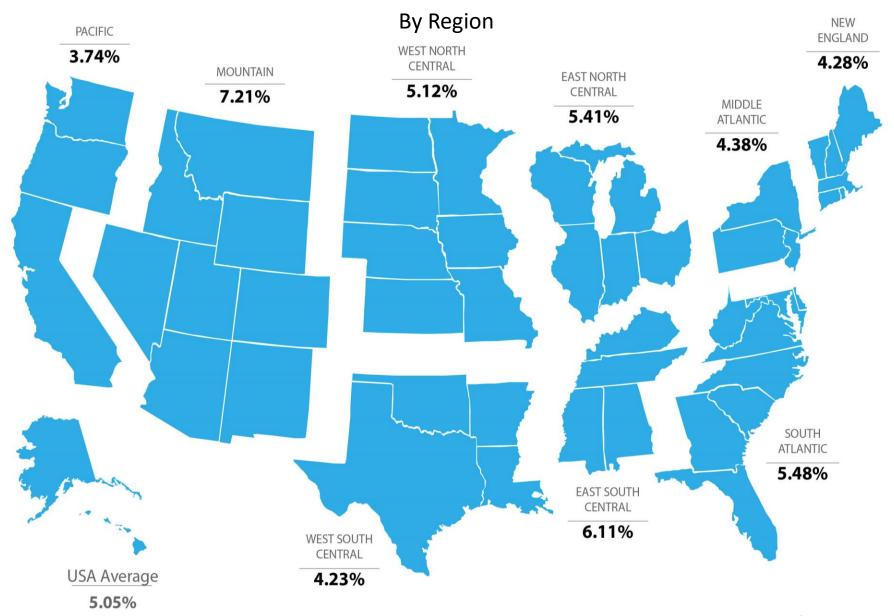
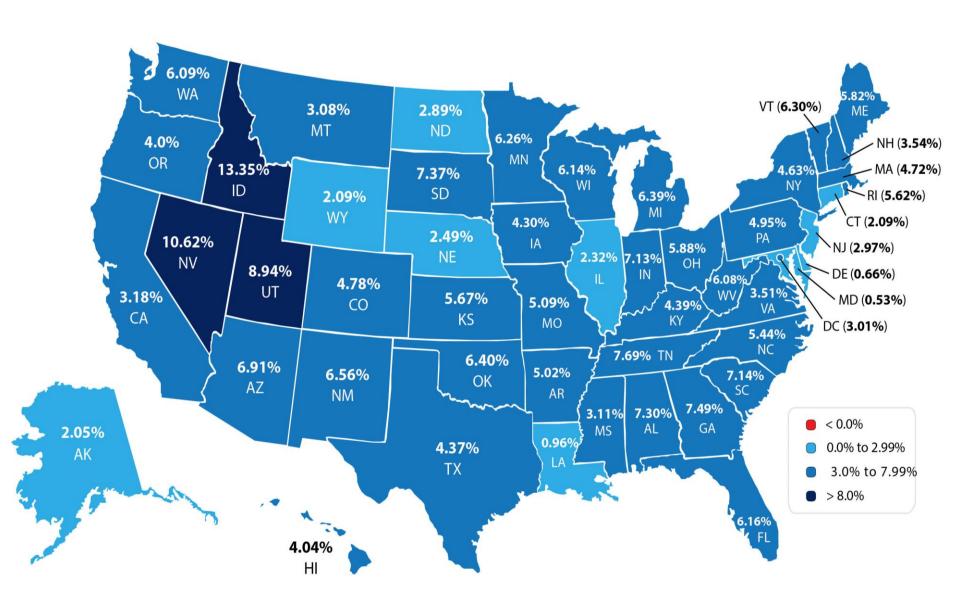
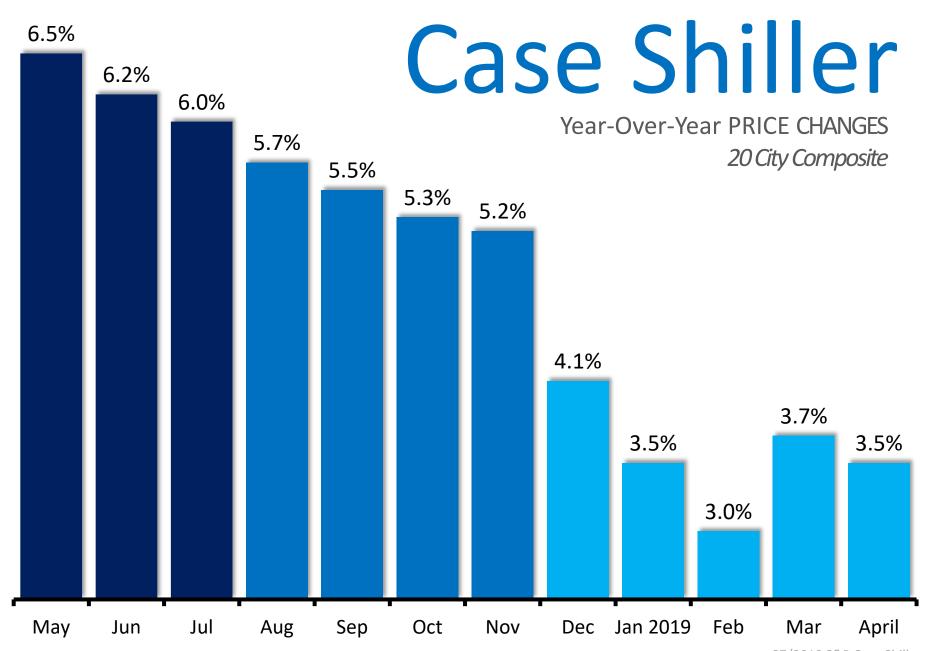


