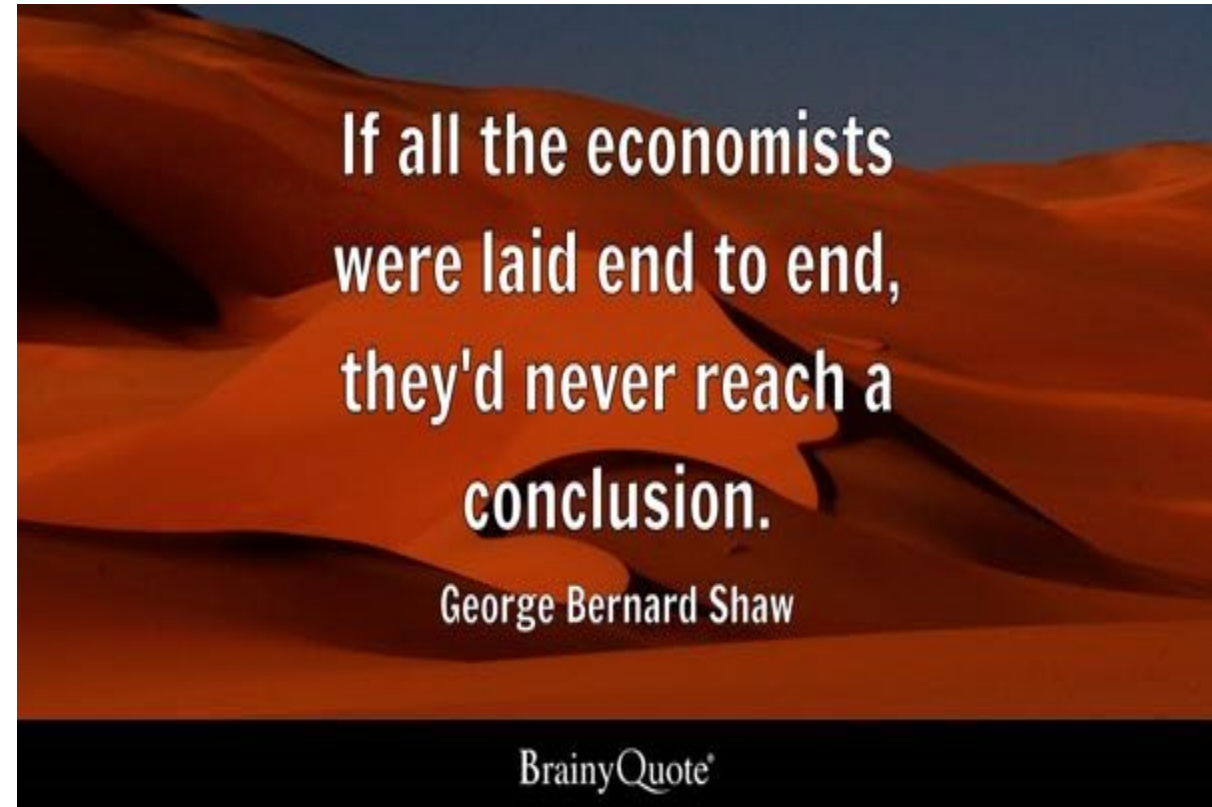




ARMADA

Global Economic Review 2024 NIA – Naples, Florida

Chris Kuehl, Managing Director



Some Recent Developments

- **Chinese deflation may lead to dumping more export product on the global market. Slows down the process of re-shoring. China chronically overproduces. “Survival of the Fittest.”**
- **Expectation of more labor demands and disputes in the months to come. More attempts to unionize in sectors where labor shortage has been acute. Also occurring internationally – major strikes likely in France as the Olympics get closer.**
- **Wider war in Middle East – some signs of calm in the oil markets as there is less chance of an all-out war. Real threat comes from restricted flow of oil because of route closures.**
- **Oil world shifting – record production in Russia, record exports by Iran, renewed oil sanctions on Venezuela. Investors coming back to oil and gas as enthusiasm for alternatives starts to fade.**

Key Issues for 2024

- **Interest rates – when does the Fed cut, how many times and how does this change economic expectations? Was likely in third quarter but now 2025 is a possibility. Maybe down to 4.75 (from 5.5). Depends on inflation and unemployment numbers.**
- **Worker shortage and wage inflation – prime driver for the increase in inflation has been wage hikes – some evidence of the wage-price spiral. Worker shortage has been acute for years and no real relief in sight.**
- **Election and politics – Presidents do not affect economy much (bully pulpit). Monetary policy likely to remain stable. If Congress goes Republican there will be priority shifts – away from alternative energy to traditional infrastructure. No progress expected on debt or deficit.**
- **Trade relations – shift underway from a consumer-centric trade policy to one that favors domestic producers. More barriers to imports will mean higher prices for consumers but more opportunity for domestic production.**

In Case You Have Been Sleeping at Night

- **The great wealth transfer – Boomers have a lot to work with. 1,000 billionaires over the age of 70 sitting on \$5.4 trillion. Generally speaking, Boomers control 72% of the U.S. wealth collectively.**
- **More billionaires created with inherited wealth in 2023 than through any sort of entrepreneurial activity.**
- **Governments have noted this and would just love to get more taxation in place. Inheritance taxes are very popular with governments but very unpopular with people who resent having their money taxed at least twice (once when earned and again when handed down).**
- **Economic impact – If Boomers see that their money is going to be taxed when passed on, they are more likely to spend it instead of losing it to taxation. That surge of cash will trigger a massive increase in inflation and that will trigger a major increase in interest rates as central banks try to restrain it.**

