

Reef Report

Real Estate & Economic Forecast
United States

March 2025

Executive Summary

Macro Context

- Inflation declines, but fed sees resurgence
- Unemployment rate ticks upward
- Labor market remains soft

Housing Market

- Mortgage rates remain elevated
- Potential for affordability relief on the horizon
- On the U.S. housing shortage
- New home inventory continues to rise

Supply & Construction

- Housing pipeline signal contraction and caution
- Construction spending flat amid inventory surge
- Supply increases even as transactions increase
- Openings remain low and employment steady

Market Risks & Outlook

- FVV trends down, affordability remains an issue
- CRE charge-offs climb higher



The background features a solid blue gradient with several sets of white, wavy, concentric lines. These lines are arranged in a way that creates a sense of depth and movement, with some lines curving upwards and others downwards, resembling stylized waves or a topographical map.

Macro Context

Inflation Declines, But Fed Sees Resurgence

Macro Context

Headline Inflation

- Month-over-month, headline inflation saw a decline to 2.81%.
- Last year, headline inflation was measured at 3.17%.

Although the Consumer Price Index (CPI) is not the preferred metric for the Fed, this data gives into how the Personal Consumption Expenditures (PCE) index will move. However, we want to highlight what the Fed is projecting, as this month's data is fairly tame.



Source: U.S. Bureau of Labor Statistics

Core Inflation

- Month-over-month, core inflation saw a decline to 3.14%.
- Last year, core inflation was measured at 3.77%.

In the Fed's released Summary of Economic Projections (SEP) they are forecasting higher inflation for longer, citing tariff policy as a significant driver of cost increases moving forward, hampering progress on inflation.

Stagflation would be the worst outcome, as previous Fed chairs have prioritized saving the U.S. dollar over the U.S. economy during these periods.



Source: U.S. Bureau of Labor Statistics



Unemployment Rate Ticks Upward

Macro Context

Unemployment Rate

- The unemployment rate rose to 4.1%.
- Year-over-year, unemployment has only risen 5.1%.
- However, the U-6 unemployment rate rose from 7.5% in January to 8.0% in February.

U-3 is the official unemployment rate that measures the percentage of the labor force actively seeking work, while U-6 is a broader measure that includes discouraged workers, part-time workers seeking full-time employment, and marginally attached workers.

Watching not only the U-3 unemployment rate but also the broader U-6 unemployment rate gives us a better understanding of where we stand in the job market.

As people become unemployed, they may not be captured in the U-3 figure if they take on a part-time job or a full-time job that pays less than their previous employment. One key factor to watch is the anticipated wave of layoffs in the public sector, which will result in a large number of workers searching for jobs in a contracting market. It will be interesting to see how that dynamic unfolds.



Source: U.S. Bureau of Labor Statistics



Source: U.S. Bureau of Labor Statistics



Labor Market Remains Soft

Macro Context

Job Openings

- Month-over-month, job openings rose to 7.74 million.
- However, year-over-year, job openings have fallen 8.6%.
- Job openings have seen negative year-over-year growth since August 2022.

Job openings have returned to pre-COVID levels, which, as we can see, is probably not a bad thing. The key factor to examine further is where these openings are and what types of jobs they represent. We anticipate that job openings will continue to decline as companies restrict growth hiring and focus primarily on replacing attrition.

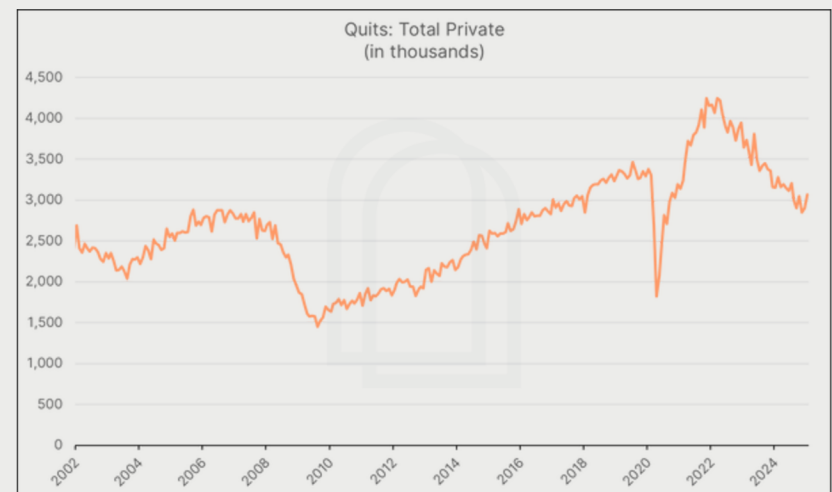


Source: U.S. Bureau of Labor Statistics

Quits

- Month-over-month, quits rose to 3.1 million.
- However, year-over-year, quits have declined by 2.7%.
- Similar to job openings, quits have seen negative year-over-year growth since August 2022.

The Fed also noted in their SEP that they are observing very low hiring and quit rates, signaling that workers are finding it harder to secure new jobs and employers are facing significant economic uncertainty.



Source: U.S. Bureau of Labor Statistics





Housing Market

Mortgage Rates Remain Elevated

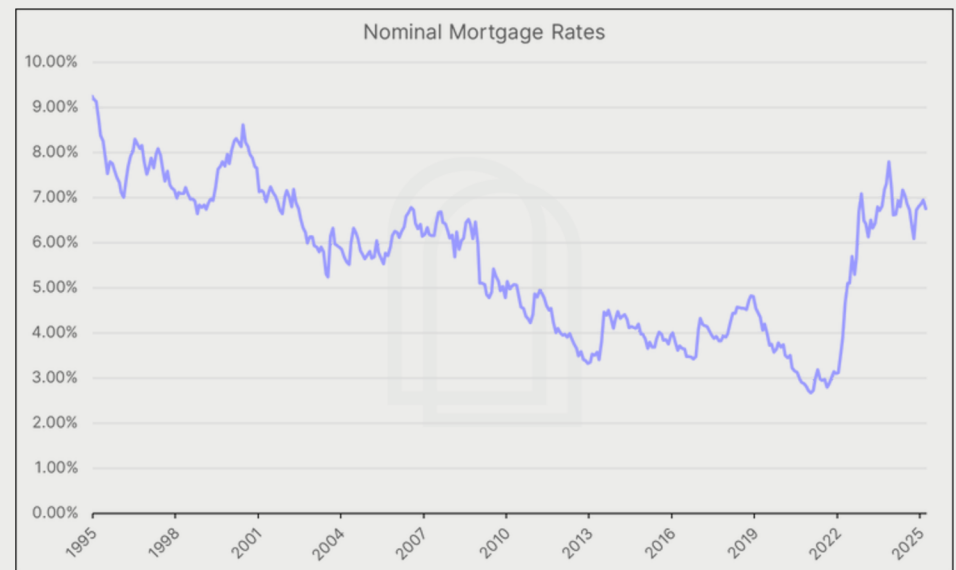
Housing Market

Mortgage Rates

- As of March 20, 2025, mortgage rates are at 6.67%.
- Mortgage rates have slightly declined from their 7.04% peak in January.

