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# 2022 Market Outlook

FEBRUARY 2022

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# Executive Summary

# Executive Summary

## MACRO OVERVIEW

### WILL INFLATION DERAIL RECOVERY?

- While markets and the real economy have bounced back sharply from the pandemic lows, the Federal Reserve's (Fed) era of accommodative monetary policy may be coming to an end
- Inflation concerns have pushed the Fed to accelerate the rollback of their accommodative stance, with the market pricing in several rate hikes by the end of 2022
- The key question is — will the Fed successfully engineer a soft landing for the economy? How will housing fare as interest rates rise?

## U.S. SINGLE-FAMILY HOUSING

### HOUSING STRENGTH WILL LIKELY PERSIST INTO 2022

- While higher interest rates would be concerning, they are generally accompanied by strong economic growth
- Housing historically fares well in rising-rate environments
- Housing will also be supported by the current record-low inventory levels and high absorption rates. New home supply has lagged demand and both material and labor shortages will delay an increase in supply.
- Markets are overvalued in regional pockets, but not near the levels seen in 2005. Rent growth has strengthened in 2021 but has still lagged the increase in Personal Consumption Expenditure (PCE).

### DEMOGRAPHIC SUPPORT FOR HOUSING

- Long-run demographics point to rising 21-45 populations in the next decade, which should support household formation and housing fundamentals in the coming years



Source: Amherst estimates as of Jan 2022 based on publicly available information

2022 REAL ESTATE MARKET OUTLOOK / 01. EXECUTIVE SUMMARY

The views expressed herein are for information purposes only and are derived by Amherst from current market conditions and assumptions, which may materially change over time. Please see important disclosures at the end of this presentation.

# Executive Summary

## U.S. COMMERCIAL REAL ESTATE

### MIXED RECOVERY ACROSS CRE SECTORS

- Commercial Real Estate (CRE) prices have seen a multi-track recovery, with industrial and apartment sectors leading the way
- Central Business District (CBD) office has recovered from the pandemic lows, but remote-working and hybrid-working arrangements pose questions on long-term prospects
- Retail prices rebounded strongly in 2021, but we expect longer-term concerns to continue to weigh on the sector in coming years, particularly in the mall segment
- We expect asset repositioning and adaptive re-use to drive demand for both value-add equity capital and transitional loans through 2022 and beyond

## SECURITIZED PRODUCTS

### FED TAPER AND WIDER SPREADS

- Fed taper is estimated to conclude in March 2022, and the Fed may go from being a buyer of ~\$550bn in Mortgage-Backed Securities (MBS) in 2021 to being a net seller in 2022
- Bank demand for MBS might be weaker into higher rates, suggesting there may be more room for the basis to widen, in addition to recent underperformance
- We believe some value resides in the top of the capital stack in securitized credit products, especially in SASB/SFR AAAs
- There is risk of widening in the top of the capital stack, but far less than down the stack where investors face minimal compensation for the leverage and idiosyncratic risks in the current environment



Source: Amherst estimates as of Jan 2022 based on publicly available information

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# Return of Inflation

# Markets and Economy Bounced Back in 2021, Stoking Inflation for the First Time in 10-15 Years

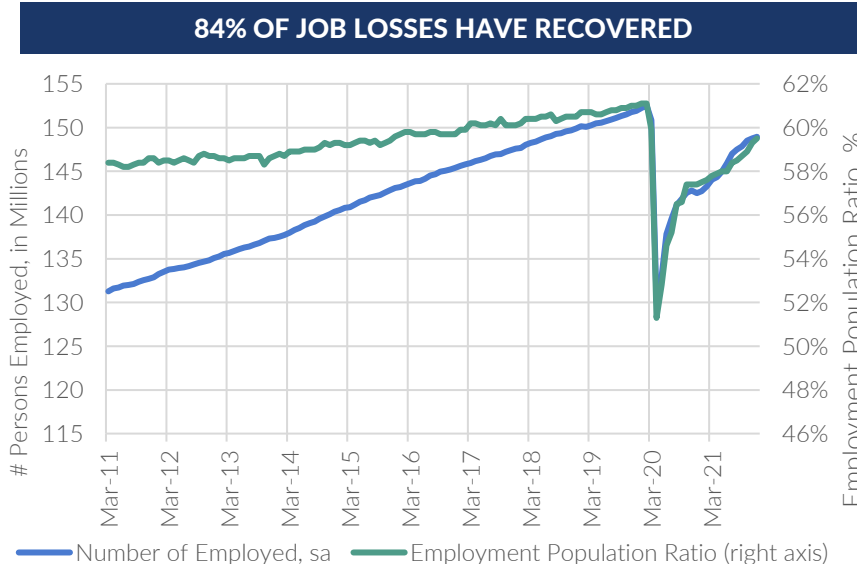
- Supportive monetary and fiscal policy caused markets to recover and then perform very well over 2021
- S&P 500 index was up 27%, and IG/HY spreads were unchanged to around their pre-pandemic tight
- On the flip side, supportive fiscal stimulus, accommodative Fed policy, and supply constraints led to high inflation readings for the first time in more than a decade

KEY PERFORMANCE INDICATORS: ECONOMY, MARKETS, CONSUMERS									
	METRIC	2014	2015	2016	2017	2018	2019	2020	2021
Economic Fundamentals	GDP YoY <sup>1</sup> Growth(%)	2.9%	2.2%	2.1%	2.7%	2.5%	2.6%	-2.3%	4.9%
	Non-Farm Payrolls Monthly Average (000s)	250	227	195	176	193	178	-785	537
	Commercial Property Price Growth (%)	11.1%	8.6%	7.6%	6.9%	6.5%	7.2%	6.1%	22.9%
Capital Markets	S&P 500 Price Return	11%	-1%	10%	20%	-6%	29%	16%	27%
	CDX IG Spread Change (bps)	4	22	-21	-19	39	-42	5	0
	CDX HY Spread Change (bps)	52	113	-115	-48	143	-169	13	0
	CMBS BBB Spread Change (bps)	-12	212	-75	-135	60	-135	150	-45
Consumer Confidence	University of Michigan Consumer Sentiment YoY Change	2	9	-1	5	2	-2	-14	-10
	Conference Board Consumer Confidence Index YoY Change	9	11	2	21	10	-2	-26	29

<sup>1</sup>Year-over-Year; Source: Bloomberg, US Bureau of Economic Analysis, US Bureau of Labor Statistics, RCA, University of Michigan, Conference Board as of Dec 2021

# Job Market Fared Well, but Still Employs Fewer Workers Than Pre-Pandemic Levels

- An unemployment rate around 4% masks the fact that participation rate has failed to bounce back
- After an initial COVID-related shock of a 10-percentage point (pp) drop (from 61.2% in Feb 2020 to 51.3% in Apr 2020), the employment-to-population ratio has recovered about 8pp to 59.5% in Dec 2021
- Nearly 2% of the working age population (3.6mm people) are still out of a job vs. pre-COVID levels (Feb 2020), totaling 16% of all jobs lost at the trough in 2020
- The number of employed workers 45 years and older has fallen by about 2mm vs. Dec 2019, suggesting some of the decline may be voluntary



JOB LOSSES BY AGE					
Age Group	Employment, Thousands				% Change
	Dec-19	Dec-20	Dec-21	Dec 2021 - Dec 2019	
16 to 19	5,029	4,793	5,068	39	0.8%
20 to 24	13,947	13,002	13,758	-189	-1.4%
25 to 34	36,263	33,993	35,464	-799	-2.2%
35 to 44	33,432	32,052	33,521	89	0.3%
45 to 54	32,088	30,382	31,031	-1,057	-3.3%
55 and older	37,744	35,391	36,891	-853	-2.3%
All	158,503	149,613	155,733	-2,770	-1.7%

Source: US Bureau of Labor Statistics, as of Jan 2022





# Many Regions Have More Than Recovered the Jobs Lost at the Start of the Pandemic

- While the U.S. overall has recovered only 84% of the peak job losses, many markets (Salt Lake City, Austin, etc.) have recovered all lost jobs and added many more
- In contrast, urban markets like San Francisco, New York City, and Philadelphia have recovered only about half of lost jobs. Temporary remote-work arrangements may explain part of this loss, but recovery is likely lagging in these cities.

JOB LOSS RECOVERY (% AS OF NOVEMBER 2021)										
	Feb 2020 Non-Farm Jobs, 000s	Job Loss Vs. Pre- COVID	% Losses Recovered (2021)							
			Mar	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Salt Lake City, UT	763	-9%	93%	106%	113%	119%	122%	125%	128%	
Austin-Round Rock-Georgetown, TX	1,145	-12%	81%	89%	98%	104%	113%	119%	126%	
Jacksonville, FL	733	-11%	82%	91%	97%	100%	109%	113%	117%	
Dallas-Plano-Irving, TX	2,759	-11%	71%	83%	89%	92%	95%	102%	110%	
Tampa-St. Petersburg-Clearwater, FL	1,407	-12%	76%	88%	92%	95%	113%	107%	108%	
Phoenix-Mesa-Chandler, AZ	2,226	-11%	71%	94%	99%	101%	102%	107%	108%	
<b>U.S. Overall</b>	<b>153,004</b>	<b>-15%</b>	<b>60%</b>	<b>68%</b>	<b>73%</b>	<b>75%</b>	<b>77%</b>	<b>80%</b>	<b>81%</b>	<b>84%</b>
San Francisco-Oakland-Berkeley, CA	2,514	-16%	37%	45%	47%	49%	51%	55%	57%	
New York City, NY	4,703	-20%	38%	43%	46%	48%	46%	51%	54%	
Urban Honolulu, HI	478	-21%	30%	45%	49%	48%	46%	46%	46%	
Richmond, VA	692	-11%	45%	45%	50%	45%	45%	45%	45%	
Philadelphia City, PA	750	-16%	35%	41%	41%	43%	44%	47%	49%	
New Orleans-Metairie, LA	593	-19%	38%	41%	44%	46%	26%	46%	49%	

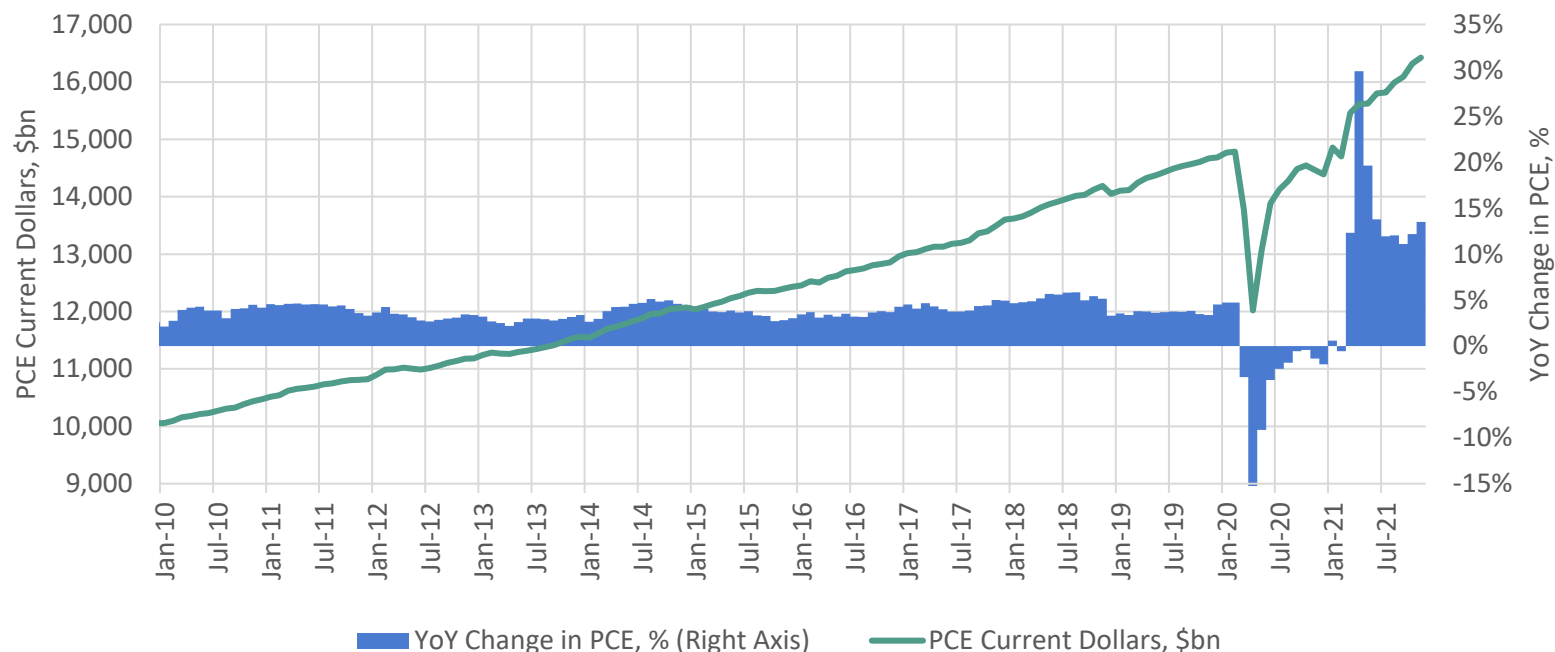
Source: US Bureau of Labor Statistics retrieved as of Jan 2022. Regional details are reported with a lag with the last data point being Nov 2021



# Personal Consumption Expenditure Has Grown by \$1Tn Since February 2020

- PCE has increased from \$14.8tn in February 2020 to \$16.3tn in most recent data (as of November 2021), after falling to \$12.0tn in April 2020

## PCE GROWTH HAS BEEN IMPRESSIVE DESPITE THE VOLATILITY POST-COVID



Source: PCE data is from the Bureau of Economic Analysis retrieved as of Jan 2022. Last data point is Nov 2021

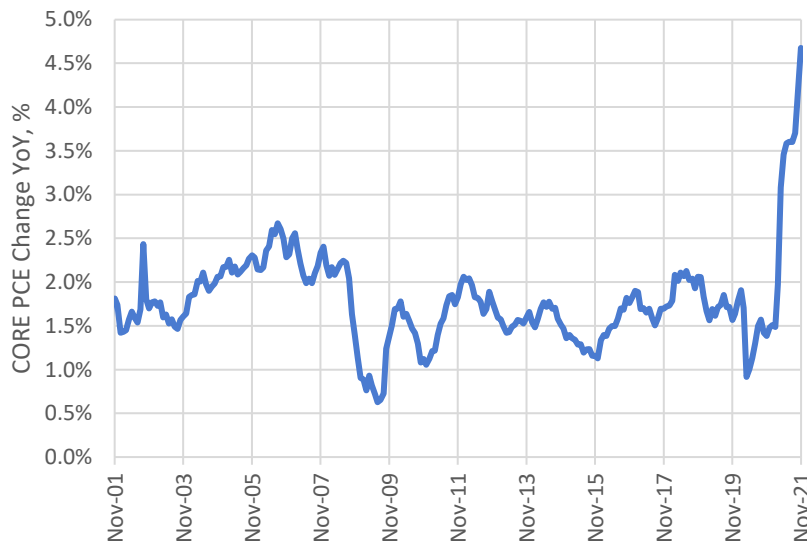
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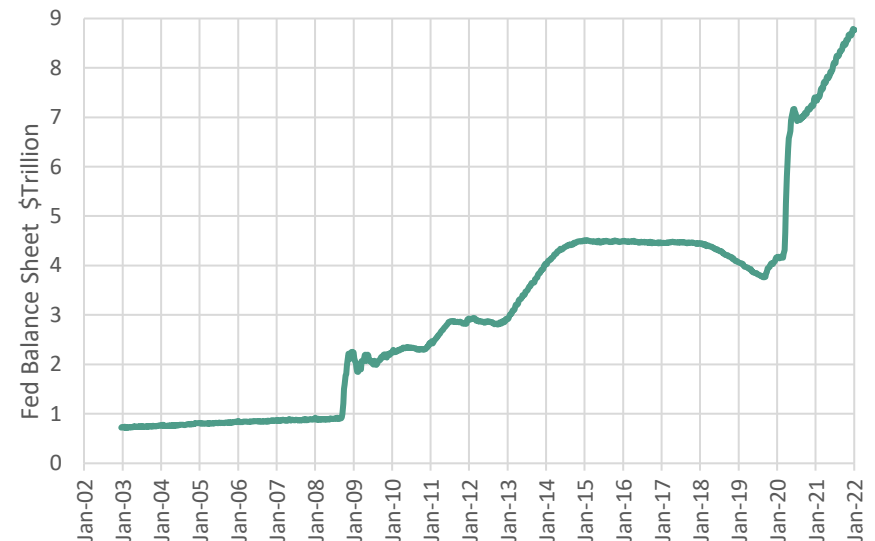
# Inflation Fears Have Prompted the Fed to Reverse Its Accommodative Policy Stance

- Supply constraints, fiscal stimulus, and accommodative Fed policy have all led to inflation concerns not seen in the U.S. in last 10-15 years
- This has led the Fed to slow/stop balance sheet growth and talk about rate hikes on an accelerated schedule

**CORE PCE INDEX (YOY% CHANGE)**



**FED BALANCE SHEET (\$TN)**



Source (Left): U.S. Bureau of Economic Analysis as of Nov 2021. Source (Right) : Federal Reserve as of Jan 5, 2022.