Macroeconomic Outlook



2. Back to sub-2% growth through '25

	2023				2024				2019	2020	2021	2022	2023	2024	2025
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4							
Real GDP	1.1	2.4	5.2	2.5	2.1	0.7	2.0	1.3	2.3	-2.8	5.9	2.1	2.1	2.0	1.6
Unemployment rate (%)	3.5	3.6	3.7	3.7	3.8	3.9	4.1	4.2	3.7	8.1	5.4	3.6	3.6	4.0	4.0
PCE Inflation (%Y/Y)	4.6	3.9	3.3	2.8	2.8	2.8	2.5	2.5	1.5	1.1	4.0	5.6	3.7	2.5	2.5
Core PCE Inflation (%Y/Y)	4.8	4.6	3.8	3.2	3.1	2.5	2.3	2.2	1.7	1.3	3.5	4.8	4.1	2.5	2.2
Fed Funds Rate	4.9	5.1	5.3	5.4	5.4	5.2	4.7	4.7	1.6	0.1	0.1	4.4	5.4	4.7	3.0
Canada Real GDP	2.1	1.1	0.6	-	-	-	-	-	1.8	-5.2	4.5	3.4	1.3	1.5	-
Unemployment rate (%)	5.0	5.2	5.6	-	-	-	-	-	5.8	9.5	7.4	5.3	5.7	6.0	-
Mexico Real GDP	3.7	3.5	-	-	-	-	-	-	-1.8	-8.2	5.0	2.7	1.6	2.1	-
Unemployment rate (%)	2.9	2.9	-	-	-	-	-	-	3.6	4.4	4.1	3.3	3.4	3.3	-

1. Low recession risk for now, barring a significant event.

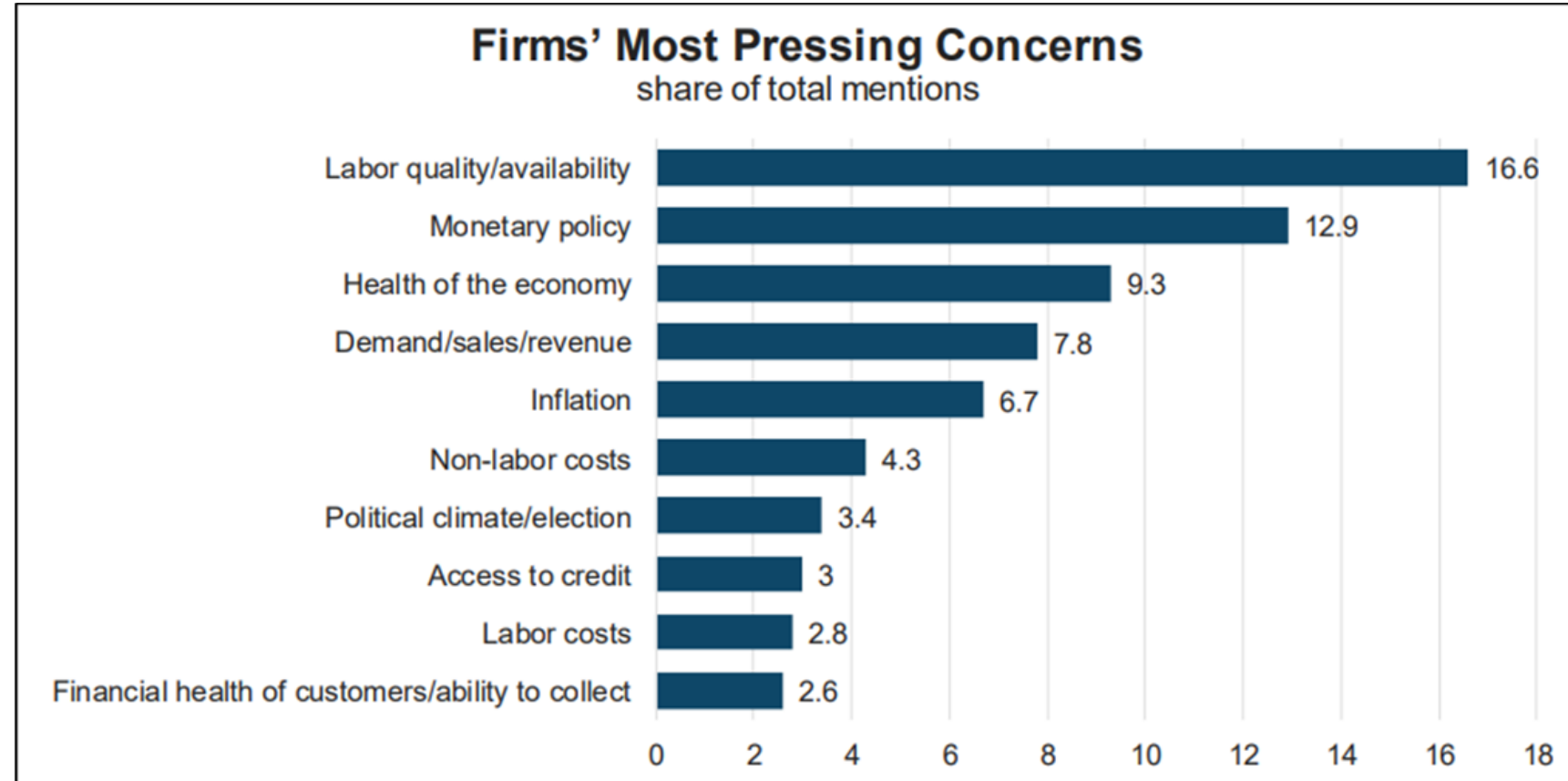
Note: Consumer spending was boosted by stock market gains

