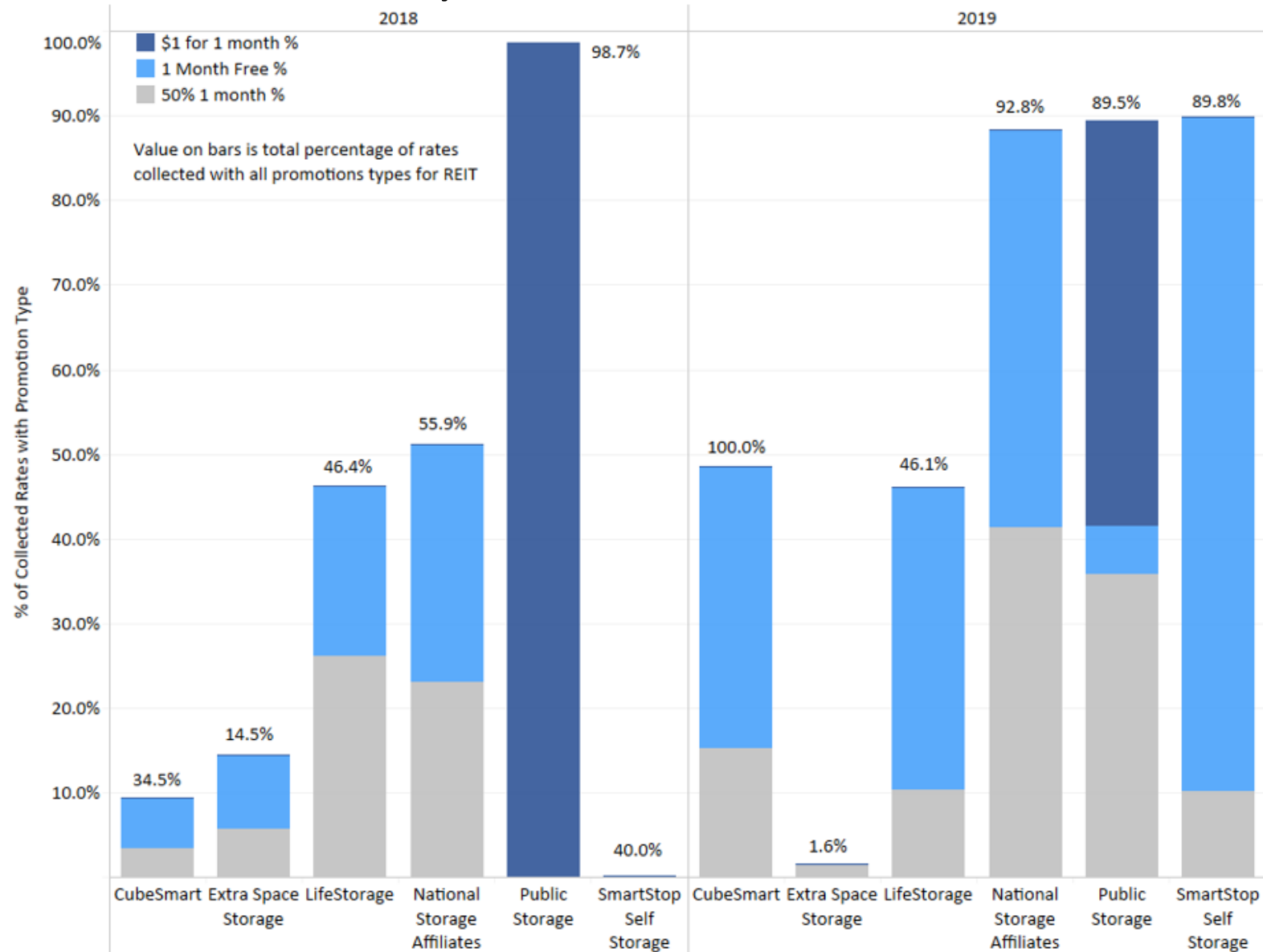
**CubeSmart:** “The operators of many of these new developments are being very aggressive in [rates] and discounting.”

**National Storage Affiliates:** “When you look at discounting, it's been relatively flat for a long, long time. This quarter, we actually saw it down versus the Q2 of last year.”