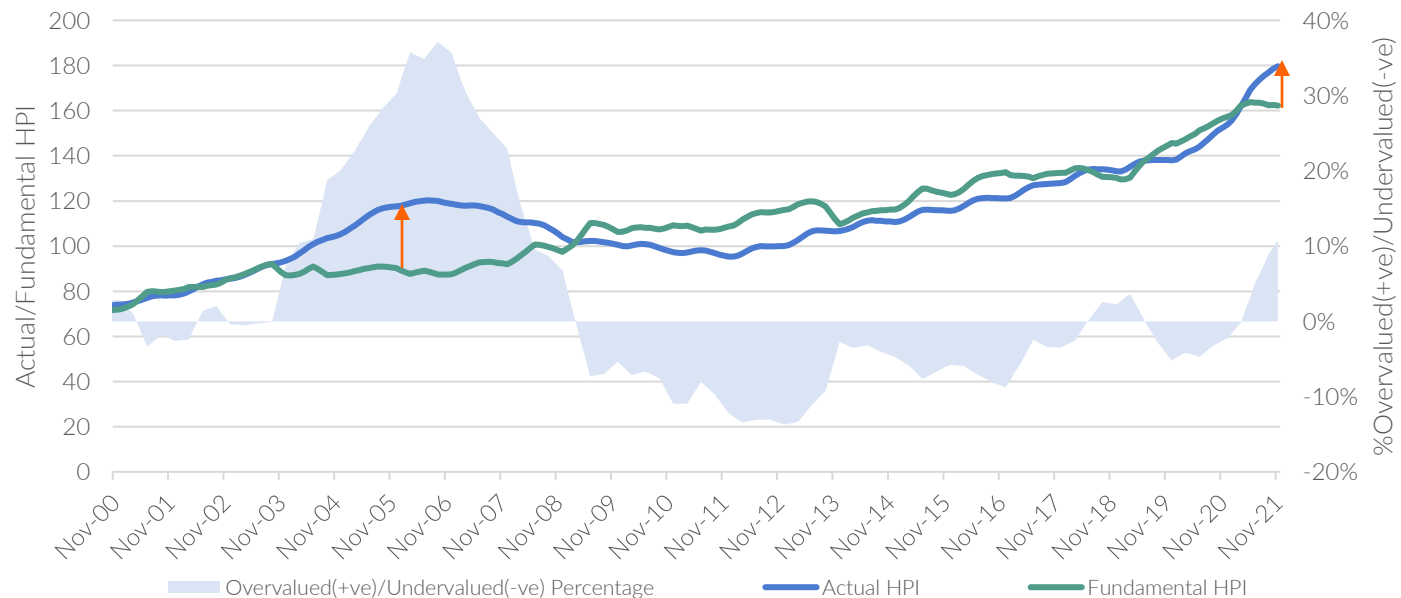
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# Housing Market Expectations for 2022

# Are We Likely To See a Correction in Single-Family Home Prices?

- Single-family home prices are up 18% Year-over-Year (YoY) as of November 2021
- Single-family home prices were 10% above fundamental value as of November 2021, based on our models
- However, this is nowhere near the extreme mispricing we saw in 2005

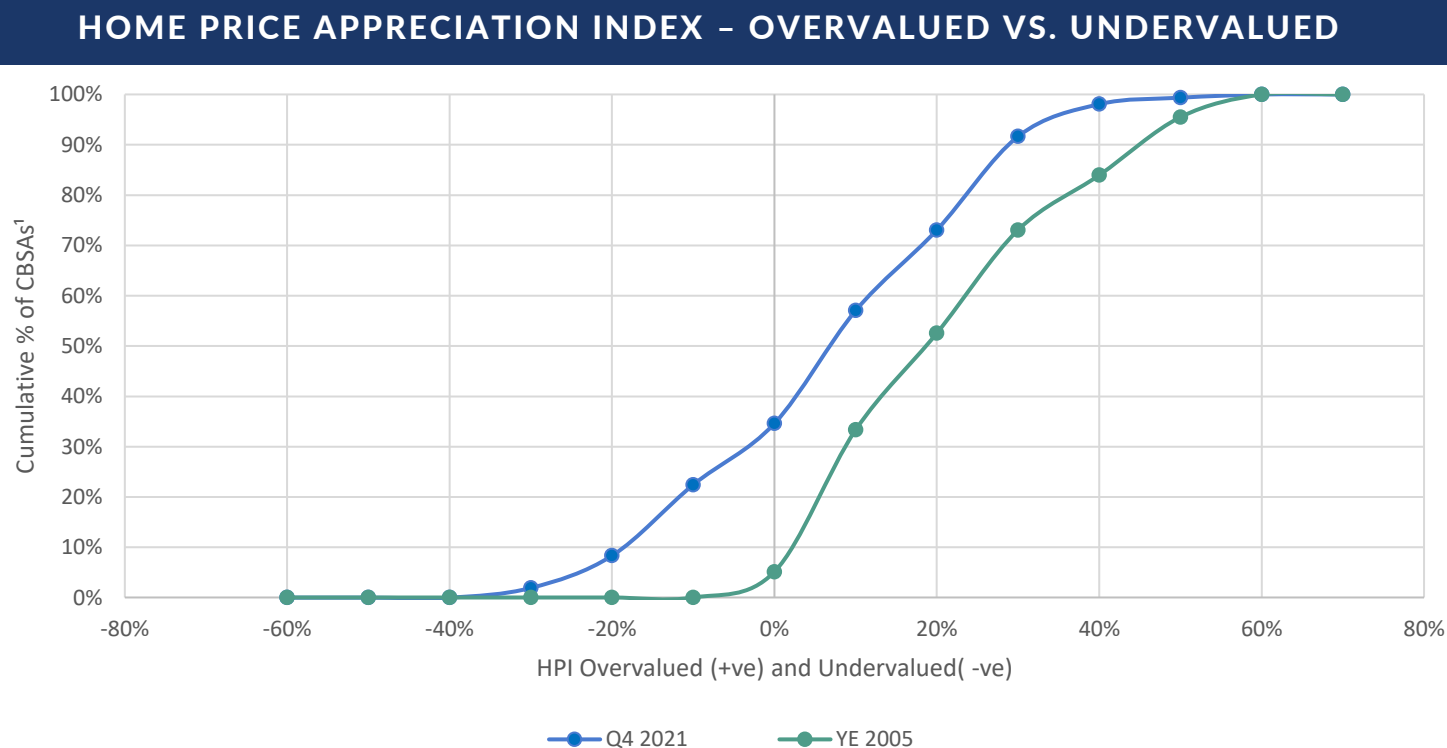
## AMHERST HOME PRICE APPRECIATION (HPA) INDEX AND FUNDAMENTAL VALUE (DEC '94 - NOV '21)



Source: The Amherst Home Price Appreciation Index as of Jan 2022. Last data point in Nov 2021

# More Even Split of Overvalued and Undervalued Markets vs. 2005

- In 2005, almost all markets (more than 90%) were overvalued
- Today, there is a more even split of overvalued and undervalued markets, and the level of overvaluation is lower



Source: The Amherst Home Price Appreciation Index as of Jan 2022. Last data point in Nov 2021. <sup>1</sup>Core-Based Statistical Areas.

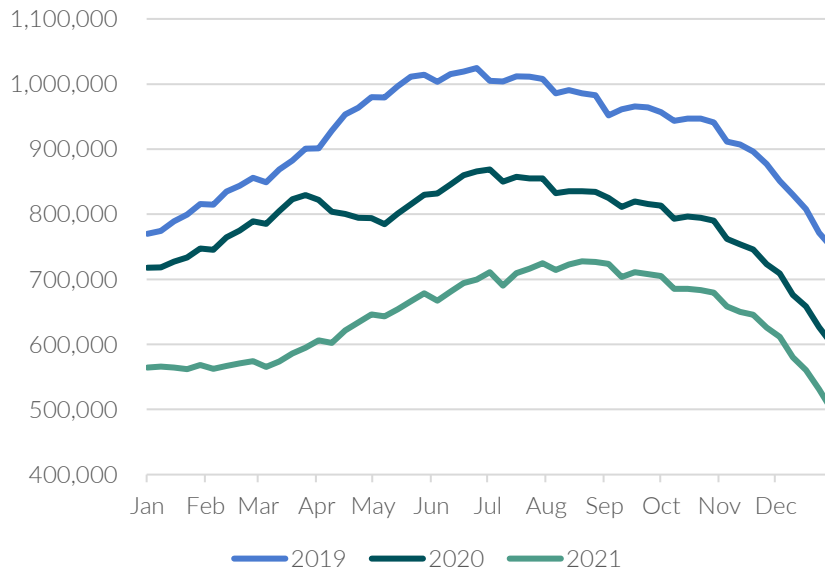




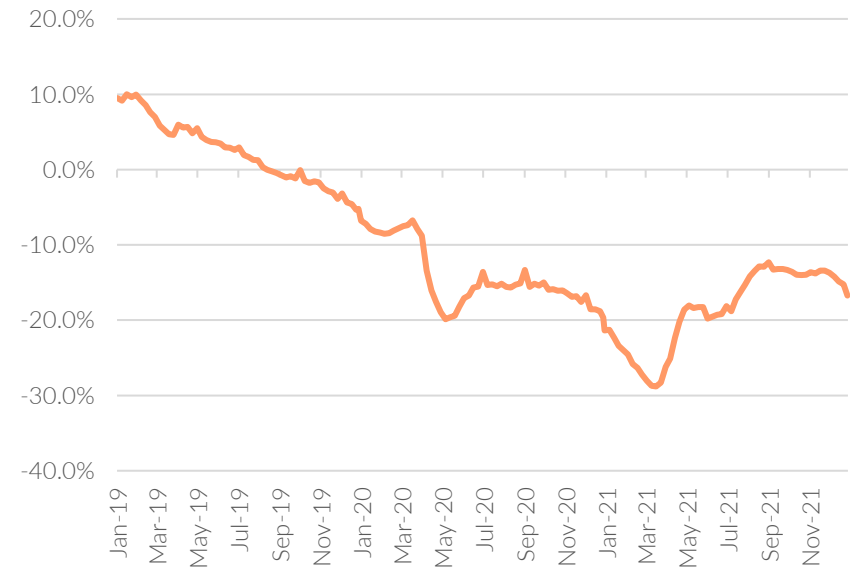
# Very Tight Supply of Single-Family Home Sales Inventory Should Continue to Support Elevated Prices

- For-sale inventory began 2021 at levels 21% below 2020 levels; the inventory gap further widened to -29% by March 2021
- YoY declines have moderated to about 17%, but housing supply remains at historically tight levels

**FOR-SALE INVENTORY (VOLUME)**



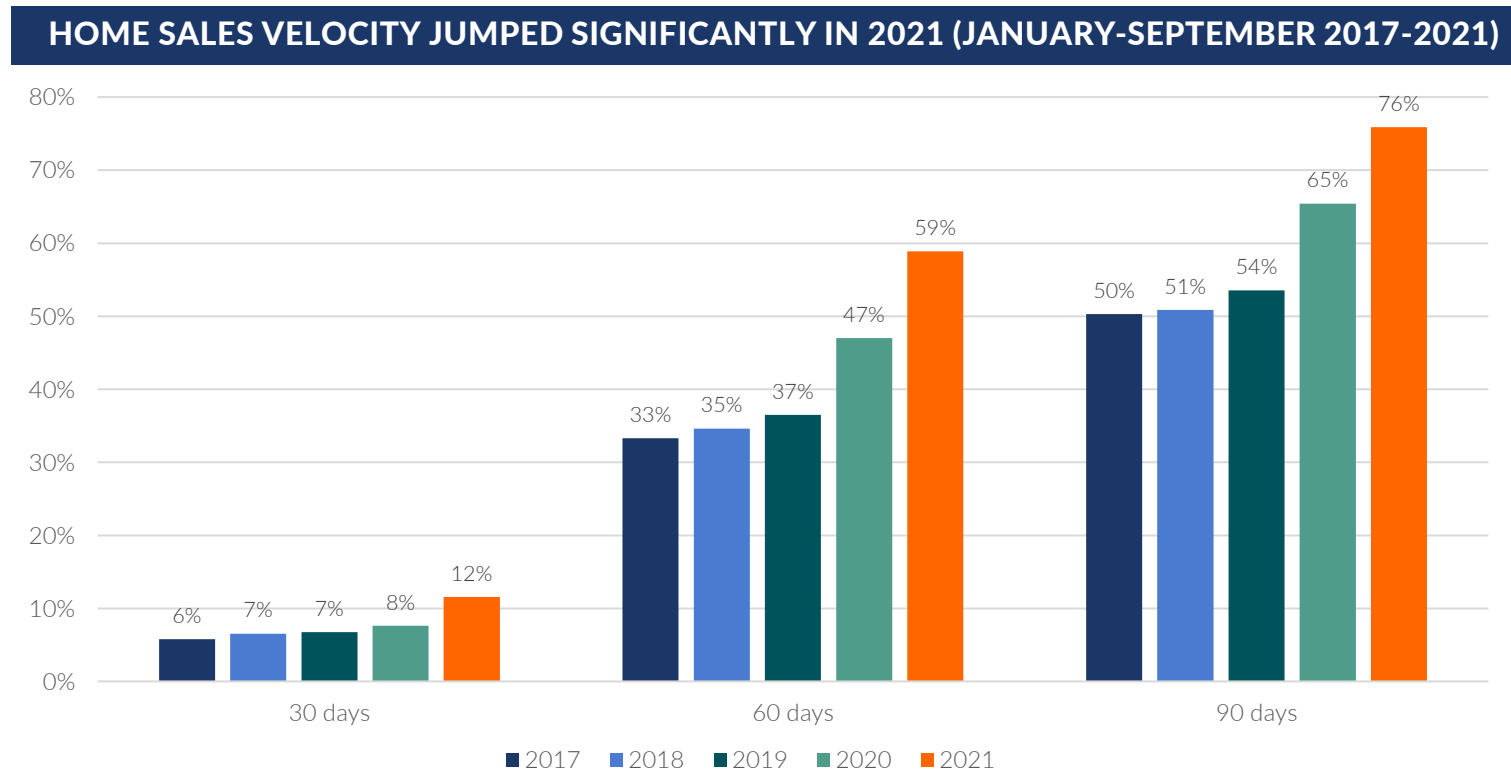
**FOR-SALE INVENTORY (YOY%)**



Source: Amherst Tabulation of Corelogic MLS database as of Dec 2021

# Sales Velocity Jumped to Unseen Levels in 2021

- Home sales velocity<sup>1</sup> has been steadily increasing since 2017, but made a significant leap in 2021
- Home sales velocity is measured as the percentage of January-September listings that sold within the first 30, 60, and 90 days



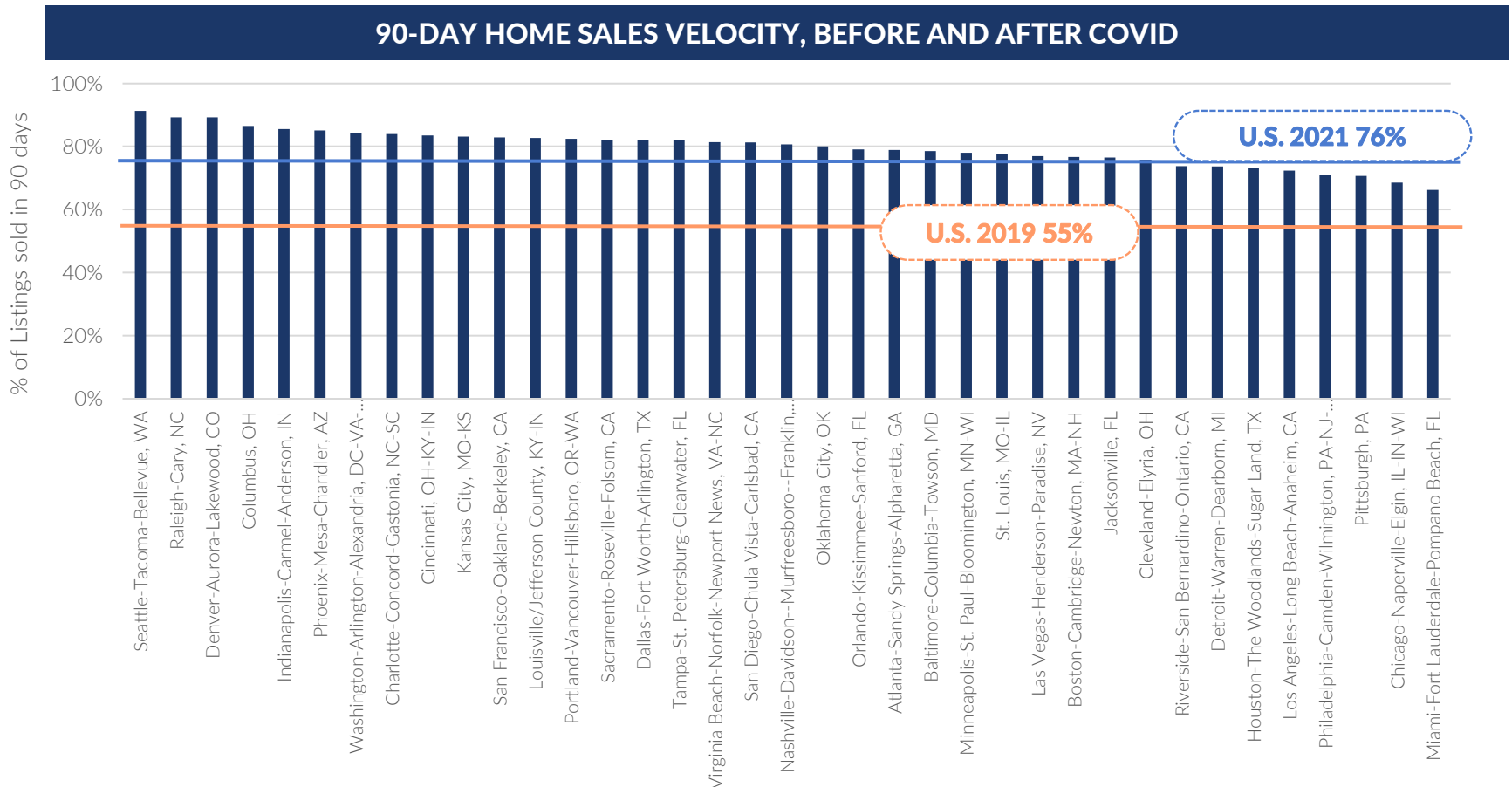
Source: Amherst estimates as of Jan 2022 based on publicly available information

<sup>1</sup>Sales velocity captures the share of homes sold in a certain number of days after listing date



# Overall, Sales Velocity Was High Across the Country

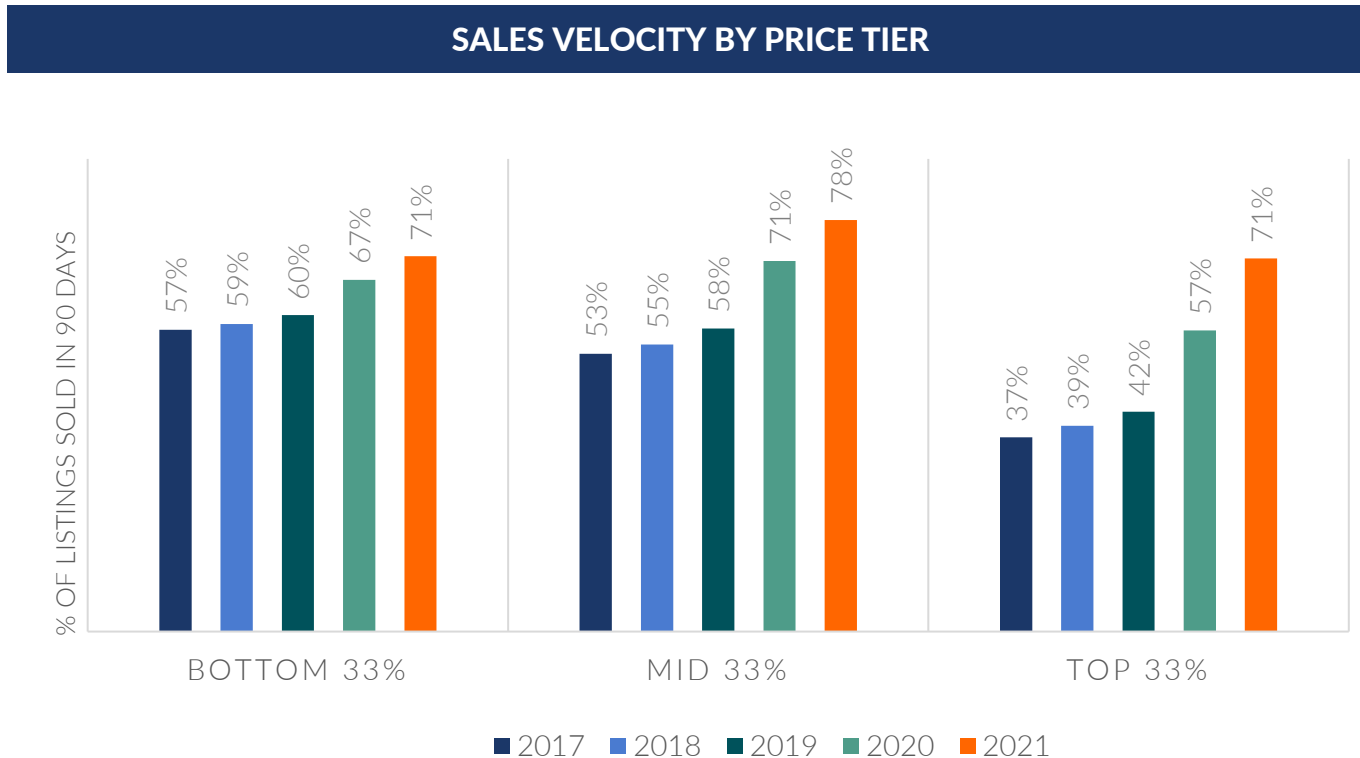
- 2021 sales velocities were uniformly high across U.S. markets
- Each market handily outperformed the 2019 average U.S. sales velocity



