

October 2024

# SENTINEL-6

## INTELLIGENCE REPORT

*Construction Industry Edition*



- **Historical Data**
- **Latest Figures**
- **6-Month Forecasts**
- **Actionable Insights**

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ANALYTICS

Accelerating Business Intelligence

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# Sentinel-6 Intelligence Report

Construction Edition

## ABOUT THIS REPORT

### Data Sourcing



Primary source providers are selected.



Extraction automations export the data monthly.



Data is structured for analysis and modeling.

### Forecast Modeling



Our proprietary model begins by layering several technical indicators commonly used in stock and commodities trading.



Our optimization engine tests over 64,000 permutations of indicator parameters to calibrate metric-specific forecasts.

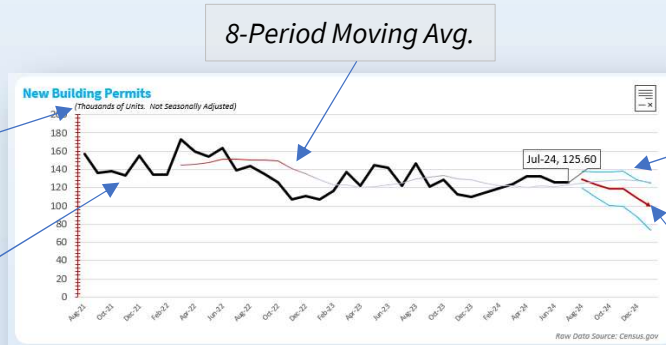


Our forecast is further enhanced by AI which incorporates sentiment analysis, current events, and industry expert forecasts.

### Data Visualizations

Unit & Scale

36-Month of Historical Data



Forecasted Probable Range

6-Month Forecast

### HOW TO USE THESE METRICS



**New Building Permits:** Signals upcoming construction activity. Use to target bids and pre-plan resources for regions expecting growth.



**New Housing Starts:** Shows residential demand. Adjust manpower and materials based on this to avoid overcommitment or missed opportunities.



**Construction Pending:** Tracks backlog of active projects. Use to gauge market saturation and decide when to expand or hold back.



**PPI: Building Material and Supplies:** Measures raw material cost trends. Use to forecast budget impacts and lock in prices before spikes.



**PPI: Concrete Brick:** Specific indicator of concrete price shifts. Critical for budgeting on large projects; avoid unexpected cost overruns.



**Lumber Futures:** Future price indicator for wood materials. Time purchases to secure bulk at lower costs or delay to reduce overhead.



**PPI: Iron & Steel:** Tracks iron and steel prices. Essential for planning steel-heavy projects. Adjust bids and contracts as prices shift.



**Bank Prime Lending Rate:** Affects borrowing costs for you and your clients. Monitor to plan refinancing and forecast project financing expenses.



**10-Year Treasury Yield:** Indicates economic confidence and impacts project financing costs. Use it to assess risk for new long-term builds.



**30-Year Conventional Mortgage Rate:** Impacts housing affordability. High rates reduce homebuyer demand, signaling when to pivot from residential.



**S&P 500:** Broad economic indicator. Use strong performance as a cue for increased private sector construction investment.



**YoY Percent Change in U.S. Real GDP:** Direct indicator of economic growth. Helps decide whether to scale up operations or conserve resources.



**Unemployment Rate:** Reflects labor availability. High rates mean cheaper labor; low rates may cause labor shortages and wage pressures.

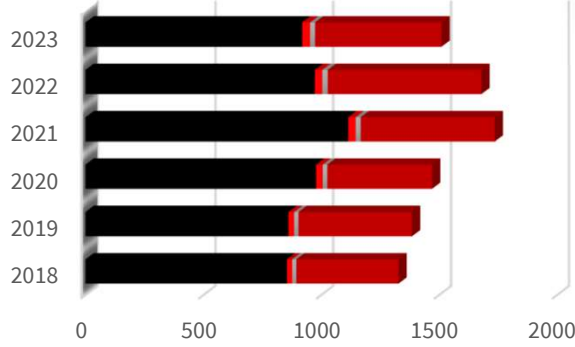
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## BUILDING PERMITS

### New Building Permits by Units

(Thousands of Units. Not Seasonally Adjusted)