Mortgage rates have remained resilient despite the Fed's cuts, primarily due to the 10-year yield staying largely unchanged and uncertainty driving wider spreads.

Given the combination of U.S. debt, government spending, and economic uncertainty, it is likely that mortgage rates will remain steady this year.



Source: Freddie Mac



Potential for Affordability Relief on the Horizon

Housing Market

Mortgage Payments to Household Income Ratio

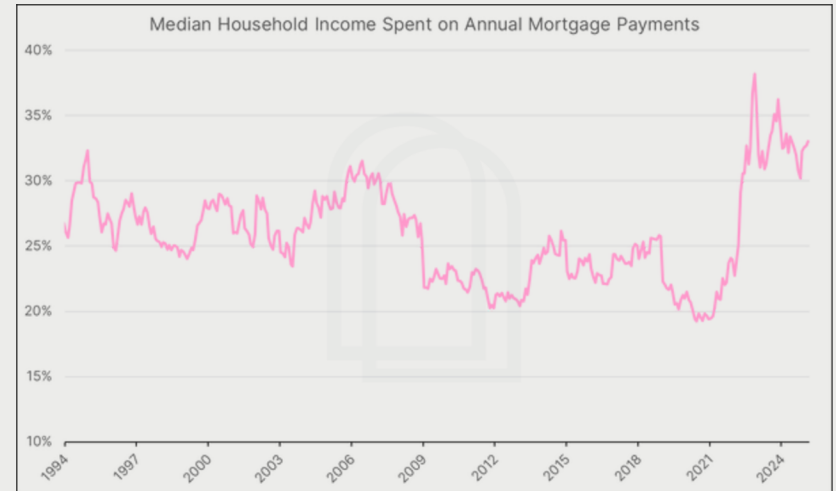
- Month-over-month, this metric rose to 33.0%.
- Year-over-year, we saw a slight 1.5% increase.
- However, the five-year change shows a 59.5% increase.

Over the past couple of years, this metric has remained elevated relative to previous levels. Housing affordability continues to be an issue, keeping demand subdued. Additionally, although existing supply has been rising, it remains limited, with many homeowners feeling stuck. With mortgage rates unlikely to decline meaningfully throughout 2025, improvements in affordability will need to come from either wage growth or a decline in home values.

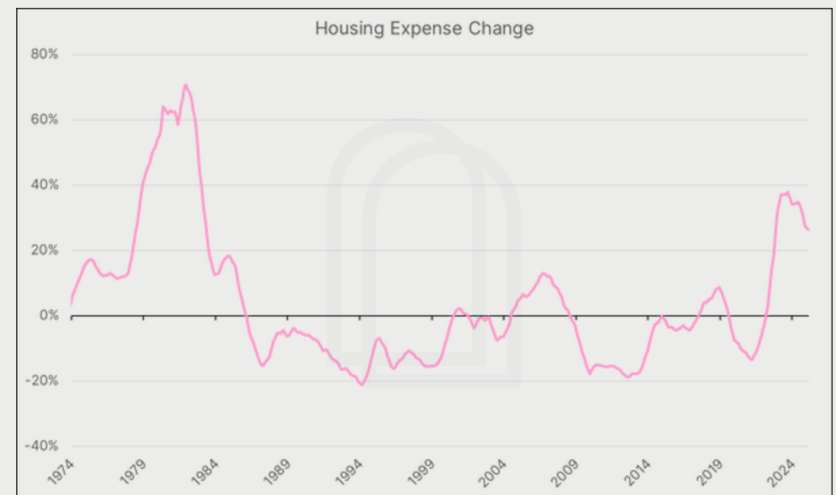
Housing Expense Change

- Month-over-month, this metric declined to 26.4%.
- This recent decline can largely be attributed to the time-decay function of the calculation.

Note that as more homes come on the market, there will be increasing opportunities for real price discovery—something that has been masked by low liquidity and volume in the market. Take Florida, for example. With a large amount of listing activity, we now have a chance for genuine price discovery, which will hopefully lead to some normalization.



Source: Reef Insights



Source: Reef Insights



On The U.S. Housing Shortage

Housing Market

Population & Housing Inventory

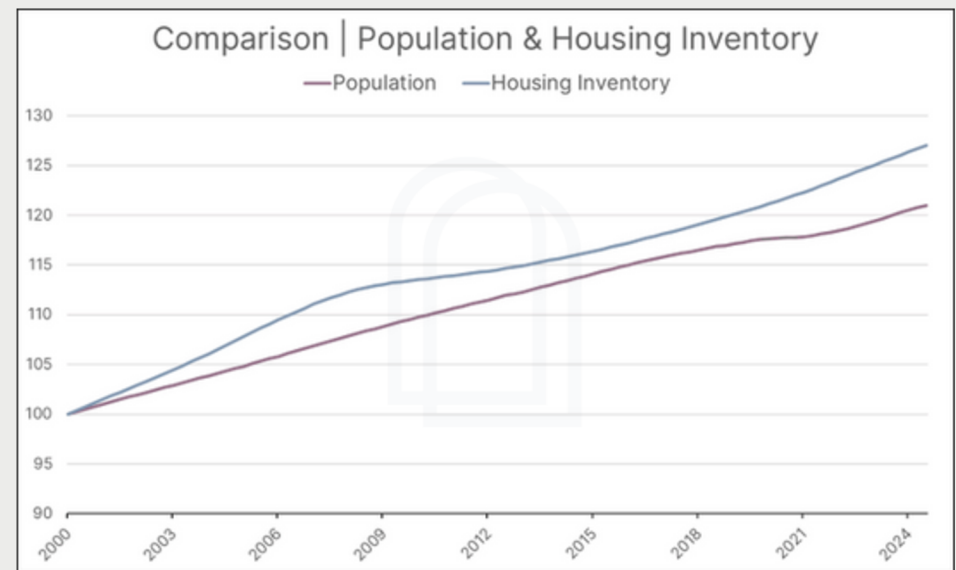
The commonly held belief is that the U.S. suffers from a housing shortage, but that belief is likely misguided.