# High Supply Markets are Utilizing More Promotions

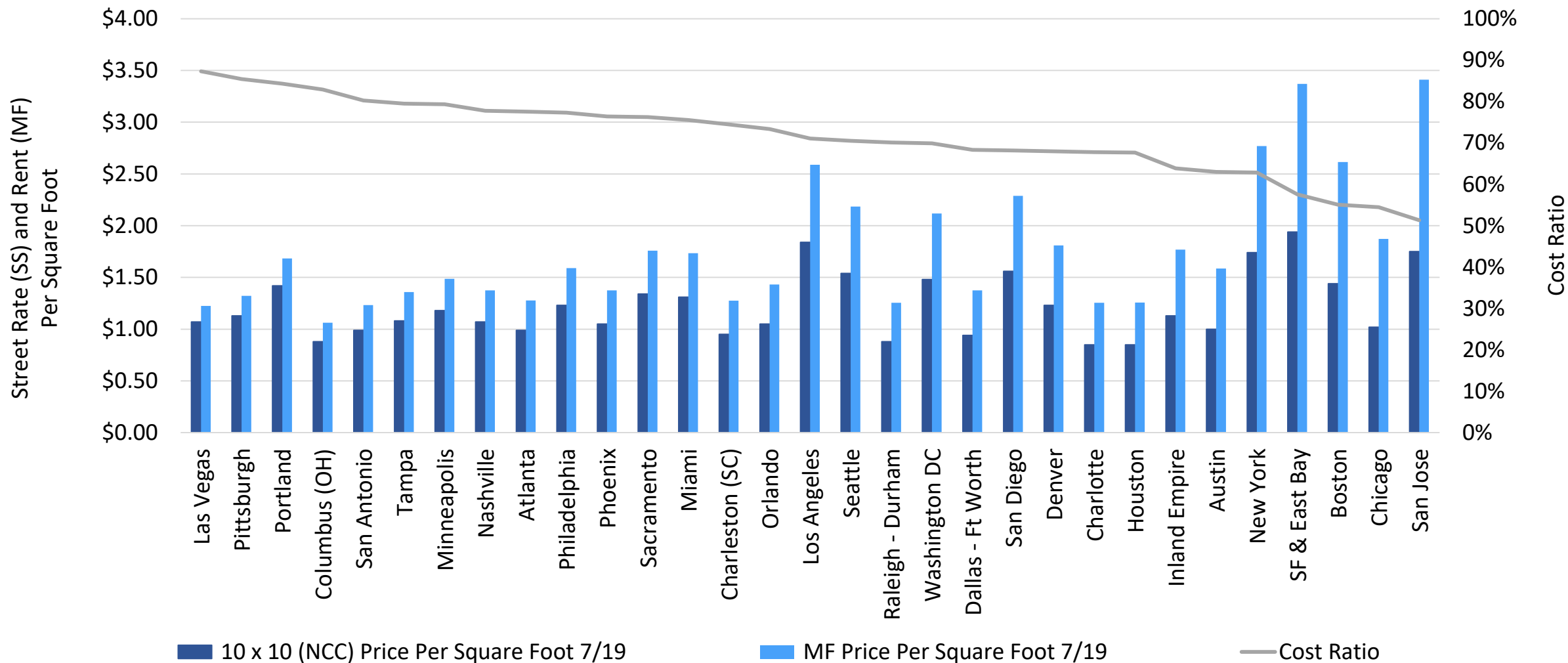


# REITs Have Drastically Different Promotional Strategies

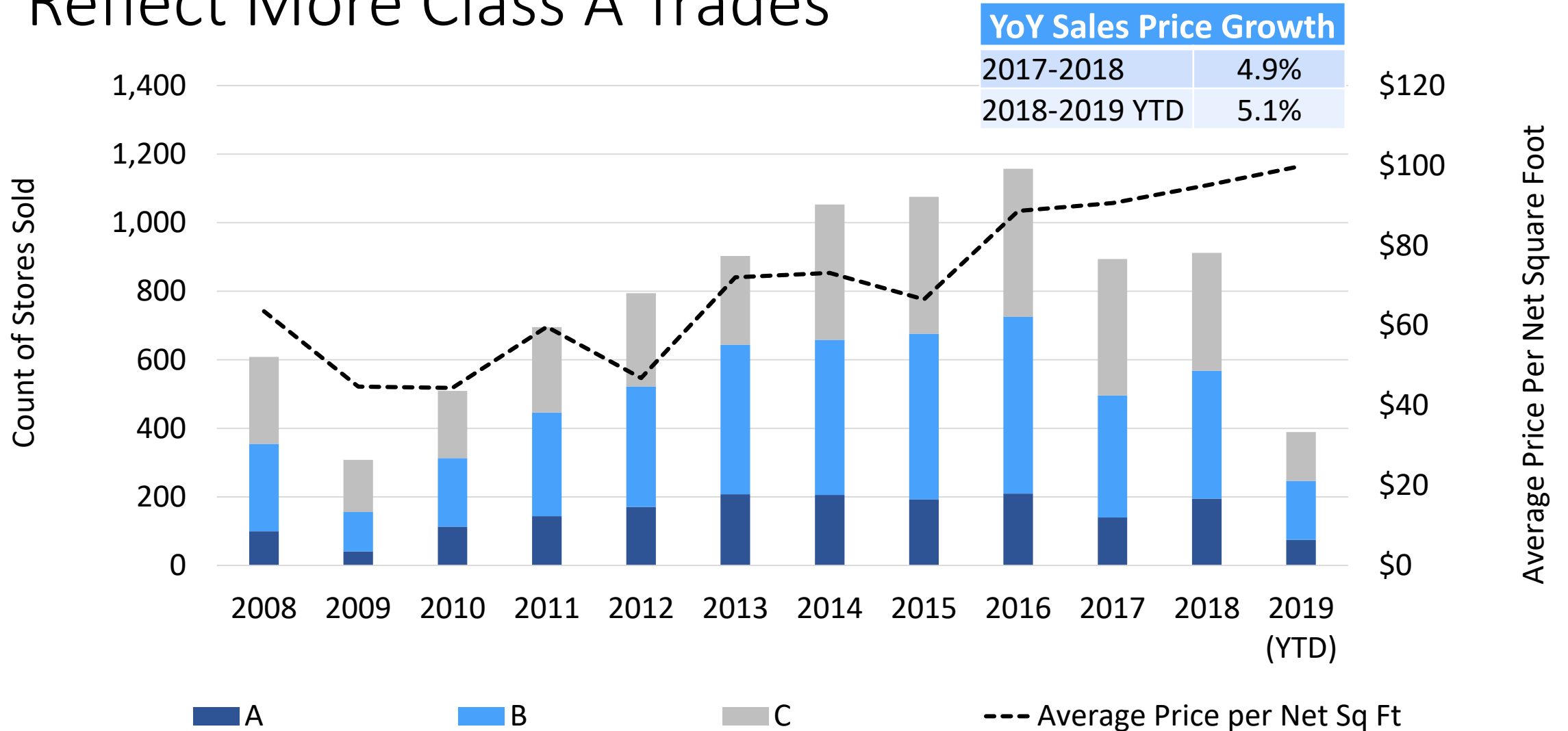


\*July 2018-July 2019  
Source: Yardi® Matrix

# Opportunities to Drive Street Rates Seem Apparent in Gateway Markets



# Sales Transaction Volume & Pricing: Higher Prices Reflect More Class A Trades





# Storage Supply Forecasts

# Takeaways From Our Updated Forecast Methodology

- Storage completions trend not dropping as quickly or as significantly as originally anticipated – plateau rather than peak and trough
- Our prior forecast under-predicted new property deliveries from October 2018 through December 2019 – most notably in Phoenix, Chicago, Twin Cities, Orlando and Atlanta, which increased by 8+ stores each
- Expansions and conversions have a significant impact on forecasted net rentable sq. ft. through 2022 – most notably in Chicago (57% of forecasted NRSF), Houston, (50%), Pittsburgh (45%), Twin Cities (38%), San Jose (33%) and Raleigh (33%)