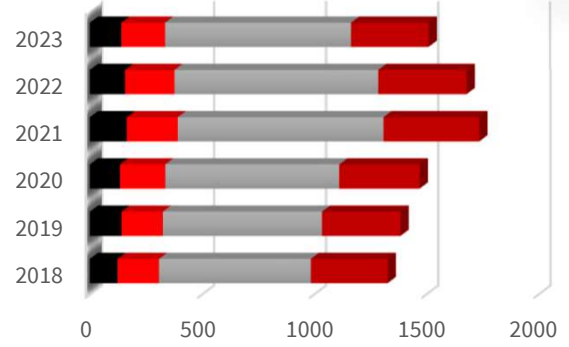


	2018	2019	2020	2021	2022	2023
■ 1 Unit	855	862	979	1115	974	920
■ 2 Units	22	24	28	32	32	34.2
■ 3 or 4 Units	18	19	19	21	23	20.5
■ 5+ Units	434	481	445	569	651	536.4

Raw Data Source: Census.gov

### New Building Permits by Region

(Thousands of Units. Not Seasonally Adjusted)

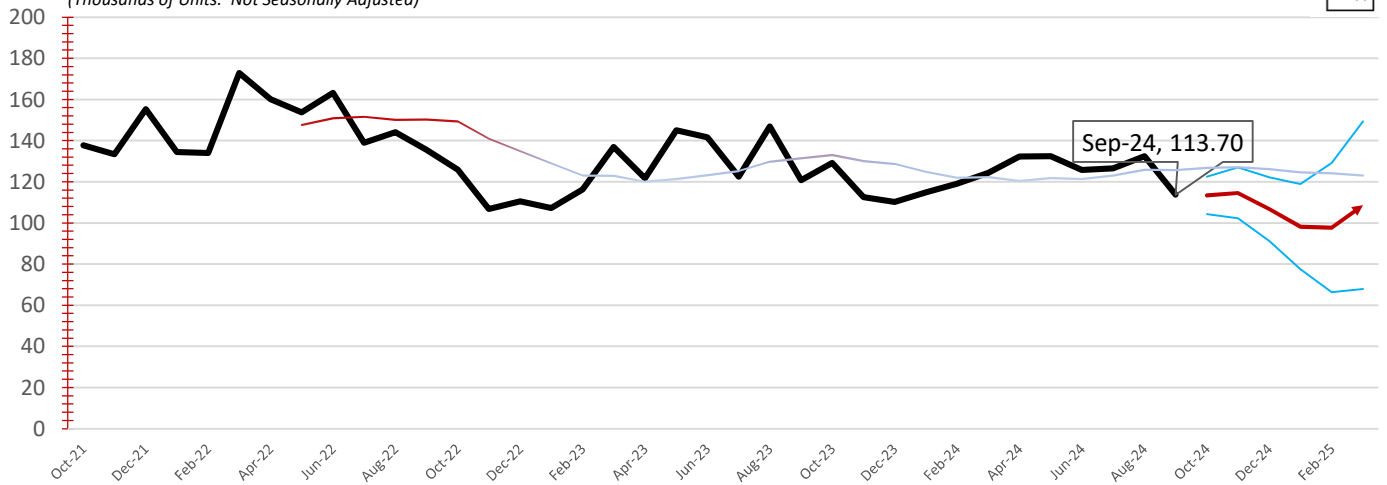


	2018	2019	2020	2021	2022	2023
■ Northeast	123	141	135	165	157	141
■ Midwest	186	185	202	228	221	195
■ South	677	710	776	918	909	830
■ West	343	350	358	427	394	345

Raw Data Source: Census.gov

### New Building Permits

(Thousands of Units. Not Seasonally Adjusted)



Raw Data Source: Census.gov

#### How to use

Tracking annual new building permits is essential for construction companies as it signals future market opportunities, helps in resource planning, and reflects economic trends, guiding strategic business decisions.

#### Insights

Building permits show a decline from 2021, with forecasts pointing to further drops through 2024, potentially hitting 98 units by January 2025, signaling a slowdown in housing demand.

