

2019 Economic and Housing Outlook



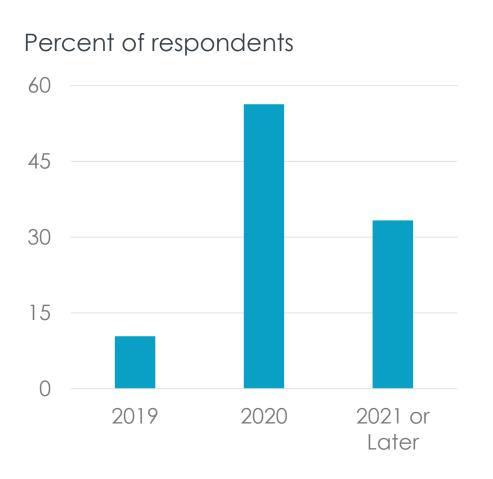
2019 Market Environment

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- Fed hikes short-term rates, mortgage rates rise to highest in 10 years
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- Special topic: Effect of natural disaster on local housing market



U.S. Economy Forecast to Grow 2.4% in 2019-When Will the Recession Hit?

In what year do you expect the next recession to begin?



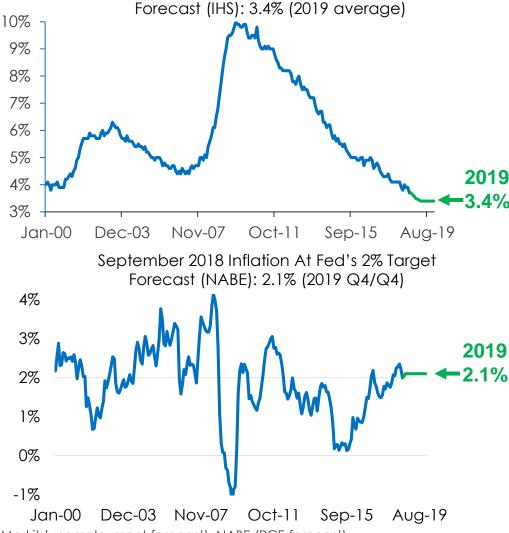
- 2.4% economic growth in 2019 (IHS)
- Expansion becomes longest in U.S. history in July 2019 (NBER)
- 20% 1-year recession probability (WSJ)
- Most economists expect recession starts 2020 or later (NABE)
 - TCJA stimulus dissipates
 - Higher interest rates
 - Trade war uncertainty

Source: IHS Markit (GDP growth 2018Q4 to 2019Q4), Wall Street Journal Economic Forecasting Survey (November 2018), National Association for Business Economics Outlook survey (October 1, 2018), National Bureau of Economic Research



Fed Increasingly Focused on Inflation Risk

- Congressional dual mandate:
 - Maximum employment
 - Price stability
- Unemployment rate 3.7% (Oct.)
 - Lowest since 1969
 - "Full employment": 4.2-4.5%
- Fed's "price stability" definition:
 - 2% annual (PCE)
 - Avg. inflation 1.9% since 2000
 - Sep. 2018: 2.0% annual
- Fed expected to raise fed funds target to 2.25-2.50% on Dec. 19
 - 3 more quarter-point hikes expected in 2019



October 2018 Unemployment 3.7%, 49-year low

Source: BLS (unemployment rate), BEA (PCE price index), IHS Markit (unemployment forecast), NABE (PCE forecast)



2019 Mortgage Rate Forecast: Highest Since 2009

30-year FRM at 4.9% (Nov. avg.); forecast to rise to 5.2% by Dec. 2019 & 5.3% by Dec. 2020