- Expansions alone add roughly 150 new projects per year (20% of total new projects per year), but only 6 million new NRSF per year (10% of total new NRSF per year)

# Storage Forecast Summary – National

Property Forecasts	2019	2020	2021	2022
New Build	560	531	483	471
Conversion	113	85	107	102
Expansion	152	139	154	157
<b>Total</b>	<b>825</b>	<b>755</b>	<b>744</b>	<b>730</b>

NRSF Forecasts (Millions)	2019	2020	2021	2022
New Build	42	40	36	35
Conversion	8	8	8	8
Expansion	6	6	6	6
<b>Total</b>	<b>56</b>	<b>54</b>	<b>51</b>	<b>49</b>
<b><i>NRSF as a % of Stock</i></b>	<b>4.2%</b>	<b>3.8%</b>	<b>3.4%</b>	<b>3.2%</b>

# Storage Forecast Summary – Top 50 MSAs

Property Forecasts	2019	2020	2021	2022
New Build	402	373	342	327
Conversion	94	60	66	69
Expansion	95	96	99	104
<b>Total</b>	<b>591</b>	<b>529</b>	<b>507</b>	<b>500</b>

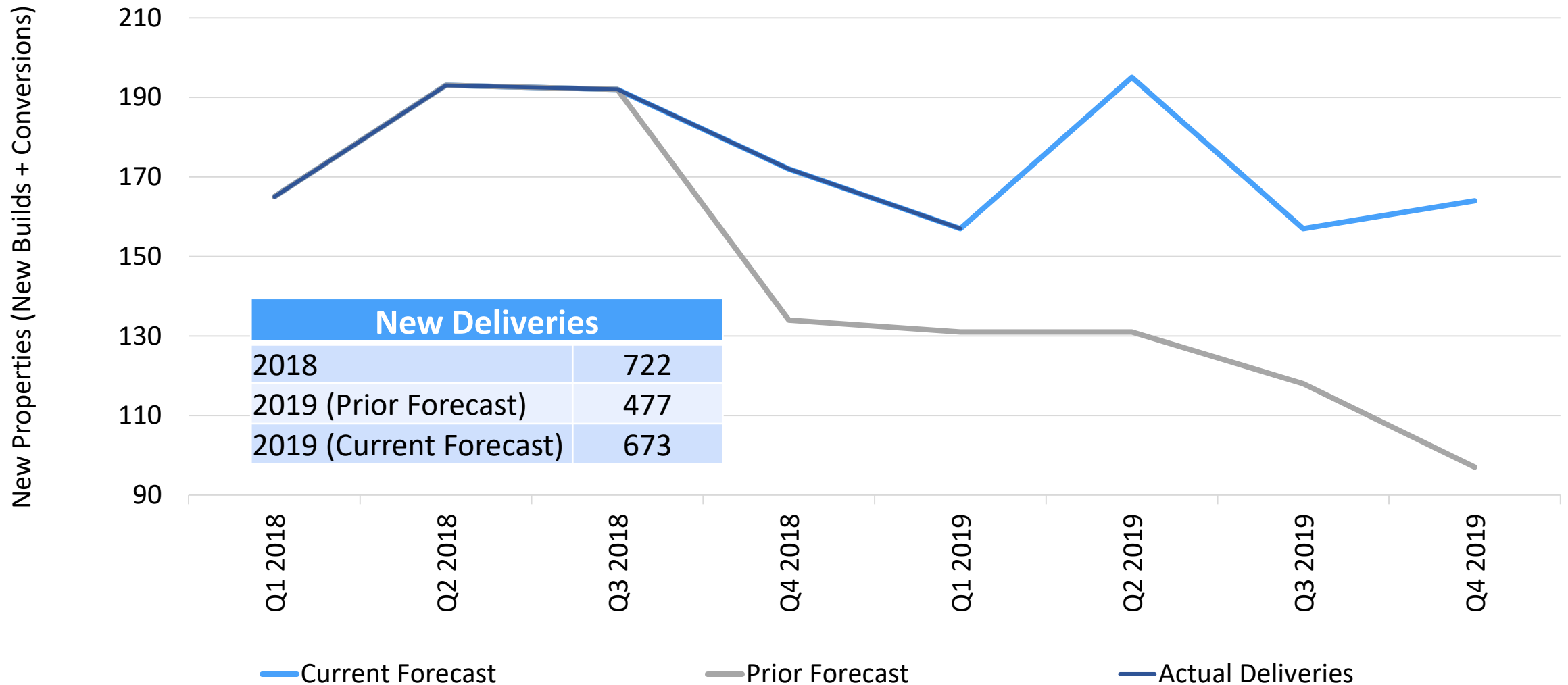
NRSF Forecasts (Millions)	2019	2020	2021	2022
New Build	31	29	26	25
Conversion	7	6	5	5
Expansion	4	4	4	4
<b>Total</b>	<b>42</b>	<b>38</b>	<b>35</b>	<b>34</b>
<b><i>NRSF as a % of Stock</i></b>	<b>4.4%</b>	<b>3.8%</b>	<b>3.4%</b>	<b>3.1%</b>