In the chart below, we analyzed the growth for population and total housing inventory since 2000, and we found that total housing inventory grew by 27%, which is markedly higher than the 21% growth in population.

New research from the University of Kansas finds that most of the nation's markets have ample housing in total, but nearly all lack enough units affordable to very low-income households.

They examined U.S. Census Bureau data from 2000 to 2020 to compare the number of households formed to the number of housing units added to determine if there were more households needing homes than units available.

The researchers found only four of the nation's 381 metropolitan areas experienced a housing shortage in the study time frame, as did only 19 of the country's 526 "micropolitan" areas — those with 10,000-50,000 residents.



Source: Reef Insights



New Home Inventory Continues to Rise

Housing Market

New Single-Family Sales & Inventory

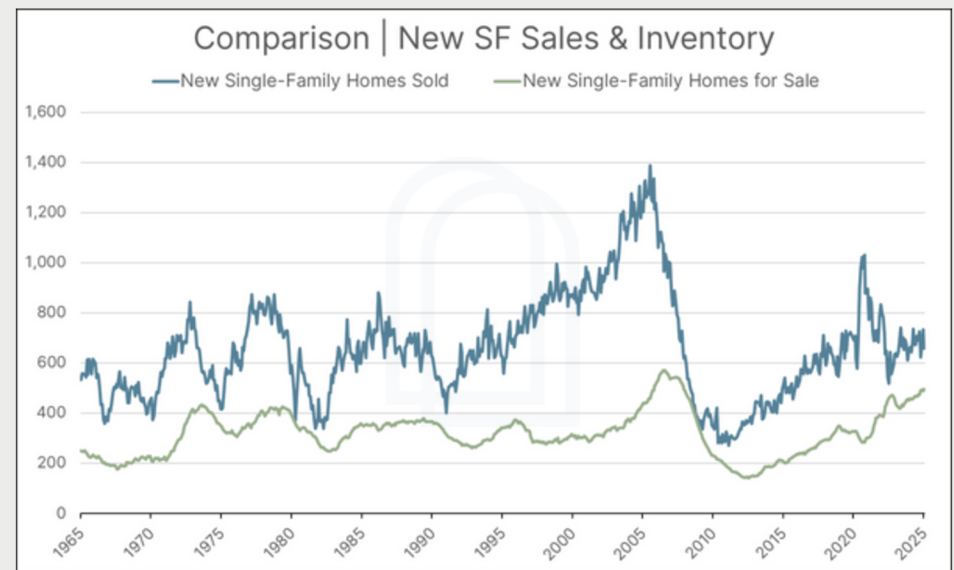
Since 1965, there have been only four instances where new single-family home inventory rose above 400,000 units. Each of these instances preceded a recession, though the outcome of the current situation remains unknown. Let's take a look at some past examples to see if they provide insight into the current situation:

1973: The housing market faced challenges due to economic stagflation and rising interest rates. This period saw a significant increase in new home inventory, which preceded a recession from 1973 to 1975.

1980: High inflation and interest rates led to a housing downturn. The increase in inventory was followed by a recession from 1980 to 1982.

2008: The housing bubble burst, leading to a severe financial crisis. Rising inventory levels were a precursor to this event.

It remains to be seen whether this build-up in inventory will precede a recession, however, it is apparent that this has been weighing on homebuilders.



Source: Reef Insights



The background of the slide is a dark blue field filled with intricate, white, wavy lines. These lines form a complex, organic pattern that resembles a topographical map or a series of concentric, flowing waves. The lines are most dense in the corners and along the edges, creating a sense of depth and movement. In the center, the text 'Supply & Construction' is displayed in a clean, white, sans-serif font.

Supply & Construction

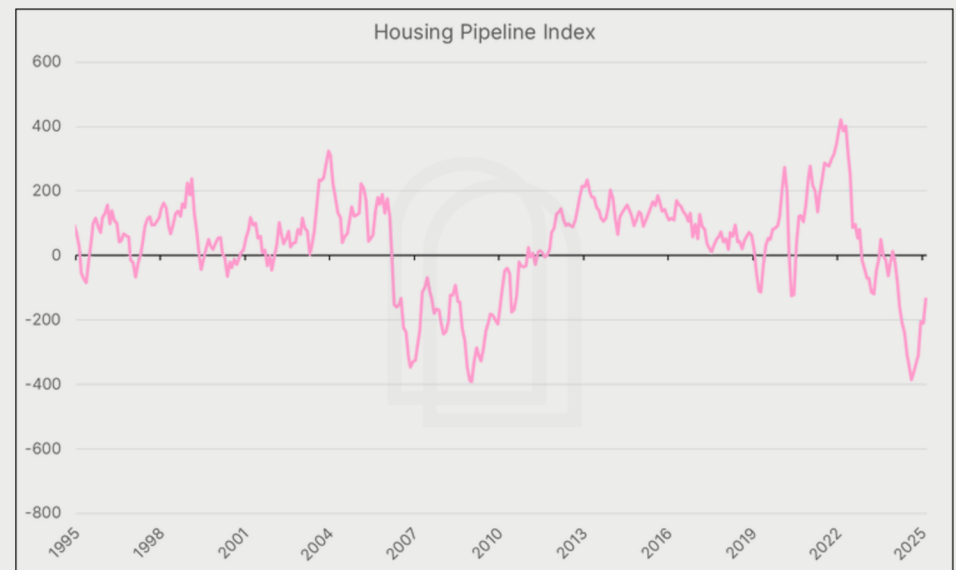
Housing Pipeline Signal Contraction and Caution

Supply & Construction

Housing Pipeline Index

- Month-over-month, the disparity shrank to -134,000 units.
- Starts are at 1.37 million while completions are at 1.65 million units.

What's interesting about this is that the improvement in the pipeline is being driven by an increase in housing starts. This is notable because home builders are already sitting on a large amount of inventory, and new housing supply continues to rise.



Source: Reef Insights



Construction Spending Flat Amid Inventory Surge

Supply & Construction

Real Residential Construction Spend

- Month-over-month, the index decreased to 108.8.
- Year-over-year, the index has increased by 1.36%.

Given the recent changes in the Housing Pipeline Index, it is possible that we may see an uptick as starts increase. However, for the time being, this metric is likely to remain flat or decline, as completions still outpace starts.

In other words, we don't see much upside for this index throughout 2025.