Interest Rate on 30-Year Fixed-Rate Mortgages

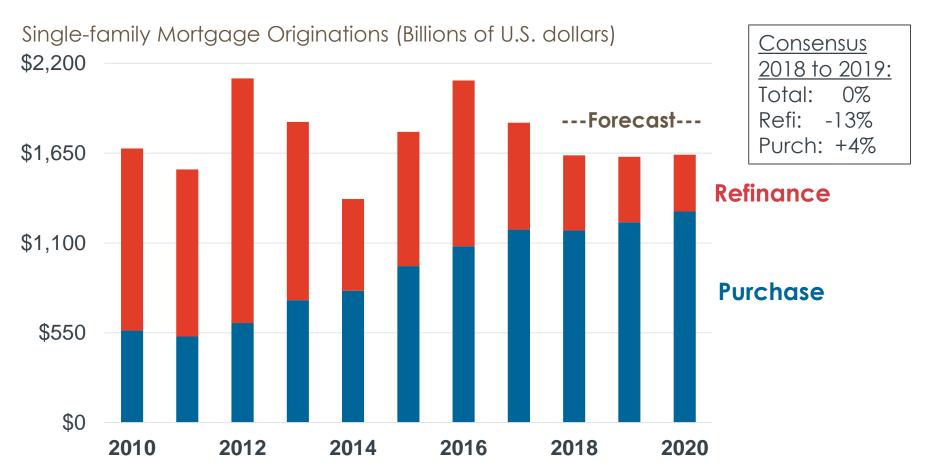


Source: Freddie Mac Primary Mortgage Market Survey®; forecast is an average of MBA, Fannie Mae, Freddie Mac, NAHB, NAR and IHS Market projections.



Dollar Origination Forecast: Flat

Loan counts down about 5% after adjusting for home-price growth

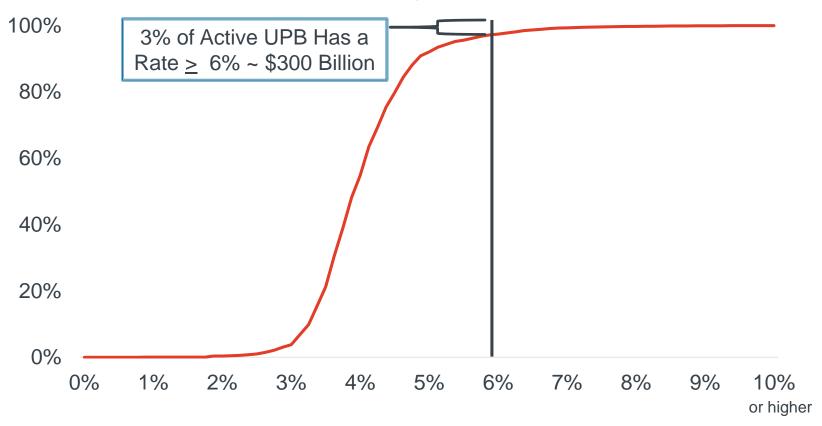


Source: Originations for 2010-2017 are from CoreLogic public records (benchmarked to HMDA through 2017); 2018 to 2020 are an average of the latest projections released by Mortgage Bankers Association, Fannie Mae, and Freddie Mac. Originations exclude HELOCs.



"In the Money" To Refinance Falls As Rates Rise

Cumulative Share of Active Balance by Interest Rate



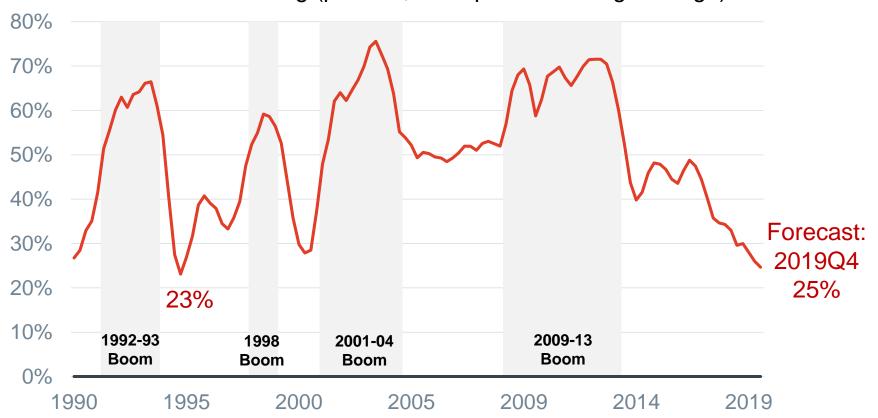
Interest Rate on Mortgage Debt Outstanding In September 2018