Source: Amherst estimates as of Jan 2022 based on publicly available information, includes listings up to Sep 2021

# Sales Velocity Increases Were Visible for Small and Big Homes

- Sales velocity increased across all asset pricing tiers and has accelerated the most for homes in both the top price and size tiers



Source: Amherst estimates as of Jan 2022 based on publicly available information, includes listings up to Sep 2021

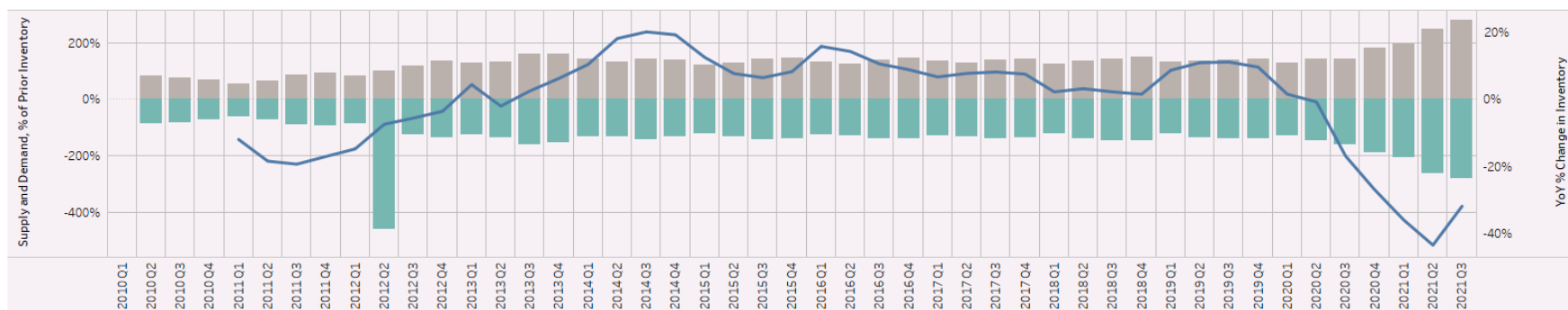
# Construction of New Homes Has Failed to Keep Pace with Demand

- While starts and completions of new homes have been ramping up, demand has been even stronger
- This has led to a dramatic decline in visible inventory, much like the market for existing homes
- We estimate that new single-family home inventory is down more than 30% YoY despite higher completion volumes

## SUPPLY AND DEMAND OF SINGLE-FAMILY HOMES

Section Status Active	Quarter of Survey Date All	Product Sub Type Single Family	Region Multiple values	<div> <div>Supply as % of Prior Inventory</div> <div>Demand as % of Prior Inventory</div> </div>	<div> <div>Demand as % of Prior Inventory</div> <div>YoY % Change in Inventory (Right Axis)</div> </div>	<div>Visible Inventory</div> <div>23,140 42,655</div>
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Demand & Supply as % of Inventory of previous quarter



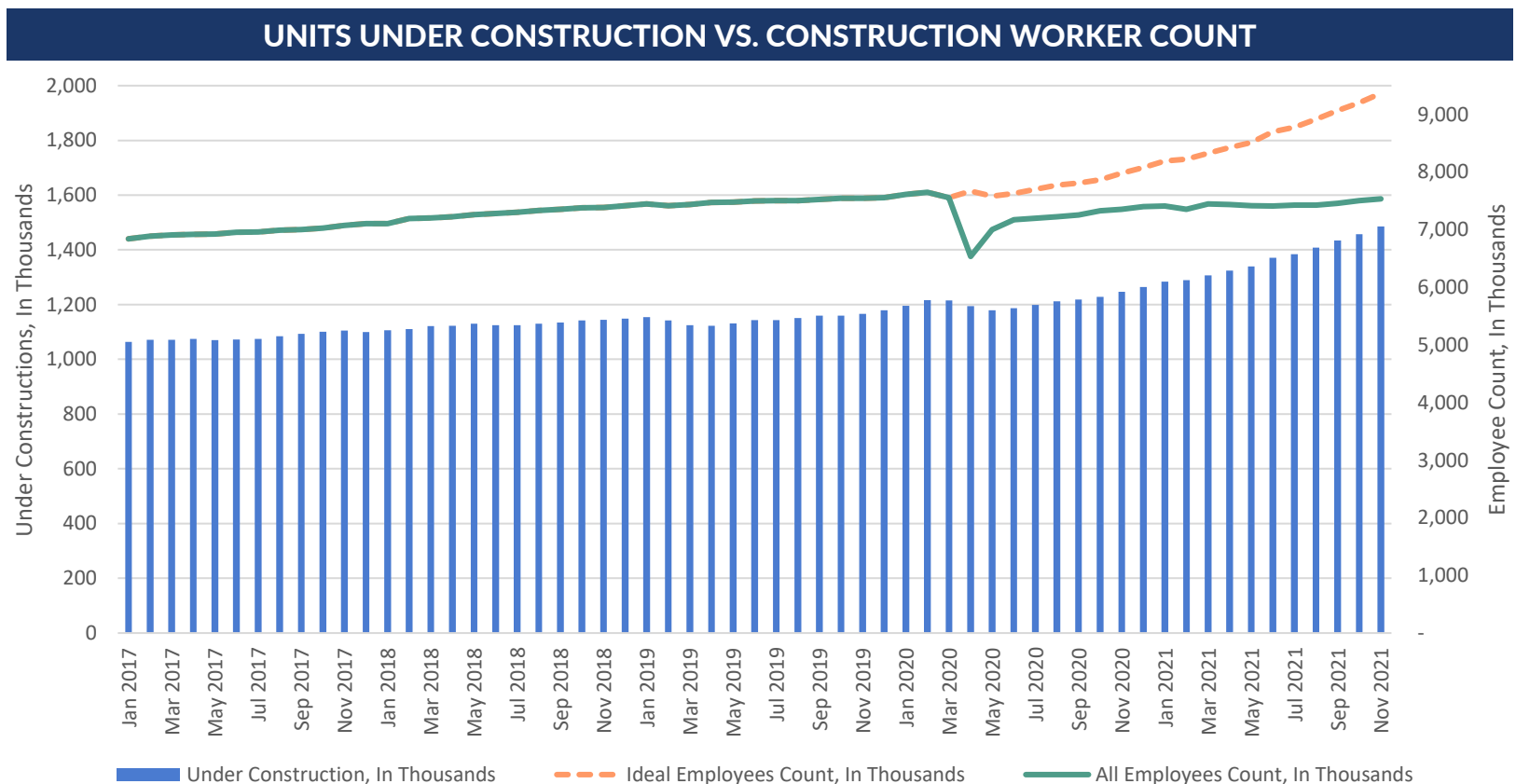
Flow of Homes in Active Subdivisions

	2017				2018				2019				2020				2021		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Visible Inventory	37,815	36,638	36,044	37,973	38,655	37,802	36,846	38,551	42,012	41,943	40,951	42,263	42,655	41,619	34,007	30,834	27,256	23,471	23,140
#Starts	46,349	54,349	56,124	47,037	49,133	60,007	58,016	49,671	47,915	56,282	61,346	55,918	57,068	59,370	68,509	73,191	73,078	83,715	78,997
#Completions	47,862	48,948	50,741	51,255	47,381	52,891	53,790	54,923	50,878	56,529	58,078	58,923	54,380	60,928	58,870	61,463	60,296	68,007	65,490
#Homes Sold	45,467	50,467	51,495	49,577	46,869	53,878	54,986	53,519	47,737	56,763	59,295	57,808	54,093	62,390	66,657	64,837	64,114	71,947	65,961
Avg. Price	451,672	454,743	457,112	457,581	457,804	459,094	456,969	458,291	458,597	458,508	457,670	457,149	455,585	454,912	455,396	456,496	456,724	459,278	462,380

Source: Amherst Tabulation of Metro Study data

# Labor Shortage Will Delay the Recovery in New Supply

- The construction market is 1.5mm workers short of the number of workers required to keep pace with the level of activity in housing construction
- This will likely delay the completion rates of homes under construction



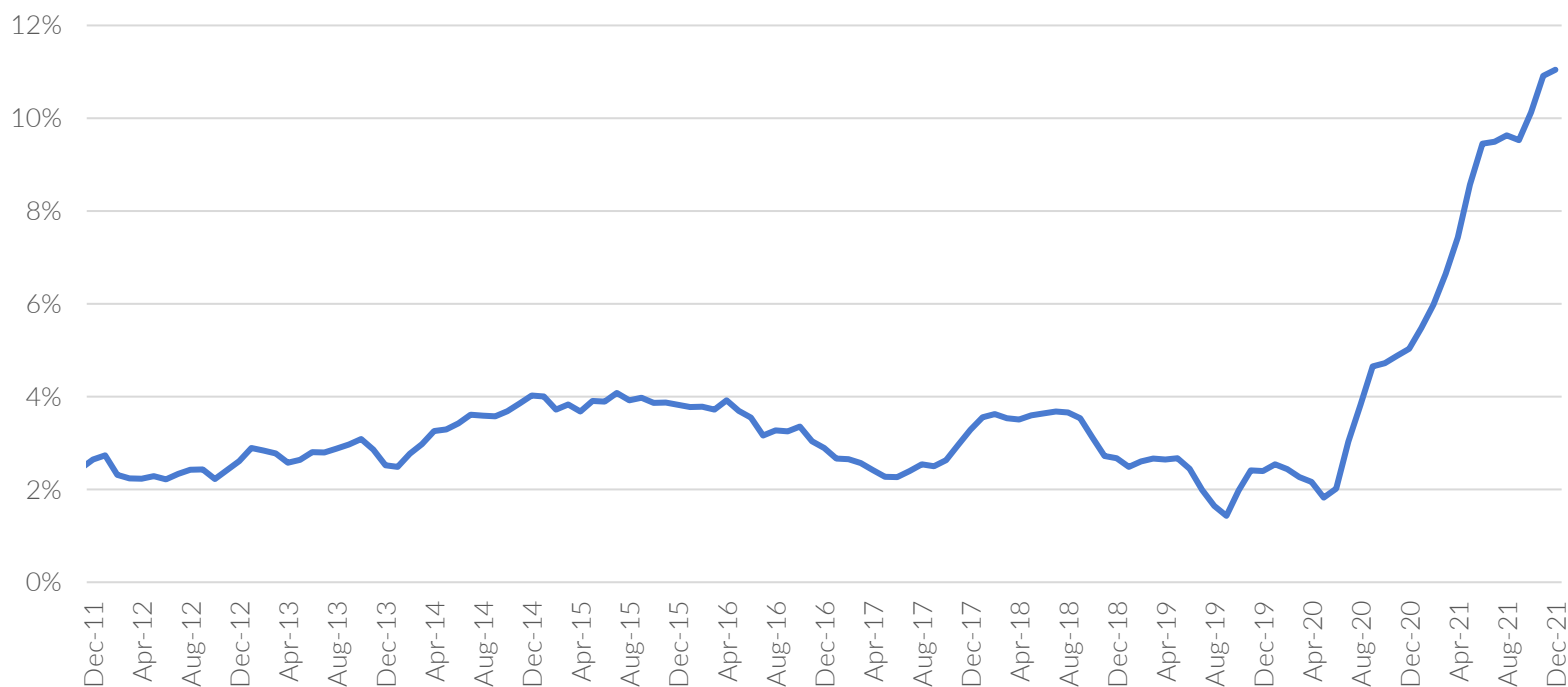
Source: US Bureau of Labor Statistics, as of Dec 2021



## Rent Growth Also Increased Significantly in 2021

- Single-family rent growth has historically been stable, varying between 2% to 4% nationally for many years, until the onset of the COVID-19 pandemic
- Demand for single-family rental (SFR) homes since the pandemic has driven rent growth up, with 2021 rent growth ending close to 11% YoY

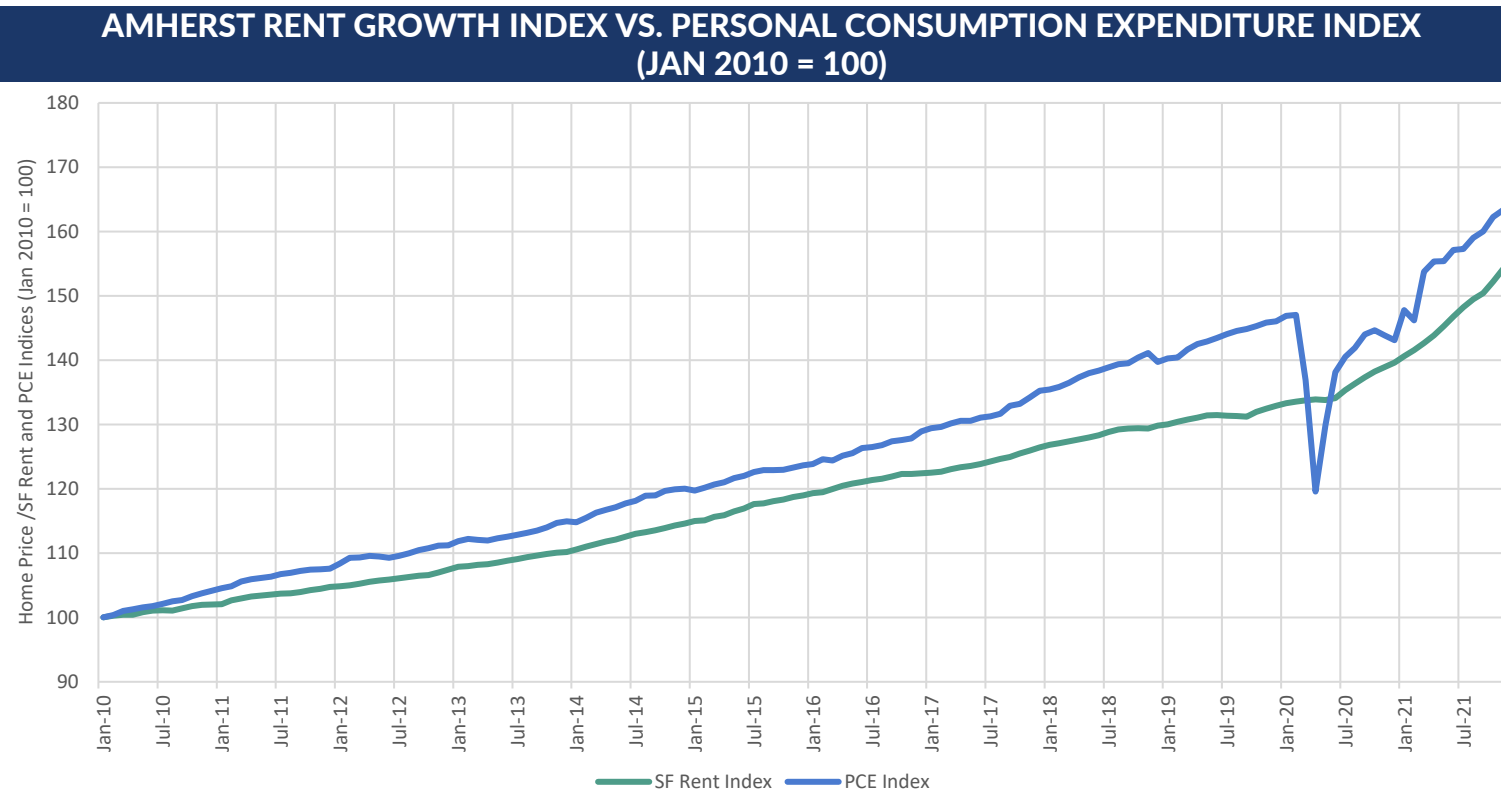
### YOY RENT GROWTH AT THE NATIONAL LEVEL



Source: Amherst Tabulation of Corelogic MLS database as of Dec 2021

# Rent Growth Still Lags Growth in Personal Consumption Expenditure (PCE) Over the Long Run

- Amherst's Rent Growth Index for single-family homes has lagged PCE growth over the long run
- Since 2010, PCE has grown at a 4.1% CAGR, and single-family rents have grown at a 3.8% CAGR; single-family rents remain about 3.4% below the PCE index

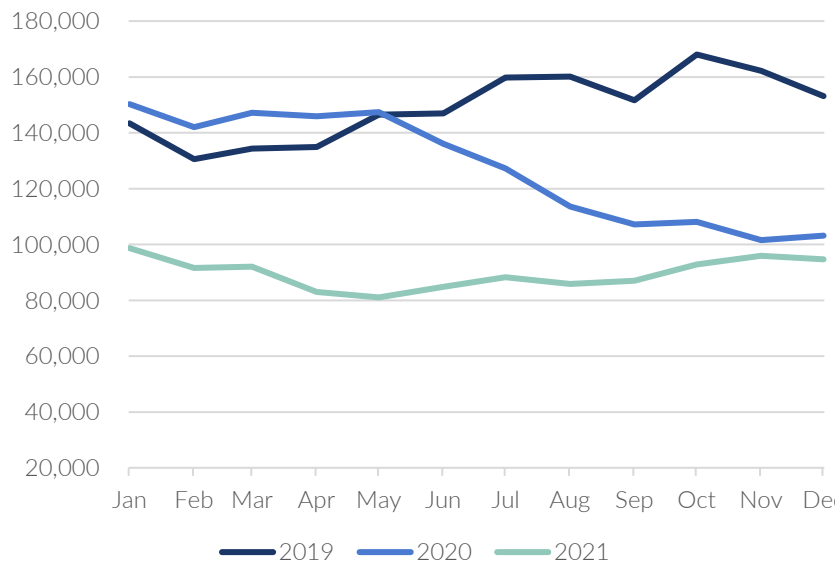


Source: SF Rent Index as of Nov 2021. PCE is from the Bureau of Economic Analysis. PCE as of Nov 2021.