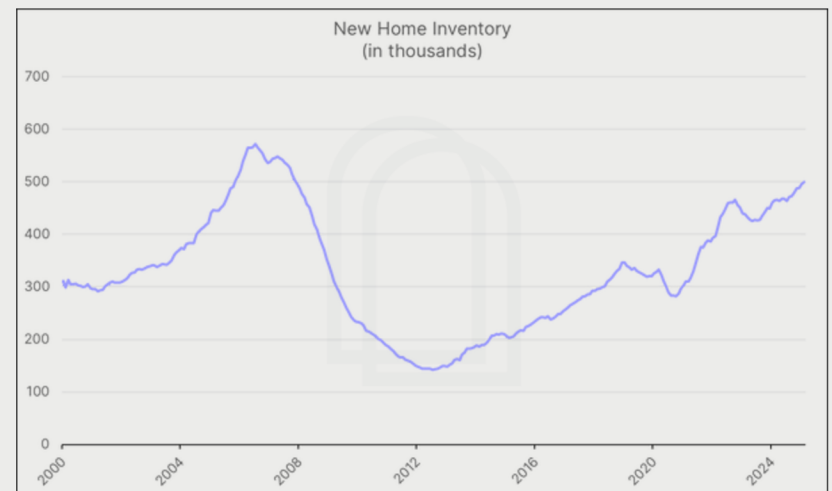


Source: Reef Insights

New Home Inventory

- Month-over-month, new home inventory rose to 500,000.
- Year-over-year, inventory has increased by 7.53%.
- The only other time inventory has been this high was leading up to the GFC.

New home inventory has often been the canary in the coal mine for housing—and, by extension, the economy—during past downturns. With a glut of new homes sitting on the market, builders now face a tough decision on how to move them off their books.



Source: U.S. Census Bureau, U.S. Department of Housing and Urban Development



Supply Increases Even As Transactions Increase

Supply & Construction

New Housing Supply

- Month-over-month, the months' supply declined to 8.9.
- Year-over-year, the months' supply increased by 2.30%.

Now that we are emerging from what seemed like a completely dry supply picture—at least to some—it will soon become apparent that there is, in fact, not a supply issue, but a demand issue. Demand issues can be addressed in a few different ways: price cuts or rate cuts.



Source: U.S. Census Bureau, U.S. Department of Housing and Urban Development

Existing Housing Supply

- Month-over-month, the months' supply was flat at 3.5.
- Year-over-year, the months' supply has risen 16.7%.
- 10-year historical average is 3.6 months' supply.

Existing housing supply continues its slow rise. While it is faring much better than new housing, it remains to be seen whether there will be sufficient demand as more housing comes online. Expect this to be highly dependent on location, as some areas will perform better than others.



Source: National Association of Realtors



Openings Remain Low and Employment Steady

Supply & Construction

Construction Job Openings

- Month-over-month, construction job openings rose to 236,000.
- However, year-over-year, construction job openings have declined 42%.
- When compared to all job openings, construction job openings have fallen 4.9 times more.

Construction job openings are a great metric to sanity-check against the housing pipeline index. As job openings fall, this reflects builder sentiment and, more importantly, builder action, as they need openings as a precursor to starting new builds.

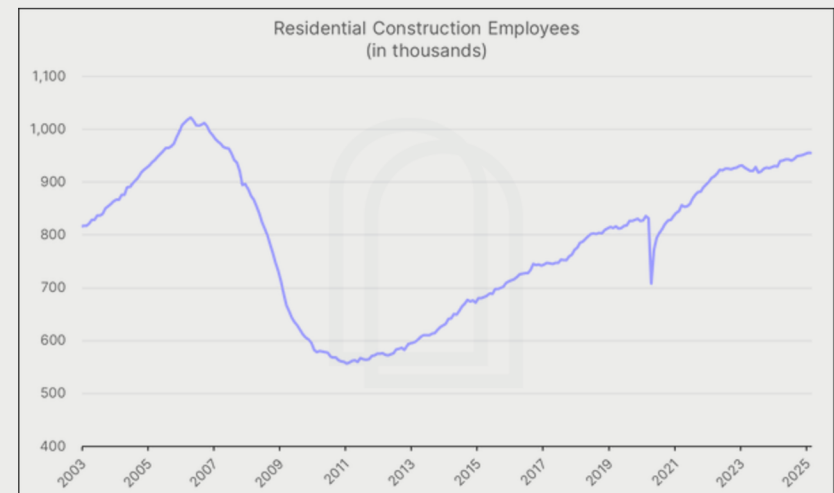
Residential Construction Employees

- Despite the decline in openings, employees continue to rise, reaching 956,000 employees in January.
- Increased 2.74% year-over-year.

As job openings fall, we expect this to remain flat and eventually contract if completions continue to outpace starts. Some distortion may come from natural disaster repair and rebuilding efforts, which will buoy employment figures.



Source: U.S. Bureau of Labor Statistics



Source: U.S. Bureau of Labor Statistics



The background features a series of thin, white, curved lines that flow across a dark blue field, creating a sense of movement and depth. The lines are arranged in a way that suggests a stylized, abstract landscape or perhaps a representation of data flow.

Market Risks & Outlook

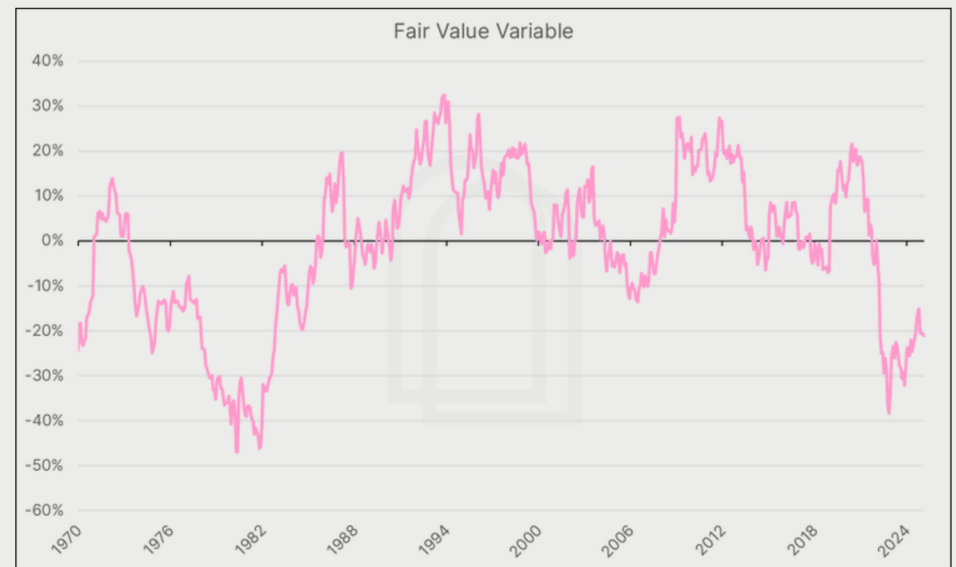
FVV Trends Down, Affordability Remains an Issue

Market Risks & Outlook

Fair Value Variable

- Month-over-month, our FVV metric declined to 21.1%
- The last time this metric was this low was in 1982.