Source: CoreLogic TrueStandings



Refi Share Projected to Fall to 25-Year Low

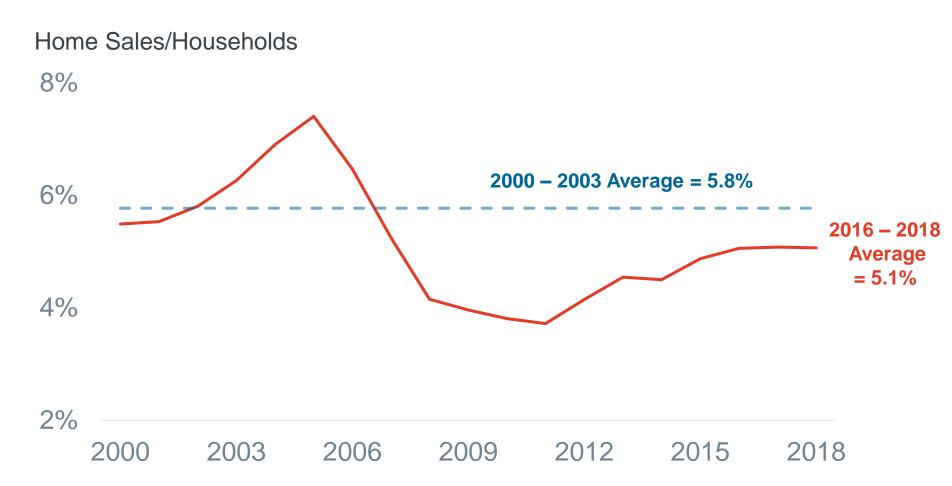
Refinance Share of Lending (percent, four-quarter moving average)



Source: Home Mortgage Disclosure Act (1990-2017); CoreLogic (2018); MBA, FNMA and FHLMC projections (2019)



Single-Family Turnover Rate Has Not Recovered New Normal Is A Million Fewer Sales Per Year

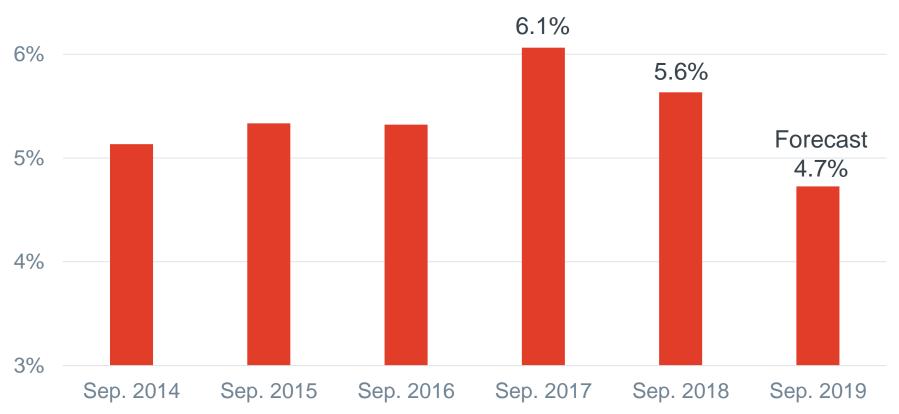


Source: CoreLogic new construction sales and resales; Census HVS households; MBA, Fannie Mae and Freddie Mac home sales projection for 2018



Home-Price Growth Forecast To Slow in 2019

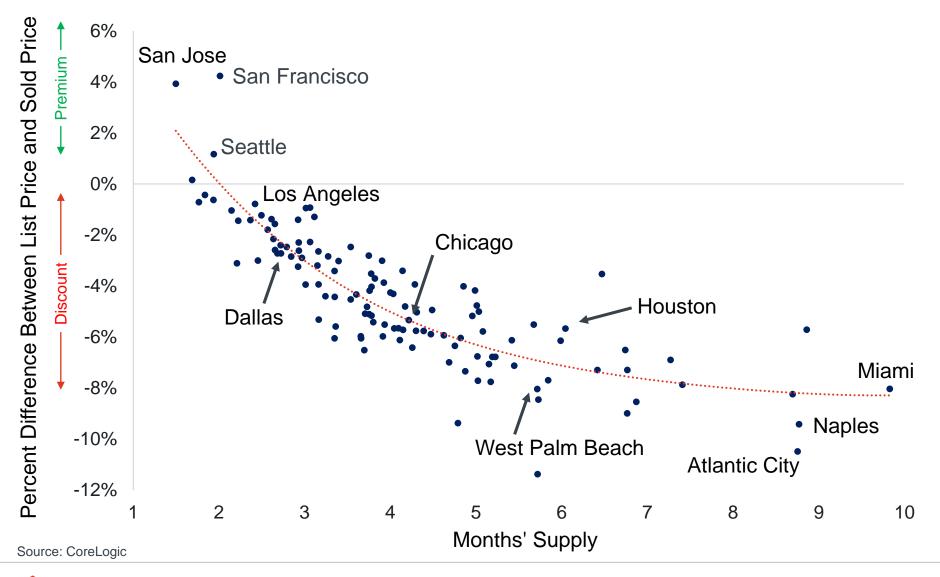
CoreLogic Home Price Index Growth for U.S. (annual, percent)