# For-Lease Inventory Is Also Very Tight

- While YoY decline at the end of 2021 seems relatively small, this figure is partially due to very low inventory levels at the end of 2020
- The for-lease market remains very tight heading into peak leasing season this spring

## FOR-LEASE INVENTORY (VOLUME)



## FOR-LEASE INVENTORY (YOY%)

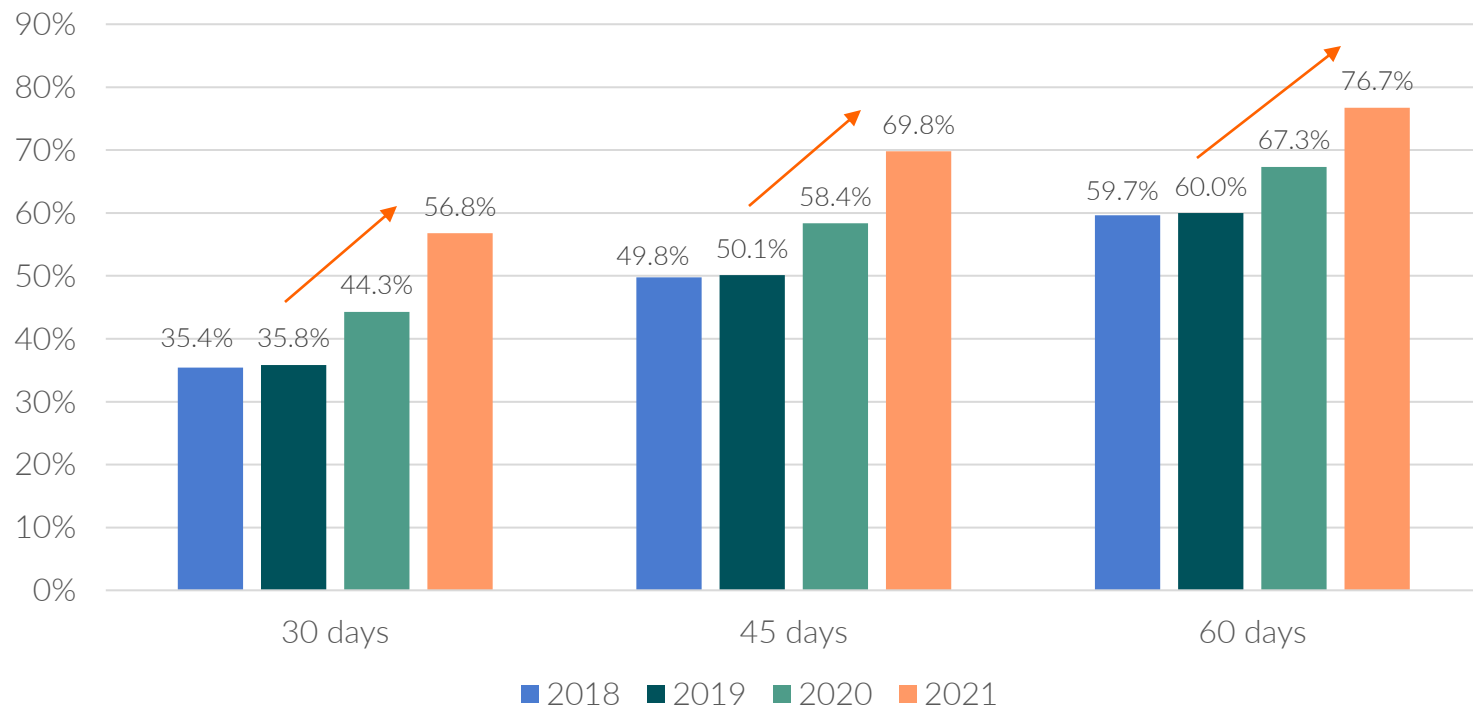


Source: Amherst estimates as of Dec 2021 based on publicly available information

# Very High Absorption Rates Make It Hard for Inventory To Normalize

- Leasing velocity made a significant leap in 2020 and then increased further in 2021
- Leasing velocity is measured as the portion of listings leased within the first 30, 45, and 60 days

## LEASE VELOCITY JUMPED SIGNIFICANTLY IN 2020-2021 (JAN-SEP LISTINGS EACH YEAR)



Source: Amherst estimates as of Jan 2022 based on publicly available information. Last data point in Sep 2021

# Are Higher Interest Rates a Significant Risk for Home Prices?

- While rising rates could be a concern, home prices have historically grown faster in environments in which rates are rising than in environments in which they are falling. Rents have also outperformed in rising-rate environments, though on a more modest scale.
- In 91% of the instances in our data since 2000, home prices have risen with a trailing 12-month 0-1% increase in 10-year U.S. Treasury (UST) rates. For the same magnitude fall in rates, HPA has been positive in only 62-64% of cases.

HOME PRICE APPRECIATION AND RENT GROWTH IN RISING RATE ENVIORNMENTS						
	10-Year UST YoY Change					
	-2% to -1%	-1% to -0.5%	-0.5% to 0	0 to 0.5%	0.5% to 1%	1-2%
Home Price Growth	2.7%	1.8%	2.6%	6.5%	5.2%	5.8%
Rent Growth	2.3%	2.0%	2.3%	3.0%	2.7%	1.8%
% Instances with Positive HPA	72%	62%	64%	91%	91%	80%
% Instances with Positive Rent Growth	100%	86%	86%	100%	100%	71%

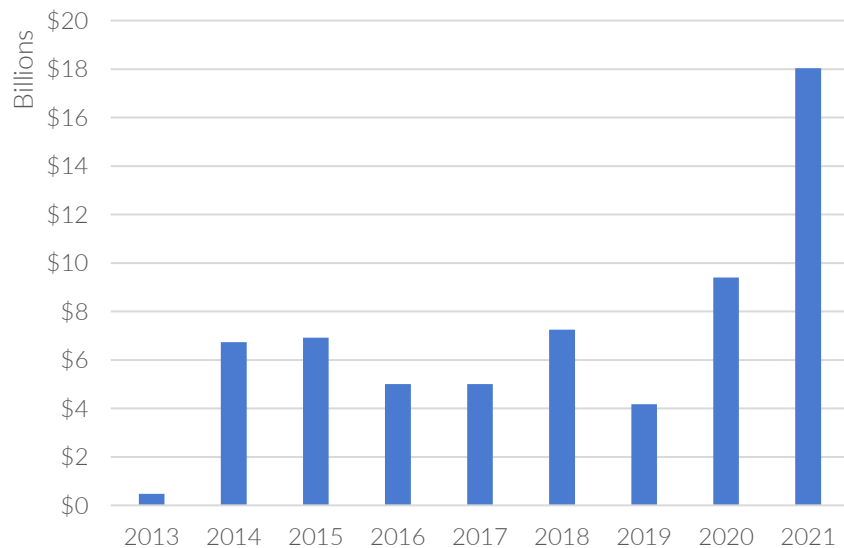
Source: Amherst Home Price Index as of Jan 2022. Last data point in Oct 2021



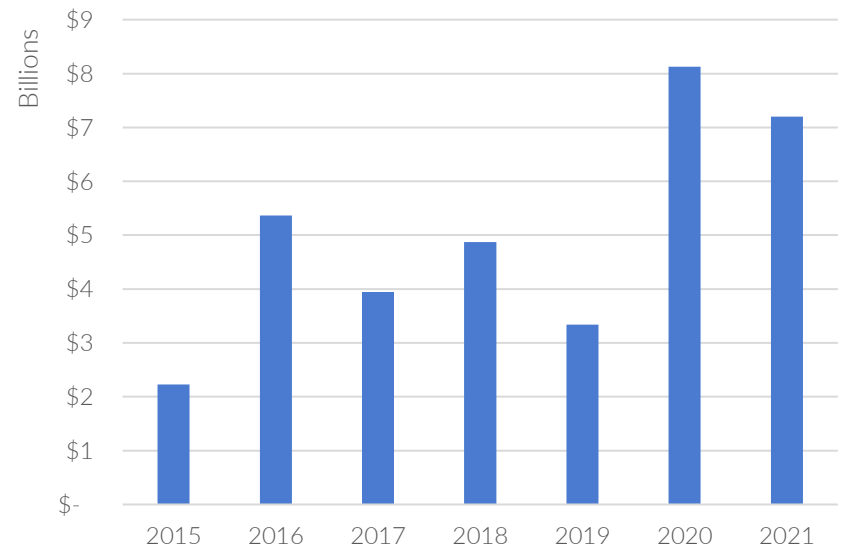
# Vibrant Market for Financing Single-Family Rental Is Yet Another Positive

- New issuance of SFR securitizations topped \$18bn in total in 2022
- Secondary trading volumes were also comparable to 2020 despite much lower volatility

## SFR SECURITIZATIONS – PRIMARY ISSUANCE



## SFR SECURITIZATIONS – SECONDARY TRADING



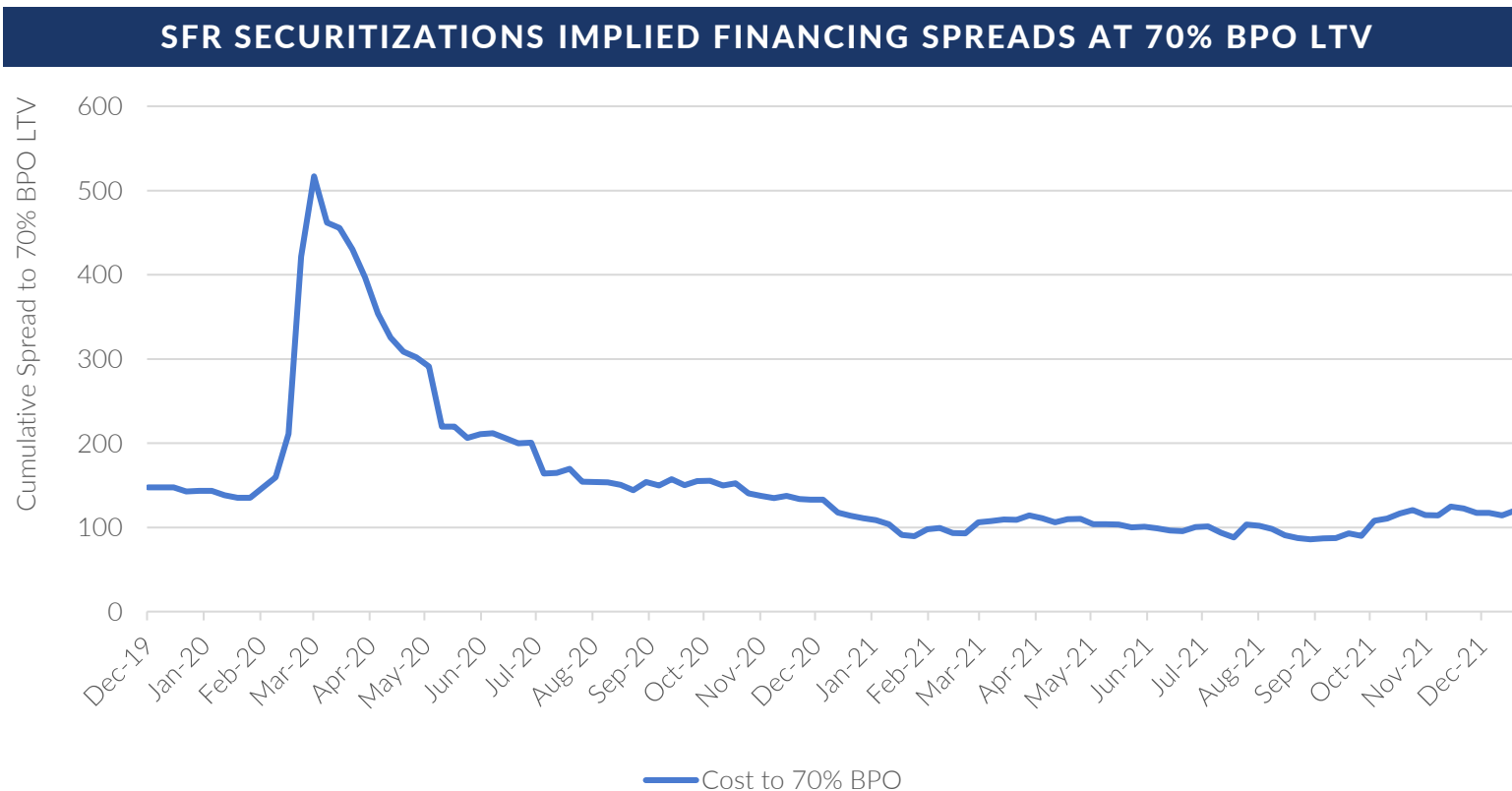
Source: Securities Industry and Financial Markets Association (SIFMA) as of Jan 2022





# Spreads Are Range-Bound and Keep Financing Costs Relatively Low

- All-in financing costs fell sharply post-pandemic
- Even after adding in deal costs—which can be substantial—financing rates are attractive



Source: Amherst estimates based on dealer marks on securitized tranches as of Jan 19, 2022



# Equity IRR Is Likely High, Even for Modest Cap-Rate Assets

- The current financing translates into a potential 17.1% IRR, even for a 4.5% cap-rate asset with a modest 3% annualized home price growth
- We believe SFR cashflows are more durable than many other CRE assets and supportive of even higher potential leverage at attractive terms

EQUITY IRR FOR THE TWO ASSETS		
	4.5% CAP RATE +3% HPA	4% CAP RATE +2.5% HPA
BPO LTV	70%	70%
Debt Financing Spread	5y Swaps +170 bps (inclusive of deal costs in ongoing spread terms)	5y Swaps +170 bps (inclusive of deal costs in ongoing spread terms)
Gross Return (Cap Rate + HPA)	7.5%	6.5%
5Y IRR to Equity	17.1%	13.7%

Source: Amherst estimates based on dealer marks on securitized tranches. 5y Swap rate assumed to be 1.703% as of Jan 19, 2022



# Expectations for 2022

## U.S. SINGLE-FAMILY HOUSING

- While concerns around the Fed's withdrawal of support and higher borrowing costs will weigh on housing, we expect housing to remain well supported due to the lack of inventory, supply bottlenecks, and robust demand
- The real concern will be if interest rates rise well beyond the expected range and growth slows dramatically. However, historical data show that such sustained rate increases are usually accompanied by strong economic growth, and home prices perform well in that environment.
- Overall, our expectation for national home price appreciation and rent growth in 2022 stand at 8.6% and 5.2%, respectively
- Regional variations will likely be driven by supply shortages and demand due to migration of jobs and people
- The SFR sector provides an investment opportunity to invest in hard assets that are benefitting from strong underlying fundamentals and have low correlation to other asset classes
- Furthermore, long-term U.S. demographic trends remain favorable for housing, as we discuss in the following segment



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# Deeper Dive into Long-Term Demographic Trends

# Predicting Long-Term Demographic Trends

- We attempt to predict the U.S. population age distribution over time in a systematic manner
- We start with the current age distribution and roll everyone forward after adjusting for mortality rates by each age
- Additionally, we use estimates of birth rates and net international immigration by age to roll forward the age-by-age population distributions and forecast distributions in the coming years

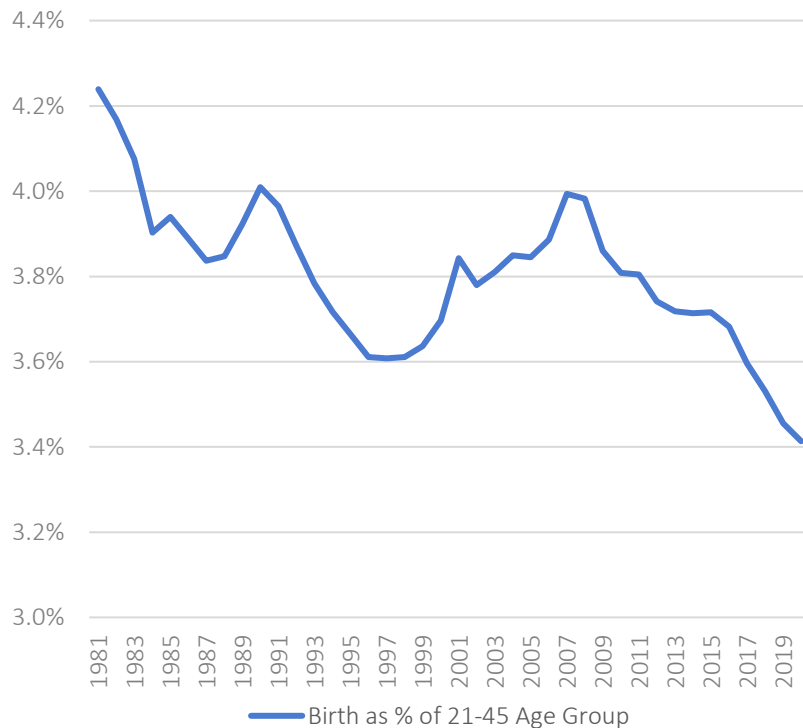
## Methodology for Predicting Demographic Trends

- 1 Start with age-by-age population estimate from U.S. Census Bureau
- 2 Apply average observed mortality rates (2014-2018) to each age
- 3 Advance the age of the remaining population one year
- 4 Add Age 0 population, using birth rate as a function of previous year's 21-45-year-old population, to estimate new live births for the year
- 5 Account for net international immigration estimate by age, using natural population growth less actual population growth in the age-by-age estimates for 2014-2019

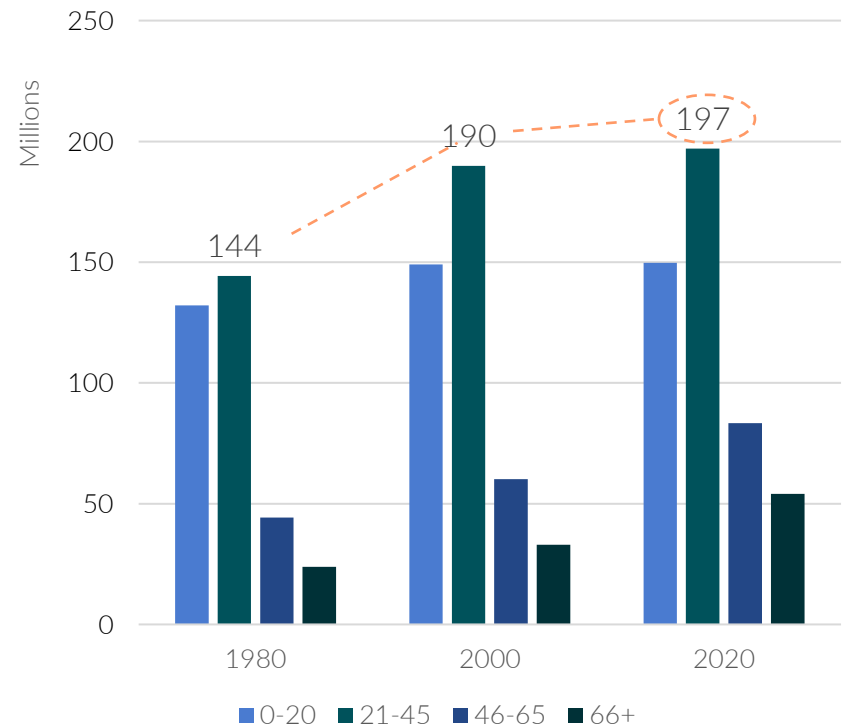
# While the U.S. Birth Rate Has Been Declining, the Population Between Ages 21-45 Is Growing

- The birth rate in the U.S. has been declining for decades, but the 21-45 age group has increased