Actual Year-Over-Year % Change in Price

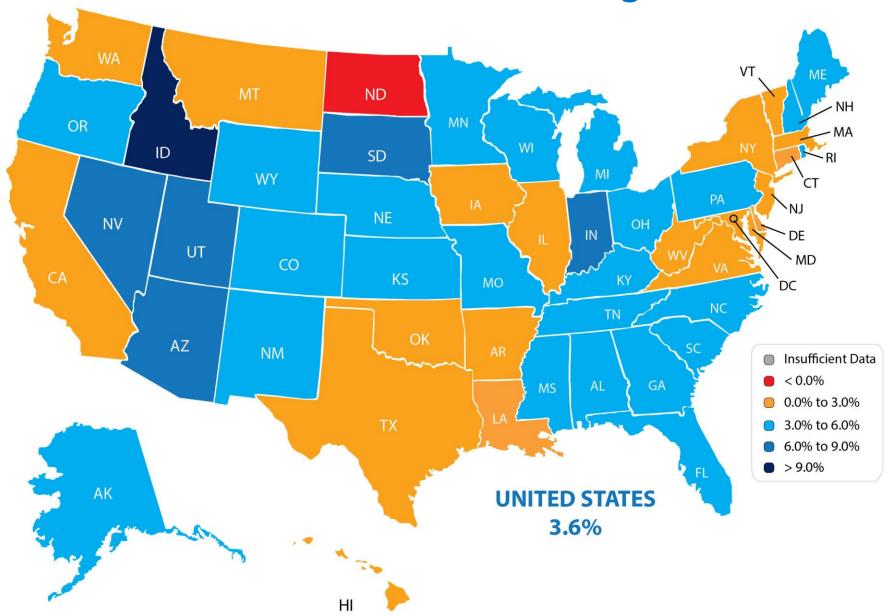


Actual Year-Over-Year % Change in Price

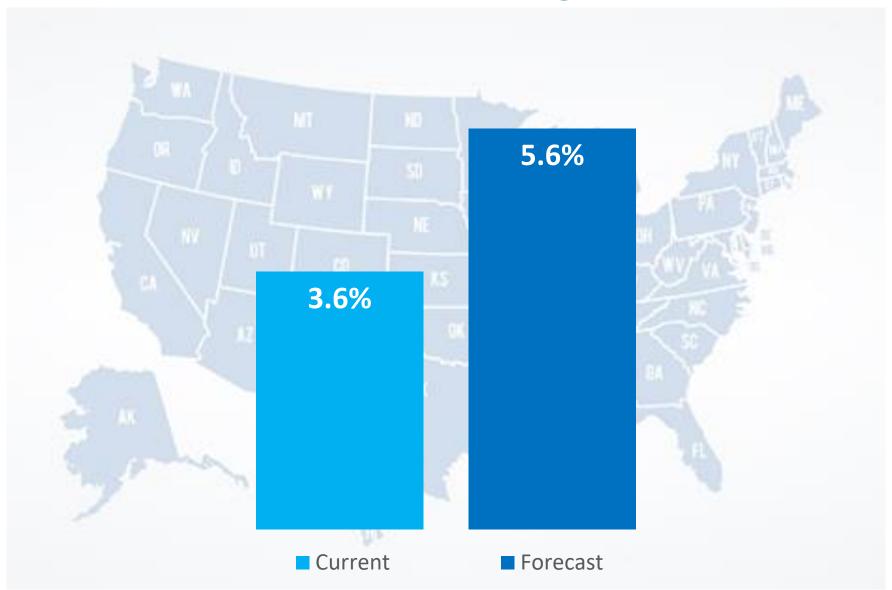


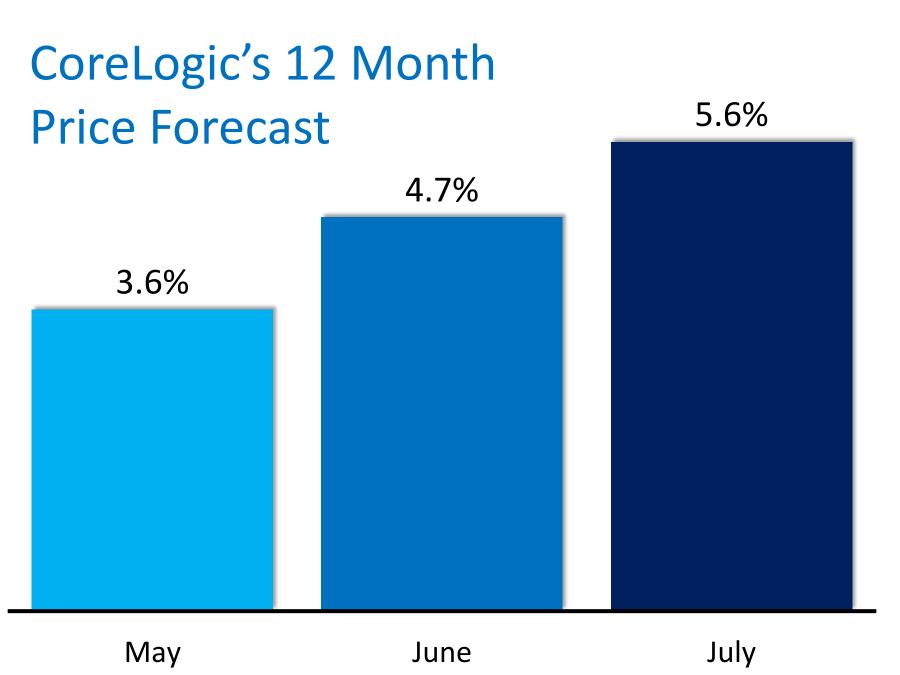


Actual Year-Over-Year % Change in Price

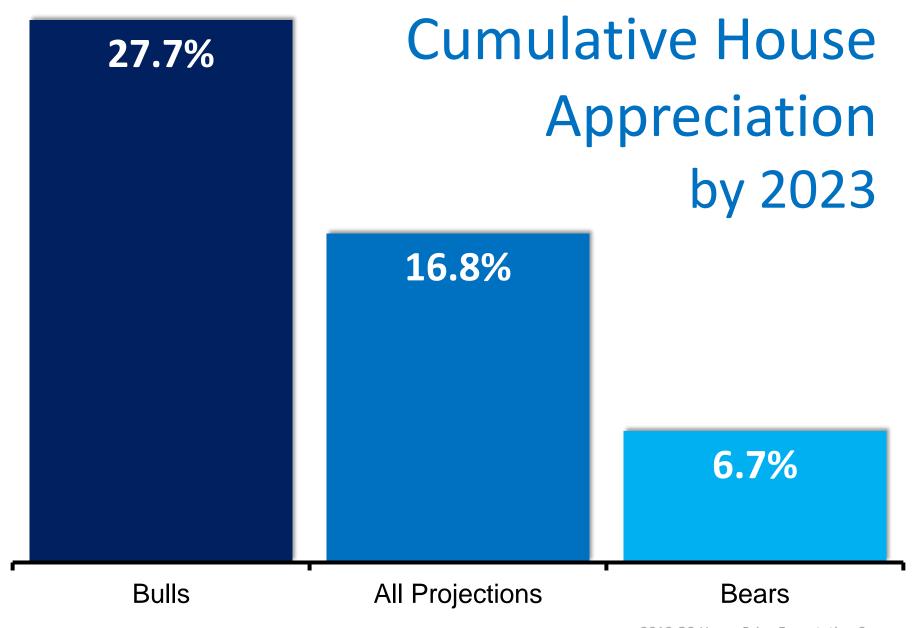


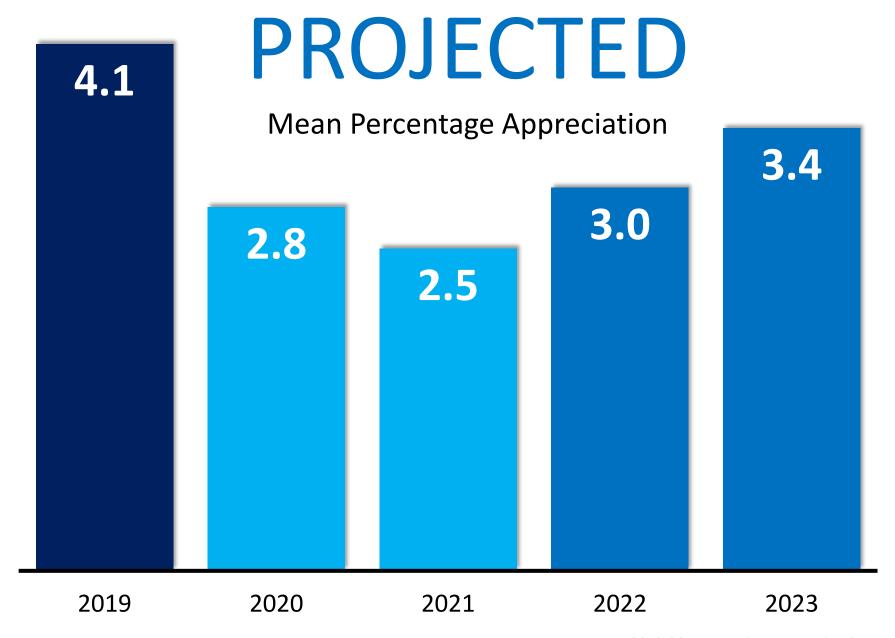
Year-Over-Year % Change in Price







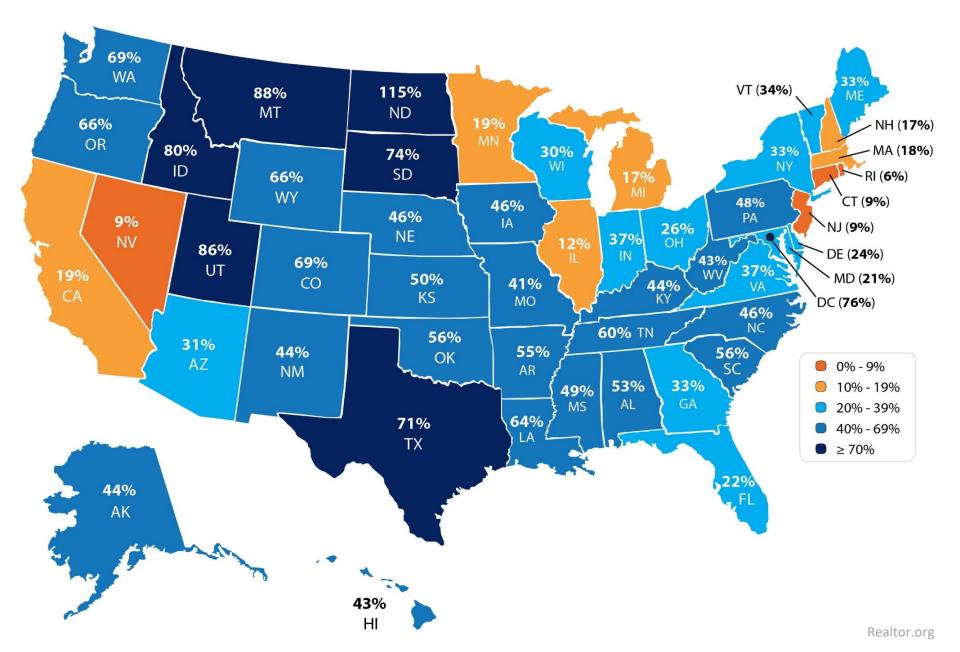




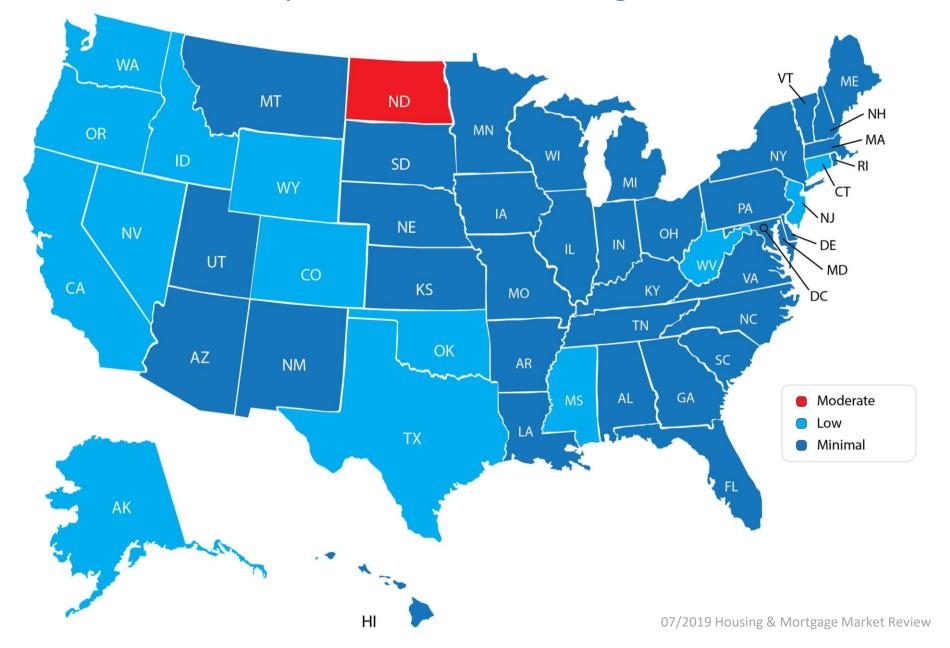
Projected Home Price % Appreciation Going Forward

Source	2019	2020	2021	2022
Home Price Expectation Survey	+4.1	+2.8	+2.5	+3.0
Mortgage Bankers Association	+4.7	+3.5	+2.6	N/A
Zelman & Assoc.	+3.5	+3.2	N/A	N/A
Freddie Mac	+3.6	+2.7	N/A	N/A
National Association of Realtors	+2.8	+3.2	N/A	N/A
Fannie Mae	+4.6	+2.9	N/A	N/A

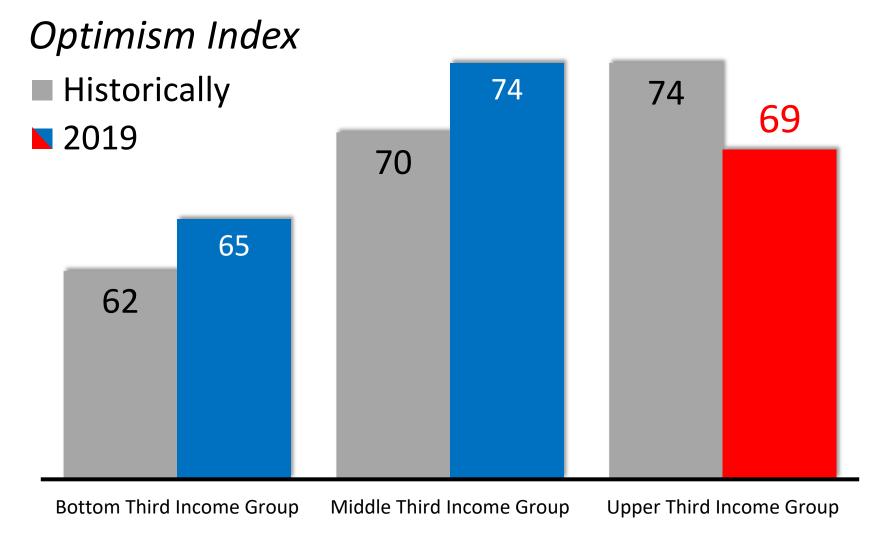
Increase in Home Values 2005-2018



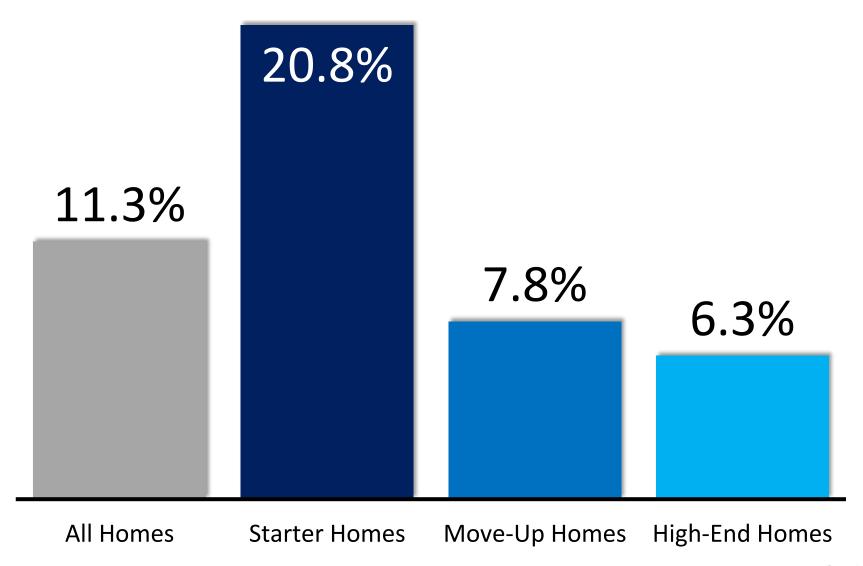
The Probability of Home Prices Being Lower in 2 Years



How Optimistic are Americans regarding FUTURE PRICE APPRECIATION?



Percentage Share of INVESTOR Purchases



"Investor buying activity in the U.S. is at record highs. And our records go back confidently, about 20 years...

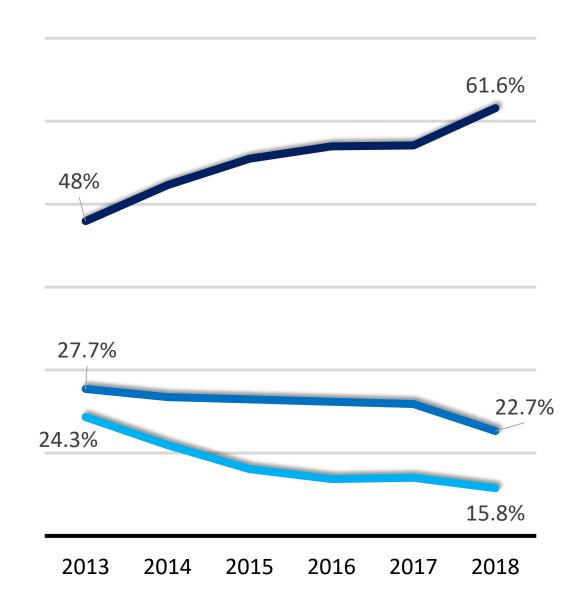
What's going on and why? Well, it turns out, it's not the big institutional guys that are leading the increase in home buying. It's actually the smaller guys. It's those that have bought between one and ten properties over this 20 year period, they're the ones that are really leading the increase in investor home buying."