Source: CoreLogic Home Price Index and HPI Forecast for U.S. (November 6, 2018 release)

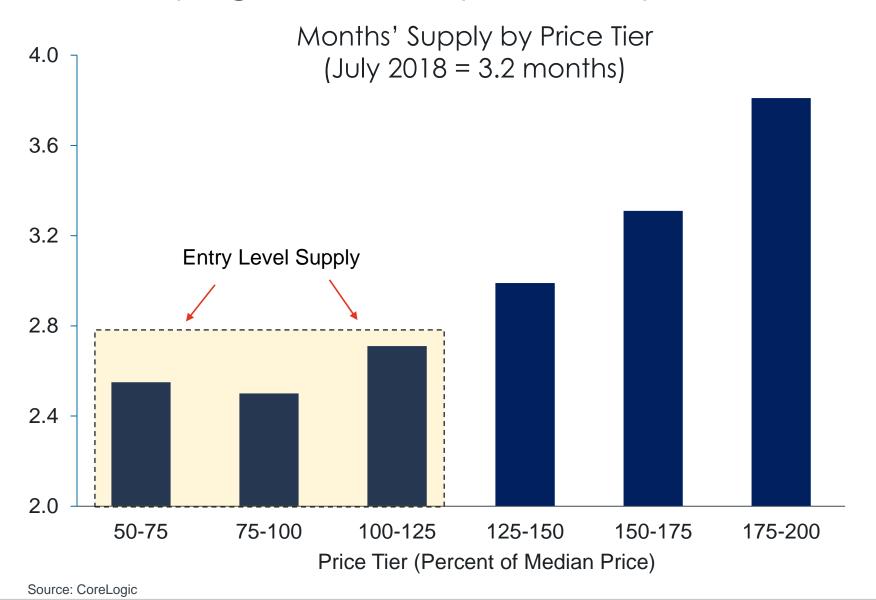


Price Pressures Rapidly Increase As Supply Drops Below 3 Months





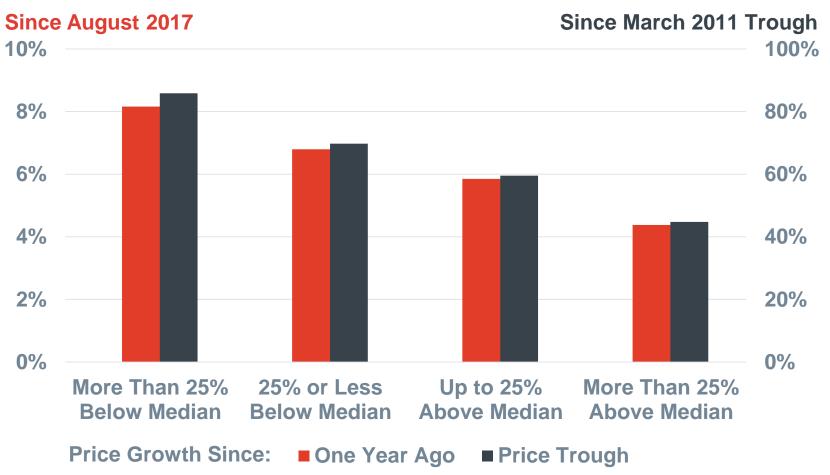
Inventory Tighter for Entry-Level Buyers





Price Growth Strongest For Lowest-Priced Houses

Cumulative Price Growth Through August 2018 (percent)