**BIRTH RATES AS % OF PREVIOUS YEAR  
POPULATION IN 21-45 AGE GROUP**



**POPULATION DISTRIBUTION IN AGE BUCKETS**



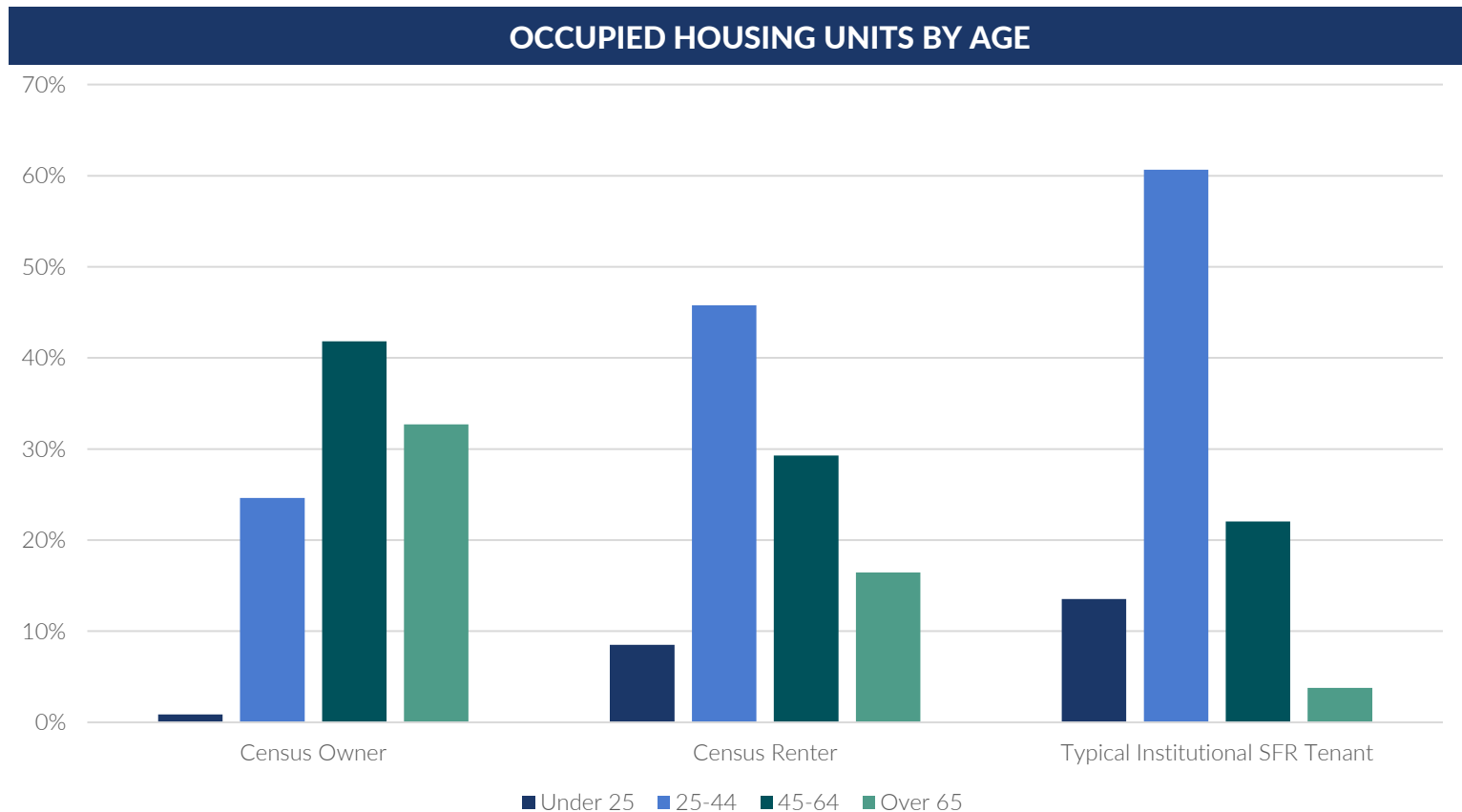
Source: Amherst estimates based on Census data





# Population Buckets Under Age 45 Are the Biggest Driver for New Housing Demand

- We estimate that the 25-44 age group makes up about half of rentals; this is even more typical for institutional single-family rentals



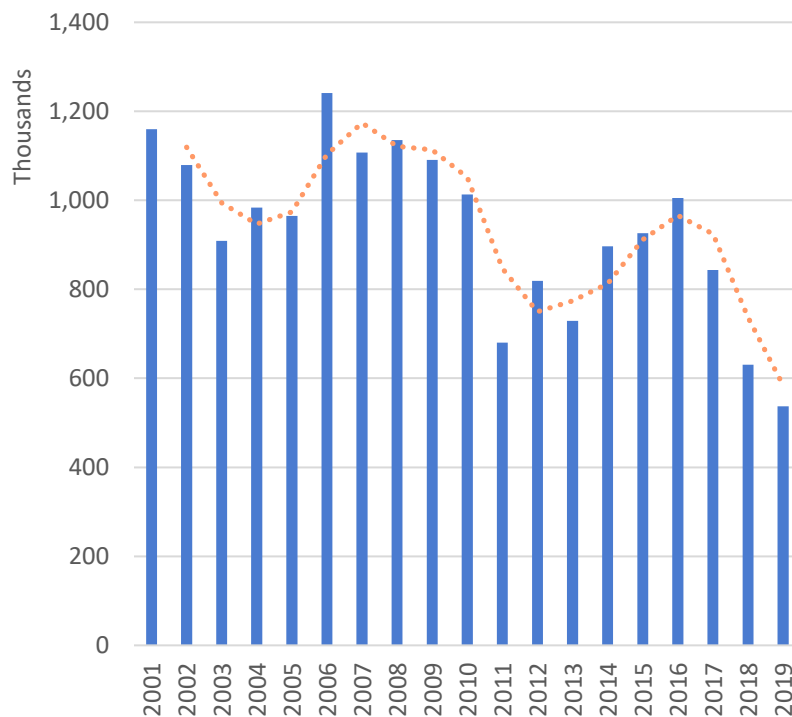
Source: Amherst estimates based on Census data and publicly available information



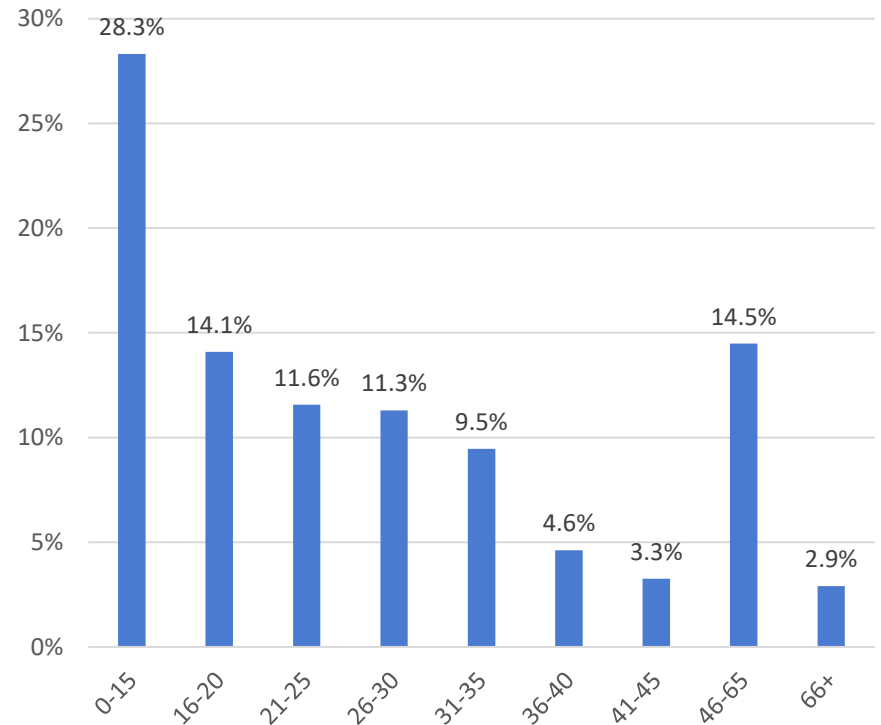
# A Large Portion of the Immigrant Population Also Falls Within this Age Range

- 40.3% of new immigrants fall into the 21–45 age group, based on our estimates
- However, immigration has been slowing in recent years

**TOTAL ESTIMATED U.S. IMMIGRATION**



**AVERAGE IMMIGRATION BY AGE GROUP**

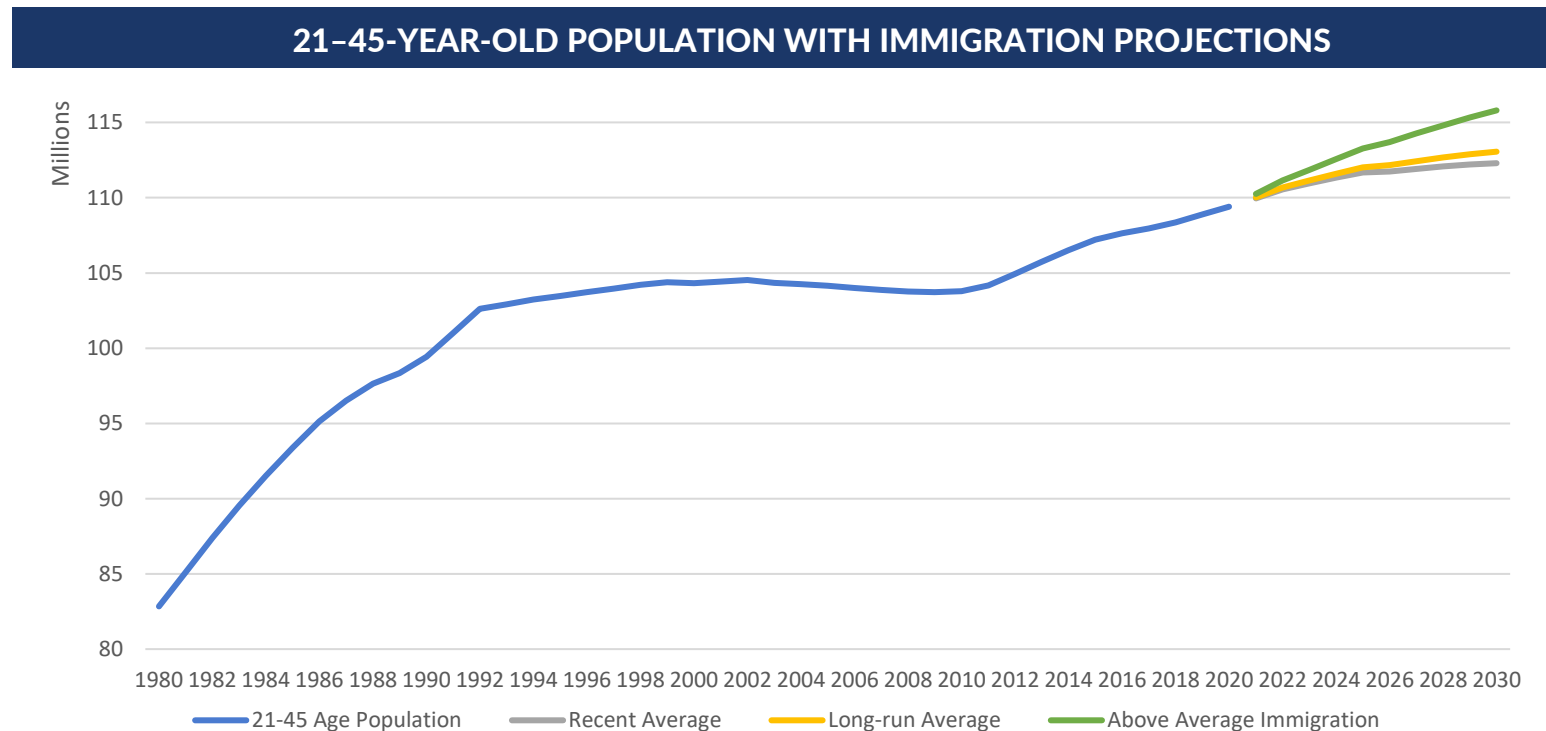


Source: Amherst estimates based on Census data



# 21-to-45-Year-Old Population Is Set To Increase Over the Next Decade

- Even if immigration remains low, the age group driving household demand (age 21–45) is likely to continue to grow over the next 5 to 10 years
- If future immigration trends are similar to long-run averages, this would lead to an even more positive impact on the housing market



Source: Amherst estimates based on Census data



# Some Cities Will See Much Higher Population Growth in the 21–45 Age Group

- Some markets, like Fort Myers, Tucson, San Antonio, and Raleigh, are likely to witness even more growth in the 21–45 age group due to demographic mix and in-migration
- Housing demand in these markets is likely to be strong for the next several years

21–45-AGE-GROUP POPULATION ESTIMATES BY MARKETS (IN THOUSANDS)						
CBSA	Long-run Average Migration	2020	2025	2030	Pop Growth 2025	Pop Growth 2030
<b>US</b>	<b>934</b>	<b>109,414</b>	<b>112,016</b>	<b>113,058</b>	<b>2.4%</b>	<b>0.9%</b>
Fort Myers	19	207	231	252	11.5%	9.0%
Tucson	10	344	375	400	9.0%	6.4%
San Antonio	27	920	990	1,042	7.7%	5.2%
Raleigh	22	499	536	575	7.4%	7.2%
Phoenix	60	1,722	1,848	1,959	7.3%	6.0%
Charlotte	27	754	805	857	6.7%	6.5%
Palm Bay	8	167	178	185	6.6%	4.1%
Greensboro	5	245	259	273	5.7%	5.3%
Nashville	18	681	719	748	5.6%	4.1%
Tampa	40	1,025	1,082	1,125	5.5%	4.0%
Oklahoma	8	499	526	543	5.4%	3.2%
Houston	63	2,555	2,689	2,823	5.3%	5.0%
Dallas	65	2,746	2,885	3,019	5.0%	4.7%
Cincinnati	10	721	756	782	4.9%	3.3%
Atlanta	47	2,103	2,193	2,286	4.2%	4.3%
Columbus	10	744	768	778	3.2%	1.3%
Denver	21	1,141	1,176	1,186	3.1%	0.9%
Seattle	30	1,536	1,581	1,586	2.9%	0.3%
Indianapolis	8	675	694	712	2.8%	2.6%
Miami	50	1,980	2,024	2,055	2.2%	1.5%
Rochester	-3	328	334	326	1.9%	-2.4%
Salt Lake City	4	485	494	500	1.8%	1.3%
Kansas city	5	737	747	754	1.3%	1.0%
Minneapolis	10	1,236	1,252	1,247	1.3%	-0.4%
Louisville	3	443	447	450	1.0%	0.6%
Birmingham	1	376	376	376	0.0%	0.2%
Jacksonville	16	528	528	577	0.0%	9.2%
Las Vegas	32	807	807	917	0.0%	13.7%
Orlando	38	945	945	1,062	0.0%	12.4%
Memphis	-3	450	446	441	-0.9%	-1.0%
St. Louis	-5	913	895	865	-2.0%	-3.3%
Cleveland	-10	633	614	591	-3.0%	-3.7%

Source: Amherst estimates based on Census data



# Demographics Trends Bode Well for Housing Market in Coming Years

## DEMOGRAPHIC TRENDS

- 21–45-year-old population segment will see continued growth in the coming years adding to new home demand
- Housing demand is likely to be stronger in the South, both due to the current demographic mix and domestic in-migration trends, which are generally persistent
- On the flipside, markets with domestic out-migration will continue to lag, especially if international migration remains at lower levels

### It is important to track and distinguish areas based on geo-demographic similarities

- Demographics also play an important role for housing demand in micro-areas within cities
- Using artificial intelligence (AI) and machine learning (ML) techniques, the market can be broken into demographically homogeneous clusters
- We divide the entire country into clusters such that each cluster looks, feels, and behaves similarly within that cluster and distinctly from other clusters
- We call these clusters the “Nine Neighborhoods of America”
- These clusters help us more accurately classify and predict the cohorts of housing and infrastructure needs that are likely to be in and out of demand over time

# Nine Neighborhoods of America – Version 2.0

- We introduce an updated version of the geo-demographic clustering we first detailed in the 2020 Annual Outlook. We use ML techniques to partition the entire country into nine clusters.
- We then describe/tag the nine clusters created by the algorithm based on their characteristic features
- We have defined three Specialty Clusters (SC): Student Housing, Transit-Oriented Urban Areas, and Retirees & Vacation Homes
- The six “Regular Clusters” are monotonically increasing in income and education and almost monotonically decreasing in unemployment and vacancy levels

AMHERST'S NINE NEIGHBORHOODS OF AMERICA											
Cluster Description	Sorted	Median Income	Vacancy	Pct College	Owner Occ SFD	% Unemp	< 25yr	65+yr	public_trans	Size % CBGs	% SFD homes
“Specialty Clusters”	Mean	72,317	9.9%	32.3%	74.3%	5.7%	3.3%	25.6%	5.9%		
	Stdev	39,086	10.7%	21.3%	22.2%	5.9%	6.0%	13.4%	11.9%		
Student Housing	SC1	44,508	12.4%	34.7%	58.5%	5.8%	25.8%	13.4%	4.2%	3.3%	1.8%
Transit Oriented	SC2	70,767	9.1%	39.0%	69.0%	6.3%	2.9%	21.9%	51.5%	4.3%	1.5%
Retirees & Vacation Homes	SC3	56,633	38.7%	27.0%	53.8%	5.0%	1.8%	39.2%	2.8%	5.0%	5.7%
“Regular Clusters”											
Lower Income	R1	36,514	16.5%	12.9%	57.5%	21.3%	3.7%	24.7%	7.2%	6.3%	4.9%
Lower AMI, Younger	R2	43,344	13.6%	18.1%	41.1%	5.9%	5.1%	17.1%	5.2%	10.9%	7.9%
Blue Collar Suburb	R3	58,361	7.0%	19.8%	79.4%	5.2%	3.0%	21.0%	2.5%	26.6%	28.1%
Moderate AMI, Older	R4	64,061	8.3%	29.5%	82.7%	4.3%	1.3%	43.6%	2.4%	14.3%	15.3%
Higher AMI White Collar	R5	95,216	5.1%	48.0%	86.8%	3.4%	1.9%	22.5%	3.6%	21.1%	25.9%
High Education, High Income	R6	162,406	5.4%	71.0%	89.5%	3.2%	0.7%	27.5%	8.3%	8.1%	8.9%

Source: Amherst estimates



# Home Price Appreciation and Rent Growth Varies Across the Nine Clusters

- According to the Amherst Home Price Appreciation Index (HPA) and Rent Growth Index, home price and rent growth of lower-income housing has tremendously outperformed over the last 3 to 5 years
- We believe this is indicative of higher beta outperforming in recent years as we had been experiencing a strong economic recovery before the pandemic struck.