Ralph McLaughlin

Deputy Chief Economist at CoreLogic



Investor Purchases by Type of Investor



of Purchases over last 20 Years

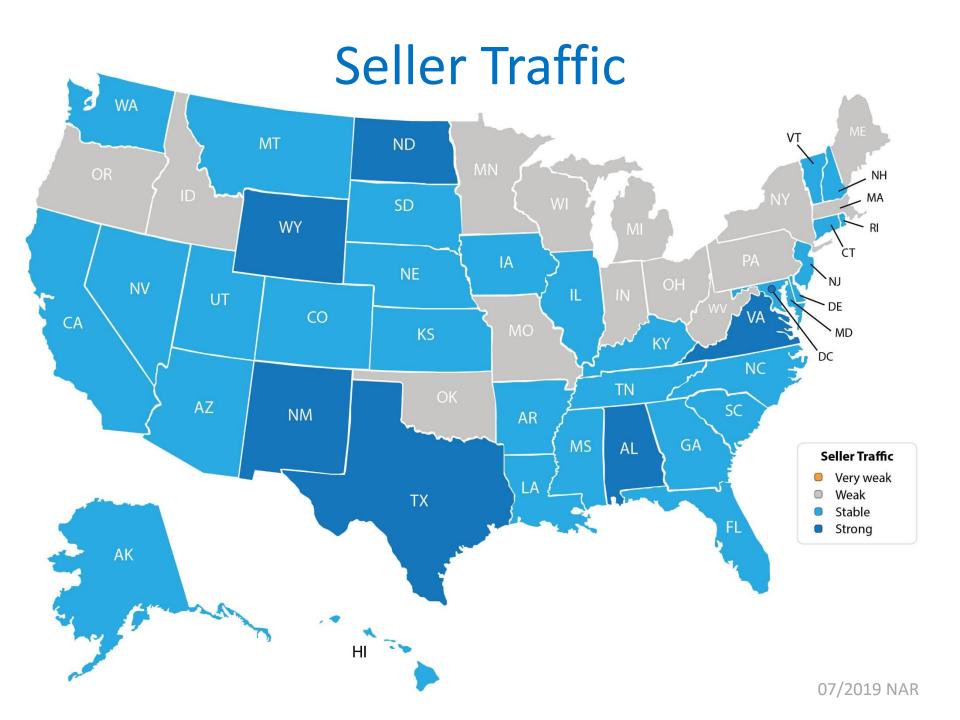
- "Mom & Pop"
 (1-10)
- Professional (11-100)
- Institutional (>100)

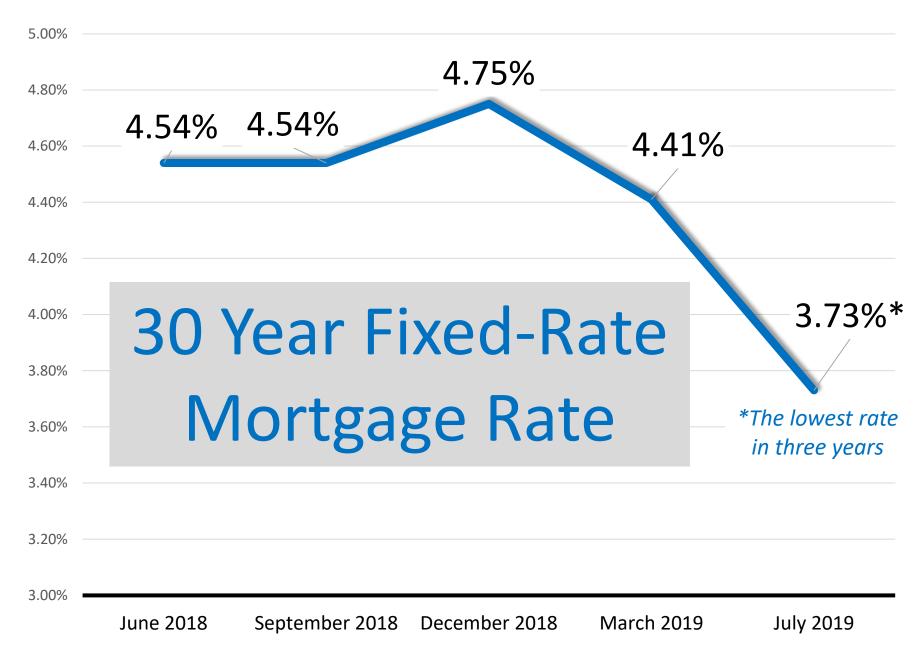
"Title agents & real estate professionals indicate home buyers encouraged by unexpectedly lower mortgage rates in 2019 – a tailwind helping to boost demand and inspire existing homeowners to sell their homes."

Mark Fleming

Chief Economist at First American







Freddie Mac

Resources

Slide	Slide Title	Link
3, 4	FHFA % Change in Price	https://www.fhfa.gov/DataTools/Tools/Pages/House-Price-Index-(HPI).aspx
5	Case Shiller Y-O-Y Price Changes 20 City Composite	http://us.spindices.com/indices/real-estate/sp-case-shiller-20-city-composite-home-price-index
6-8	CoreLogic % Change in Price	https://www.corelogic.com/insights-download/home-price-index.aspx
9-11	Home Price Expectation Survey	https://pulsenomics.com/surveys/#home-price-expectations
12	Projected Home Price % Appreciation Going Forward	www.freddiemac.com; www.fanniemae.com; www.nar.realtor/, www.pulsenomics.com; www.mba.org; www.zelmanassociates.com (subscription required); www.wsj.com (subscription required)
13	Increase in Home Values 2005-2018	https://www.nar.realtor/economists-outlook/property-values-by-state-from-2005-2018
14	The Probability of Home Prices Being Lower in 2 Years	https://mi.archcapgroup.com/hammr
15, 26	Future Price Appreciation	www.zelmanassociates.com (subscription required)
16, 18	% Share of Investors, Type of Investor	https://www.corelogic.com/blog/2019/06/special-report-investor-home-buying.aspx
17	Ralph McLaughlin Quote	At NAREE Conference
19	Mark Fleming Quote	https://blog.firstam.com/economics/the-unexpected-surprise-boosting-demand-and-supply-in- 2019
20	Seller Traffic	https://www.nar.realtor/reports/realtors-confidence-index
21	30 Year Fixed Mortgage Rate	www.freddiemac.com
23	Danielle Hale Quote	https://news.move.com/2019-06-06-Homes-Becoming-More-Affordable-Despite-Rising-Prices
24	Ralph McLaughlin Quote	https://themortgagereports.com/50482/home-price-growth-is-slowing-but-maybe-not-for-long
25	Sam Khater Quote	https://freddiemac.gcs-web.com/node/17016/pdf

"Lower mortgage rates, higher wages and more homes for sale have helped counteract rising home prices, and ultimately, made it so that buyers are able to afford more than last year."

Danielle Hale realtor.com's Chief Economist



"With mortgage rates flat and inventory picking up, we expect more buyers to take advantage of easing housing market headwinds."

Ralph McLaughlin

Deputy Chief Economist at CoreLogic



"The drop in mortgage rates over the last two months is already being felt in the housing market...In the near-term, we expect the housing market to continue to improve from both a sales and price perspective."

Sam Khater

Chief Economist at Freddie Mac



"Key metrics tracking existing home sales demand have been on an upward trajectory so far in 2019...This portends positively for our forecast for existing home closings to increase 1% in 2019, despite a 3% decline through the first five months of the year. Our outlook implies 4% growth for the remaining months of the year, predicated on...more supply than last year, the decline in mortgage rates, moderating home price appreciation and improving affordability."

'Z' Report

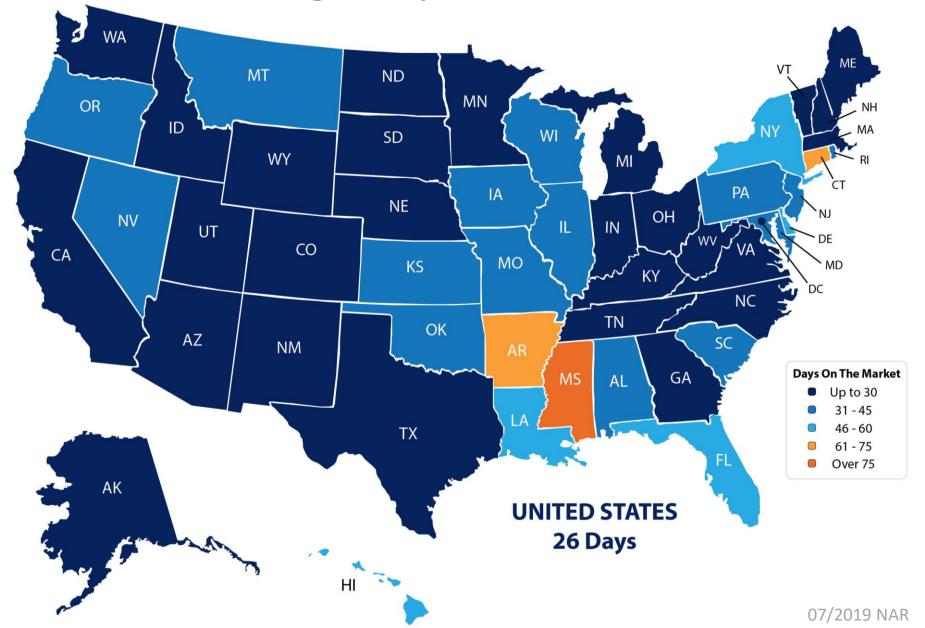


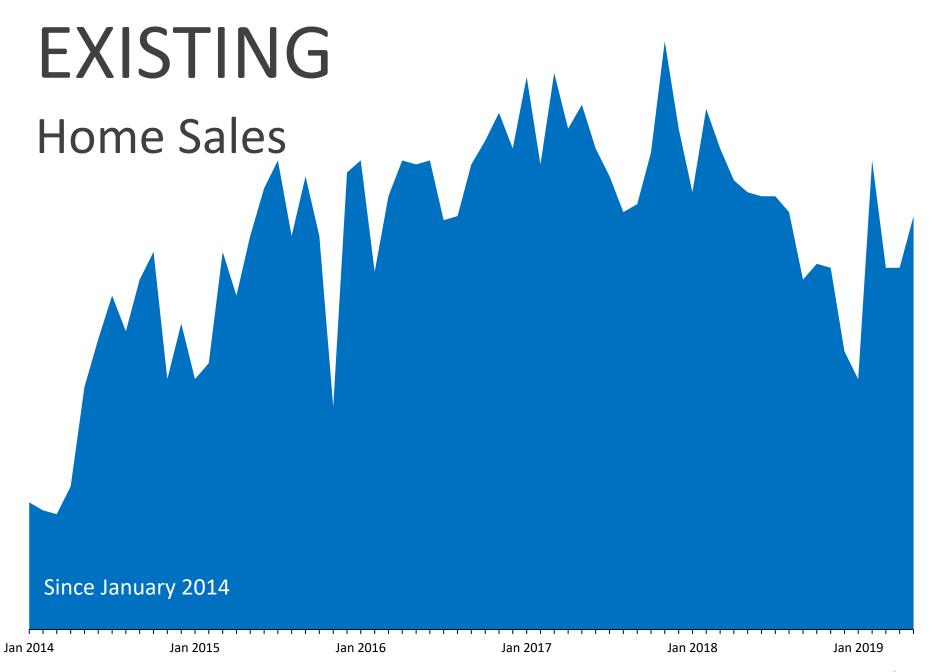
Resources

Slide	Slide Title	Link
30, 51, 64	Days on the Market, Seller Traffic, Buyer Traffic	https://www.nar.realtor/reports/realtors-confidence-index
33 -38, 41, 58, 59	Home Sales (Existing, Pending, New, Total, Distressed Property, Inventory, Supply)	http://www.census.gov/construction/nrs/pdf/newressales.pdf http://www.census.gov/newhomesales http://www.census.gov/construction/nrs/pdf/newressales.pdf
31 -33, 44, 52, 53 - 57	Existing Home Sales, YOY Sales, % Change in Sales, Inventory, YOY Inventory, Supply	https://www.nar.realtor/topics/existing-home-sales
39, 40	Pending Home Sales, YOY Sales,	https://www.nar.realtor/research-and-statistics/housing-statistics/pending-home-sales
43, 44	Existing Home Prices, % Change by Price Range	https://www.nar.realtor/topics/existing-home-sales
45 - 47	Case Shiller Home Price Index	http://us.spindices.com/indices/real-estate/sp-case-shiller-20-city-composite-home-price-index
48	CoreLogic Home Price Insights	http://www.corelogic.com/about-us/researchtrends/corelogic-home-price-insights.aspx
49	Appraiser Home Value Opinions	https://www.quickenloans.com/press-room/2019/05/14/average-appraisal-values-make-largest-monthly-jump-in-more-than-four-years-according-to-quicken-loans-study/
61-63	Foot Traffic	http://nar.realtor/infographics/foot-traffic
66, 67, 69	Mortgage Rates	http://www.freddiemac.com/pmms http://www.freddiemac.com/research/forecast/20190515_steady_growth.page https://www.nar.realtor/sites/default/files/documents/forecast-05-2019-us-economic-outlook-04-30-2019.pdf
72, 73	Mortgage Credit Availability Index	https://www.mba.org/news-research-and-resources/newsroom
74-78	FICO Scores, Days to Close, Average DTI	http://www.elliemae.com/resources/origination-insight-reports