- \$900B in new stock wealth created
- \$288B estimated in additional spending as a result
- \$1.3 trillion economic multiplier applied to that
- 76% of 2023 GDP contribution

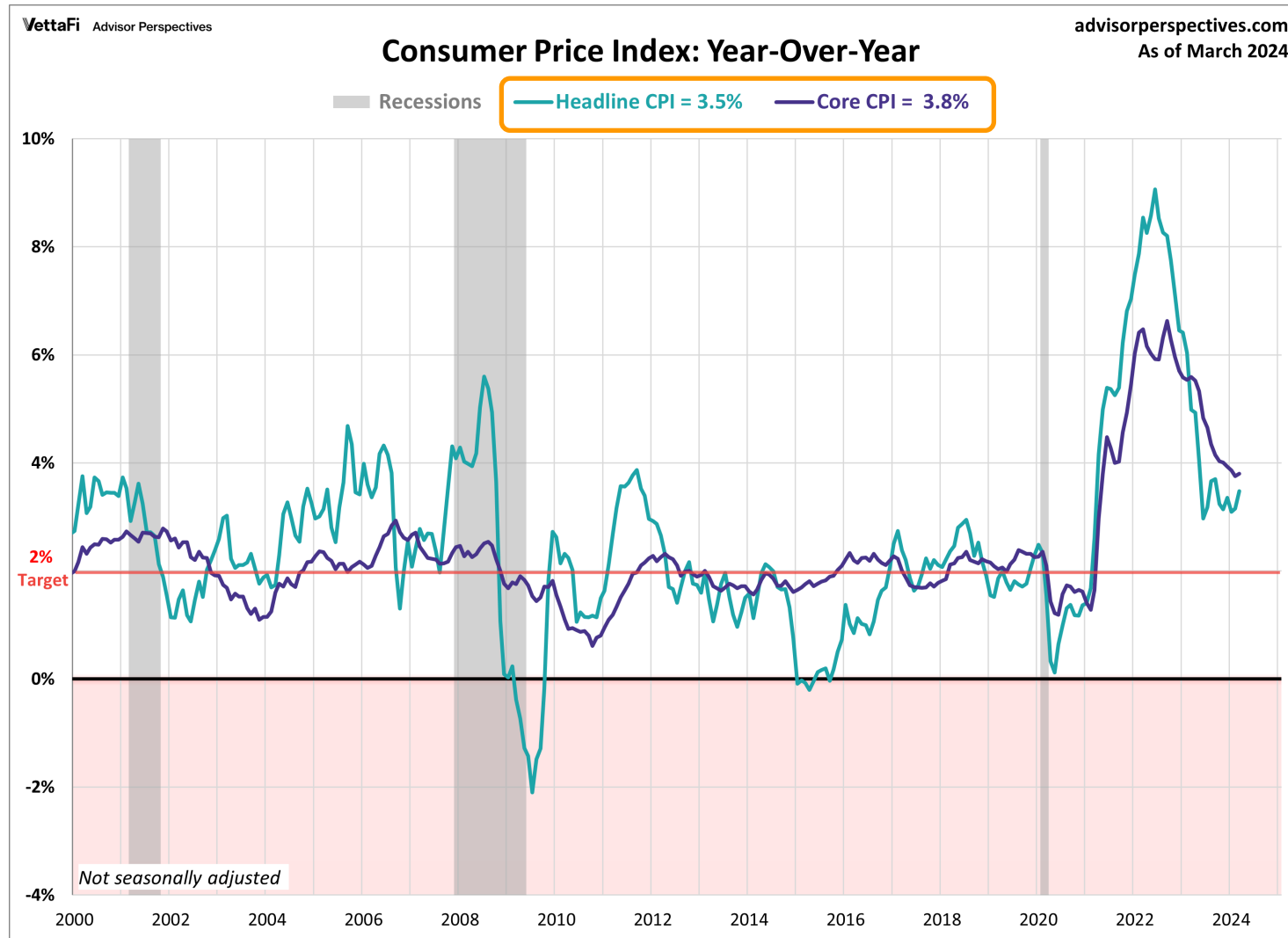
Source: Conference Board; Federal Reserve

New York Fed Business Sentiment Survey – Most Pressing Concerns

- Labor still most pressing with job openings @8.4 million.
- Fed action on interest rates second most pressing.
- Concerns about the macro economy.
- Worries about demand/sales continue.