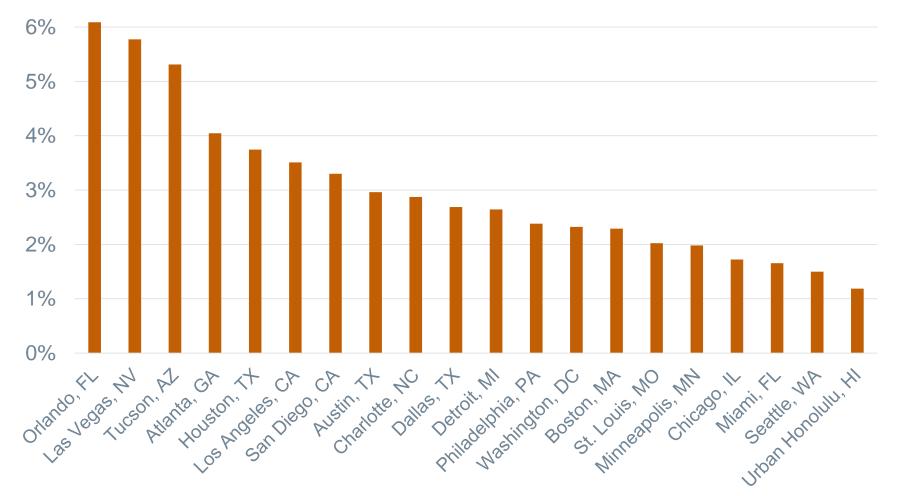


Source: CoreLogic HPI, Single-family Detached (October 2, 2018 release); National HPI trough occurred March 2011.



Single-family Rents Are Rising Too

Single-Family Rent Growth (annual percent change, August 2018)







Bubbles? Market Conditions Indicator, Price-to-Rent, and Payment-to-Rent Ratio, by Metro

Metro Area	Market Conditions Indicator: 2018Q3	Price-to-Rent: Growth 2001Q1 to 2018Q1 Above or Below 65%	Payment-to-Rent: Growth 2001Q1 to 2018Q1
Los Angeles, CA	Overvalued	Above	33%
West Palm Beach, FL	Overvalued	Above	14%
New York, NY	Overvalued	Below	14%
Seattle, WA	Overvalued	Above	12%
San Francisco, CA	Normal	Above	12%
Washington, DC	Overvalued	Above	8%
Raleigh, NC	Normal	Below	4%
Austin, TX	Overvalued	Above	-3%
Tucson, AZ	Normal	Below	-4%
Houston, TX	Overvalued	Below	-13%
Virginia Beach, VA	Normal	Below	-14%
Trenton, NJ	Normal	Below	-33%
U.S.*	Normal	Below	-15%

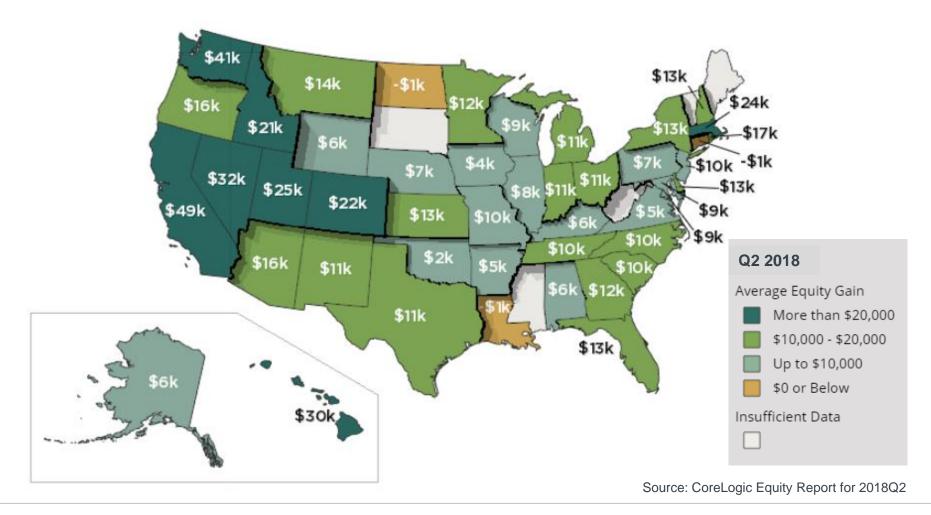
^{*} U.S. price-to-rent and payment-to-rent analysis begins 2004Q1 Source: CoreLogic median sales price and Single-Family Rent Index, Freddie Mac PMMS for 30-year FRM



Average Equity Gain per Homeowner

U.S.: \$16,200 per home (June 2017 to June 2018)

Wealth effect adds \$60 billion to consumer spending next 2-3 years





Longer Homeowner Duration and Growth in Home Equity Spurs Remodeling Expenditures

Homeowner Improvements and Repairs (Billions)