Average Days on the Market





NAR 7/2019





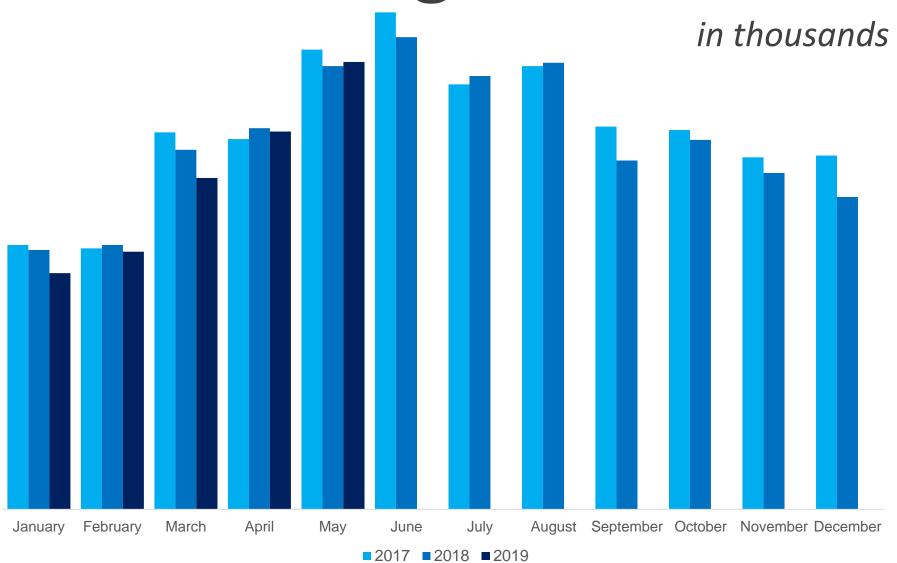
-3.9%

EXISTING
Home Sales

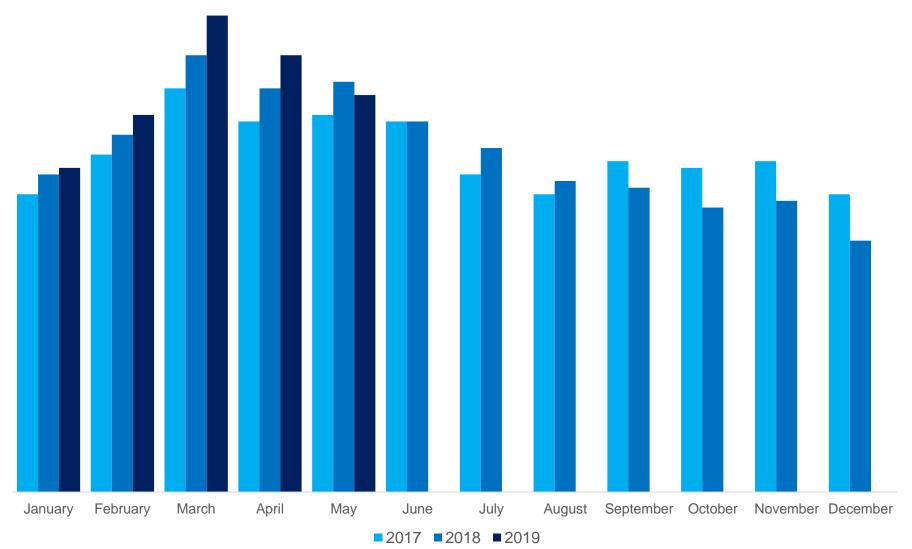
Y-O-Y by Region

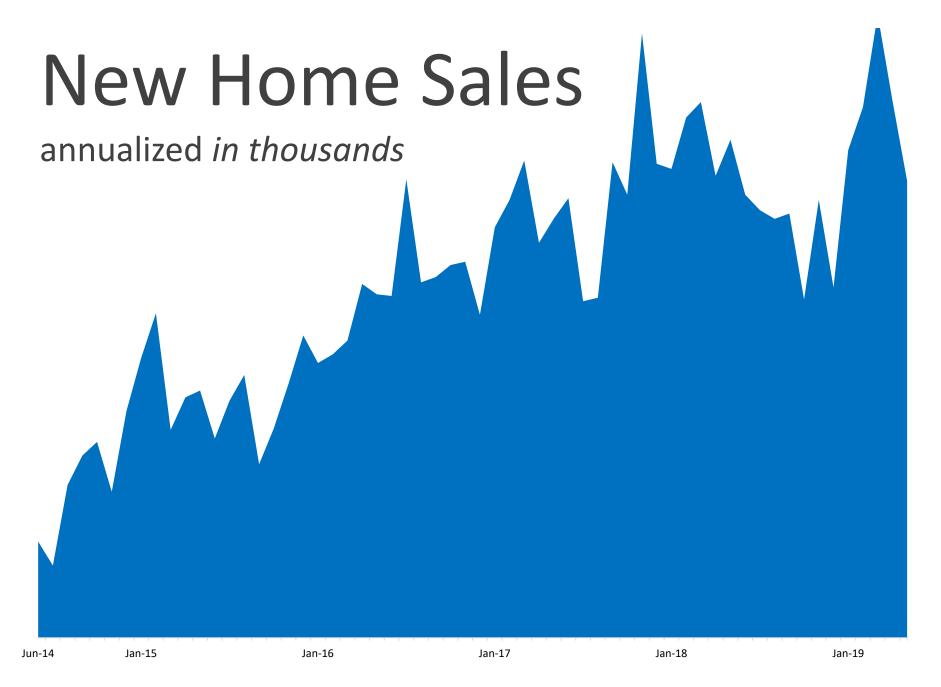
-3.4%

Existing Home Sales



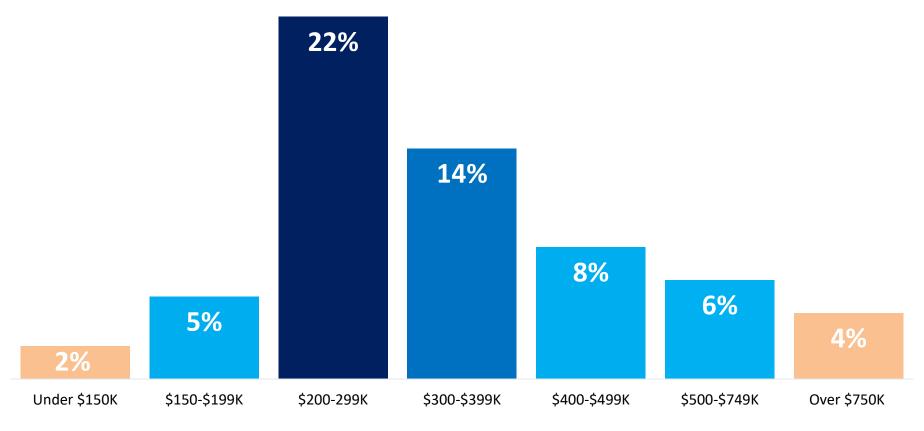
New Home Sales in thousands





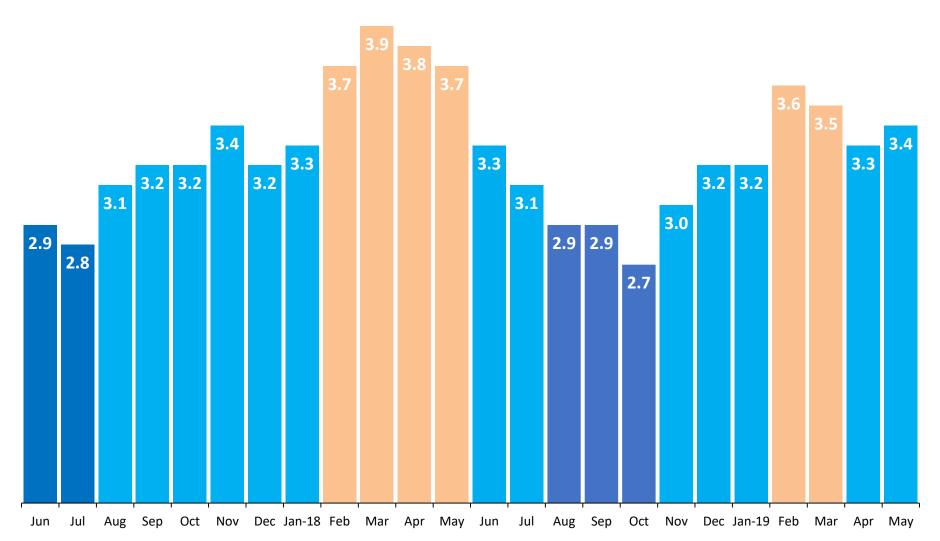
New Home Sales

% of sales by price range

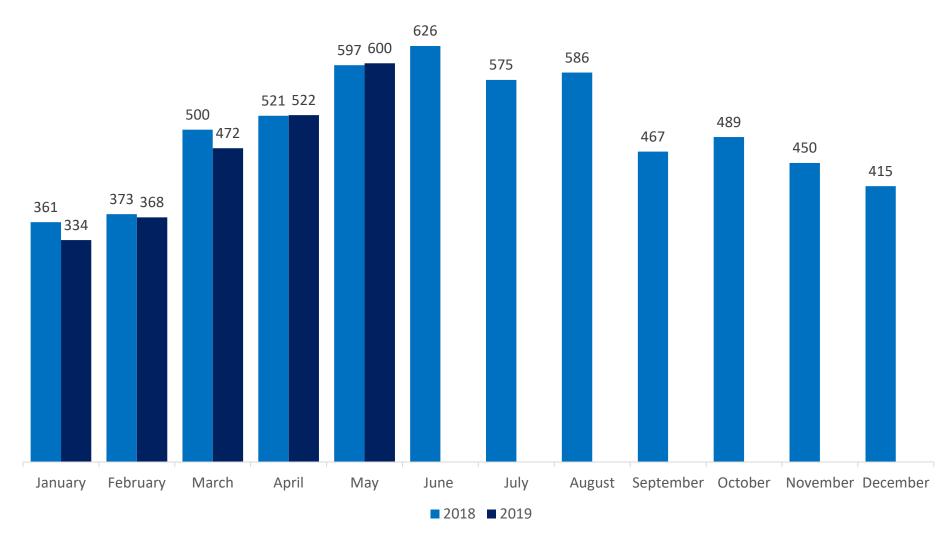


New Homes Selling Fast

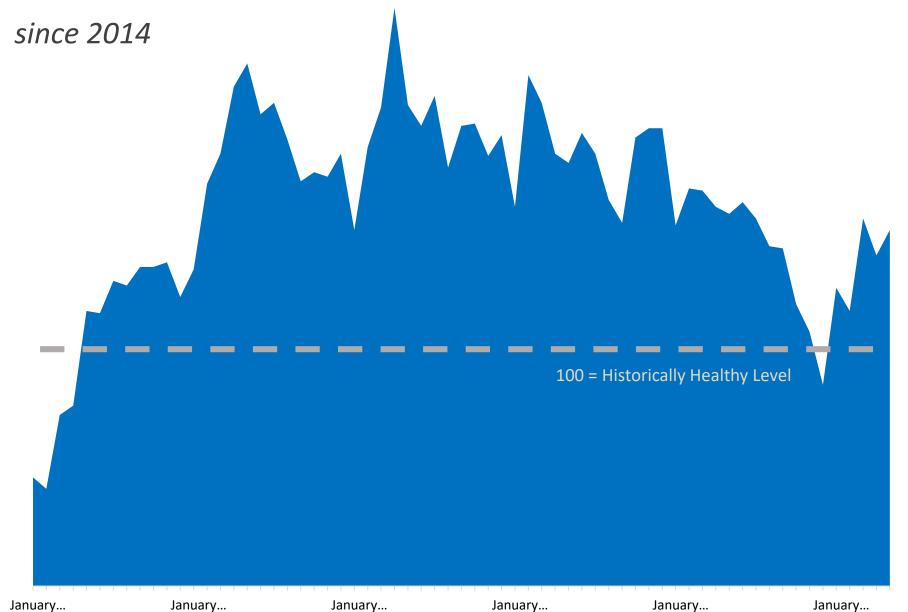
(median months from completion to sold)