The News Was a Hot CPI



Average Inflation Smoothed Out in February – Waiting on the Newest Data from the PCE 4/26



One-month PCE inflation, annual rate

	Sept-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
PCE	4.7	0.4	-0.1	1.5	4.6	4.1
PCE ex F&E	4.0	1.7	1.1	1.8	5.6	3.2
Trimmed mean	3.7	2.5	1.8	1.8	5.7	3.4

Six-month PCE inflation, annual rate

	Sept-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
PCE	2.9	2.4	2.1	2.1	2.6	2.5
PCE ex F&E	2.7	2.3	1.9	1.9	2.6	2.9
Trimmed mean	3.1	2.8	2.6	2.5	3.0	3.1

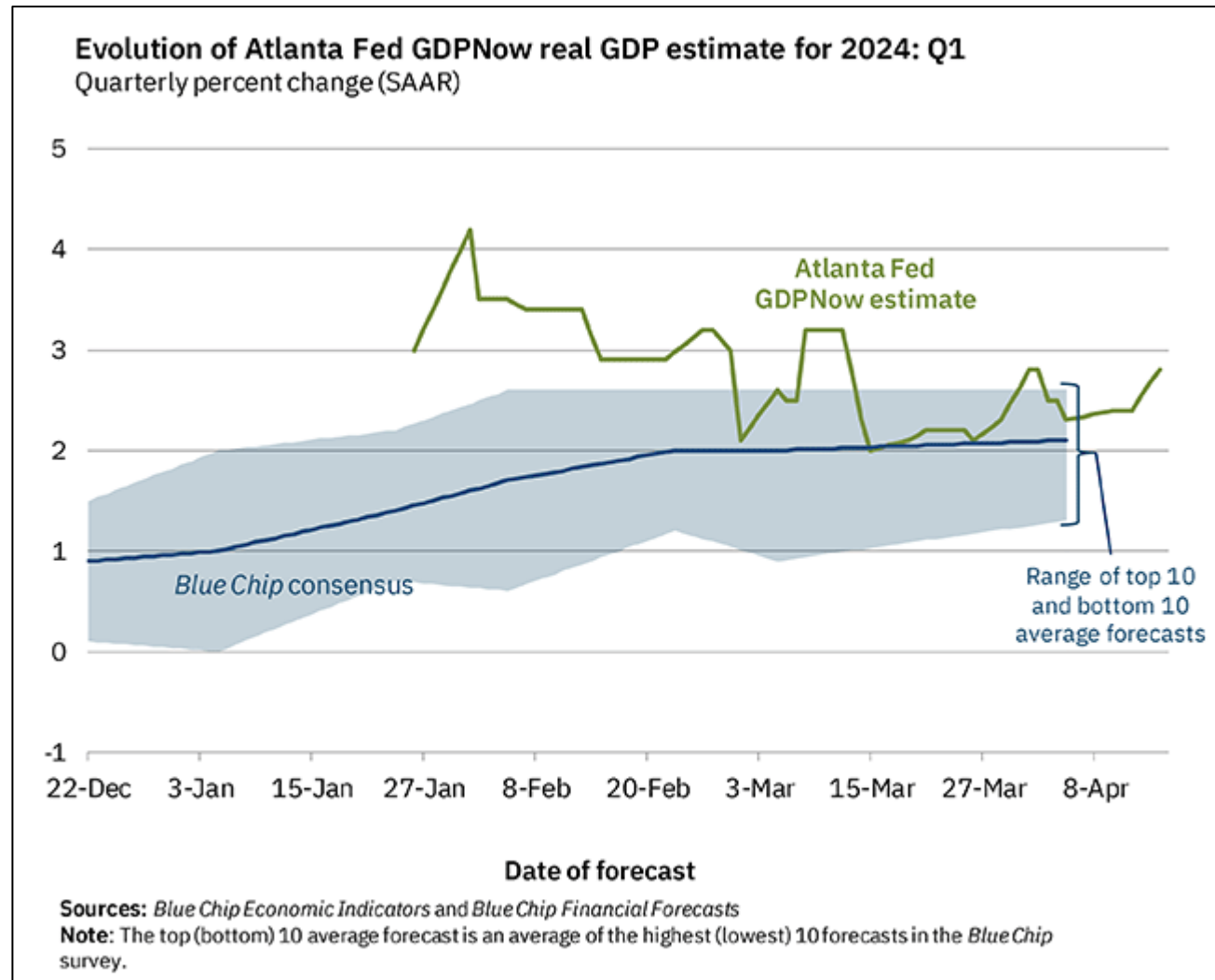
12-month PCE inflation

	Sept-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
PCE	3.4	2.9	2.7	2.6	2.4	2.5
PCE ex F&E	3.6	3.4	3.2	2.9	2.9	2.8
Trimmed mean	3.8	3.6	3.4	3.2	3.2	3.1