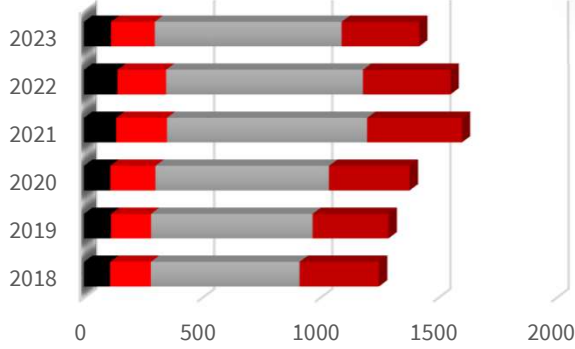
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## HOUSING STARTS

### New Housing Starts by Units

(Thousands of Units. Not Seasonally Adjusted)

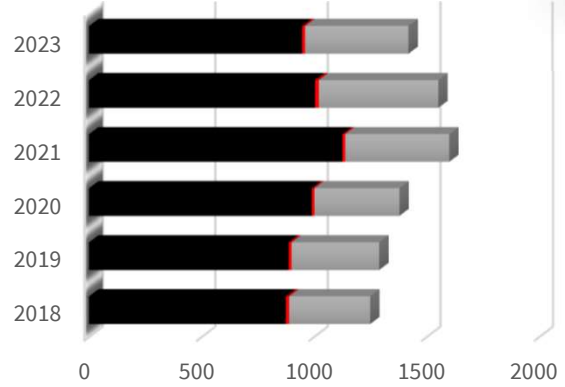


	2018	2019	2020	2021	2022	2023
■ Northeast	111	115	112	137	142	115
■ Midwest	173	169	192	216	206	185
■ South	630	685	736	848	834	792
■ West	336	321	341	401	371	328

Raw Data Source: Census.gov

### New Housing Starts by Region

(Thousands of Units. Not Seasonally Adjusted)

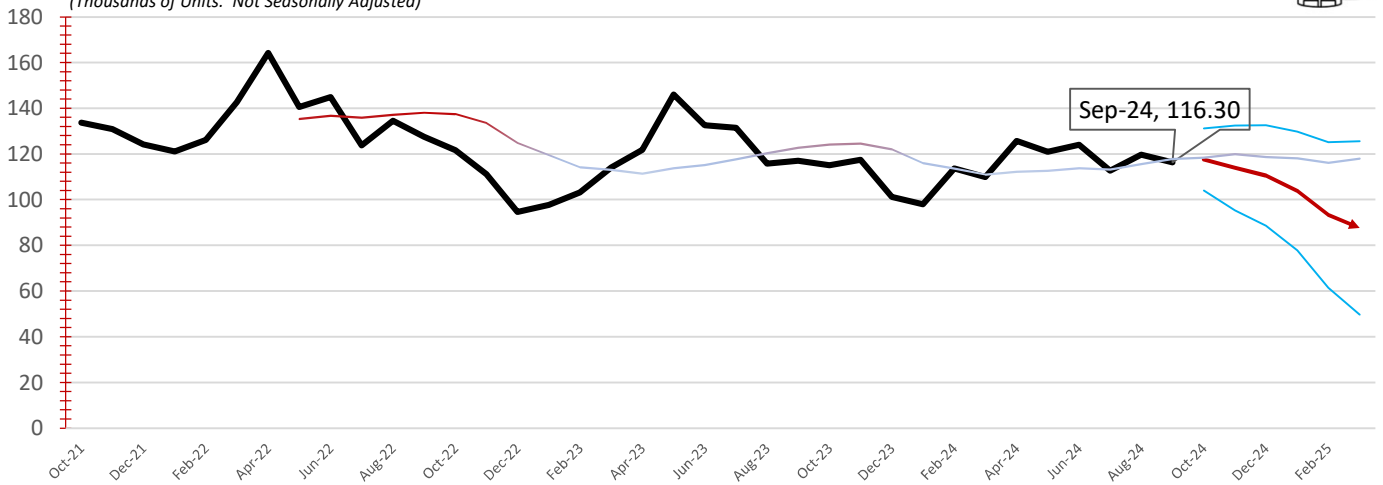


	2018	2019	2020	2021	2022	2023
■ 1 Unit	876	888	991	1127	1005	948
■ 2 Units	14	13	12	12	16	13
■ 3 or 4 Units	360	389	377	462	531	459

Raw Data Source: Census.gov

### New Privately-Owned Housing Units Started

(Thousands of Units. Not Seasonally Adjusted)



Raw Data Source: Census.gov

#### How to use

New Residential Construction Starts indicate upcoming project opportunities and market demand, helping companies align resources and anticipate industry growth.