Total Home Sales in thousands

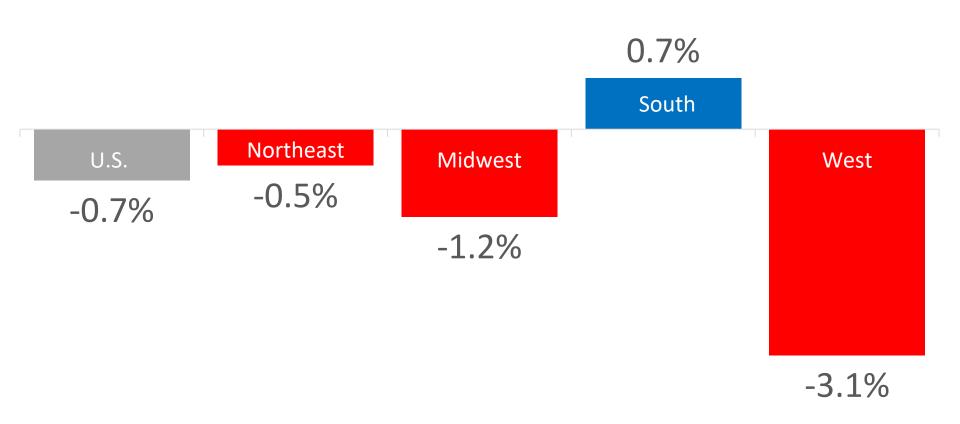


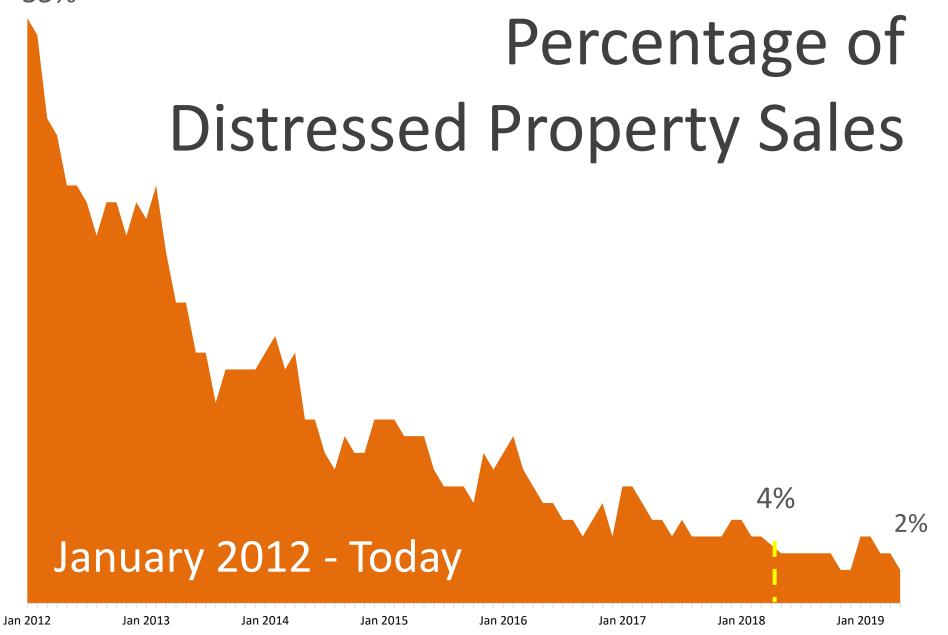
PENDING Home Sales



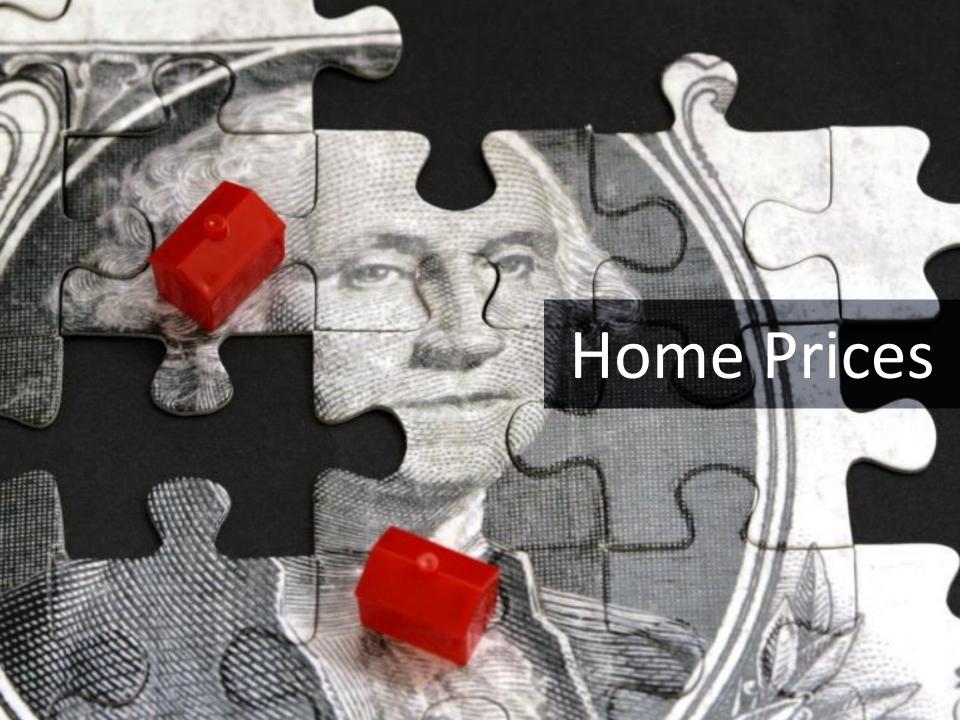
Pending Home Sales

Year-Over-Year By Region



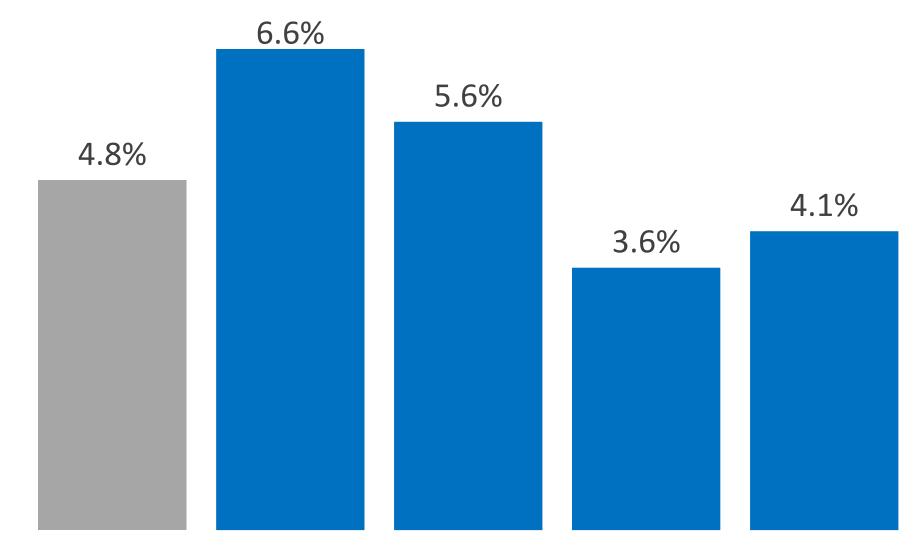


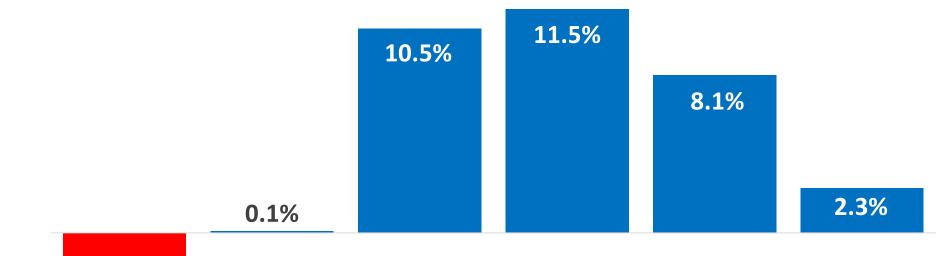
NAR 7/2019



EXISTING Home Prices

Y-O-Y by Region





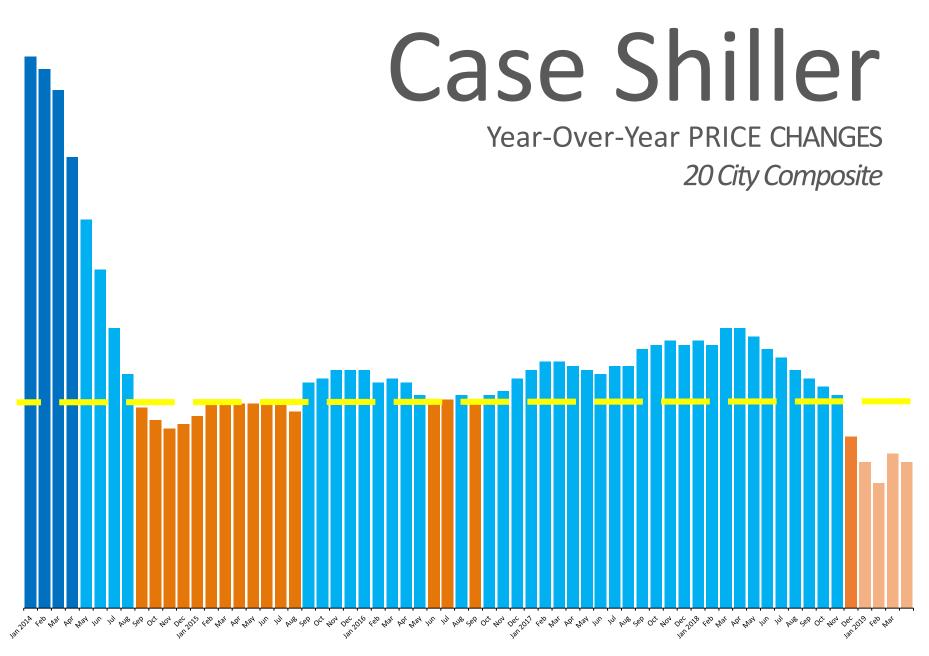
% Change in Sales

from last year by Price Range

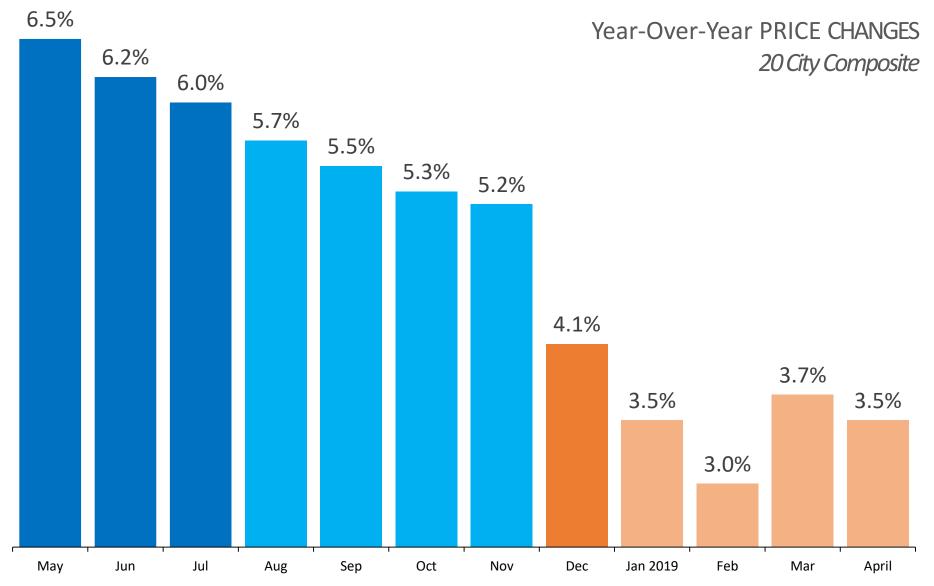
\$0-100K	\$100-250K	\$250-500K	\$500-750K	\$750K-1M	\$1M+
-12.4%	0.1%	10.5%	11.5%	8.1%	2.3%