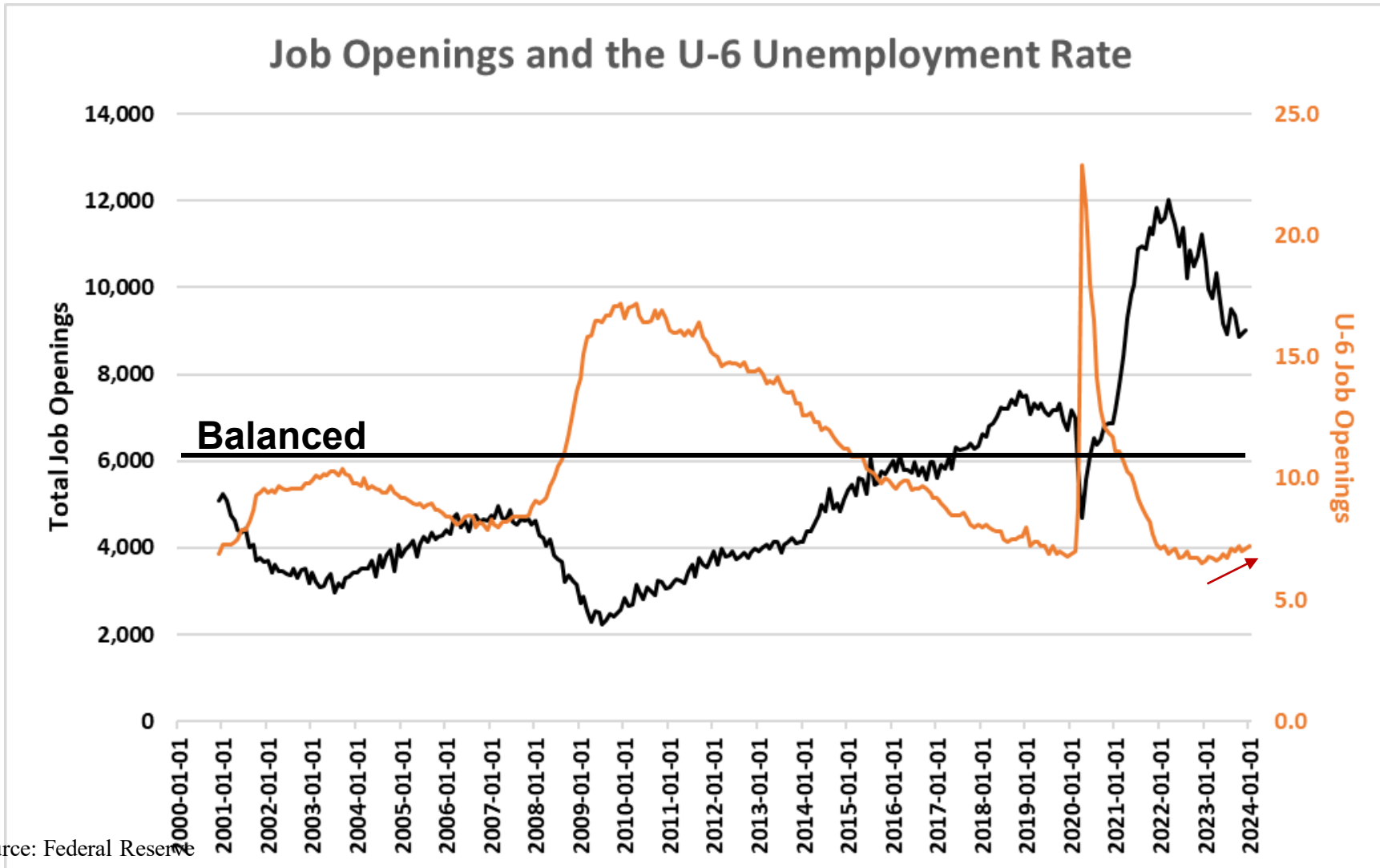
- 3.10% Feb '24
- 3.20% Jan '24
- 3.20% Dec '23
- 3.40% Nov '23
- 3.60% Oct '23
- 3.80% Sep '23
- 3.90% Aug '23
- 4.20% July '23 ← Pause
- 4.34% June '23
- 4.71% May '23
- 4.91% Apr '23
- 4.88% Mar '23
- 4.67% Feb '23
- 4.63% Jan '23
- 4.68% Dec '22
- 4.70% Nov '22
- 4.75% Oct '22
- 4.73% Sep '22
- 4.75% Aug '22

Fed's Target Rate is 2%.