For a brief moment, the FVV spiked as mortgage rates declined. However, mortgage rates have since trended back up, leading to a pullback. For the FVV to revert to a normal level, we will need to see mortgage rates meaningfully decline, wage growth occur, or home valuations decrease. As it stands, housing affordability is at multi-decade lows.



Source: Reef Insights



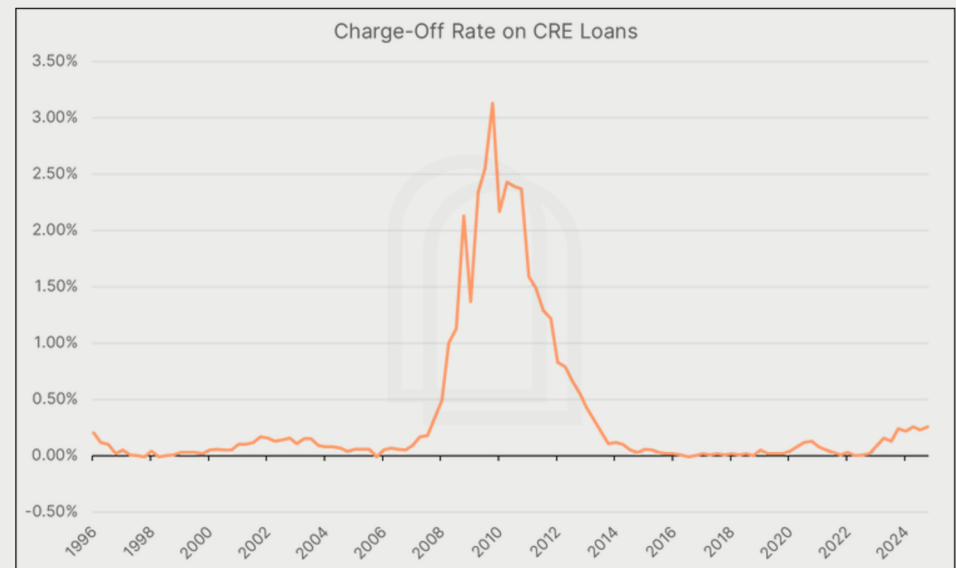
CRE Charge-Offs Climb Higher

Market Risks & Outlook

CRE Loan Charge-Off Rate

- Quarter-over-quarter, charge-off rates have increased to 0.26%.
- Year-over-year, charge-off rates have risen 8.33%.

As delinquencies continue to rise and the ability of lenders to "pretend and extend" on CRE loans becomes more limited, we are seeing increased activity in the space, with many headline deals showcasing buildings selling at steep discounts of 80-90% off their previous purchase price. The two areas where this is most prevalent are office and multi-family properties.



Source: Board of Governors of the Federal Reserve System



Forecasts

50% No Rate Cuts, 50% Rates to Zero

- Given some Fed officials' commentary in the past week, following the SEP and FOMC, regarding how the Fed might act in the event of certain economic conditions, we are compelled to update our forecast on rate cuts.
- There is a strong signal that the Fed "doesn't really know where the economy is headed," which is alarming. This delay in response means the Fed will act late, likely resulting in more significant moves.
- We expect that they won't be able to cut rates due to stagflation (worst-case scenario), or they may not be able to tolerate asset devaluation and will aggressively lower rates in response.

CRE Charge-off Rates Continue Climb

- Multi-family serious delinquency rates have hit peak GFC levels.
- CRE continues to feel tremendous pressures and we expect this to continue.
- Looming Federal lease terminations will have a negative impact on the CRE market.

Job Market Softens

- We expect job openings to continue to decline as companies pull back from headcount expansion.
- We also expect quits to drop as a result, given that workers will have a harder time finding new jobs.
- We are already seeing increases in U.S. layoff announcements in the Challenger survey, and we expect this trend to continue.



Data Table

Metric	This Period	Last Period	Year Ago	Latest Release
Housing Starts: Total Units	1,501	1,350	1,546	Feb-25
New Housing Supply	8.90	9.00	8.70	Feb-25
Existing Housing Supply	3.50	3.50	3.00	Feb-25
Nominal Median Sales Price of Houses Sold	\$ 419,200	\$ 415,300	\$ 423,200	Oct-24
New Building Permit Authorizations: Total Units	1,459	1,473	1,563	Feb-25
Case-Shiller Index	323.54	323.33	310.86	Jan-25
Residential Construction Employees	955	955	930	Feb-25
Nominal Mortgage Rates	6.76	6.95	6.94	Mar-25
Delinquency Rates: Single-Family	1.77	1.74	1.70	Oct-24
Delinquency Rates: Commercial	1.57	1.51	1.05	Oct-24
PPI: Residential Construction	325	325	316	Feb-25
Construction Spending: Residential	\$ 944	\$ 949	\$ 915	Jan-25
Housing Inventory: Median Days on Market	66	73	50	Feb-25
Nominal Monthly Mortgage Payment	\$ 2,177	\$ 2,220	\$ 2,258	Mar-25
Real Mortgage Payment Index	594.45	588.44	585.74	Feb-25



Data Table

Metric	This Period	Last Period	Year Ago	Latest Release
Median Household Income Spent on Annual Mortgage Payments	33.05	32.71	32.56	Feb-25
Fair Value Variable	(21.08)	(20.63)	(23.65)	Feb-25
Housing Expense Change	26.40	26.66	34.25	Feb-25
Nominal Median Household Income	\$ 80,610	\$ 74,580	\$ 74,580	2023
Headline Inflation	2.81	3.00	3.17	Feb-25
Core Inflation	3.14	3.29	3.77	Feb-25
Unemployment Rate	4.10	4.00	3.90	Feb-25
Federal Funds Rate	4.33	4.33	5.33	Feb-25
Personal Savings Rate	4.60	3.50	5.50	Jan-25
Jobless Claims	223,000	221,000	212,000	Mar-25
10-Year U.S. Treasury Yield Minus 2-Year U.S. Treasury	(0.34)	(0.26)	(0.80)	Mar-25
Residential Rental Vacancy Rate	6.90	6.90	6.60	Oct-24
Real Residential Construction Spend Index	108.82	110.84	107.35	Jan-25
Household Savings	\$ 1,162	\$ 711	\$ 711	2023
Bank Credit: All Commercial Banks	\$ 18,094	\$ 18,089	\$ 17,559	Mar-25