-12.4%

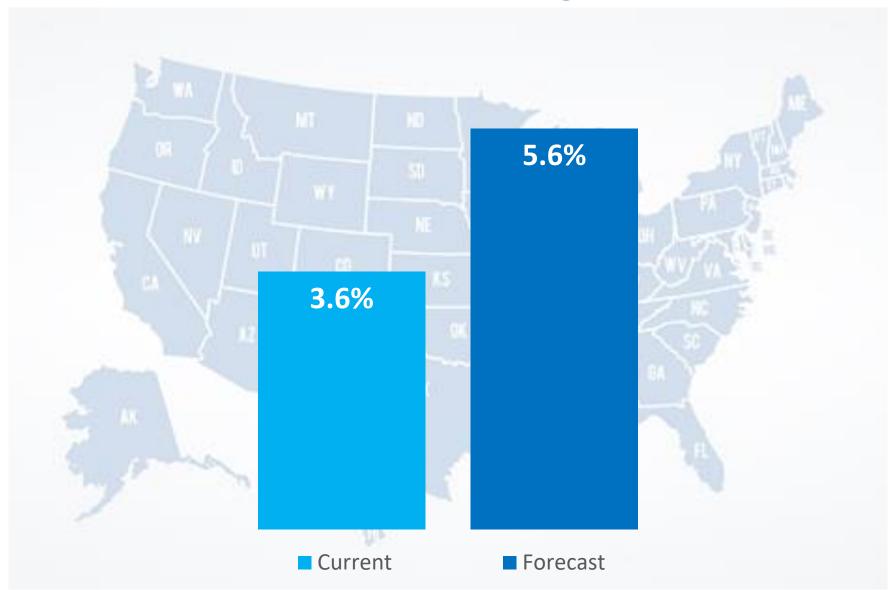




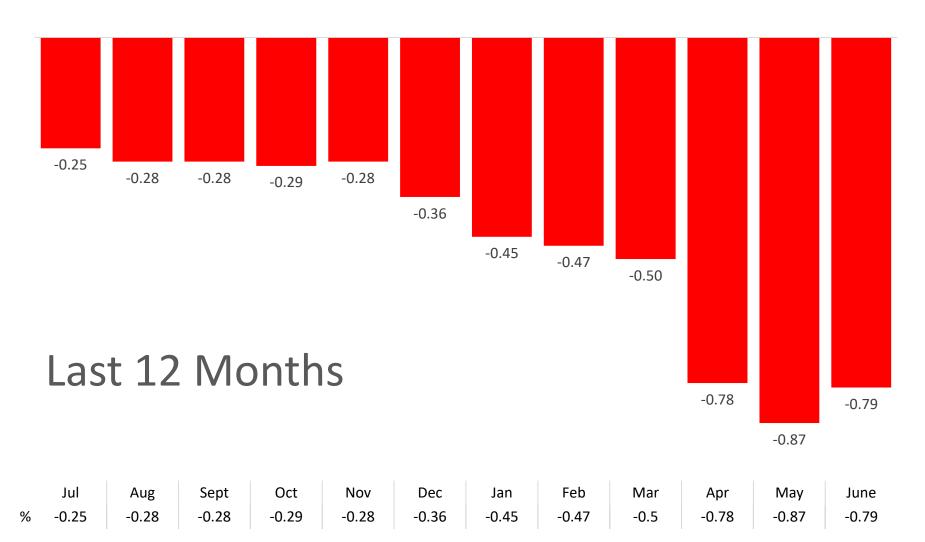
Case Shiller



Year-Over-Year % Change in Price



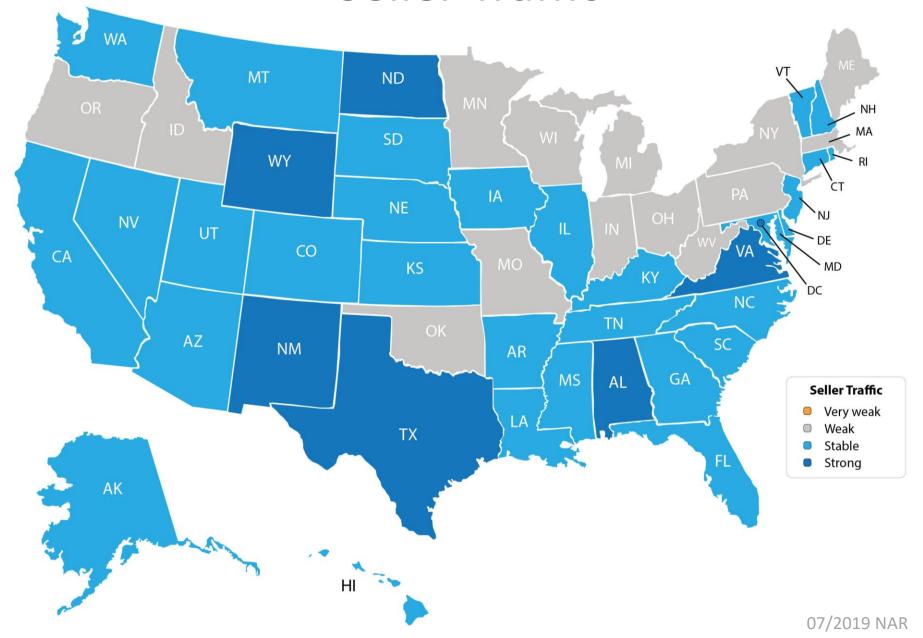
Appraiser Home Value Opinions Compared to Homeowner Estimates



HOUSING INVENTORY



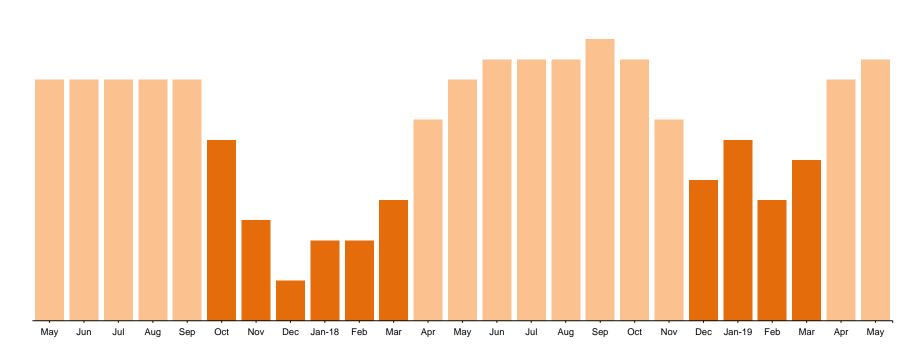
Seller Traffic





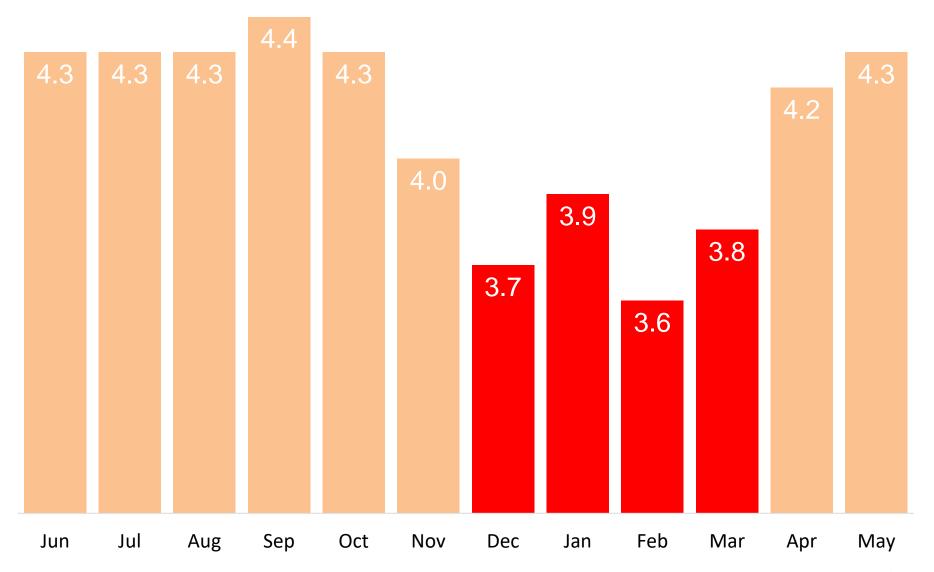
Months Inventory of HOMES FOR SALE

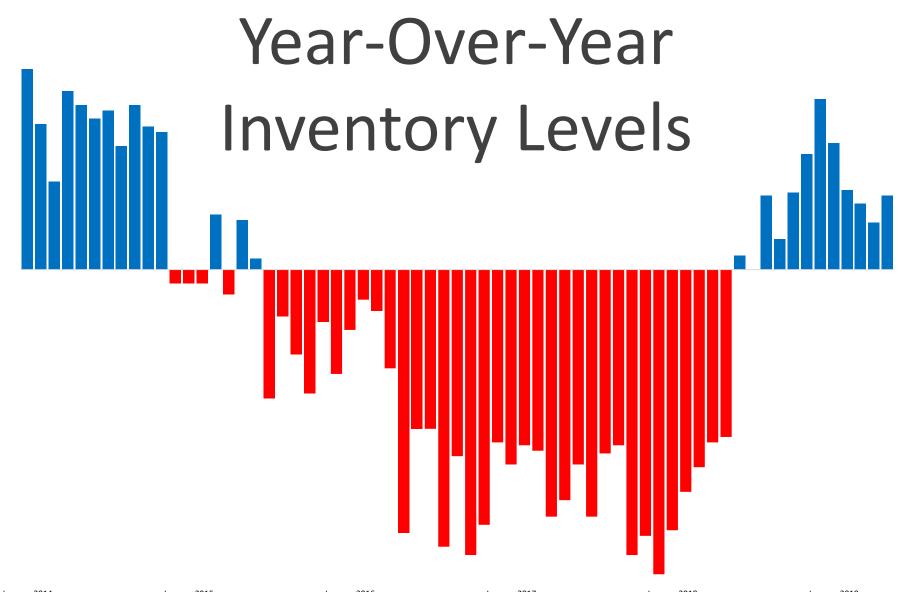
last 2 years



Months Inventory of HOMES FOR SALE

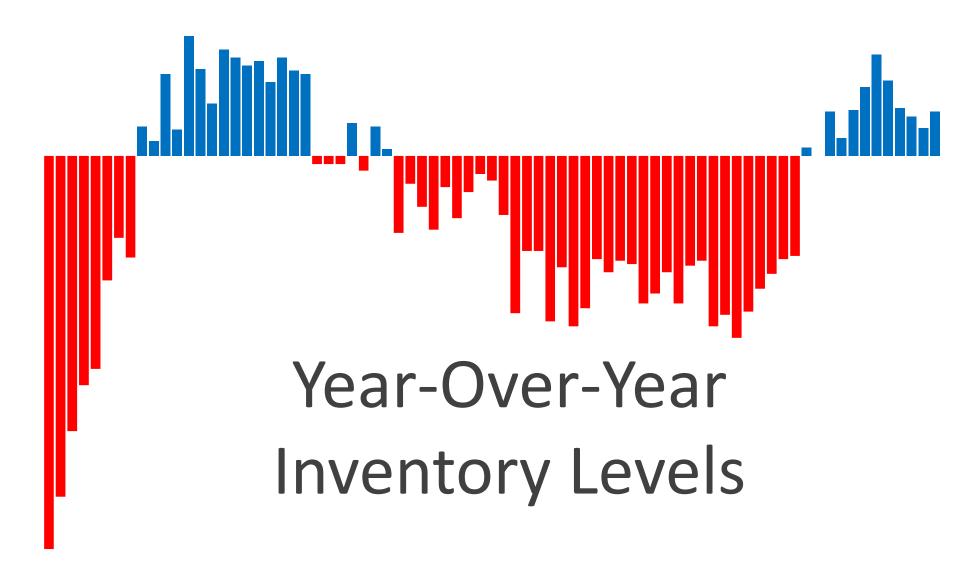
Last 12 Months





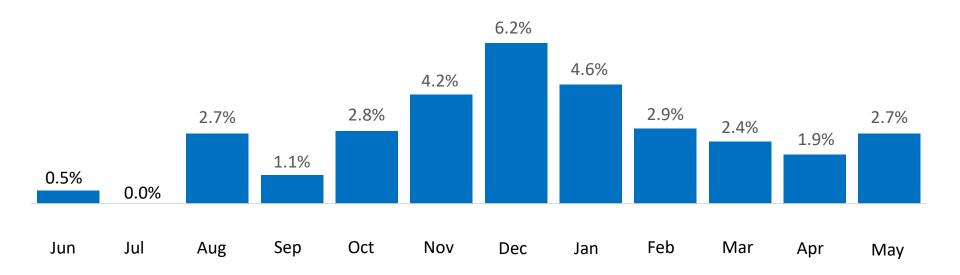
January 2014 January 2015 January 2016 January 2017 January 2018 January 2019

% 7.3 5.3 3.2 6.5 6.0 5.5 5.8 4.5 6.0 5.2 5.0 -0. -0. -0. 2.0 -0. 1.8 0.4 -4. -1. -3. -4. -1. -3. -2. -1. -1. -3. -9. -5. -5. -10 -6. -10 -9. -6. -7. -6. -6. -9. -8. -7. -9. -6. -6. -10 -9. -11 -9. -8. -7. -6. -6. 0.5 0.0 2.7 1.1 2.8 4.2 6.2 4.6 2.9 2.4 1.7 2.7