#### Insights

Housing starts are forecasted to decline steadily through 2024, with a significant drop expected by early 2025, reaching a possible low of 77.8 units in January, indicating ongoing market softness.

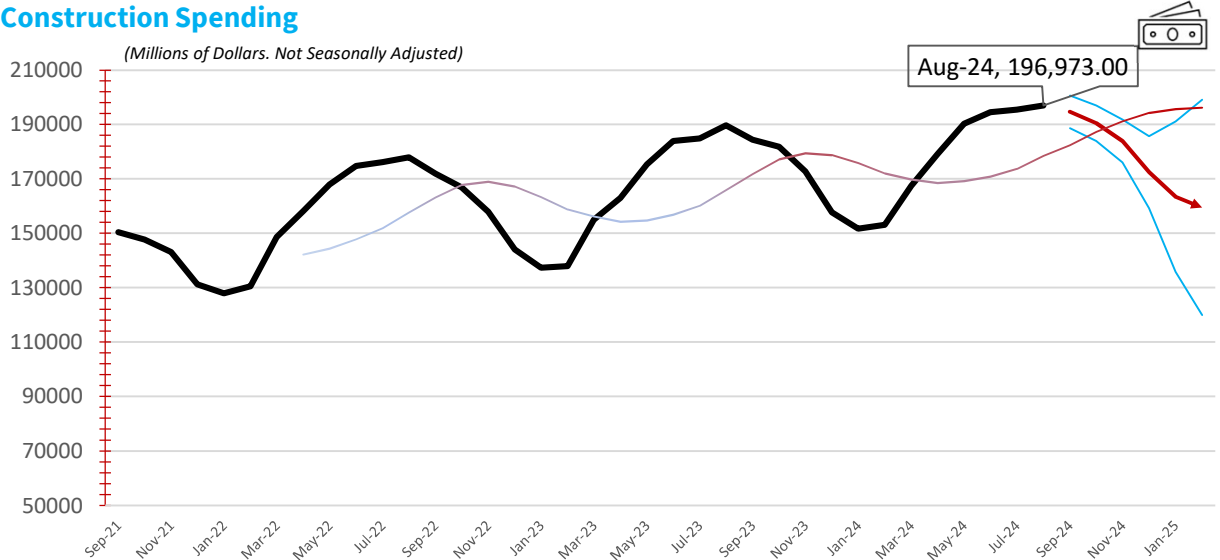
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## CONSTRUCTION SPENDING

### Construction Spending

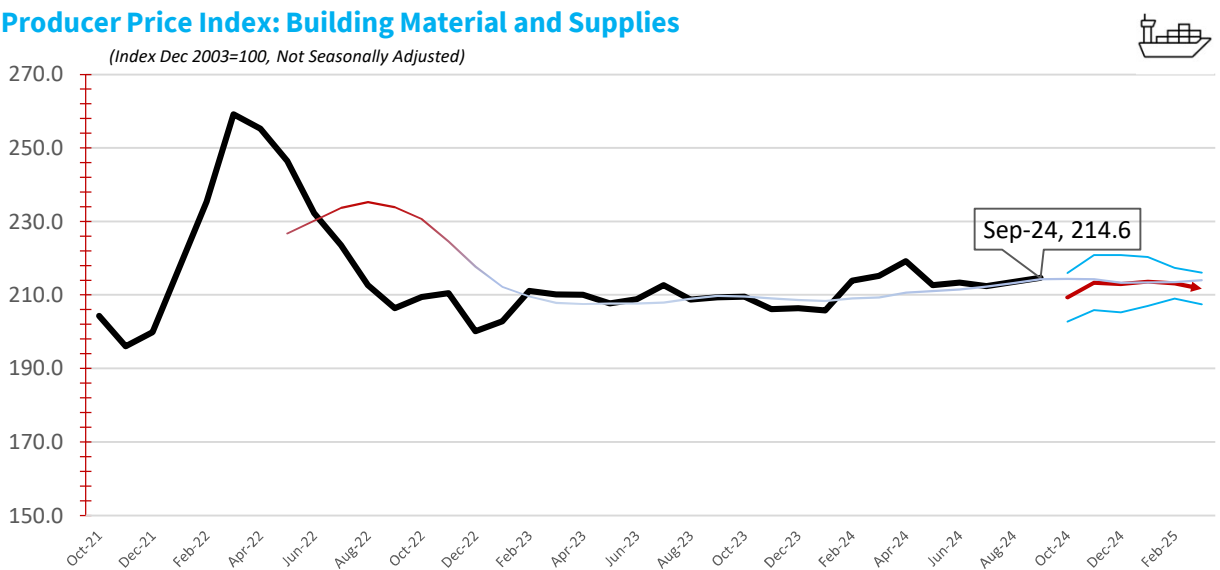
(Millions of Dollars. Not Seasonally Adjusted)