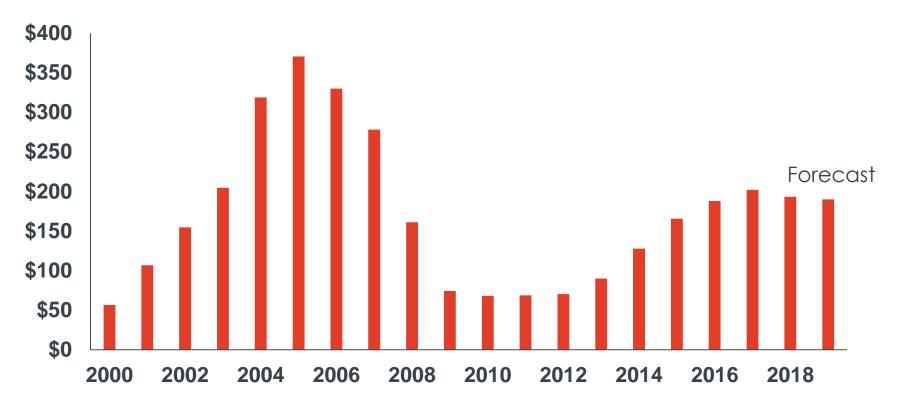
Source: Harvard Joint Center for Housing Studies



HELOC Volume Projected to Hold Steady

Home Improvement HELOC gain in 2019 expected to offset part of decline in other HELOCs

Billions of Dollars Authorized

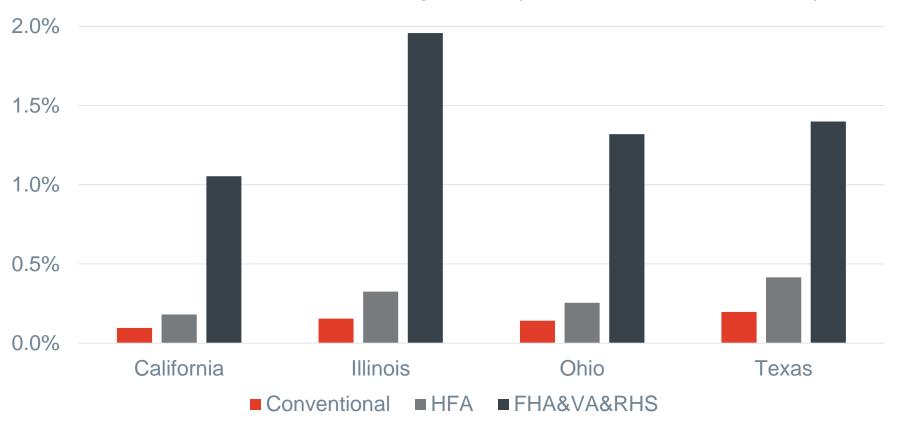


Source: CoreLogic Public Records; second-lien HELOCs placed more than 60 days after first lien; 2018 reflects first eight months, annualized.



Recent HFA Loans Have Much Lower Early Payment Default Rates than Federal Programs

Early Payment Default Rate for 2017 Originations (percent seriously delinquent)



Source: CoreLogic TrueStandings, loans originated 2017 and outstanding as of September 30, 2018



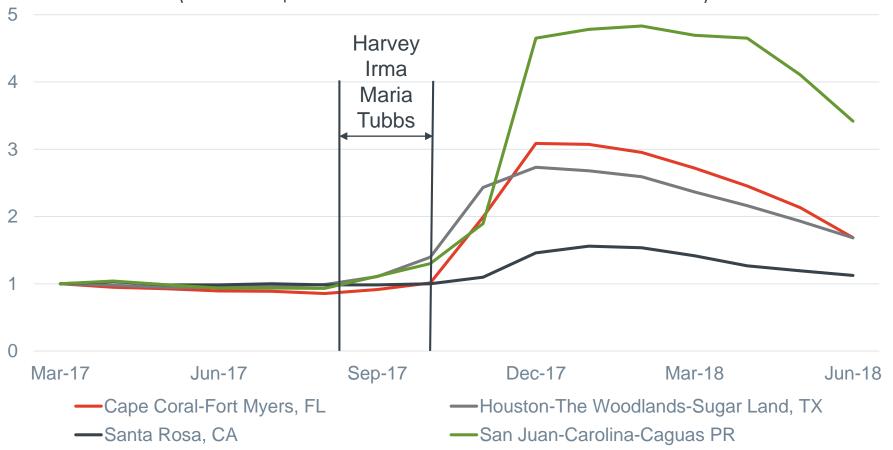
Natural Disasters: Housing Market Effects