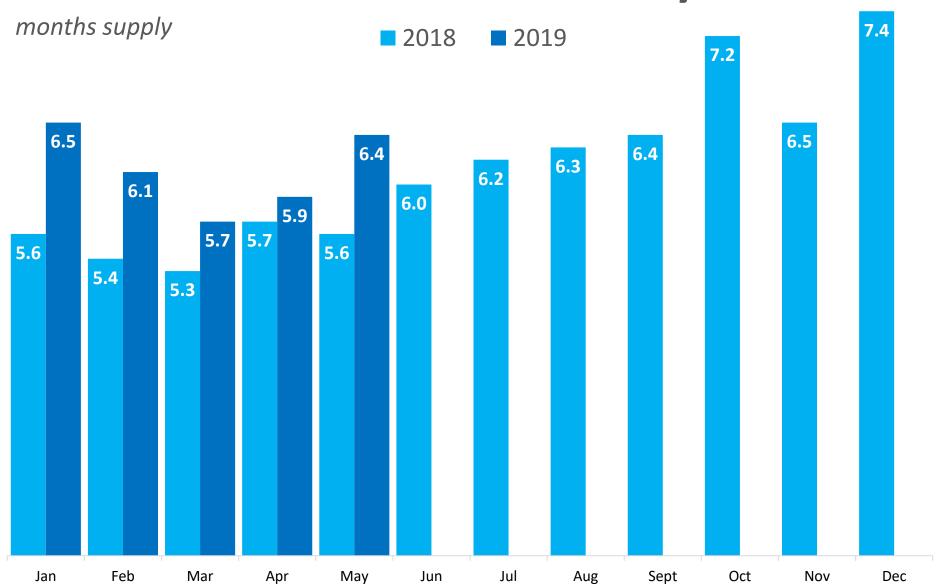
HOUSING SUPPLY

Year-Over-Year

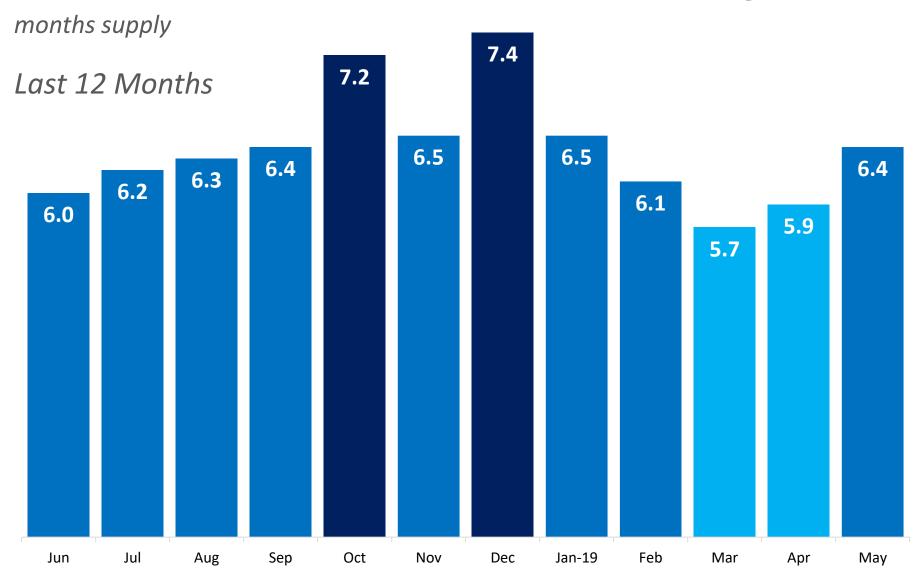


Last 12 Months

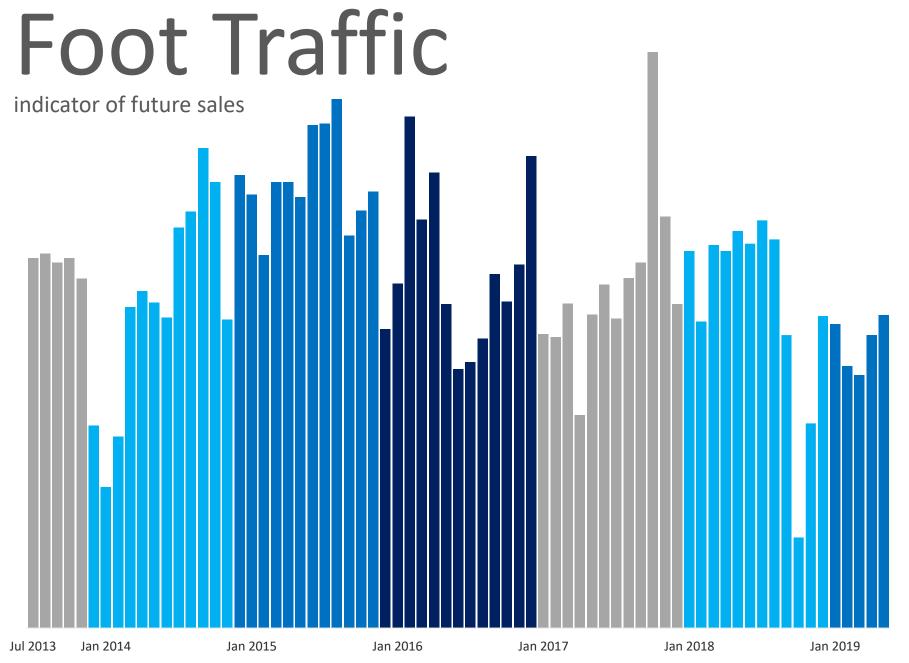
New Home Inventory



New Home Inventory

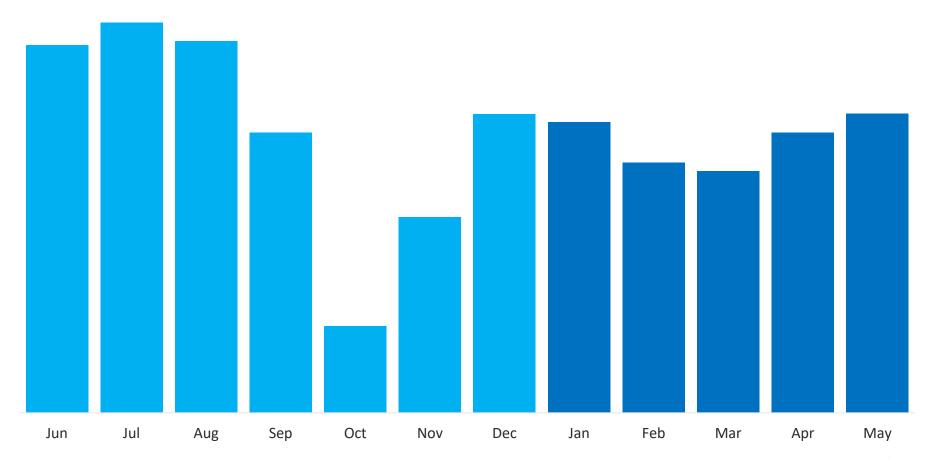






Foot Traffic Last 12 Months

indicator of future sales

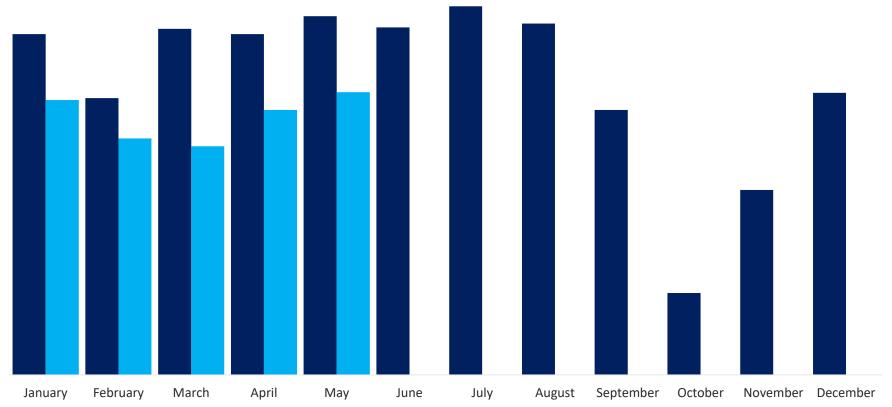


Foot Traffic

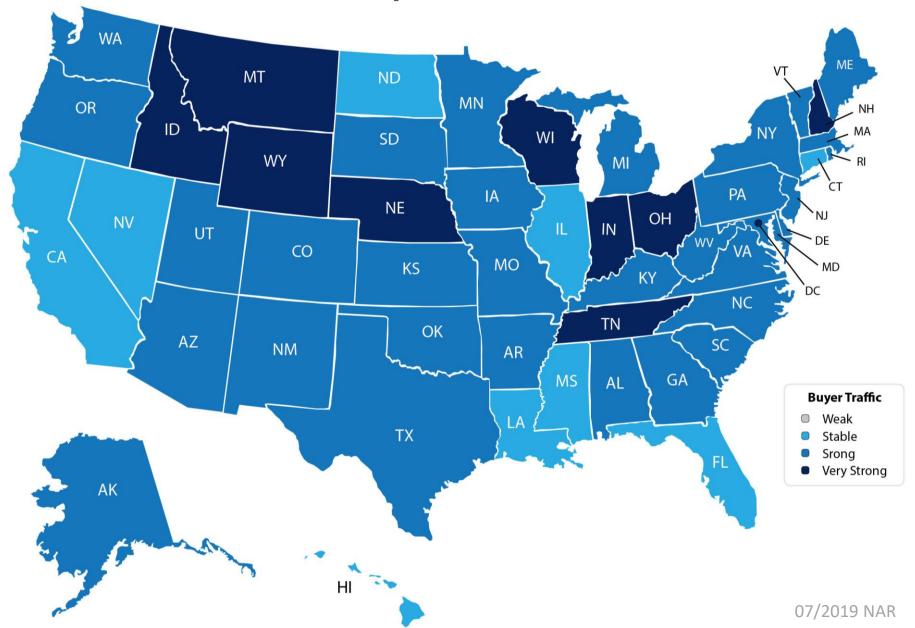
indicator of future sales

2018

2019

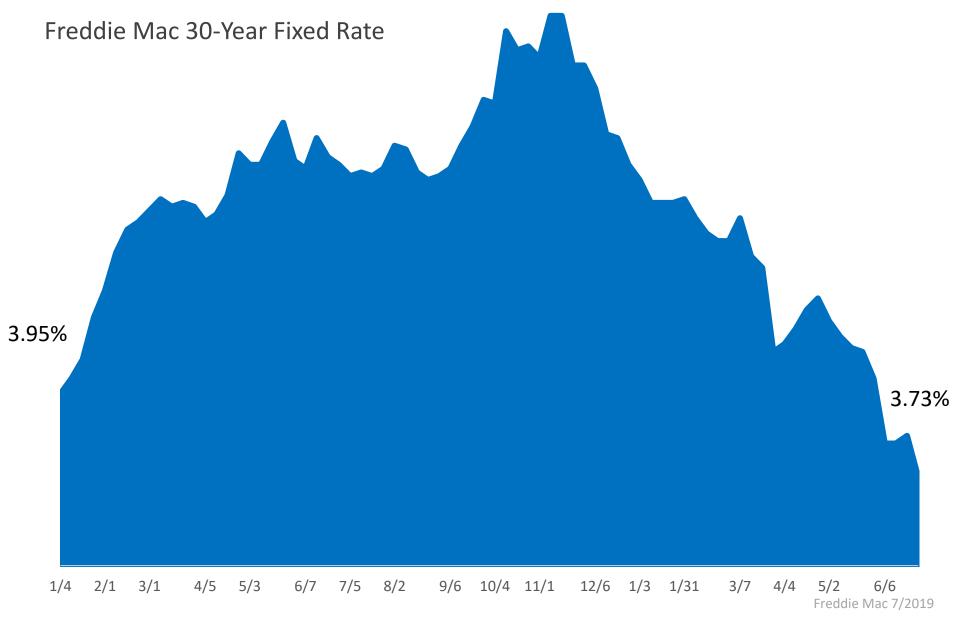


Buyer Traffic





Mortgage Rates



30-Year Fixed Rate Mortgages from Freddie Mac 3.97 1/7/16 2/4 3/3 3/3 4/7 6/2 6/2 11/3 11/3 11/3 11/1 11/1 11/1 11/1 11/1 11/1 11/1 11/1 11/1 11/1 11/3 11/3 11/3 11/3 11/4/20.... 2/1 3/14 11/3 11/3 11/4/20.... 11/4/20.... 11/4/20.... 2/1 3/14 11/3 11/3 11/3 11/3 11/4/20.... 11/4/20.... 11/4/20.... 2/1 3/14 11/3