GDP is still too Hot



The Fed Still Has a Job Buffer to Work With



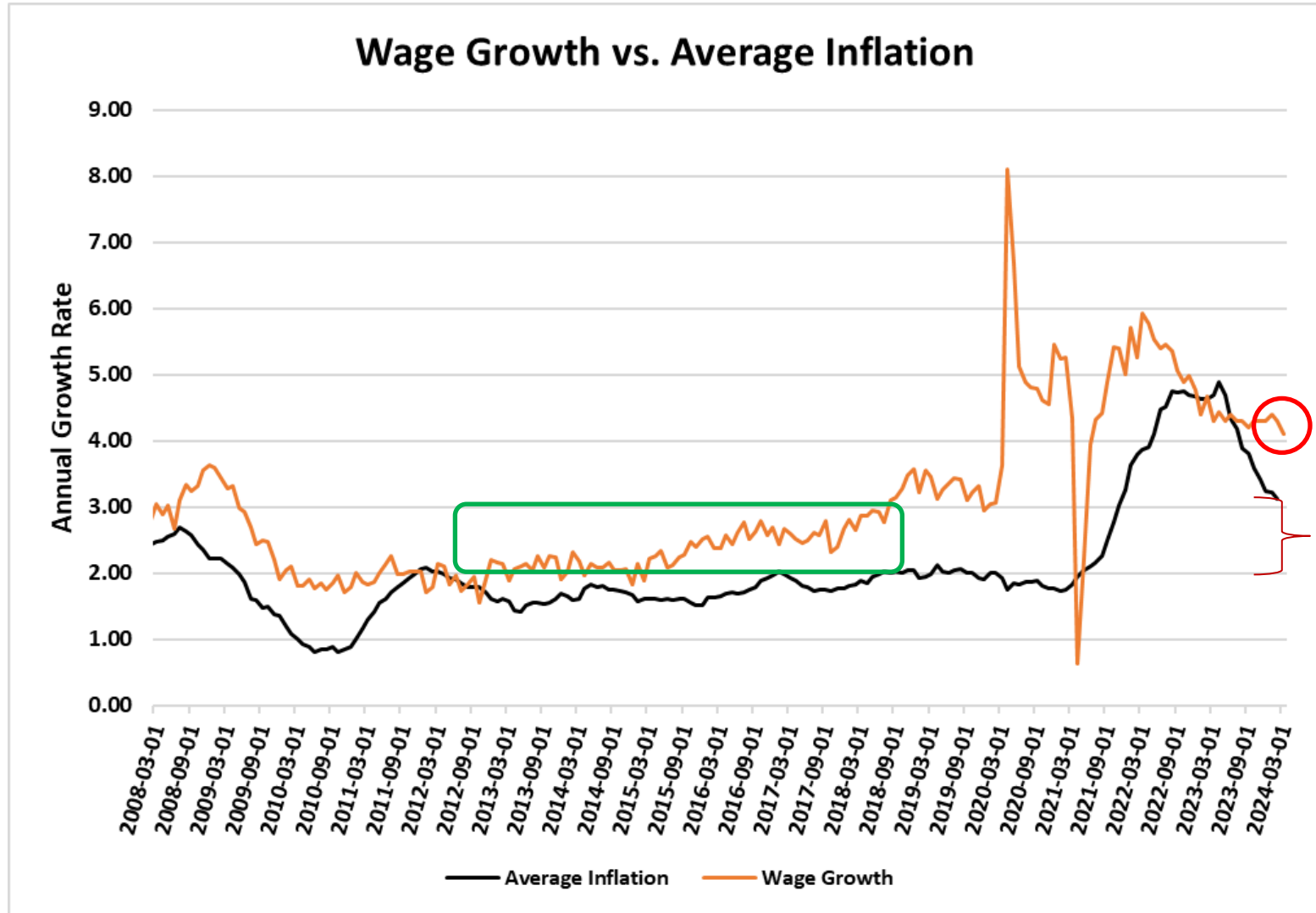
Powell still has a 2.756M job opening buffer to work with.

And a U-6 rate near the lowest in history (at 7.3%, but up from the 6.5% rate hit in Dec. 2022).

Source: Federal Reserve

And Wages Are Still Outpacing Inflation

1. Historical wage growth of 2.5%-3.0%
2. Average inflation needs to be 2% in order to allow households to build some “headroom” between income and costs
3. 62% of US households still living check-to-check (28% in higher earning households): 78 million households



Still need to close this gap

Source: Federal Reserve

Construction Spending Still Very Strong

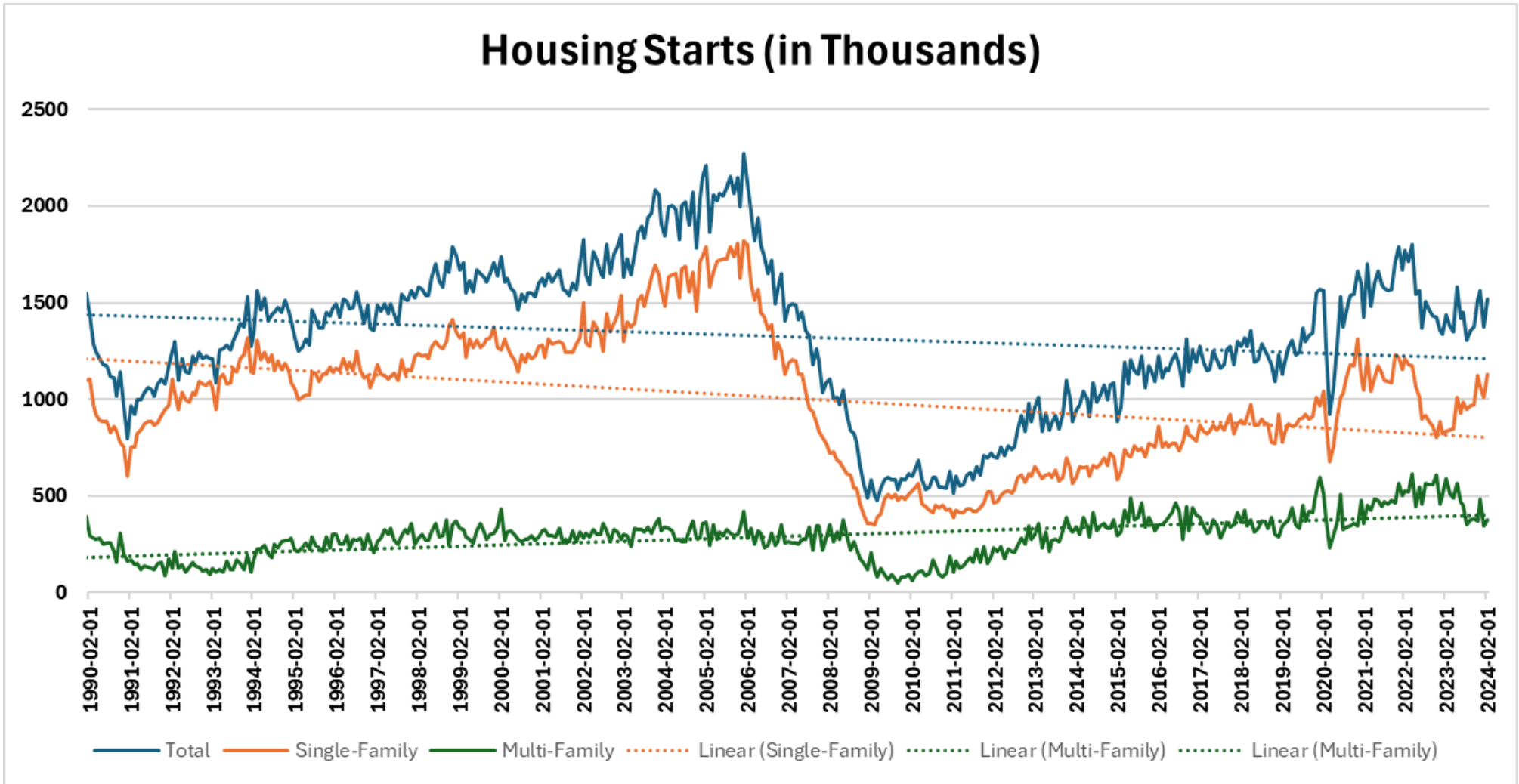
- Spending remains stable and many sectors still setting records (or near record) spending levels.
- As mentioned prior, the question remains whether spending can survive higher interest rates through 2024.
- Private sector funding and spending is strongest in manufacturing (reshoring activity) but is slowing in other categories.
- Government spending is among the fastest growing sectors outside of manufacturing and religious (very small annual spending levels).
- CHIPS Act, Inflation Reduction Act, and Infrastructure Bill will all see accelerated spending in 2024.