Data Table

Metric	This Period	Last Period	Year Ago	Latest Release
Delinquency Rates: Credit Card	3.08	3.20	3.10	Oct-24
Gross Domestic Product (GDP)	\$ 29,720	\$ 29,375	\$ 28,297	Oct-24
M2 (Money Supply)	\$ 21,671	\$ 21,577	\$ 20,862	Feb-25
Federal Reserve's Balance Sheet	\$ 6,756	\$ 6,760	\$ 7,514	Mar-25
PCE: Headline Inflation	2.51	2.60	2.61	Jan-25
PCE: Core Inflation	2.65	2.86	3.06	Jan-25
Debt-to-GDP	121.87	120.73	120.16	Oct-24
Real GDP	\$ 23,536	\$ 23,400	\$ 22,961	Oct-24
Trucking Employees	1,515	1,517	1,531	Feb-25
Industrial Production	104	103	103	Feb-25
Credit Card Interest Rates	21.47	21.76	21.47	Nov-24
Charge-Off Rate: Credit Card Loans	4.48	4.37	4.07	Oct-24
Charge-Off Rate: Business Loans	0.50	0.55	0.41	Oct-24
Charge-Off Rate: Commercial Real Estate Loans	0.26	0.23	0.24	Oct-24
Yield Curve	0.36	0.17	(0.26)	Feb-25



Data Table

Metric	This Period	Last Period	Year Ago	Latest Release
Total Assets: Money Market Funds	\$ 7,243,180	\$ 6,839,054	\$ 6,357,551	Oct-24
Federal Government Interest Payments	\$ 1,124	\$ 1,117	\$ 1,031	Oct-24
CPI: Rent in U.S. City Average	431	430	414	Feb-25
Consumer Loans: Credit Card Debt	#N/A	\$ 1,091	\$ 1,056	Mar-25
New Single-Family Home Sales	676	664	643	Feb-25
New Housing Units Completed	1,592	1,659	1,698	Feb-25
Job Openings: Construction	236	205	407	Jan-25
New Homes: Median Square Footage	2,157	2,169	2,199	Oct-24
Median Sales Price of New Houses Sold	\$ 414,500	\$ 427,400	\$ 420,900	Feb-25
Job Openings: Total Nonfarm	7,740	7,508	8,468	Jan-25
Housing Inventory: Active Listing Count	847,825	829,376	664,745	Feb-25
New Home Inventory	500	496	465	Feb-25
Quits: Total Private	3,069	2,899	3,154	Jan-25



Sources

Metric	Frequency	Sources	Notes
Housing Starts: Total Units	Monthly	U.S. Census Bureau, U.S. Department of Housing and Urban Development	As provided by the Census, start occurs when excavation begins for the footings or foundation of a building. All housing units in a multifamily building are defined as being started when this excavation begins. Beginning with data for September 1992, estimates of housing starts include units in structures being totally rebuilt on an existing foundation.
New Housing Supply	Monthly	U.S. Census Bureau, U.S. Department of Housing and Urban Development	The months' supply is the ratio of new houses for sale to new houses sold. This statistic provides an indication of the size of the new for-sale inventory in relation to the number of new houses currently being sold. The months' supply indicates how long the current new for-sale inventory would last given the current sales rate if no additional new houses were built.
Existing Housing Supply	Monthly	National Association of Realtors	The National Association of Realtors monthly housing indicators are based on a representative sample of local boards and multiple listing services. Sales volume, inventory, and price levels for existing homes are measured for the US in aggregate and by census region. Existing homes, unlike new homes, are homes that are owned and occupied before coming onto the market. Inventory indicates the number of properties marked as "active" on the market or those pending sales. When a seller lists a property, it becomes counted as inventory.
Nominal Median Sales Price of Houses Sold	Quarterly	U.S. Census Bureau, U.S. Department of Housing and Urban Development	The purpose of the Survey of Construction (SOC) is to provide national and regional statistics on starts and completions of new single-family and multifamily housing units and statistics on sales of new single-family houses in the United States. The United States Code, Title 13, authorizes this survey and provides for voluntary responses. The Department of Housing and Urban Development partially funds this survey. The SOC also provides statistics on characteristics of new privately-owned residential structures in the United States. Data included are various characteristics of new single-family houses completed, new multifamily housing completed, new single-family houses sold, and new contractor-built houses started.
New Building Permit Authorizations: Total Units	Monthly	U.S. Census Bureau, U.S. Department of Housing and Urban Development	Starting with the 2005-02-16 release, the series reflects an increase in the universe of permit-issuing places from 19,000 to 20,000 places.
Case-Shiller Index	Monthly	S&P Dow Jones Indices LLC	The S&P CoreLogic Case-Shiller Home Price Indices measure the price level of existing single-family homes in the U.S.
Residential Construction Employees	Monthly	U.S. Bureau of Labor Statistics	Construction employees in the construction sector include: Working supervisors, qualified craft workers, mechanics, apprentices, helpers, laborers, and so forth, engaged in new work, alterations, demolition, repair, maintenance, and the like, whether working at the site of construction or in shops or yards at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.