# Storage Forecast Summary – Top 25 MSAs

Property Forecasts	2019	2020	2021	2022
New Build	289	261	245	248
Conversion	63	43	48	42
Expansion	63	74	71	76
<b>Total</b>	<b>415</b>	<b>378</b>	<b>364</b>	<b>366</b>

NRSF Forecasts (Millions)	2019	2020	2021	2022
New Build	23	20	19	19
Conversion	4	4	4	3
Expansion	3	3	3	3
<b>Total</b>	<b>30</b>	<b>27</b>	<b>25</b>	<b>25</b>
<b><i>NRSF as a % of Stock</i></b>	<b>4.5%</b>	<b>3.9%</b>	<b>3.5%</b>	<b>3.3%</b>

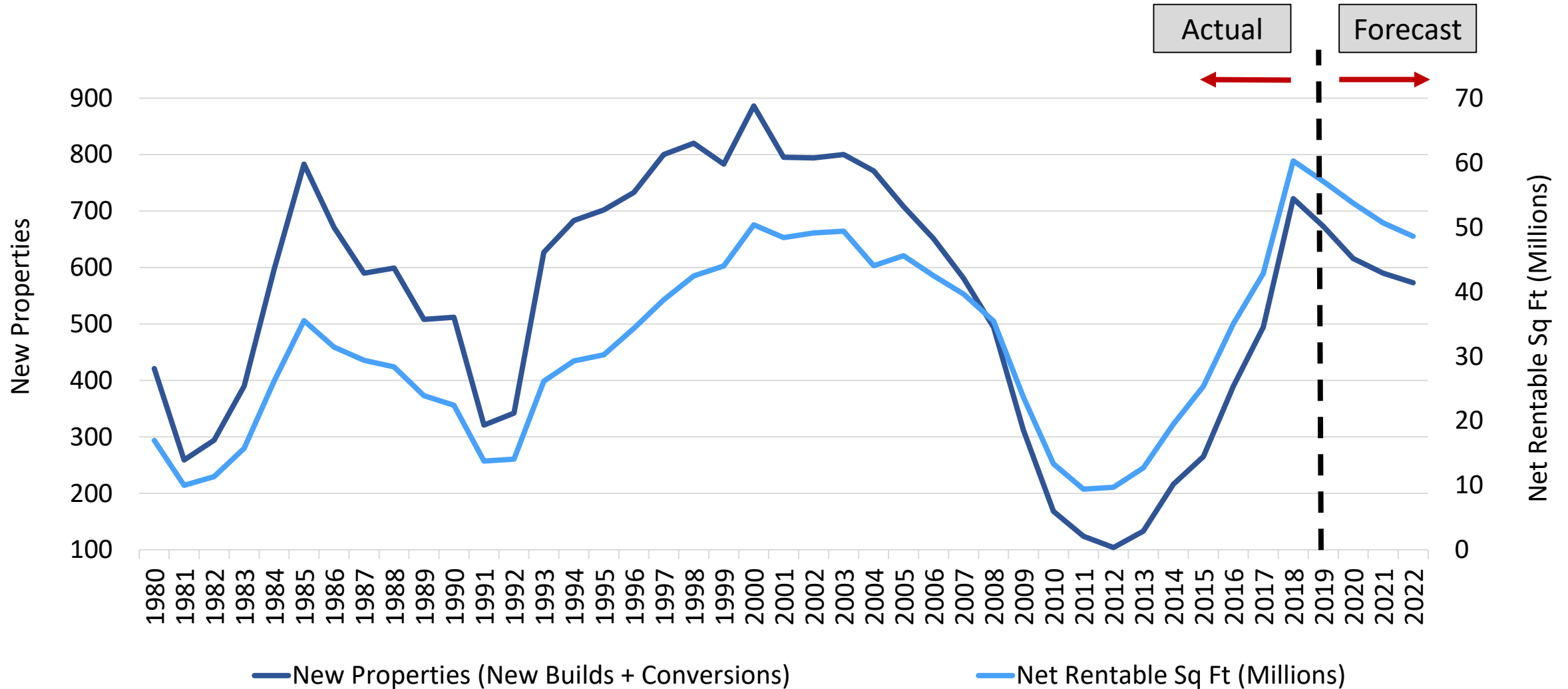
# 2019 New Deliveries Will be Slightly Lower Than the 2018 Peak