- Disruption to local economy and family income
 - -Substantial dollar-value property loss & job loss
 - -Mortgage delinquency rates spike up
 - Occurs even for homes without damage in FEMA designated disaster areas
- Destruction/Damage to housing reduces stock
 - Family relocation reduces vacancy rates
 - -Upward pressure on prices and rent for undamaged homes



Delinquency Rates Jump After a Disaster

Serious Delinquency Rate
(as a multiple of the metro-area rate in March 2017)

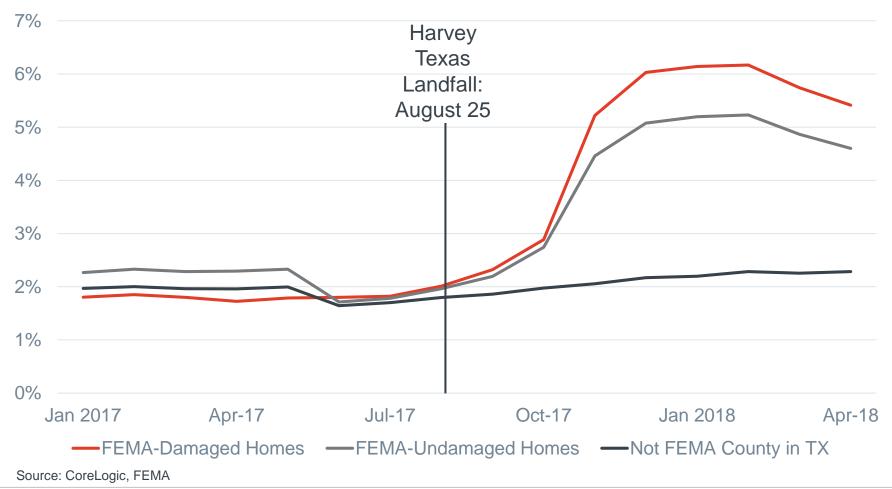


Source: CoreLogic TrueStandings Servicing, percent of loans that were 90-or-more days delinquent or in foreclosure measured relative to March 2017



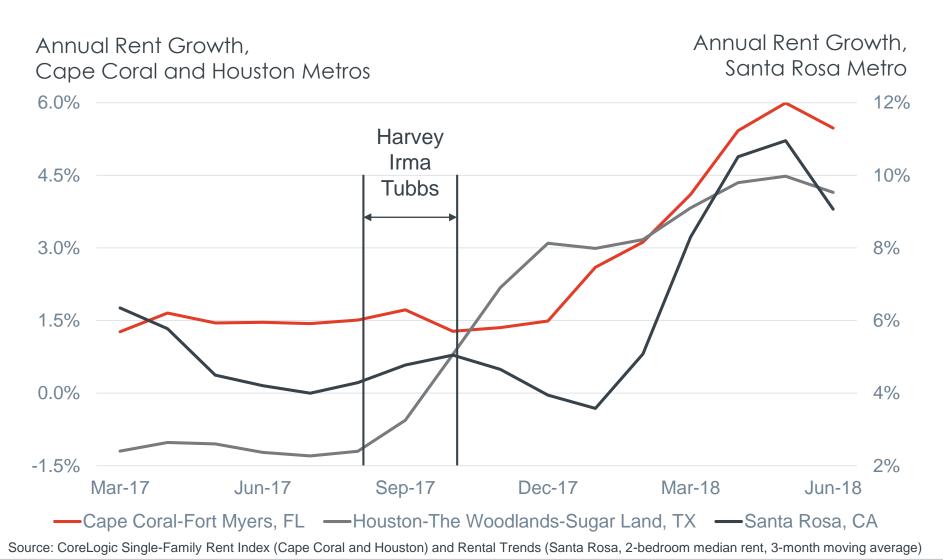
Hurricane Harvey: Delinquency Jumped for All Homes in FEMA-Designated Disaster Areas

Serious Delinquency Rate





Rent Growth Quickens After a Disaster





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Where to find more information

Look for regular updates to our housing forecast, commentary and data at

http://www.corelogic.com/blog

- @CoreLogicEcon
- @DrFrankNothaft

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