Raw Data Source: Census.gov

### Producer Price Index: Building Material and Supplies

(Index Dec 2003=100, Not Seasonally Adjusted)



Raw Data Source: fred.stlouisfed.org

#### How to use

Monitoring Construction Spending and Building Materials prices helps companies forecast project costs, manage budgets, and adjust for fluctuations in material availability.

#### Insights

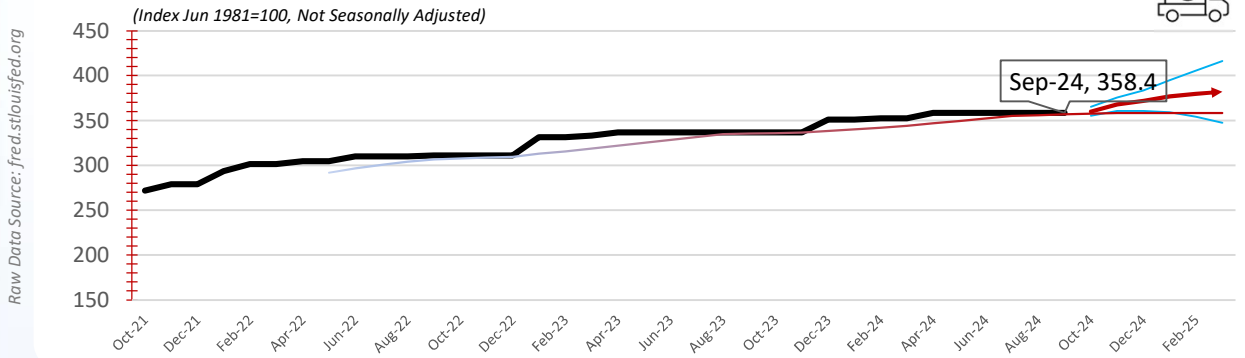
Construction spending is expected to decline through early 2025, while the PPI for building materials will remain stable, with the potential for a slight increase of 1-2% in input prices.

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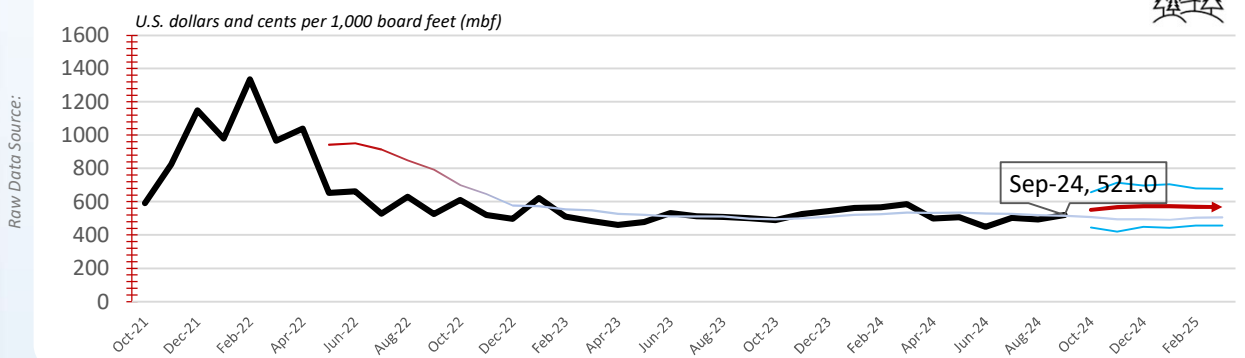
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## MATERIAL COSTS