Sources

Metric	Frequency	Sources	Notes
Nominal Mortgage Rates	Weekly	Freddie Mac	On November 17, 2022, Freddie Mac changed the methodology of the Primary Mortgage Market Survey® (PMMS®). The weekly mortgage rate is now based on applications submitted to Freddie Mac from lenders across the country. For more information regarding Freddie Mac's enhancement, see their research note.
Delinquency Rates: Single-Family	Quarterly	Board of Governors of the Federal Reserve System	The charge-off rates are annualized and are calculated net of recoveries. Delinquent loans and leases encompass those that are past due by thirty days or more and are still accruing interest, as well as those in nonaccrual status. This comprehensive approach provides insight into the financial health and performance metrics of these major banks, considering both charge-offs and delinquencies in their loan portfolios.
Delinquency Rates: Commercial Real Estate	Quarterly	Board of Governors of the Federal Reserve System	The charge-off rates are annualized and are calculated net of recoveries. Delinquent loans and leases encompass those that are past due by thirty days or more and are still accruing interest, as well as those in nonaccrual status. This comprehensive approach provides insight into the financial health and performance metrics of these major banks, considering both charge-offs and delinquencies in their loan portfolios.
PPI: Residential Construction	Monthly	U.S. Bureau of Labor Statistics	The Producer Price Index (PPI) program measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services.
Construction Spending: Residential	Monthly	U.S. Census Bureau	Construction work done each month on new structures or improvements to existing structures for private and public sectors (in 50 states and the District of Columbia).
Housing Inventory: Median Days on Market	Monthly	Realtor.com	With the release of its September 2022 housing trends report, Realtor.com® incorporated a new and improved methodology for capturing and reporting housing inventory trends and metrics. The new methodology updates and improves the calculation of time on market and improves handling of duplicate listings. Most areas across the country will see minor changes with a smaller handful of areas seeing larger updates. As a result of these changes, the data released since October 2022 will not be directly.
Nominal Monthly Mortgage Payment	Monthly	Reef Insights LLC	The nominal monthly mortgage payment is determined based on the current prevailing mortgage rate and the median sales price of houses sold. Our calculations are grounded in the following assumptions: a 20 percent down payment, a 30-year maturity period, and a fixed interest rate.
Real Mortgage Payment Index	Monthly	Reef Insights LLC	The real mortgage payment index is calculated by dividing the nominal monthly mortgage payment by the prevailing CPI index value.
Median Household Income Spent on Annual Mortgage Payments	Monthly	Reef Insights LLC	To determine the median household income spent on annual mortgage payments, we have annualized the prevailing nominal monthly mortgage payment and divided that payment by the prior years' median household income.



Sources

Metric	Frequency	Sources	Notes
Fair Value Variable	Monthly	Reef Insights LLC	The analysis incorporates three distinct rolling averages signifying the percentage of median household income allocated to annual mortgage payments. These averages span 5 years, 10 years, and 15 years, respectively. In the determination of a 'fair value' premium or discount for each period, the established averages are divided by the prevailing percentage of median household income dedicated to annual mortgage payments. The resultant values are subsequently averaged to ascertain a premium or discount, which is applicable to the prevailing median sales price of houses sold.
Housing Expense Change	Monthly	Reef Insights LLC	The computed values have been obtained through the division of the rolling 1-year average for the percentage of median household income allocated to annual mortgage payments by the rolling 10-year average.
Nominal Median Household Income	Annually	U.S. Census Bureau	The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For households and families, the median income is based on the distribution of the total number of households and families including those with no income. The median income for individuals is based on individuals 15 years old and over with income. Median income for households, families, and individuals is computed on the basis of a standard distribution.
CPI: Headline Inflation	Monthly	U.S. Bureau of Labor Statistics	The CPIs are based on prices for food, clothing, shelter, and fuels; transportation fares; service fees (e.g., water and sewer service); and sales taxes. Prices are collected monthly from about 4,000 housing units and approximately 26,000 retail establishments across 87 urban areas. To calculate the index, price changes are averaged with weights representing their importance in the spending of the particular group. The index measures price changes (as a percent change) from a predetermined reference date. In addition to the original unadjusted index distributed, the Bureau of Labor Statistics also releases a seasonally adjusted index. The unadjusted series reflects all factors that may influence a change in prices. However, it can be very useful to look at the seasonally adjusted CPI, which removes the effects of seasonal changes, such as weather, school year, production cycles, and holidays.
CPI: Core Inflation	Monthly	U.S. Bureau of Labor Statistics	The "Consumer Price Index for All Urban Consumers: All Items Less Food & Energy" is an aggregate of prices paid by urban consumers for a typical basket of goods, excluding food and energy. This measurement, known as "Core CPI," is widely used by economists because food and energy have very volatile prices.
Unemployment Rate	Monthly	U.S. Bureau of Labor Statistics	The unemployment rate represents the number of unemployed as a percentage of the labor force. Labor force data are restricted to people 16 years of age and older, who currently reside in 1 of the 50 states or the District of Columbia, who do not reside in institutions (e.g., penal and mental facilities, homes for the aged), and who are not on active duty in the Armed Forces.



Sources

Metric	Frequency	Sources	Notes
Federal Funds Rate	Monthly	Board of Governors of the Federal Reserve System	The federal funds market consists of domestic unsecured borrowings in U.S. dollars by depository institutions from other depository institutions and certain other entities, primarily government-sponsored enterprises.
Personal Savings Rate	Monthly	U.S. Bureau of Economic Analysis	Personal saving as a percentage of disposable personal income (DPI), frequently referred to as "the personal saving rate," is calculated as the ratio of personal saving to DPI. Personal saving is equal to personal income less personal outlays and personal taxes; it may generally be viewed as the portion of personal income that is used either to provide funds to capital markets or to invest in real assets such as residences.
Jobless Claims	Weekly	U.S. Employment and Training Administration	An initial claim is a claim filed by an unemployed individual after a separation from an employer. The claim requests a determination of basic eligibility for the Unemployment Insurance program.
10-Year U.S. Treasury Yield Minus 2-Year U.S. Treasury	Weekly	Board of Governors of the Federal Reserve System	This particular yield curve is derived by subtracting the 10-year U.S. Treasury by the 2-Year U.S. Treasury.
Residential Rental Vacancy Rate	Quarterly	U.S. Census Bureau	The rental vacancy rate is the proportion of the rental inventory that is vacant for rent.
Real Residential Construction Spend Index	Monthly	Reef Insights LLC	This index is constructed by dividing the Total Construction Spending: Residential by the CPI: Residential Construction.
Household Savings	Annually	U.S. Bureau of Economic Analysis	To calculate the amount of household savings, the BEA starts with personal income, and then subtracts from that personal taxes to derive disposable personal income. Then, personal outlays are subtracted from disposable income. This results in an estimate of household savings.
Bank Credit: All Commercial Banks	Weekly	Board of Governors of the Federal Reserve System	The H.8 release provides an estimated weekly aggregate balance sheet for all commercial banks in the United States. The release also includes separate balance sheet aggregations for several bank groups: domestically chartered commercial banks; large domestically chartered commercial banks; small domestically chartered commercial banks; and foreign-related institutions in the United States
Delinquency Rates: Credit Card	Quarterly	Board of Governors of the Federal Reserve System	For more information, check out the Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks release.
Gross Domestic Product (GDP)	Quarterly	U.S. Bureau of Economic Analysis	Gross domestic product (GDP), the featured measure of U.S. output, is the market value of the goods and services produced by labor and property located in the United States.
M2 (Money Supply)	Monthly	Board of Governors of the Federal Reserve System	Beginning May 2020, M2 consists of M1 plus (1) small-denomination time deposits (time deposits in amounts of less than \$100,000) less IRA and Keogh balances at depository institutions; and (2) balances in retail MMFs less IRA and Keogh balances at MMFs. Seasonally adjusted M2 is constructed by summing savings deposits (before May 2020), small-denomination time deposits, and retail MMFs, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.
Federal Reserve's Balance Sheet	Weekly	Board of Governors of the Federal Reserve System	For more information, check out the H.4.1 release.