Type of Construction	Feb 2024 ^p	Jan 2024 ^r	Feb 2023	Percent change Feb 2024 from -	
				Jan 2024	Feb 2023
Total Construction	2,091,511	2,096,922	1,889,562	-0.3	10.7
Residential	912,718	906,285	857,211	0.7	6.5
New single family	438,786	432,715	374,548	1.4	17.2
New multifamily	133,219	133,435	125,529	-0.2	6.1
Nonresidential	1,178,793	1,190,637	1,032,350	-1.0	14.2
Public safety	15,786	15,827	11,634	-0.3	35.7
Manufacturing	222,875	224,300	168,976	-0.6	31.9
Religious	3,922	3,983	3,225	-1.5	21.6
Highway and street	148,349	150,655	125,146	-1.5	18.5
Educational	125,751	127,724	107,916	-1.5	16.5
Amusement and recreation	34,128	34,649	29,588	-1.5	15.3
Water supply	28,621	29,133	24,856	-1.8	15.1
Power	132,934	133,528	118,122	-0.4	12.5
Sewage and waste disposal	43,140	43,445	38,380	-0.7	12.4
Health care	66,479	67,948	60,362	-2.2	10.1
Conservation and development	11,535	11,585	10,809	-0.4	6.7
Transportation	66,389	65,960	62,252	0.7	6.6
Office	101,546	101,655	96,085	-0.1	5.7
Lodging	23,398	23,704	22,754	-1.3	2.8
Communication	25,355	25,502	24,661	-0.6	2.8
Commercial	128,585	131,041	127,585	-1.9	0.8

Data Source: U.S. Census Bureau

Housing Starts

Housing Starts (in Thousands)