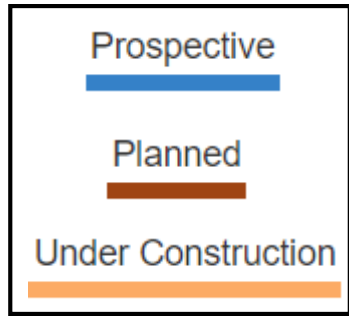
\*Prior forecast was done in 2018 and forecasted through 2019

Source: Yardi® Matrix

# Our Current Forecasts Show New Deliveries Dropping in the Next Few Years, but Less of a Drop Than Previously



# There is Robust Expansion Activity Nationally



Property Status	# Properties	Total Sq. Ft. (MM)	Rentable Sq. Ft. (MM)
Prospective	59	2.68	2.35
Planned	210	10.03	8.55
Under Construction	89	3.66	3.17
<b>TOTAL EXPANSIONS:</b>	<b>358</b>	<b>16.38</b>	<b>14.07</b>

\*Data as of August 2019  
Source: Yardi® Matrix



# Biggest Expansions Under Construction

## 1 - Public Storage: Westminster, CO

- 131,400 sq. ft. expansion
- Existing 89,640 sq. ft. facility
- Expansion will add one 2-story building
- Anticipated completion October 2019

## 2 – Public Storage: Rosemount, MN

- 123,000 expansion
- Existing 63,322 sq. ft. facility
- Expansion will add one 3-story building
- Anticipated completion September 2019

## 3 – San Felipe Storage: Hollister, CA

- 120,750 sq. ft. expansion
- Existing 94,902 sq. ft. facility
- Expansion will add three 1-story buildings
- Anticipated completion July 2020

## 4 – Public Storage: Stillwater, MN

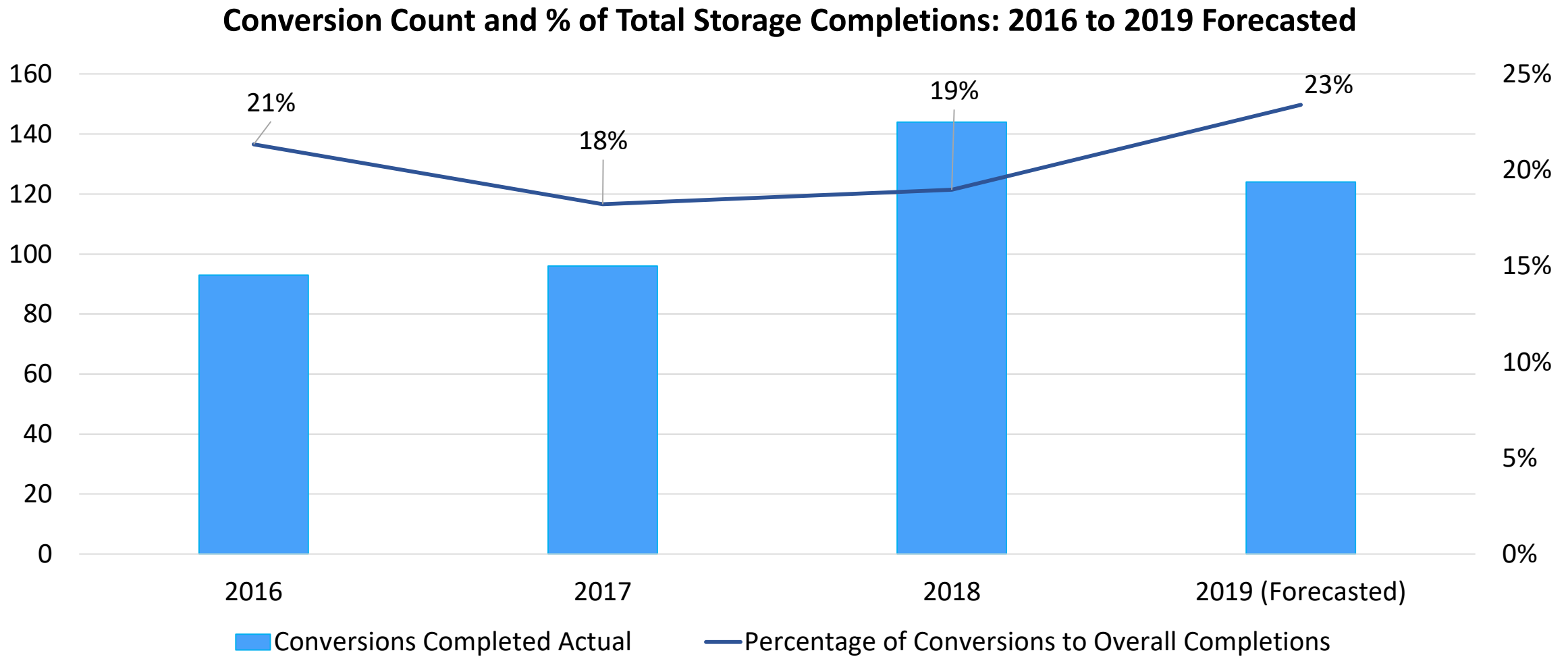
- 120,300 sq. ft. expansion
- Existing 107,312 sq. ft. facility
- Expansion will add one 3-story building
- Anticipated completion September 2019