Sources

Metric	Frequency	Sources	Notes
PCE: Headline Inflation	Monthly	U.S. Bureau of Economic Analysis	Table 9.1U - Comparison of the PCE Price Index with the CPI reconciles the changes in the personal consumption expenditures (PCE) chain-type price index, prepared by the Bureau of Economic Analysis (BEA), with changes in the consumer price index for all urban consumers (CPI), prepared by the Bureau of Labor Statistics (BLS).
PCE: Core Inflation	Monthly	U.S. Bureau of Economic Analysis	Table 9.1U - Comparison of the PCE Price Index with the CPI reconciles the changes in the personal consumption expenditures (PCE) chain-type price index, prepared by the Bureau of Economic Analysis (BEA), with changes in the consumer price index for all urban consumers (CPI), prepared by the Bureau of Labor Statistics (BLS).
Debt-to-GDP	Quarterly	U.S. Office of Management and Budget	Federal Debt: Total Public Debt as Percent of Gross Domestic Product (GFDEGDQ188S) was first constructed by the Federal Reserve Bank of St. Louis in October 2012.
Real GDP	Quarterly	U.S. Bureau of Economic Analysis	Real gross domestic product is the inflation adjusted value of the goods and services produced by labor and property located in the United States.
Trucking Employees	Monthly	U.S. Bureau of Labor Statistics	Each month, CES surveys approximately 119,000 businesses and government agencies, representing approximately 629,000 individual worksites.
Industrial Production	Monthly	Board of Governors of the Federal Reserve System	The industrial production (IP) index measures the real output of all relevant establishments located in the United States, regardless of their ownership, but not those located in U.S. territories.
Credit Card Interest Rates	Monthly	Board of Governors of the Federal Reserve System	This release is generally issued on the fifth business day of each month.
Charge-Off Rate: Credit Card Loans	Quarterly	Board of Governors of the Federal Reserve System	The 100 largest banks are measured by consolidated foreign and domestic assets. Charge-offs are the value of loans and leases removed from the books and charged against loss reserves. Charge-off rates are annualized, net of recoveries. Delinquent loans and leases are those past due thirty days or more and still accruing interest as well as those in nonaccrual status.
Charge-Off Rate: Business Loans	Quarterly	Board of Governors of the Federal Reserve System	The 100 largest banks are measured by consolidated foreign and domestic assets. Charge-offs are the value of loans and leases removed from the books and charged against loss reserves. Charge-off rates are annualized, net of recoveries. Delinquent loans and leases are those past due thirty days or more and still accruing interest as well as those in nonaccrual status.
Charge-Off Rate: Commercial Real Estate Loans	Quarterly	Board of Governors of the Federal Reserve System	The 100 largest banks are measured by consolidated foreign and domestic assets. Charge-offs are the value of loans and leases removed from the books and charged against loss reserves. Charge-off rates are annualized, net of recoveries. Delinquent loans and leases are those past due thirty days or more and still accruing interest as well as those in nonaccrual status.



Sources

Metric	Frequency	Sources	Notes
Yield Curve	Daily	Federal Reserve Bank of St. Louis	Starting with the update on June 21, 2019, the Treasury bond data used in calculating interest rate spreads is obtained directly from the U.S. Treasury Department. Series is calculated as the spread between 10-Year Treasury Constant Maturity (BC_10YEAR) and 2-Year Treasury Constant Maturity (BC_2YEAR). Both underlying series are published at the U.S. Treasury Department.
Total Assets: Money Market Funds	Quarterly	Board of Governors of the Federal Reserve System	For more information about the Flow of Funds tables, see the Financial Accounts Guide.
Federal Government Interest Payments	Quarterly	U.S. Bureau of Economic Analysis	For more information about this series, please see http://www.bea.gov/national/ .
CPI: Rent in U.S. City Average	Monthly	U.S. Bureau of Labor Statistics	The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Indexes are available for the U.S. and various geographic areas. Average price data for select utility, automotive fuel, and food items are also available.
Consumer Loans: Credit Card Debt	Monthly	Board of Governors of the Federal Reserve System	For further information, please refer to the Board of Governors of the Federal Reserve System's H.8 release.
New Single-Family Home Sales	Monthly	U.S. Census Bureau	For further further information, please refer to the New Residential Sales report that is published by the U.S. Census Bureau.
Hew Housing Unit Completed	Monthly	U.S. Census Bureau	This metric's official title is New Privately-Owned Housing Units Completed: Total Units, and further information can be found on the New Residential Construction report that is published by the U.S. Census Bureau.
Job Openings: Construction	Monthly	U.S. Bureau of Labor Statistics	This data can be found in the Job Openings and Labor Turnover Survey report that is published by the U.S. Bureau of Labor Statistics.
New Homes: Median Square Footage	Quarterly	U.S. Census Bureau, U.S. Department of Housing and Urban Development	For further information, please refer to the Quarterly Starts and Completions by Purpose of Design release.
Median Sales Price of New Houses Sold	Monthly	U.S. Census Bureau	For further further information, please refer to the New Residential Sales report that is published by the U.S. Census Bureau.
Job Openings: Total Nonfarm	Monthly	U.S. Bureau of Labor Statistics	Total Nonfarm Job Openings are a measure of all jobs that are not filled on the last business day of the month. A job is considered open if a specific position exists and there is work available for it, the job can be started within 30 days, and there is active recruiting for the position.
Housing Inventory: Active Listing Count	Monthly	Realtor.com	The count of active single-family and condo/townhome listings for a given market during the specified month (excludes pending listings).
New Homes For Sale	Monthly	U.S. Census Bureau, U.S. Department of Housing and Urban Development	For further information, please refer to the New Residential Sales release.
Quits: Total Private	Monthly	U.S. Bureau of Labor Statistics	For further information, please refer to the Job Openings and Labor Turnover Survey release.



About

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We also send out a daily newsletter called, Reef Daily, which provides a quick summary of notable real estate transactions across the country and highlighting any notable events in real estate and economics.

The Team

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