HOME PRICE APPRECIATION BY CLUSTER							
Sorted Cluster	Cluster Description	Overall HPA over 1 Year	Relative HPA across clusters vs CBSA (1 Year)	Overall HPA over 3 Years	Relative HPA across clusters vs CBSA (3 Years)	Overall HPA over 5 Years	Relative HPA across clusters vs CBSA (5 Years)
SC1	Student Housing	18.09%	-0.44%	9.03%	0.21%	7.86%	0.30%
SC2	Transit Oriented		-4.53%		-0.93%		0.44%
SC3	Retirees & Vacation Homes		3.05%		1.37%		0.64%
R1	Lower Income		1.09%		2.38%		2.39%
R2	Lower AMI, Younger		2.32%		2.34%		2.69%
R3	Blue Collar Suburb		1.08%		0.93%		1.06%
R4	Moderate AMI, Older	10.69%	-0.13%	6.66%	0.06%	5.31%	-0.10%
R5	Higher AMI White Collar		-0.72%		-0.71%		-0.68%
R6	Highly Educated Affluent		-2.57%		-2.24%		-2.16%

RENT GROWTH BY CLUSTER							
Sorted Cluster	Cluster Description	Overall Rent Growth over 1 Year	Relative Rent growth across Clusters vs CBSA (1 Years)	Overall Rent Growth over 3 Years	Relative Rent growth across Clusters vs CBSA (3 Years)	Overall Rent Growth over 5 Years	Relative Rent growth across Clusters vs CBSA (5 Years)
SC1	Student Housing	10.69%	-0.34%	6.66%	0.21%	5.31%	0.29%
SC2	Transit Oriented		-5.12%		-2.26%		-1.00%
SC3	Retirees & Vacation Homes		1.27%		0.42%		0.55%
R1	Lower Income		-0.56%		1.27%		1.03%
R2	Lower AMI, Younger		0.90%		1.50%		1.29%
R3	Blue Collar Suburb		0.51%		0.83%		0.71%
R4	Moderate AMI, Older	10.69%	-0.09%	6.66%	0.16%	5.31%	0.20%
R5	Higher AMI White Collar		-0.18%		-0.52%		-0.48%
R6	Highly Educated Affluent		-1.01%		-2.31%		-1.91%

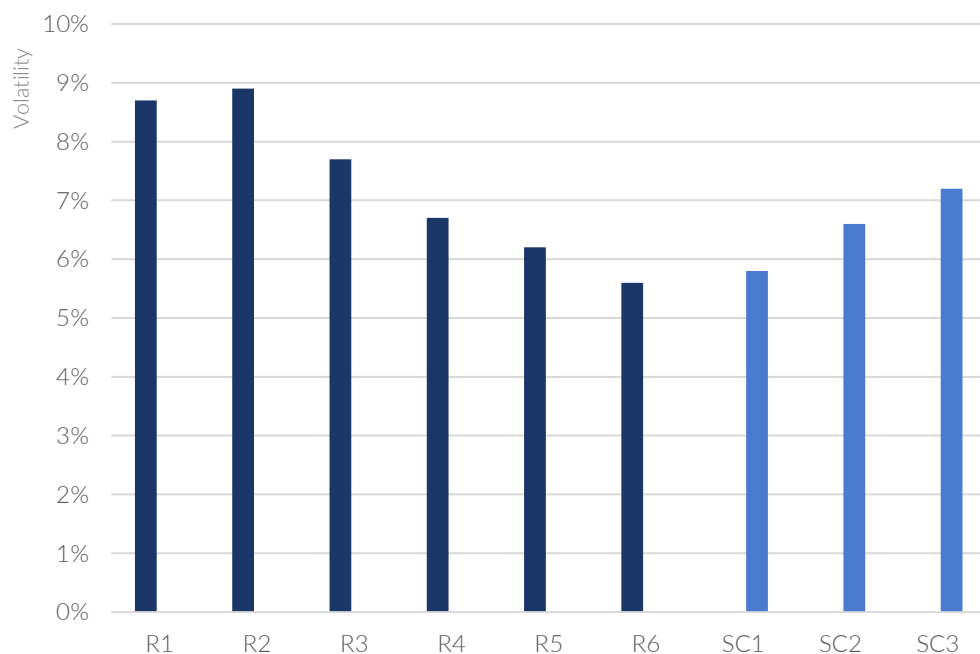
Source: Amherst estimates. HPI as of 2021 Q3; Rent Index as of 2021 Q4



# Long-Term Home Price Appreciation Volatility Is Higher for Lower-Income, Lower-Wealth Clusters

- The highest performing clusters in the recent years were the biggest underperformers in 2008-2011
- Price volatility is significantly lower for the higher-income R5/R6 clusters than lower-income R1/R2 clusters; the middle clusters (R3/R4) change in relative risk/reward

## HOME PRICE APPRECIATION VOLATILITY SINCE 2005



SC1	Student Housing
SC2	Transit Oriented
SC3	Retirees/vacation homes

R1	Lower Income
R2	Lower AMI, Younger
R3	Blue Collar Suburb
R4	Moderate AMI, Older
R5	Higher AMI White Collar
R6	High Education, High Income

Source: Amherst estimates as of Sep 30, 2021





# Lower Clusters Have Higher Beta to Overall Home Price Appreciation

- Risk/reward measured as [Average return over the 16-year period / standard deviation over the 16-year period] are monotonically increasing within the regular clusters (R1-R6)
- As a result, SFR portfolios should target to be overweight lower end during an HPA rally and overweight higher end toward the peak of a cycle

YOY HOME PRICE APPRECIATION (BY CLUSTER)									
Period	YoY HPA by Cluster								
	R1	R2	R3	R4	R5	R6	SC1	SC2	SC3
2006 Q3	8.55%	8.03%	6.96%	6.60%	5.11%	4.36%	7.12%	7.75%	8.84%
2007 Q3	-3.66%	-3.95%	-3.66%	-3.53%	-2.68%	-1.25%	-0.78%	-0.30%	-4.36%
2008 Q3	-12.22%	-13.22%	-11.47%	-9.25%	-8.50%	-6.32%	-6.40%	-6.34%	-8.78%
2009 Q3	-12.63%	-12.96%	-10.59%	-8.57%	-7.72%	-6.87%	-6.70%	-6.17%	-8.95%
2010 Q3	-7.88%	-6.80%	-4.25%	-2.81%	-1.95%	-0.57%	-2.39%	-1.47%	-3.14%
2011 Q3	-8.17%	-7.24%	-5.51%	-4.85%	-3.97%	-2.57%	-4.09%	-4.00%	-4.70%
2012 Q3	-1.31%	0.42%	0.99%	1.19%	2.01%	3.54%	1.26%	1.78%	1.47%
2013 Q3	6.17%	9.52%	8.49%	7.20%	8.51%	9.30%	6.02%	7.32%	5.60%
2014 Q3	8.34%	8.57%	6.87%	5.88%	5.96%	6.98%	6.18%	12.15%	6.25%
2015 Q3	5.24%	7.03%	5.62%	4.21%	4.56%	5.19%	4.70%	9.40%	3.53%
2016 Q3	6.55%	7.79%	6.68%	4.66%	4.78%	2.85%	5.85%	5.92%	3.66%
2017 Q3	8.19%	8.93%	7.28%	5.55%	5.49%	4.22%	6.77%	8.55%	4.81%
2018 Q3	9.08%	9.56%	7.66%	5.88%	5.58%	4.26%	6.96%	7.31%	4.67%
2019 Q3	5.97%	5.43%	4.26%	2.79%	2.08%	-0.39%	4.19%	3.38%	2.35%
2020 Q3	8.48%	8.19%	7.08%	6.35%	6.02%	5.25%	6.08%	5.47%	6.87%
2021 Q3	20.66%	21.18%	20.05%	18.94%	18.07%	16.37%	18.61%	13.49%	22.35%
CAGR p.a.	2.19%	2.73%	2.60%	2.29%	2.51%	2.62%	3.15%	3.84%	2.27%
St Dev of Annual Return	9.24%	9.50%	8.16%	7.05%	6.59%	5.81%	6.37%	6.20%	7.66%
Return/Unit St Dev	24%	29%	32%	32%	38%	45%	49%	62%	30%

Source: Amherst estimates as of 2021 Q3





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# Mixed Recovery in Commercial Real Estate

# Recovery Will Follow Long-term Fundamentals from Here

## COMMERCIAL REAL ESTATE

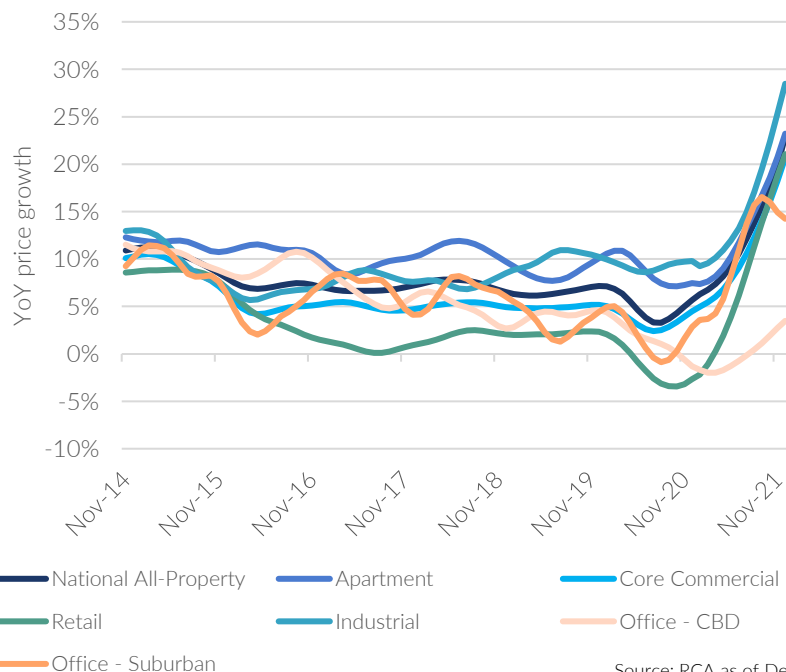
- Commercial Real Estate (CRE) markets bounced back forcefully in 2021 with prices jumping across all sectors and transaction volume topping \$800bn
- However, CRE price recovery has been uneven across sectors, with industrial and apartment sectors leading the way with the most gains
- CBD office has recovered from the lows, but remote-working and hybrid-working arrangements pose question marks on long-term prospects; purpose-built office, especially for job sectors where remote work is less practical, may continue to fare better
- Retail prices rebounded strongly in 2021, but we expect longer-term concerns to remain, especially related to malls. “Essential retail” is likely to continue to fare better.

**We expect repositioning and adaptive re-use opportunities to drive demand for both value-add equity capital and transitional loans in 2022 and beyond**

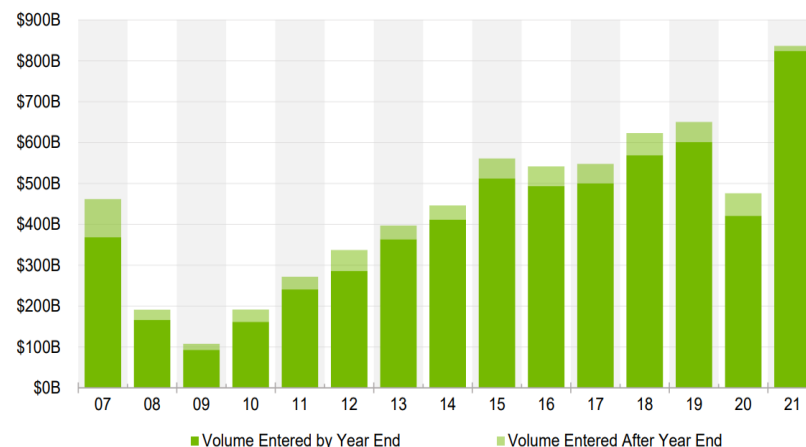
# Property Prices and Transaction Volumes Were Up Significantly in 2021

- All-properties price growth in December 2021 was at 22.9% YoY vs. 7.2% YoY in December 2019
- Industrial and apartment price growth remained the strongest across all CRE sectors, while CBD office experienced the lowest price growth
- Retail price growth has been a surprise with RCA indices showing 21% annual growth rate in December 2021, following years of slower growth than other major sectors

## PRICE GROWTH HAS JUMPED SINCE 2020 (JAN '14 - DEC '21)



## TRANSACTION VOLUMES HAVE BEEN STRONG



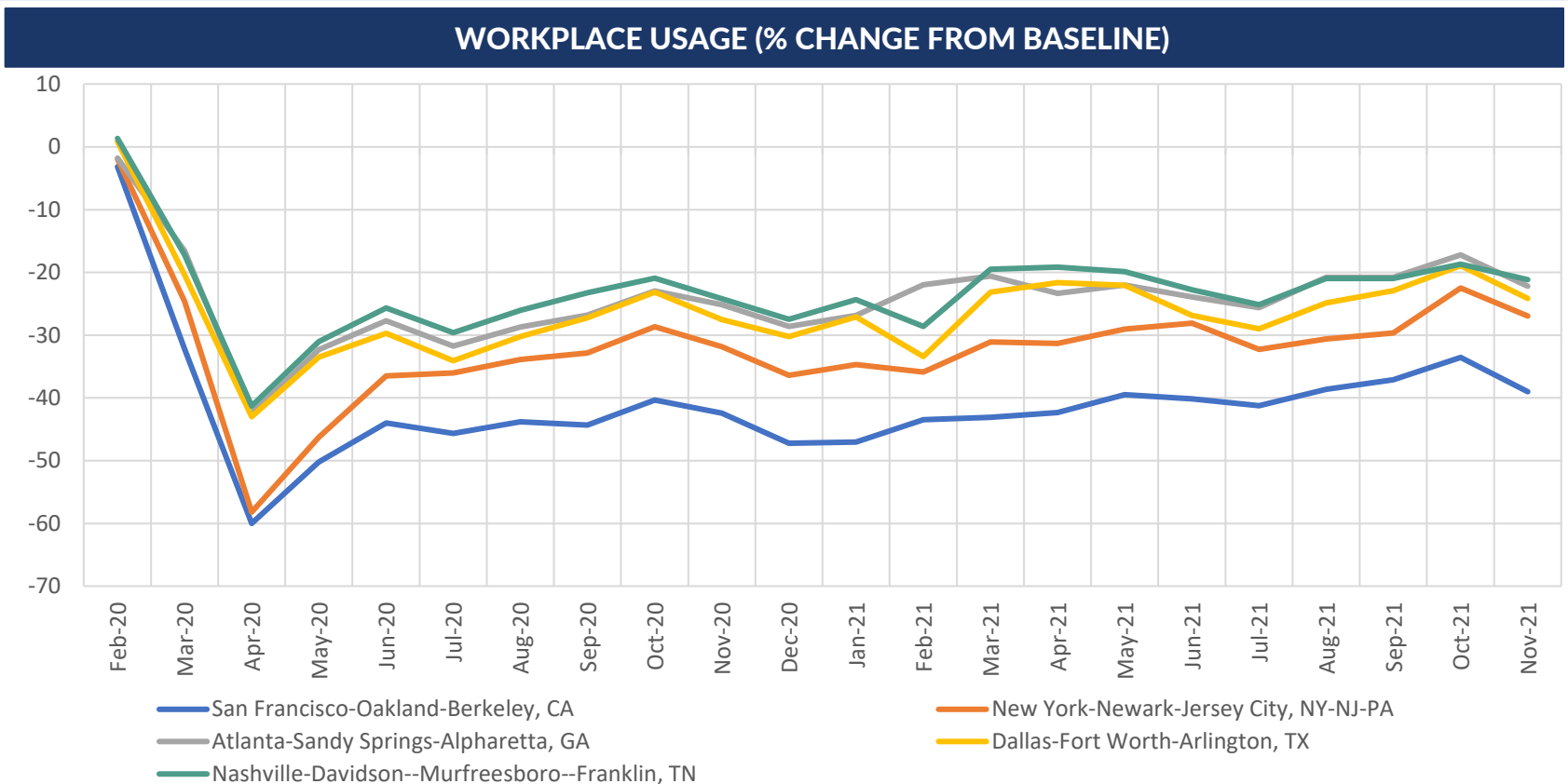
Source: RCA as of Dec 2021

Source: Costar as of Jan 2022



# Office Workplaces Are Still Underutilized

- Office workplace usage is still in a slow recovery mode from the pandemic. The emergence of COVID variants, such as Delta and Omicron, have slowed return-to-office recalls further.
- As of November 2021, employees are still spending 20-40% less time in the workplace than pre-pandemic levels

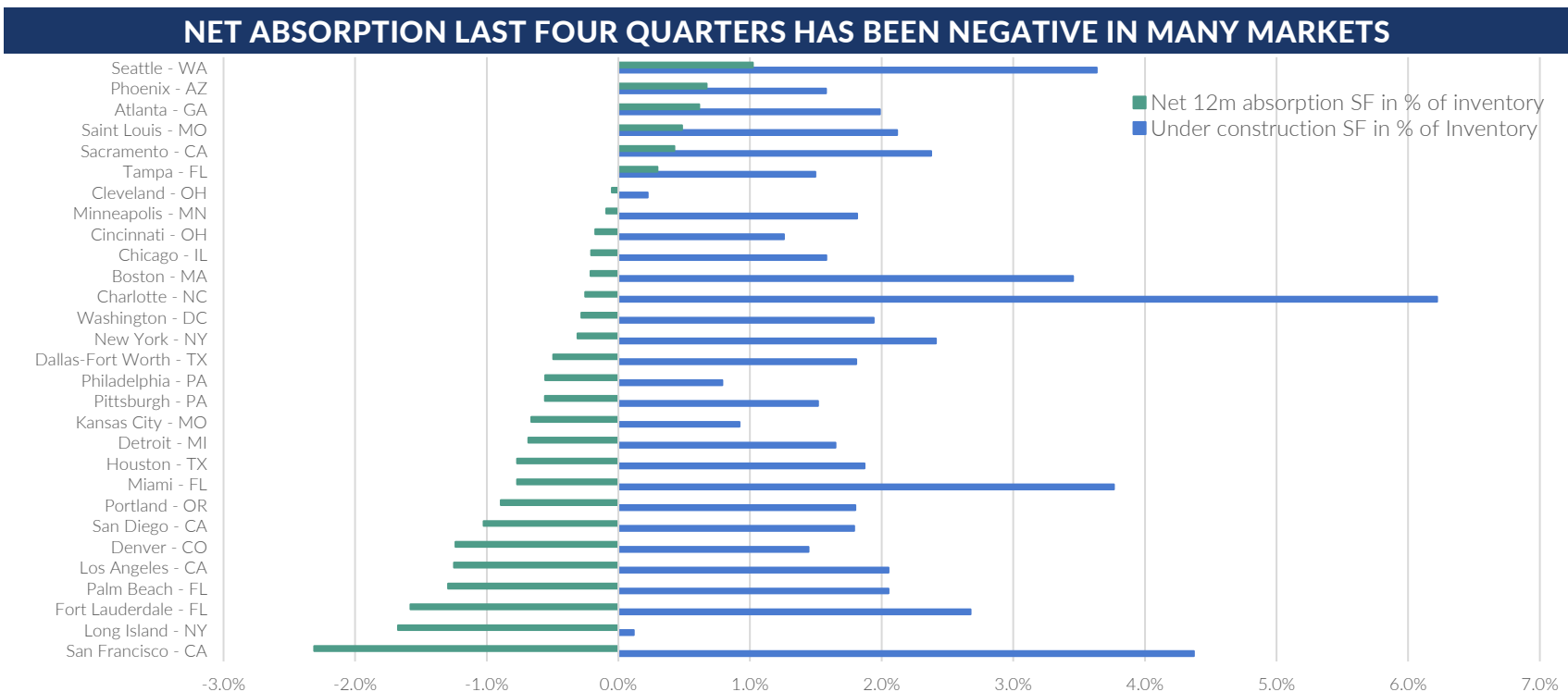


Source: Google Mobility Data as of Nov 2021



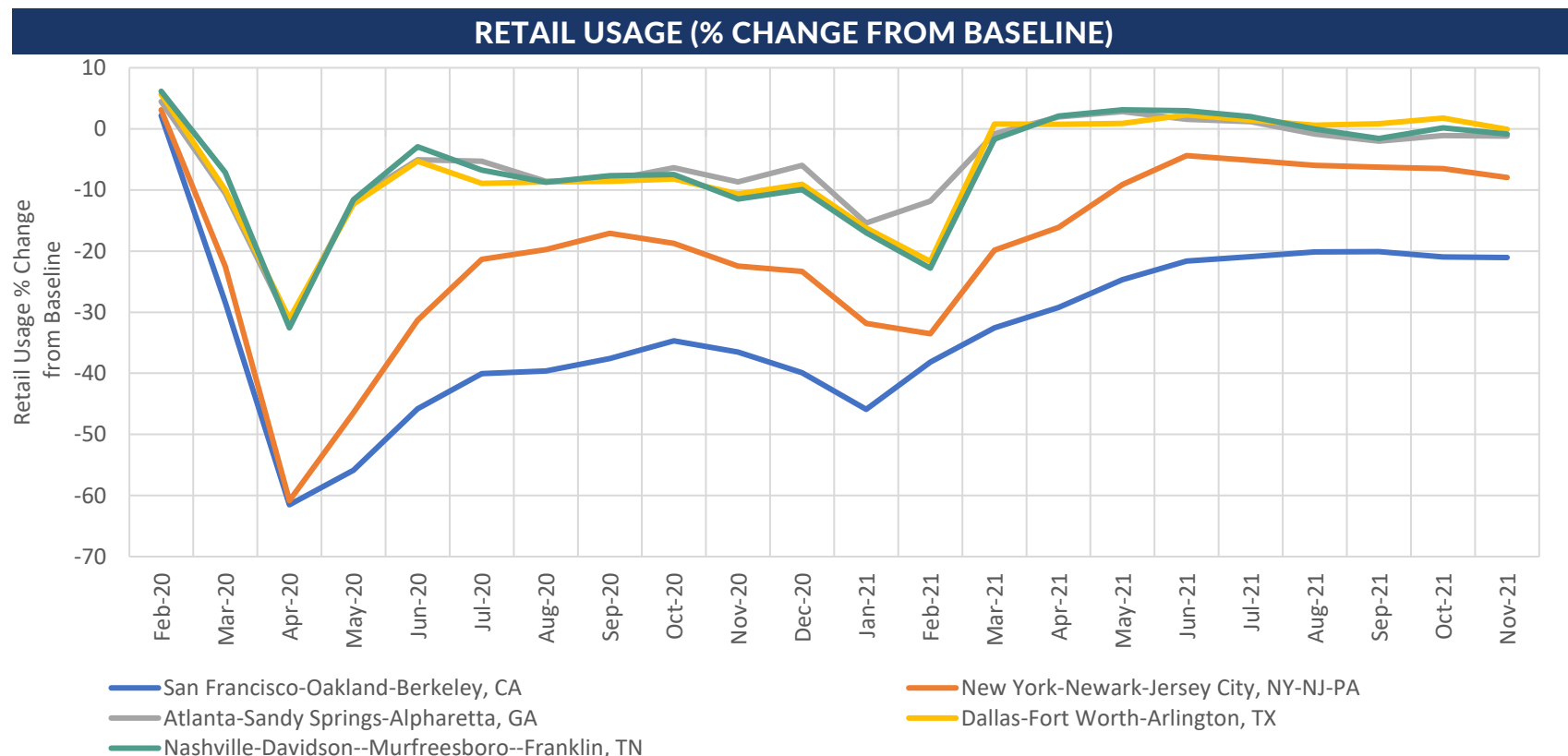
# Office Fundamentals Remain at Risk of Weakening Further

- Overall U.S. office net absorption was -0.4% from Q4 2019 to Q3 2021 and weaker across many large CBDs. Significant supply pipelines, along with negative net absorption, will exert additional pressure on rents and prices.
- Certain cities, including Seattle, Phoenix, and Atlanta, had positive absorption in the past 12 months and could see additional price growth going forward. Segments, such as medical office and lab space, could outperform the traditional office market in the near term.