## 5 – Extra Space Storage: Bluffdale, UT

- 98,729 sq. ft. expansion
- Existing 38,520 sq. ft. facility
- Expansion will add two 2-story building
- Anticipated completion September 2019



# Conversions as a Percentage of Overall Deliveries are Increasing



# Forecast Methodology – Prior Forecast

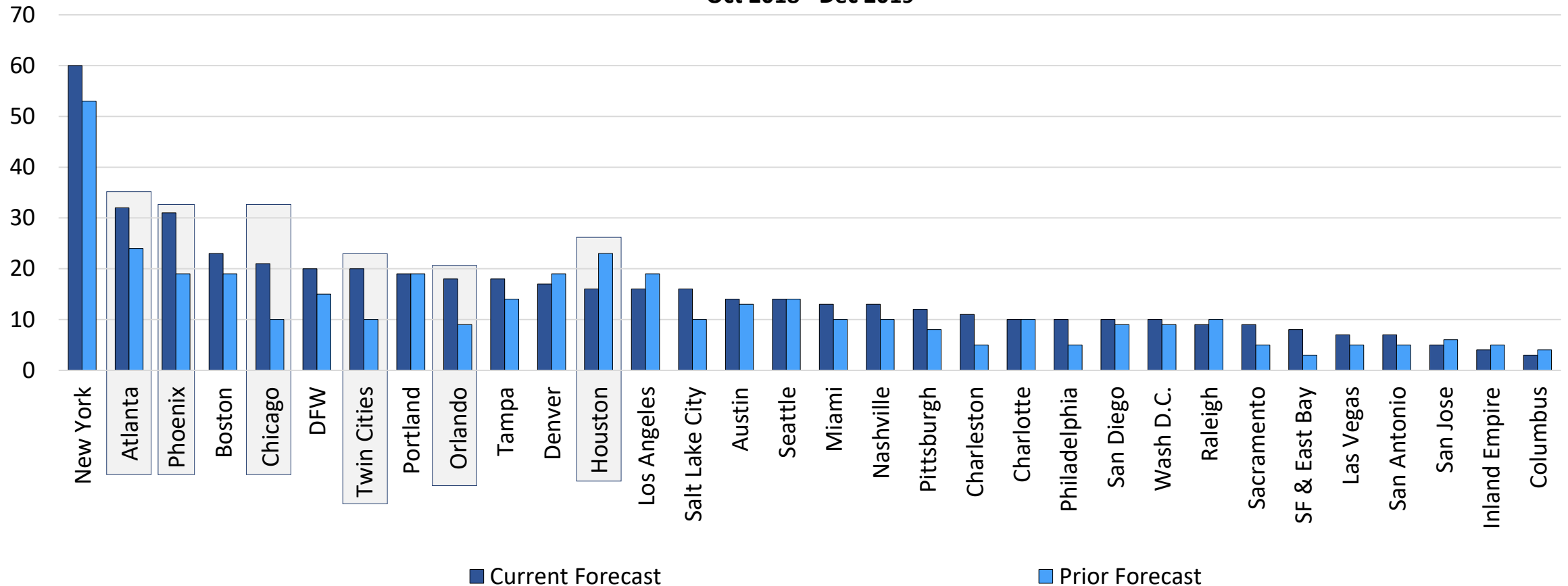
- Used existing under construction inventory and construction loan originations to predict future completions
- Completion date was based off of historical completion times at the national level
- Used a top down approach, starting with national deliveries and then broke down the model by market
- Under-predicted upcoming deliveries due to timing of last forecast, did not see increased starts that occurred in late 2018
- Methodology needed to be enhanced because:
  - Completion times are inconsistent market to market
  - The model only took into account new builds and conversions
  - Using construction loans and properties under construction only gave us visibility to the short end of the pipeline

# Forecast Methodology – Current Forecast

- Includes property expansions, not previously forecasted
- Extends forecasts into 2022
- Forecasts precise net rentable square footage at the property level
- Predicts completions at the property level and aggregates up to market and national levels incorporating local factors including average historical completion times
- Uses construction loans as a backstop, will not remove any projects that have a loan identified, however the model is not solely limited to properties with construction loans
- Simulates and predicts new supply tracking process by applying historical completion percentages to the pipeline each month
- Movement between development statuses is relatively consistent as a percentage of the total size of each status group, allowing us to generate future snapshots of the entire pipeline
- Predicts completions by using a weighted sampling system that generates a pool of candidate properties for completion
- Model simulates the entire pipeline thus predicting new projects not yet found, and refills planned and prospective pipeline