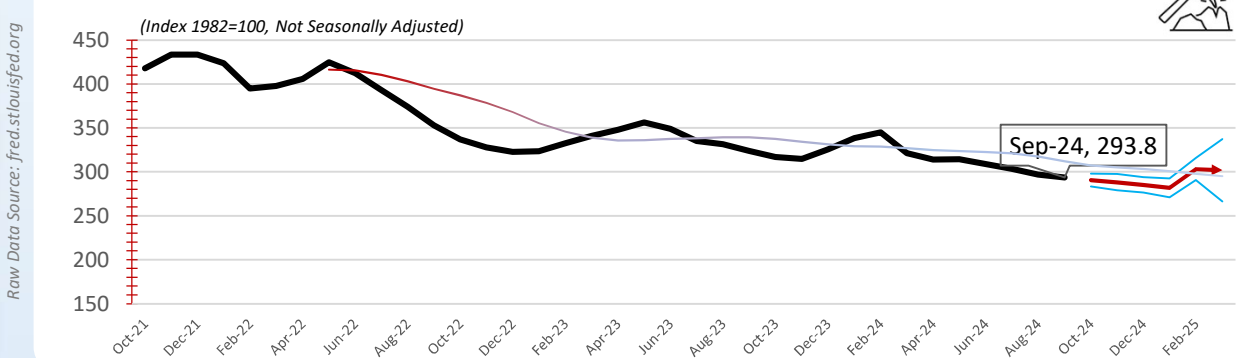
### Producer Price Index: Concrete Brick



### Lumber Futures



### Producer Price Index: Iron & Steel



#### How to use

Tracking Material Costs for Concrete, Lumber, and Iron & Steel prices helps companies mitigate rising expenses, improve bidding accuracy, and plan procurement more efficiently.

#### Insights

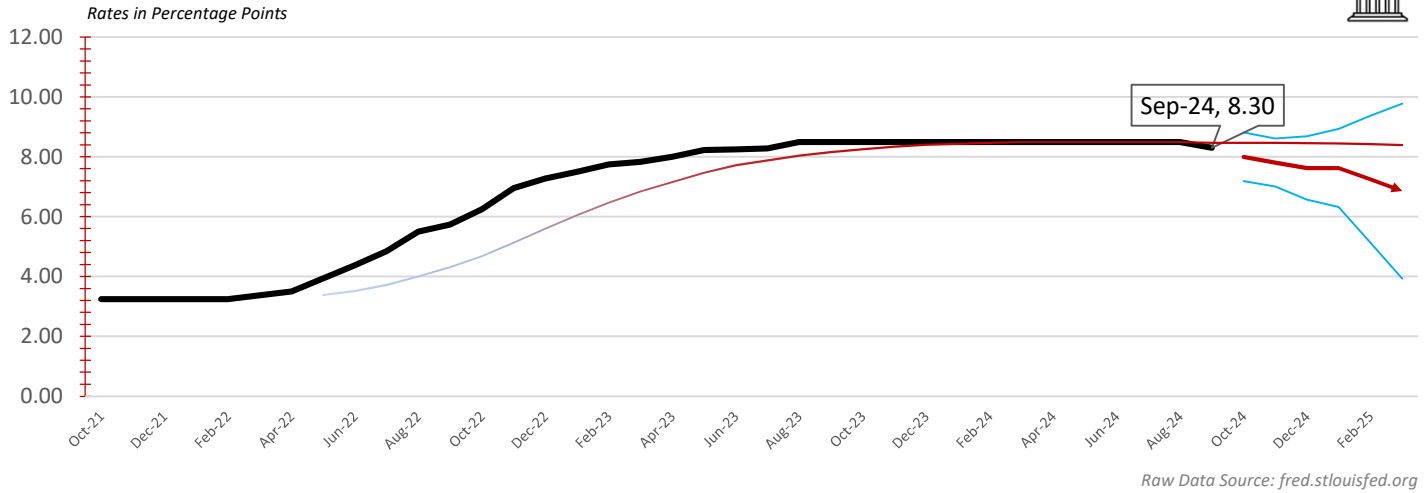
Lumber prices will rise moderately, while steel remains stable amid weak demand from China but offset by infrastructure growth. Concrete prices will stay flat, with minor inflationary pressures into Q1 2025