Mortgage Rate Projections

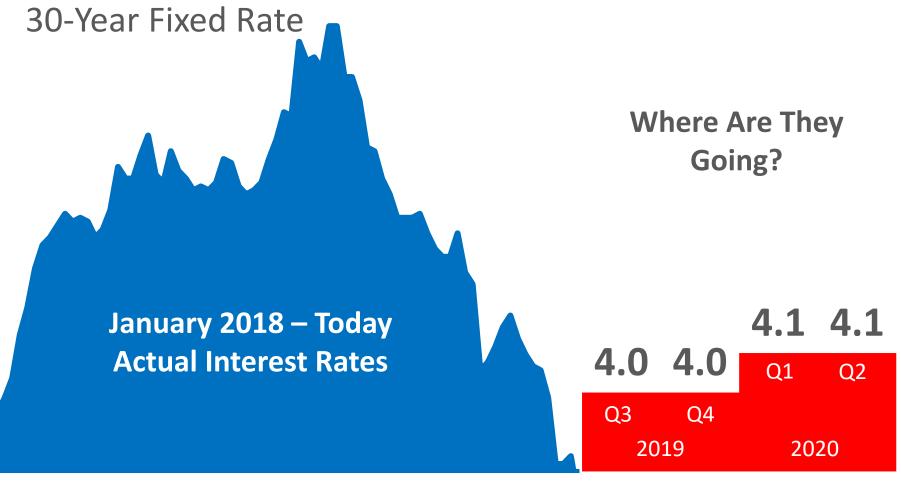
Quarter	Freddie Mac	Fannie Mae	MBA	NAR	Average of All Four		
2019 3Q	4.0	3.9	3.9	3.9	3.92%		
2019 4Q	4.0	3.9	4.0	3.9	3.95%		
2020 1Q	4.1	3.8	4.0	4.0	3.97%		
2020 2Q	4.1	3.8	4.0	4.1	4.0%		

Mortgage Rates Freddie Mac - Actual 30-Year Fixed Rate - Projected 2017 2018 2020 2016 2019

	2016	2016	2016	2016	2017	2017	2017	2017	2018	2018	2018	2018	2019	2019	2019	2019	2020	2020	2020	2020
	Q1	Q2	Q3	Q4																
Rate	3.7	3.6	3.5	3.8	4.2	4.0	3.9	3.9	4.3	4.5	4.6	4.8	4.4	4	4	4	4.1	4.1	4.2	4.3

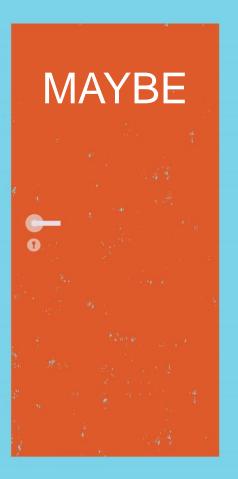
Mortgage Rates

Freddie Mac



Mortgage Credit Availability

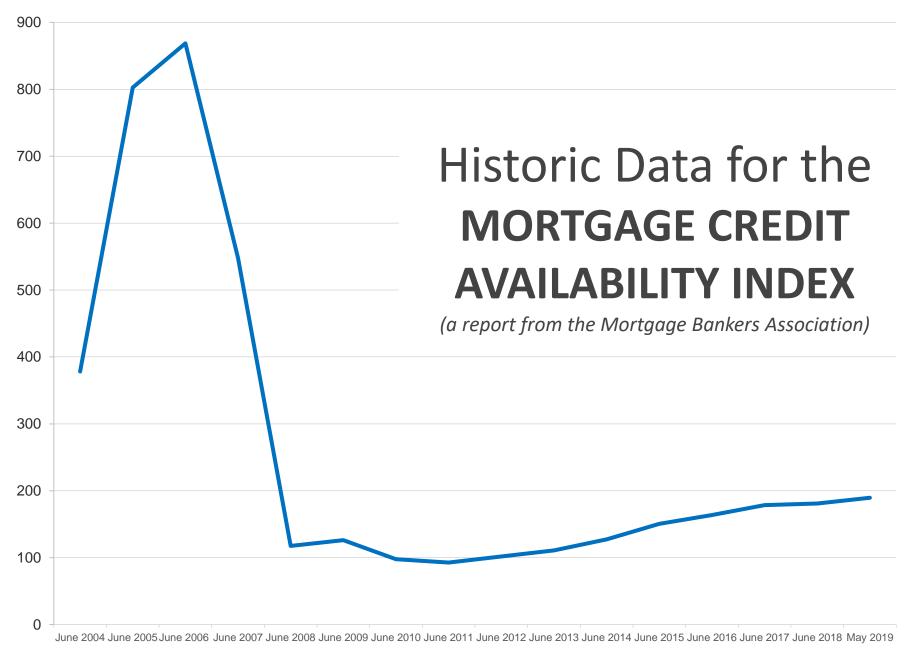


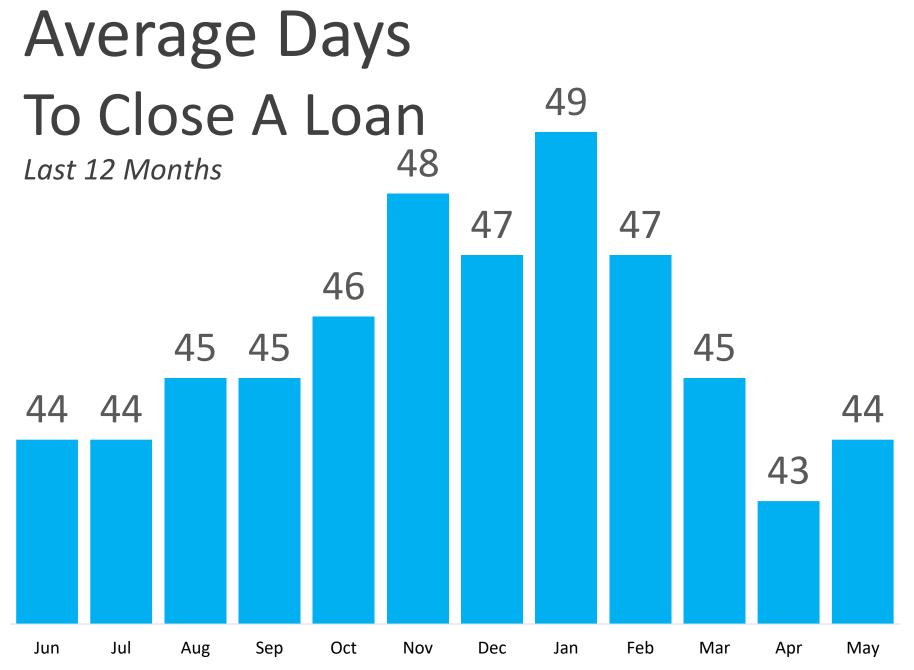


Mortgage Credit Availability



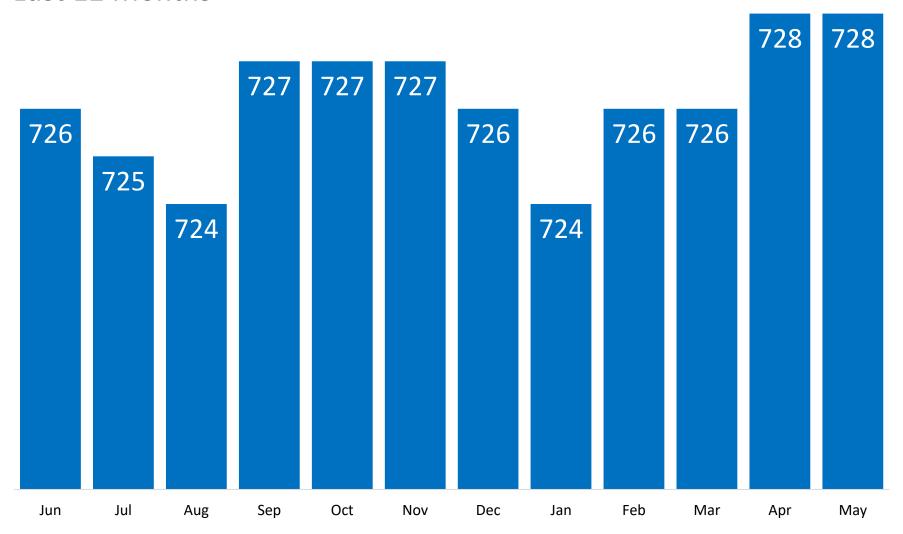
Apr 2013 Jan 2014 Jan 2015 Jan 2016 Jan 2017 Jan 2018 Jan 2019

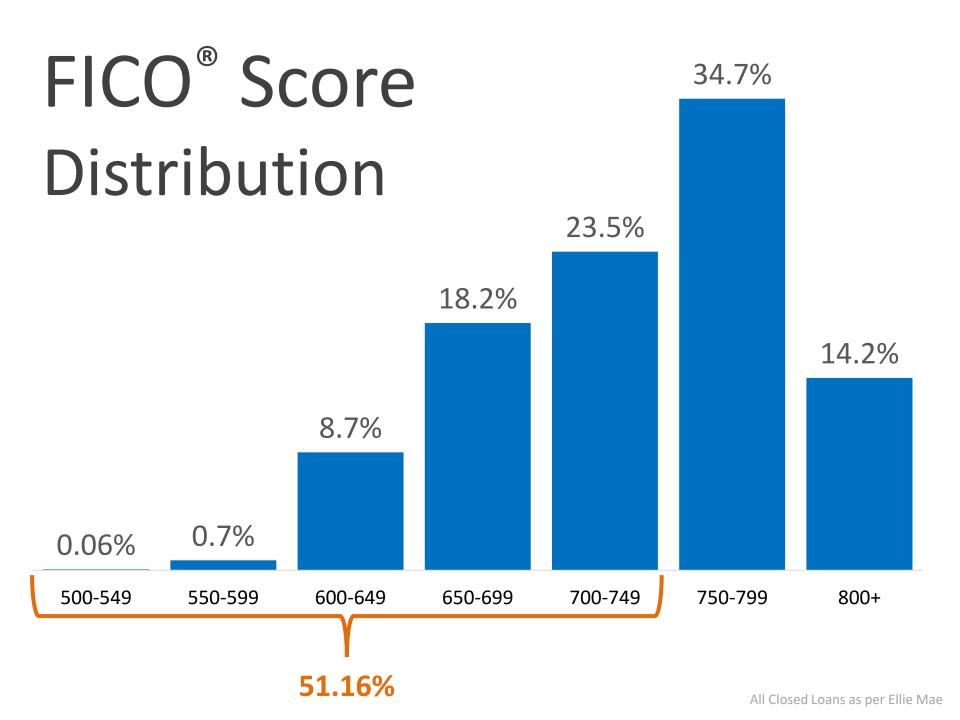




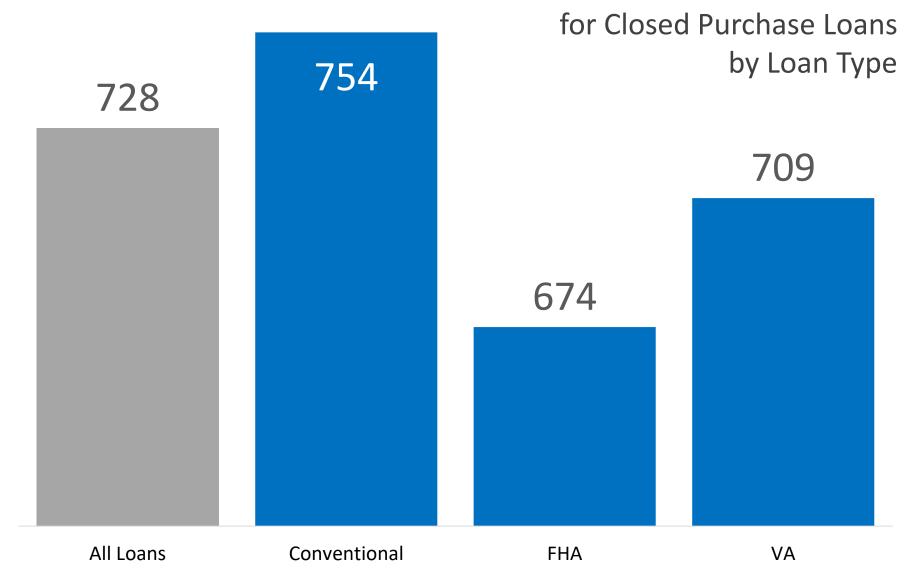
FICO® Score Requirements

Last 12 Months





Average FICO® Score



Average Back-End DTI

for Closed Purchase Loans by Loan Type