# Change in Methodology Does Have Impacts at the Metro Level – Most Notably in Phoenix, Chicago, Twin Cities, Orlando, Atlanta and Houston

Forecast New Properties (New Builds + Conversions)  
Oct 2018 - Dec 2019

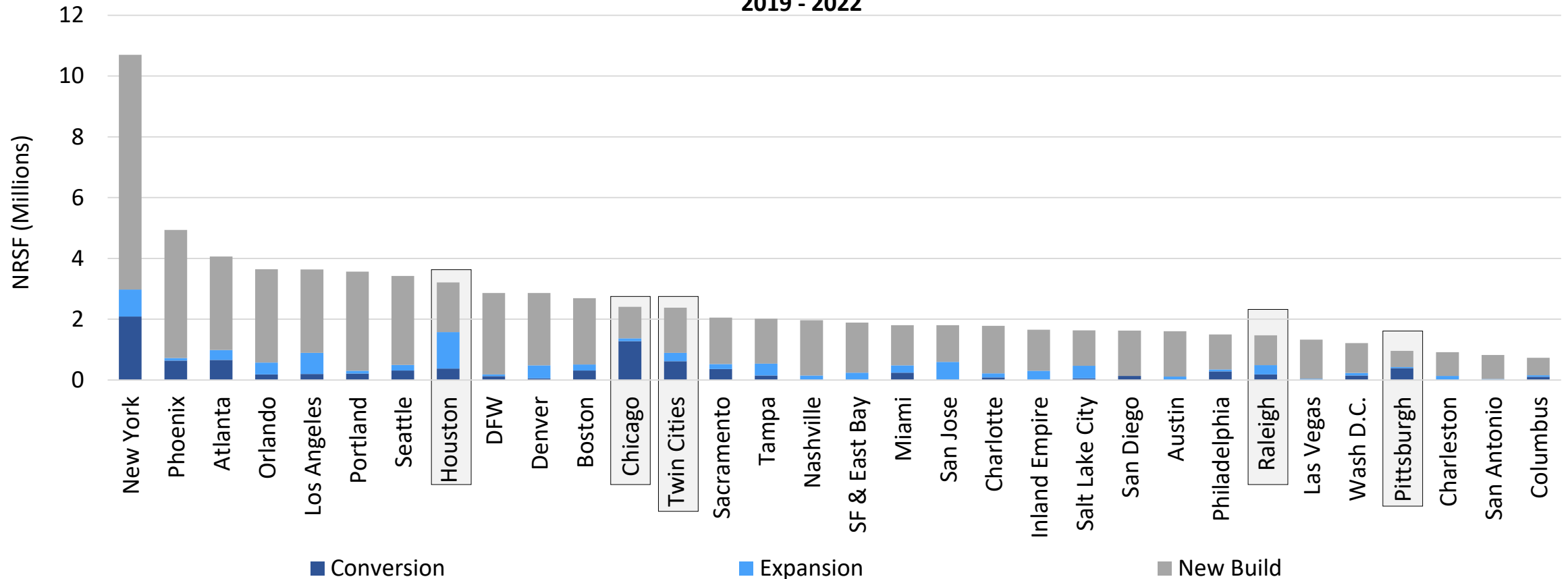


\*Prior forecast was done in 2018 and forecasted through 2019

Source: Yardi® Matrix

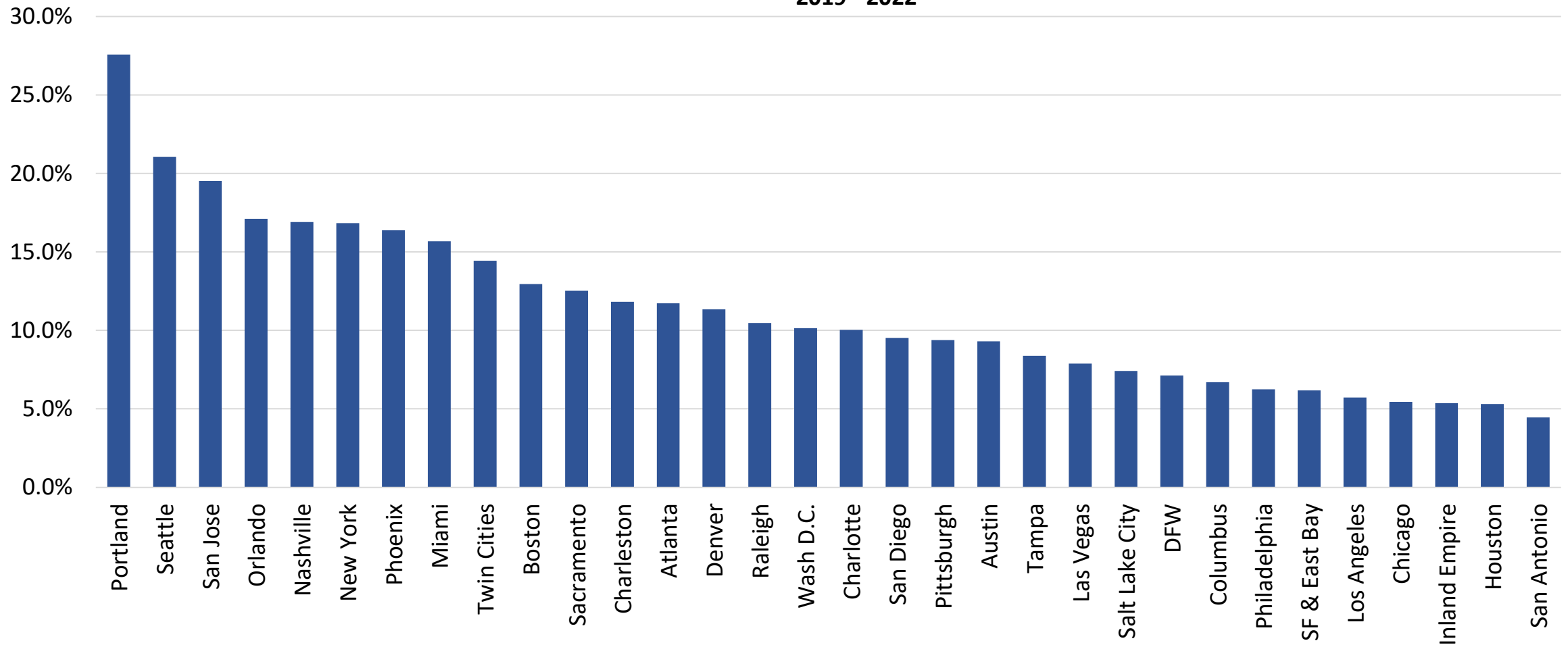
# Conversions and Expansions Account for a Significant Portion of New NRSF in Chicago, Houston, Pittsburgh, Twin Cities and Raleigh

Forecasted New NRSF  
2019 - 2022



# Some Markets Face Short-Term Absorption Risk with Forecasted New NRSF Above 15% of Existing Stock

Forecasted New NRSF as a % of Existing Stock  
2019 - 2022



# Takeaways From Our Updated Forecast Methodology

- Storage completions trend not dropping as quickly or as significantly as originally anticipated – plateau rather than peak and trough
- Our prior forecast under-predicted new property deliveries from October 2018 through December 2019 – most notably in Phoenix, Chicago, Twin Cities, Orlando and Atlanta, which increased by 8+ stores each
- Expansions and conversions have a significant impact on forecasted net rentable sq. ft. through 2022 – most notably in Chicago (57% of forecasted NRSF), Houston, (50%), Pittsburgh (45%), Twin Cities (38%), San Jose (33%) and Raleigh (33%)
- Expansions alone add roughly 150 new projects per year (20% of total new projects per year), but only 6 million new NRSF per year (10% of total new NRSF per year)



# Storage Technology Trends

# New Technology Impacting the Self Storage Industry

## Internet of Things (IoT)

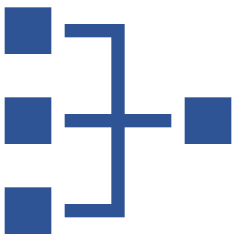
- IoT network connects smart devices, via the internet, to a centralized platform
- Connected smart devices collect data and can be controlled remotely using a smartphone, allowing operators to remotely monitor the property in real-time
- Vast range of devices can be connected including smart locks, surveillance cameras, lights, HVAC, gates and other security devices using a smartphone

## Mobile Apps

- Customer Mobile Apps – Enables customers to rent a unit, pay their bills, gain access to main entrances and view their activity history from their smartphone