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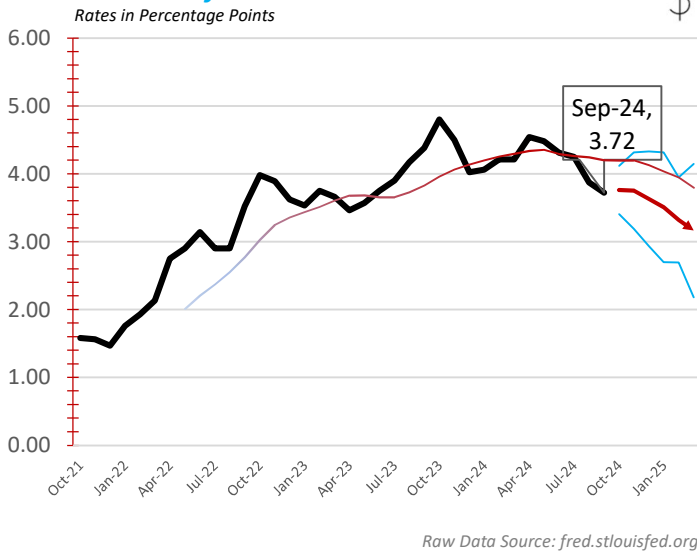
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## INTEREST RATES

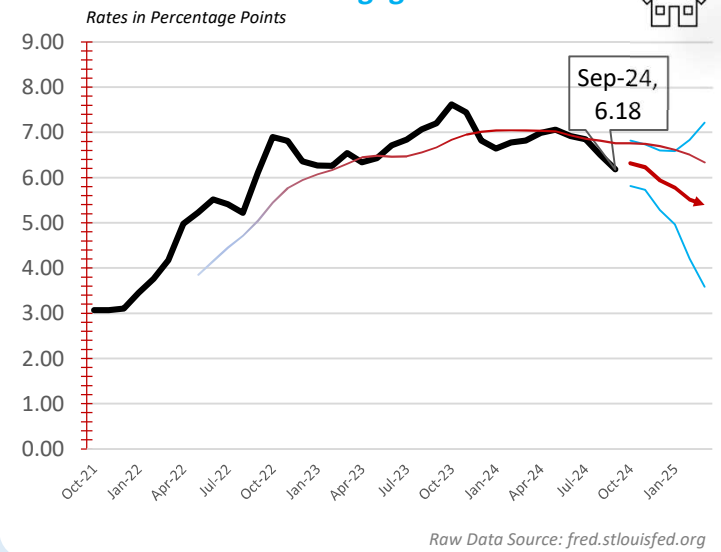
### Bank Prime Lending Rate



### 10-Year Treasury Yield



### 30-Year Conventional Mortgage Rate



#### How to use

Watching Prime Lending Rates, Treasuries, and Mortgage rates aids in understanding financing trends, client borrowing costs, and real estate market shifts.

#### Insights

Interest Rates: Prime lending rates are forecasted to decrease in 2025, providing relief for borrowers, but historically high mortgage rates will likely continue to suppress housing demand throughout 2024.