# Retail Demand Stable Despite the COVID Pandemic

- As of November 2021, retail demand had recovered in most regions with the coasts still lagging the broader recovery
- While “essential retail” has outperformed, other segments of the retail landscape, particularly malls, will likely still lag the recovery

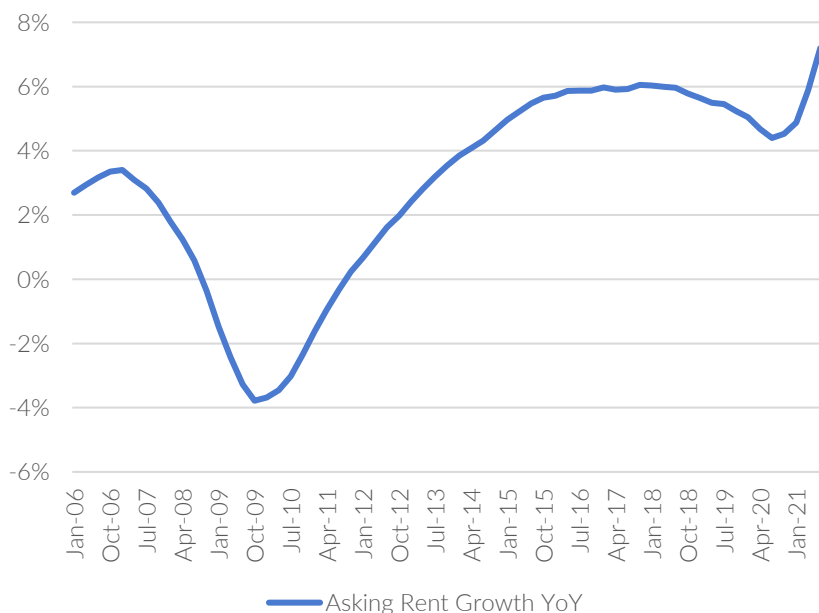


Source: Google Mobility Data as of Nov 2021. Retail and recreation are places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters.

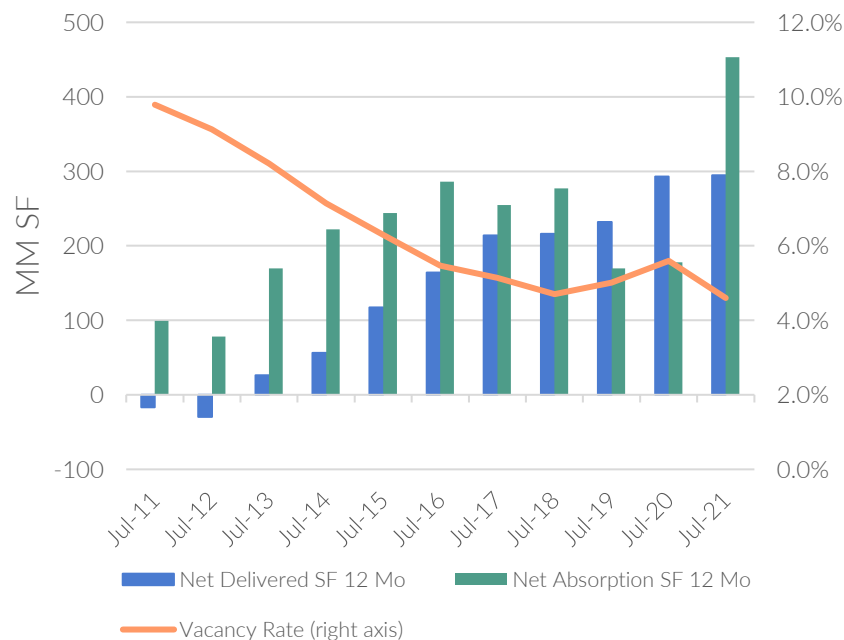
# Industrial Sector Gained from Continued E-Commerce Expansion

- The industrial sector posted the strongest rent growth among CRE asset classes at 7.2% as of Q3 2021, largely due to the massive upswing in e-commerce-related demand
- Industrial construction (measured by square feet) remains at an all-time high of 459mm square feet as of Q3 2021. Net absorption is expected to remain strong and outpace the supply in the near term
- Continued strong demand will support the industrial sector in 2022

## INDUSTRIAL RENT GROWTH SLOWING SLIGHTLY (SEP '06 – SEP '21)



## NEW CONSTRUCTION CATCHING UP TO DEMAND (JUL '11 – JUL '21)



Source: Costar as of Dec 2021

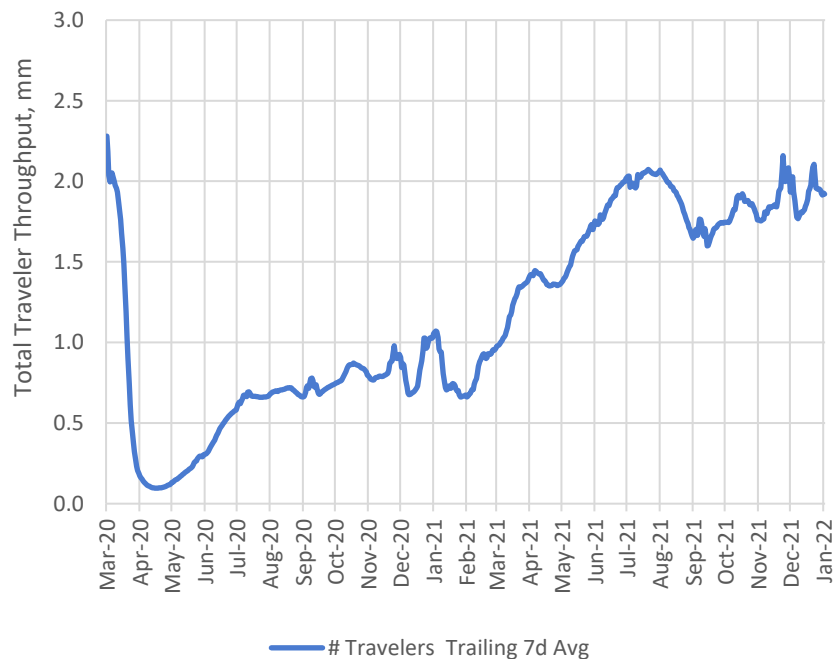




# Travel and Restaurants Recovered Closer to Pre-Pandemic Levels

- Travel and restaurant demand recovered to pre-pandemic levels over the summer of 2021; however, demand has fluctuated in recent months
- Despite restrictions and safety measures still affecting many businesses, general demand has recovered meaningfully from the pandemic bottom
- While leisure travel demand has now exceeded 2019 levels, business travel and convention activity lag

## AIR TRAVEL DEMAND HAS RECOVERED



## RESTAURANT DEMAND HAS RECOVERED



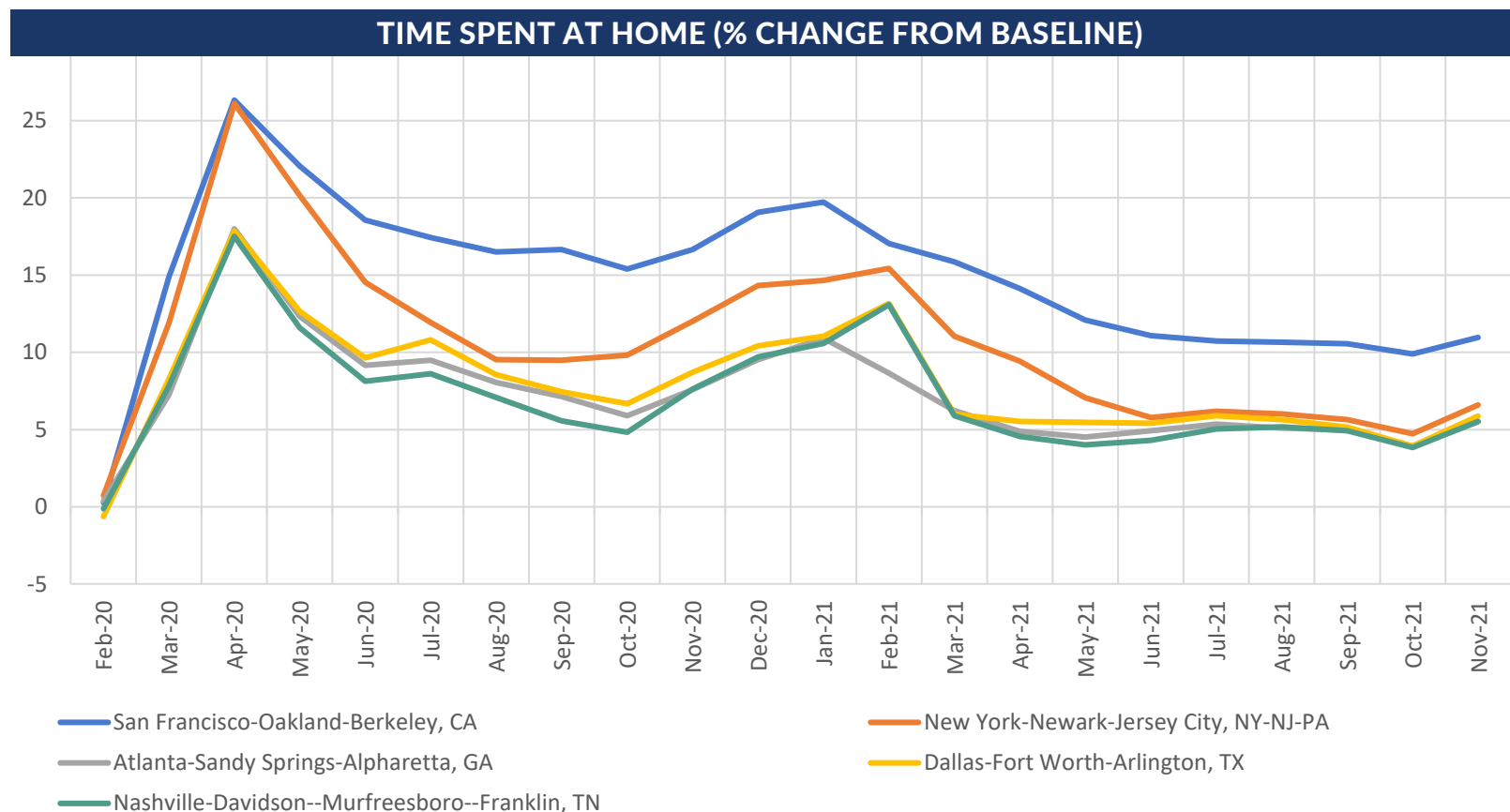
Source: Transportation Security Administration, US Government (TSA) as of Jan 2022

Source: Opentable.com as of Jan 2022



## 5-10% More Time Spent at Home Drives Demand for Housing

- Residential usage has been declining since the pandemic peak in Spring 2020; however, time spent at home remains higher than pre-pandemic levels, leading to sustained demand for larger residential spaces
- This has translated into a strong recovery in apartment rents and vacancy levels

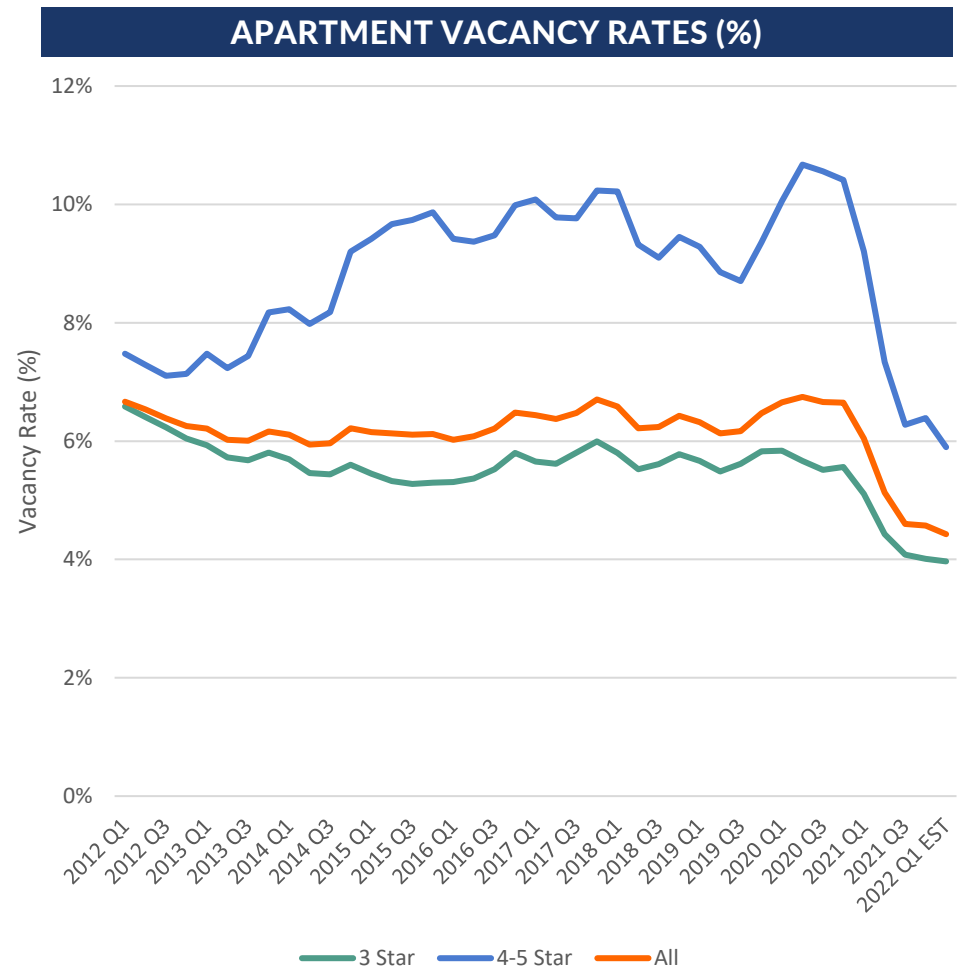


Source: Google Mobility Data as of Nov 2021



# Apartment Vacancy Rates Have Dropped Sharply Across All Tiers

- Apartment vacancy rates declined across the board and are now well below pre-pandemic levels
- Lower-end apartments saw an initial uptick in vacancy rates, but absorption has returned in full force and is expected to stay steady
- High-end apartments in denser, urban areas generally have higher vacancy rates but have shown the most improvement recently
- The drop in vacancy rates has driven rent growth across the overall apartment sector



Source: Costar as of Dec 2021



# Public Markets Pricing Shows Uneven Recovery Between Sectors

- SFR and Industrial REITS have meaningfully outperformed other REIT sub-sectors since the onset of the COVID-19 pandemic
- Retail and apartments have fared moderately well
- Office and hotel have been impacted most severely and remain below pre-pandemic levels

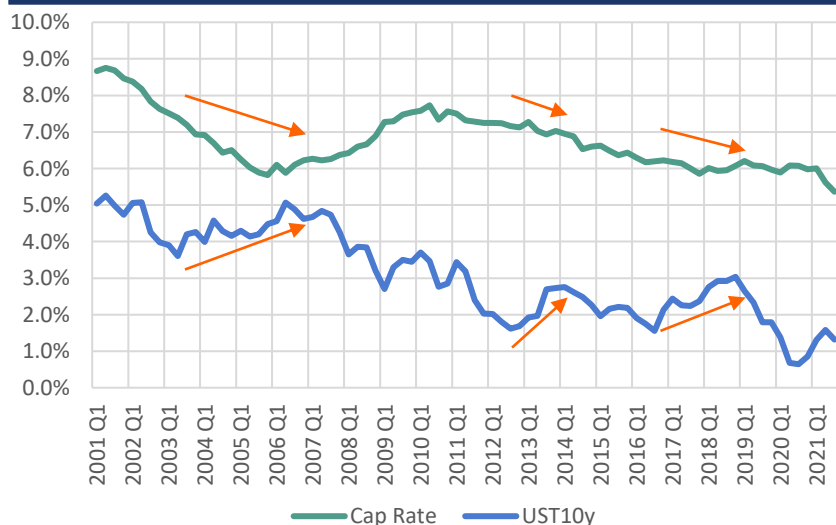
PUBLIC SECTOR REIT ENTERPRISE VALUE CHANGE BY REAL ESTATE SECTOR <sup>1</sup>		
	December 31, 2019 – December 31, 2021	December 31, 2019 – December 31, 2020
Industrial	81.9%	20.2%
Self Storage	72.8%	8.1%
Single-Family Rental	52.9%	6.3%
Retail	20.1%	-19.4%
Multifamily	19.5%	-16.7%
Hotel	-9.7%	-16.7%
Office	-13.3%	-20.0%
S&P 500	47.5%	16.3%
MSCI USA	52.7%	20.7%

<sup>1</sup>As of 12/31/21. Amherst calculated based upon Bloomberg data and company filings.