  - Operators can also use it to easily communicate with customers on important facility matters
- Operator Mobile Apps – Property and financial management apps with abilities to support facility operations, leasing, accounting and payment processing

## Smart Locks

- Smart electronic locks installed on the exterior or interior of each unit
- Customers use smartphone as a digital key, receive alarm notices and monitor their unit access history
- Facilitates a fully automated move-in/move-out process that is available 24/7



# The Yardi Matrix View – Outlook

- **Storage outlook – markets to focus on: the confluence of supply and demand**
  - Increasing number of retail bankruptcies and adaptive re-use may lead to potential storage conversion facilities
  - Currently, in place renters are accepting rent increases according to recent REIT releases; street rates likely to remain negative
  - Atlanta, Las Vegas, and Phoenix continue to benefit from strong domestic migration of both baby boomers and millennials, but the rates of growth are slowing
  - New York and Boston face new supply headwinds, but have historically low penetration, and long-term development opportunity remains despite demographics
  - Capital markets remain well balanced, and abundant capital exists for storage investment. Major CRE firms are diversifying their portfolios and growing their storage allocation
  - Given new supply, the likelihood of long lease ups may lead to distressed sales
  - Owners benefit from overflows in tight industrial market; small commercial operations use storage for inventory
  - Opportunity zones present an ability for investors and developers to take advantage of deferred capital gains
  - Targeting opportunity zones with strong demographic and investment landscapes is key
  - **The industry is in for a tough slog for an extended period of time – adding new technologies and services will have increasing importance**

# Next Steps with Yardi® Matrix: Solutions in Storage Data

Thank you! We are happy to answer any questions. Please contact:

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