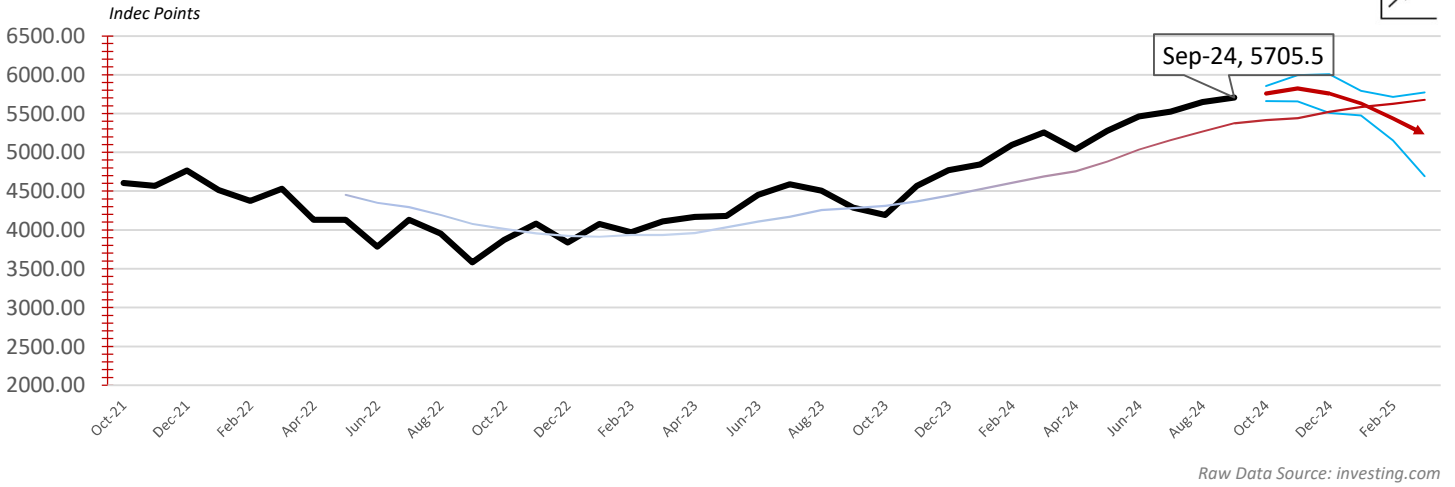


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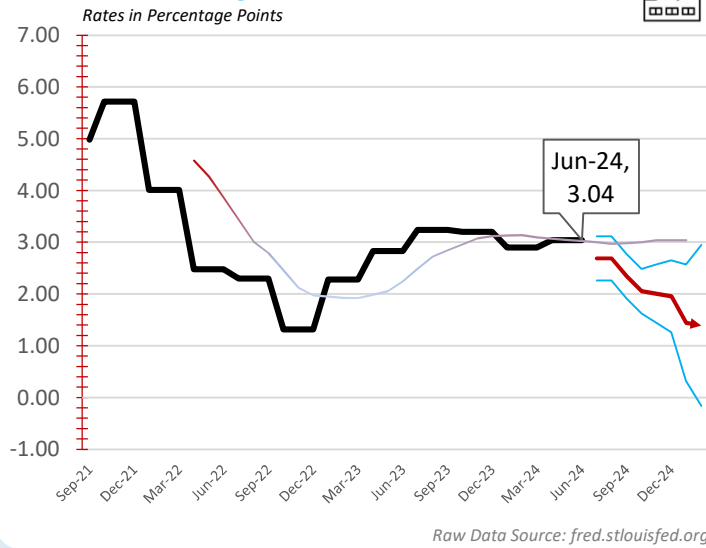
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## ECONOMIC INDICATORS

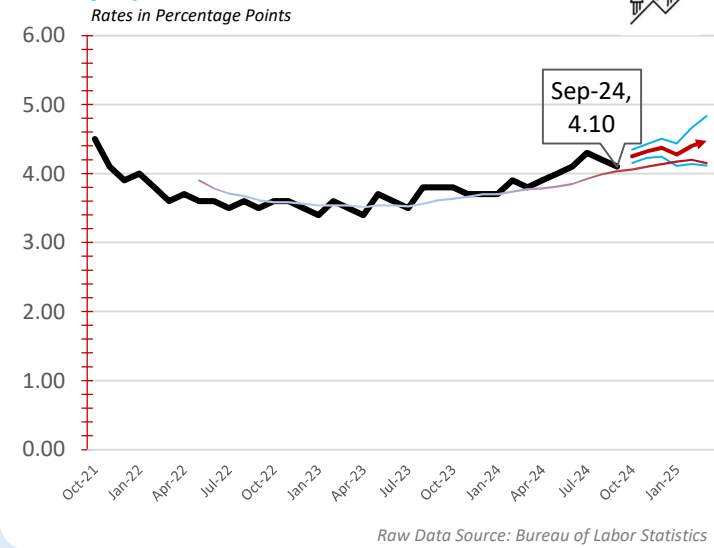
### Standard & Poors 500 Index



### YoY Percent Change in U.S. Real GDP



### Unemployment Rate



#### How to use

S&P 500, GDP, and Unemployment data reflect economic health, impacting construction investments, client financial stability, and labor market conditions.

#### Insights

GDP is forecasted to decline sharply by late 2024, while unemployment rises, suggesting an economic slowdown that may dampen construction investment across sectors, particularly in 2025.