# As Interest Rates Rise...Where Will Cap Rates Go?

- Historically, cap rates have fallen during periods of small-to-medium interest rate increases
- The expectation of higher forward NOI/rents, supported by historically strong economic growth during periods of sustained rate increases, has led to this result
- On average, when rates rise 50bps, cap rates during the same period fall 6bps; this is due to expected NOI growth accompanying a stronger economy and tighter cap-rate spreads
- However, if rates rise beyond market expectations and strong economic growth does not coincide, cap rates could move meaningfully higher

**CAP RATES VS. U.S. TREASURY 10-YEAR**



Rate Scenario	Average Change in 10y UST			Average Change in Cap Rate		
	3 Mo	6 Mo	12 Mo	3 Mo	6 Mo	12 Mo
>1SD Move in Rates	0.51%	0.69%	0.78%	-0.06%	-0.07%	-0.17%
>2SD Move in Rates	0.72%			-0.09%		

Source: Costar as of Dec 2021



# Expectations for 2022

## COMMERCIAL REAL ESTATE

- Sustained increases in interest rates are usually accompanied by strong economic growth, which typically bodes well for rents, occupancies, and property values
- However, if economic growth slowdown and rates are much higher than expected, cap rates could widen meaningfully from current levels
- We expect CRE markets to be driven more by longer-term, sector-specific fundamentals in 2022
- Some retail and older CBD office properties will remain a concern, especially in cities like New York, Philadelphia, and San Francisco, where the recovery in jobs has been slower and work-from-home trends continue
- Shifting demand drivers are likely to lead to accelerated obsolescence and, consequently, to more repositioning demand in 2022 and beyond, resulting in the need for both value-add equity capital and transitional debt
- The overall levels of sales activity is expected to remain elevated as real estate fundamentals remain strong and liquidity is plentiful; we expect heightened transaction activity will continue



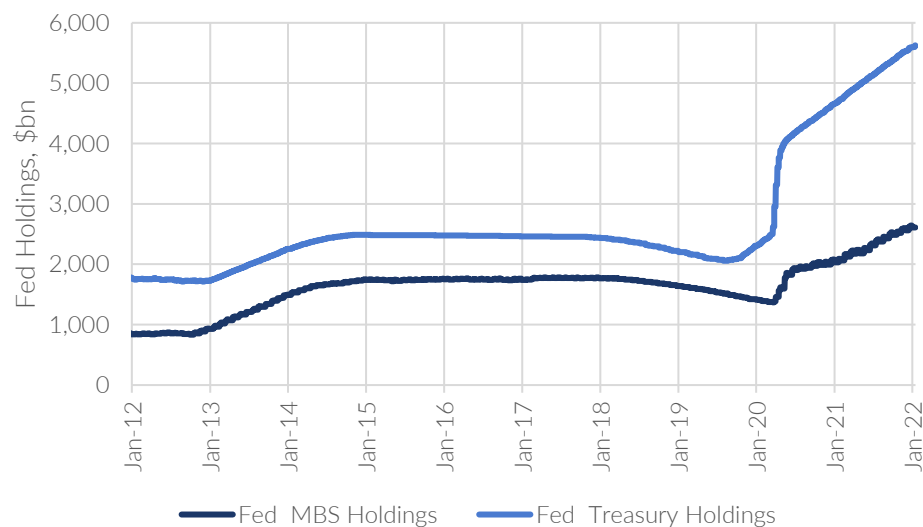
Amherst

# Relative Value in Securitized Products

# Faster Fed Taper Followed by Earlier Hikes?

- The Fed is trying to thread the needle by tapering/hiking, while trying not to derail economic growth
- Taper pace for mortgage-backed securities (MBS) will rise from the initially announced pace, and new asset purchases will conclude by March 2022
- Markets are pricing in five hikes by the end of 2022 and a reduction in MBS holdings to begin in 2022

## FED MBS AND TREASURY HOLDINGS 2012-2022



## MARKET IMPLIED HIKES AND FED FUNDS RATE

Fed Meeting	Market-Implied Hikes	Implied Policy Rate
16-Mar	1.3	0.34%
4-May	2.4	0.60%
15-Jun	3.2	0.80%
27-Jul	3.8	0.94%
21-Sep	4.4	1.09%
2-Nov	4.8	1.19%
14-Dec	5.3	1.33%

Source: Bloomberg,. The views expressed herein are for informational purposes only, and are derived by Amherst Capital, from current market conditions and assumptions, which may materially change over time. Please see important disclosures at the end of this presentation.



# Fed Will Reverse Course from Buying \$600bn to Some Selling

- Despite net issuance estimated to drop to \$550bn in 2022, overall supply net of Fed will increase by \$300bn versus 2021
- Bank demand may weaken as rates rise due to extension in MBS and a reduction in deposit duration
- Money managers will likely have to absorb the excess supply at wider spreads
- Spreads are estimated to return to historical norms of 15–25bps wider from current levels

## 2022 PROJECTED AGENCY MBS SUPPLY & DEMAND

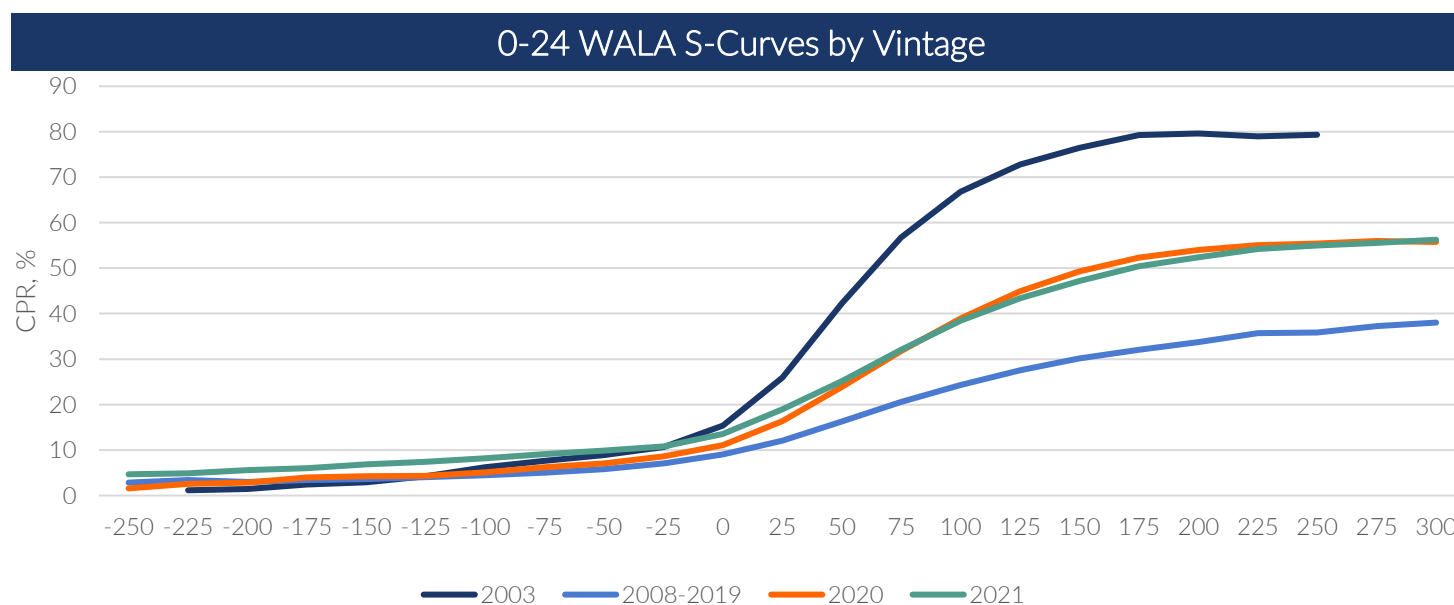
	Historical Change (Billions)												2021 Proj.	2022 Proj.
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Gross Supply	1,693	1,355	1,159	1,164	1,544	923	1,251	1,472	1,305	1,171	1,532	3,161	3,500	2,130
Net Issuance	437	-142	29	32	235	71	165	230	315	283	225	513	850	550
GSEs	24	-259	-91	-85	-83	-46	-42	-43	-2	-18	1	-61	-50	-40
FHLB	6	4	-1	-	4	-27	-10	-8	-9	-5	-5	-11	-10	-10
Fed	908	84	-155	89	570	240	11	-6	24	-128	-228	621	575	-30
Treasury	131	-47	-118	-26	-	-	-	-	-	-	-	-	-	-
Banks	109	105	161	94	-46	39	151	120	112	34	123	508	450	200
Foreign	-25	-48	-15	-11	-19	23	38	114	65	106	80	-27	-10	40
REITs	16	38	105	109	-88	9	-50	-27	55	18	61	-126	-20	-
Money Managers	-731	-20	143	-138	-104	-165	67	80	72	276	194	-391	-85	390

Source: Bloomberg, Morgan Stanley and Citigroup. The views expressed herein are for informational purposes only, and are derived by Amherst Capital, from current market conditions and assumptions, which may materially change over time. Please see important disclosures at the end of this presentation.



# The Refinancing Function Is Likely To Be Even Steeper in 2022-23

- Prepayment response was much steeper in 2020-21 after years of depressed response. 100bps in-the-money speeds were close to 40% CPR in 2020-21, up from 24% CPR in 2008-2019. 100bp in-the-money speeds are still a lot lower than the 2003 experience of mid-60s% CPR.
- We believe that risks from further credit easing and technological advancements, which increase refinancing efficiency, are not adequately priced-in
- Further, mortgage lenders have ramped up staffing for a low-rate environment and could lead to more cash-out volumes



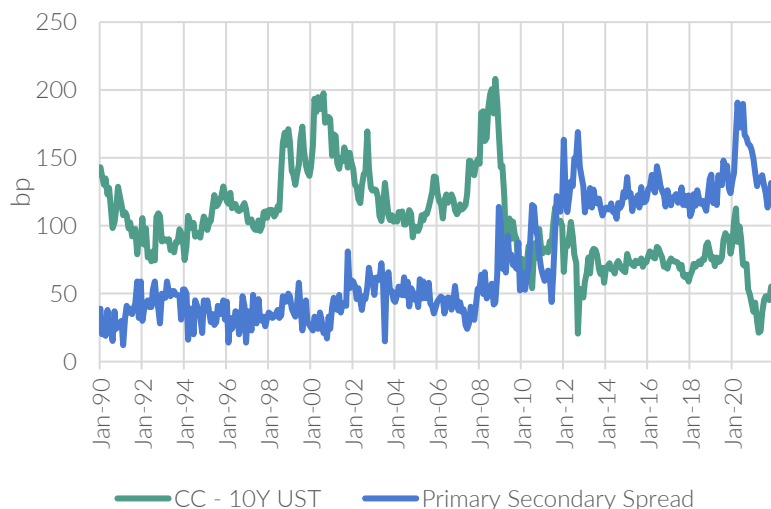
Source: Amherst estimates



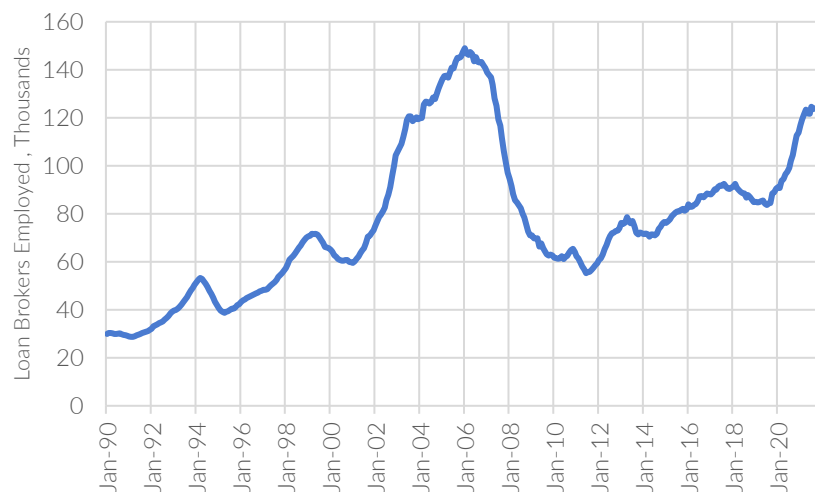
# Staffing Levels for Mortgage Lenders Suggest More Credit Easing

- Mortgage lenders now have excess capacity as mortgage rates have moved up sharply
- As rates rise, they may be incentivized to originate more cash-out mortgages to keep volumes up
- This could lead to mortgages being even more callable than what would be expected given the strong home price growth
- Lending capacity could be rightsized in response, but this generally happens with a lag
- The primary-secondary spread is still very high compared to pre-Great Financial Crisis (GFC), when it was closer to 50bps, with potential to shrink and further steepen the refinancing response

## MBA REFINANCING VS MORTGAGE RATES



## LOAN BROKER EMPLOYMENT AT LEVELS LAST SEEN IN 2005-07



Source: Credit Suisse

# Securitized Credit Spreads Are Tighter Than Pre-Pandemic Levels

- The COVID-19 pandemic exposed the market's inherent weakness in pricing risk. Most sectors over-corrected but have now retraced the correction entirely and are even tighter than February 2020.
- Leveraged CMBS bonds, like CMBX BBB-/BB-, continue to lag in a world where long-term real estate demand is unclear in some sectors and some losses seem unavoidable
- However, losses should be limited to below-IG conduit bonds for the most part
- Despite this underperformance in spreads, we believe that the pickup to go down the capital stack in structured credit is not commensurate with the risk

	January 7, 2022	Max Spread (Week of Mar 23, 2020)	Week of Feb 1, 2020	% Spread Widening Retraced
Fannie DUS	28	135	53	130%
Freddie K A2	26	110	48	135%
CMBX AAA	42	164	50	107%
Conduit 10yr AAA	68	350	76	103%
Office/ Industrial SASB AAA	70	350	85	106%
Hotel SASB AAA	105	550	125	105%
SFR AAA	68	378	93	109%
Non QM AAA RMBS 2.0	70	478	122	115%
Conduit 10yr BBB Cash	353	1080	280	91%
SFR BBB	173	771	194	104%
SFR NR/B-	287	1350	400	112%
CMBX 12 BBB-	398	1097	315	89%
CMBX 12 BB-	696	1834	589	91%
CRT M1 (From MS)	70	550	75	101%
CRT M2 (From MS)	155	700	180	105%
CRT B1 (From MS)	275	1550	300	98%
CRT B2 (From MS)	560	3000	480	97%
CDX IG	53	152	47	95%
CDX HY	307	871	292	97%

Source: Dealer marks, Amherst as of Jan 2022

# Expectations for 2022

## SECURITIZED PRODUCTS

### OVERVIEW

- Valuations in agency MBS continue to be strained, the additional return in deep securitized credit does not adequately compensate for the leverage and idiosyncratic risks assumed
- We find some value in the top of the capital stack in securitized credit products, especially in SASB/SFR AAAs

### AGENCY MBS

- Valuations remain challenged with the Fed going from a net buyer of \$550-600bn to a net seller. Further pressure from higher volatility, ramped-up mortgage banking capacity, and more callable mortgages are likely to exacerbate the weakening MBS performance.
- We expect further widening in Agency MBS OAS before other buyers can step in to absorb net issuance

### PRIVATE LABEL AAA (CMBS/RMBS)

- SASB/SFR AAAs offer some pickup to Agency MBS; however, the basis has been shrinking, especially as mortgages have become cheaper

### PRIVATE LABEL MEZZANINE BONDS

- Most public/144a securitized sectors do not offer adequate compensation for credit risk
- Our research points to the best opportunities for higher yields in private transactions outside the securitized space in transitional CRE loans



## ABOUT AMHERST

Amherst is on a mission to transform the way real estate is owned, financed, and managed. Amherst leverages its proprietary data, analytics, technology, and decades of experience to seek solutions for a fragmented, slow-to-evolve real estate ecosystem and to materially improve the experience for residents, buyers, sellers, communities, and investors. Today Amherst has over 1,000 employees and more than \$12.3 billion in assets under management.

Over the past decade, Amherst has scaled its platform to become one of the largest operators of single-family assets and has acquired, renovated, and leased 33,791 homes across 28 markets (30 cities, 21 states) in the U.S. The firm delivers customized, stabilized cash-flowing portfolios of assets to its investors, wrapped in all the ongoing services required to manage, own, and finance the asset including property management, portfolio management, and a full capital markets team. In addition to its single-family rental platform, Amherst's debt business pursues two distinct credit strategies in mortgage-backed securities and commercial real estate lending. Over its 27-year history, Amherst has developed a deep bench of research and technology talent, and leverages data and analytics at every stage in the asset lifecycle to improve operations and preserve long-term value for our investors and the more than 181,000 residents the firm has served.

## ABOUT AMHERST HPA INDEX AND RENT GROWTH INDEX

The Amherst Home Price Index (HPA) tracks home price changes in the 20 Metropolitan Statistical Areas<sup>1</sup> (MSAs) that are used to construct the S&P Case Shiller 20-city Index as well as over 200 Core-Based Statistical Areas (CBSA) in the United States. The index is published on a monthly basis and is based on the Case Shiller repeat-sales methodology. Unlike the indices published by S&P Case Shiller Weiss, Corelogic, and the Federal Housing Finance Agency (FHFA), Amherst HPA is a distressed-free index, which does not include price changes due to foreclosures, short-sales, bank repossession, and REO resale. The use of Multiple Listing Services (MLS) data that are supplemented by Corelogic off-market data allow the HPA to have a timelier look at monthly shifts in the housing market than some other leading market indices<sup>2</sup>.

The Amherst Rent Growth Index tracks rent price changes of Single-Family Detached (SFD) homes in the 20 Metropolitan Statistical Areas (MSAs) that are used to construct the S&P Case Shiller Index as well as over 150 CBSAs in the United States. The Index is published every month and uses a repeat-rent methodology similar to the one employed for the Amherst HPI. The index incorporates both MLS and Altos Research rental data to produce a timely rent index.

\*As of 9/30/2021





## IMPORTANT DISCLOSURES

The comments provided herein are a general market overview and do not constitute investment advice, are not predictive of any future market performance, are not provided as a sales or advertising communication, and do not represent an offer to sell or a solicitation of an offer to buy any security. Similarly, this information is not intended to provide specific advice, recommendations or projected returns of any particular product of The Amherst Group, LLC ("Amherst") or its subsidiaries. These views are current as of the date of this communication and are subject to rapid change as economic and market conditions dictate. Though these views may be informed by information from sources that we believe to be accurate and reliable, we can make no representation as to the accuracy of such sources nor the completeness of such information. Past performance is no indication of future performance. Investments in mortgage related assets are speculative and involve special risks, and there can be no assurance that investment objectives will be realized or that suitable investments may be identified. Many factors affect performance including changes in market conditions and interest rates and in response to other economic, political, or financial developments. An investor could lose all or a substantial portion of his or her investment. No investment process is free of risk and there is no guarantee that the investment process described herein will be profitable. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

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Projected returns are hypothetical in nature and are shown for illustrative, informational purposes only. This material is not intended to forecast or predict future events. Specifically, the projected returns are based upon a variety of estimates and assumptions by Amherst of future returns including, among others, estimates of future operating results, the value of assets and market conditions at the time of disposition, related transaction costs and the timing and manner of disposition or other realization events. The returns and assumptions are inherently uncertain and are subject to numerous business, industry, market, regulatory, competitive and financial risks that are outside of Amherst's control. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Actual operating results, asset values, timing and manner of dispositions or other realization events and resolution of other factors taken into consideration may differ materially from the assumptions upon which estimates are based. Changes in the assumptions may have a material impact on the projected returns presented. The projected returns do not reflect the actual returns of any portfolio strategy and do not guarantee future results. Actual results experienced by clients may vary significantly from the hypothetical illustrations shown.

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