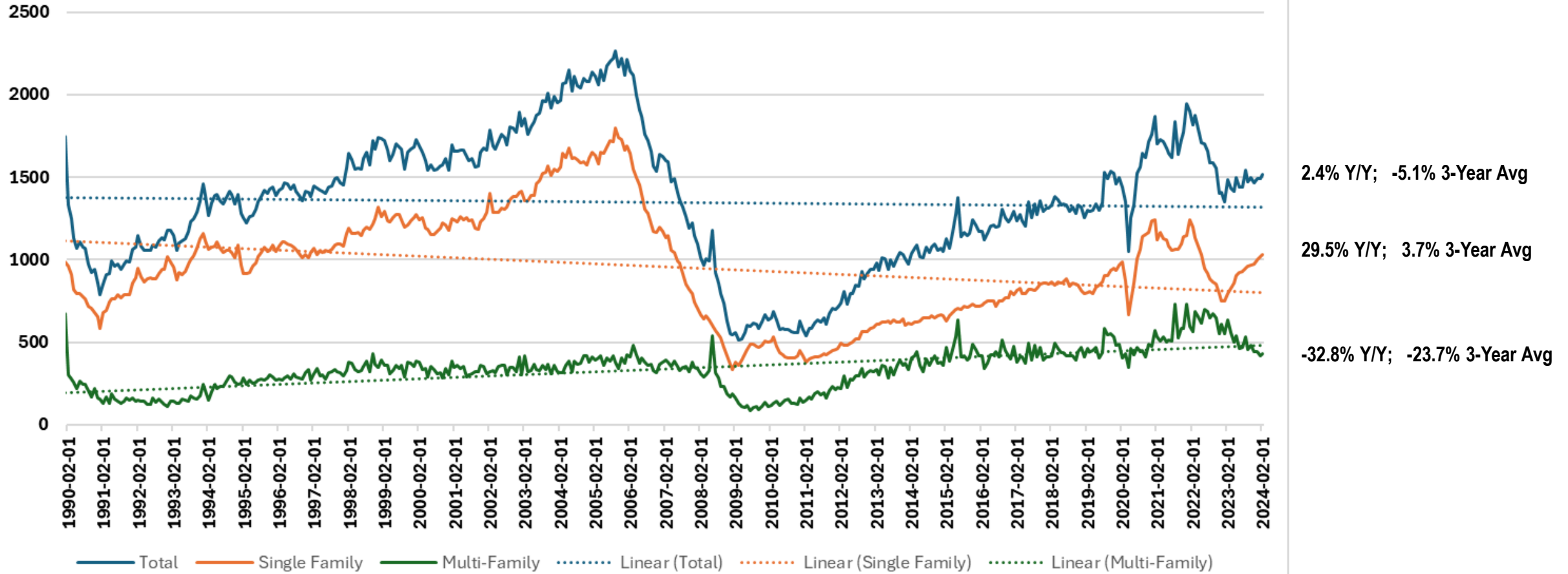
5.9% Y/Y; 0.1% 3-Year Avg

35.2% Y/Y; 9.9% 3-Year Avg

-35.9% Y/Y; -21.3% 3-Year Avg

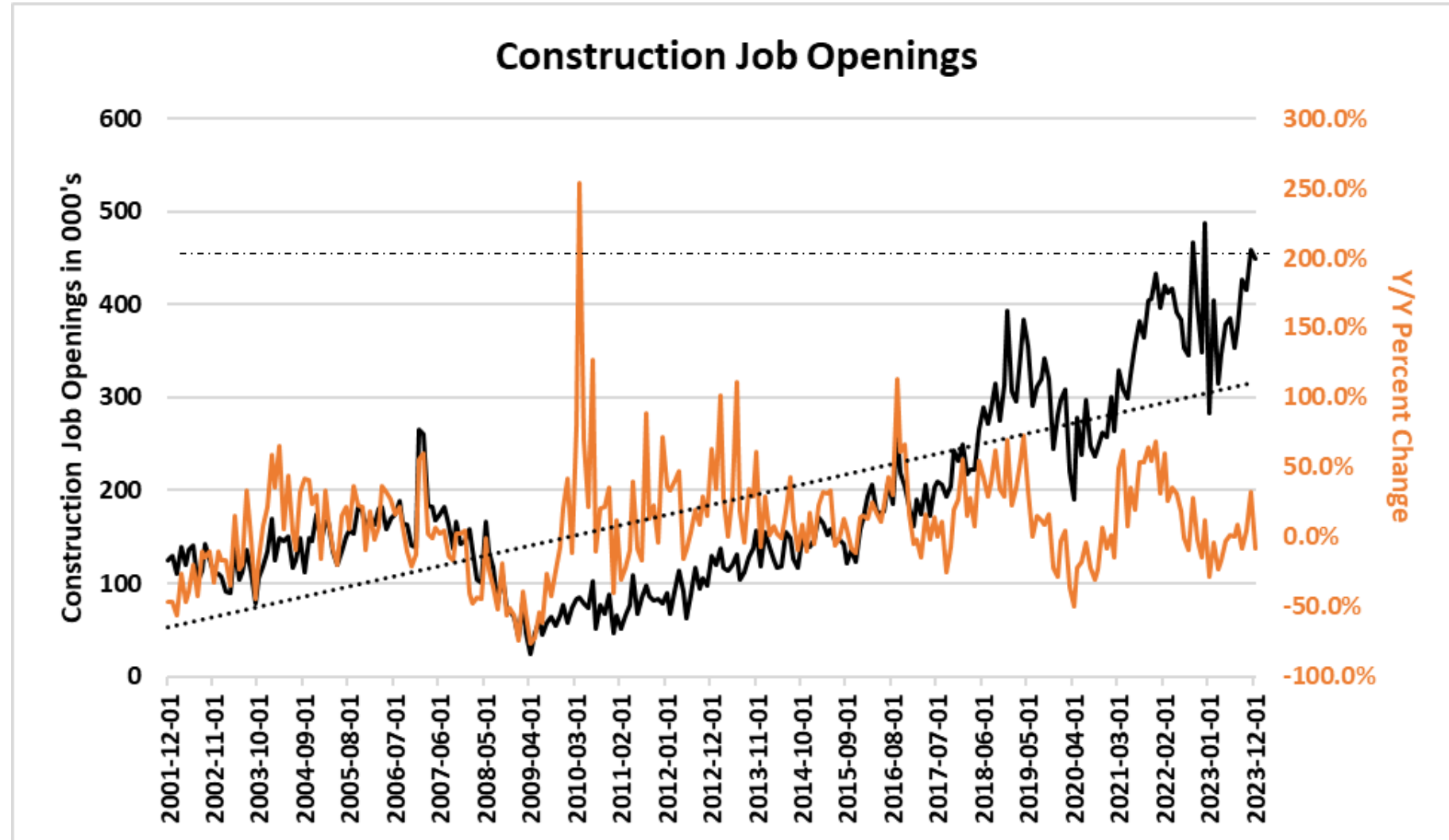
Housing Permits

Housing Permits (in Thousands)



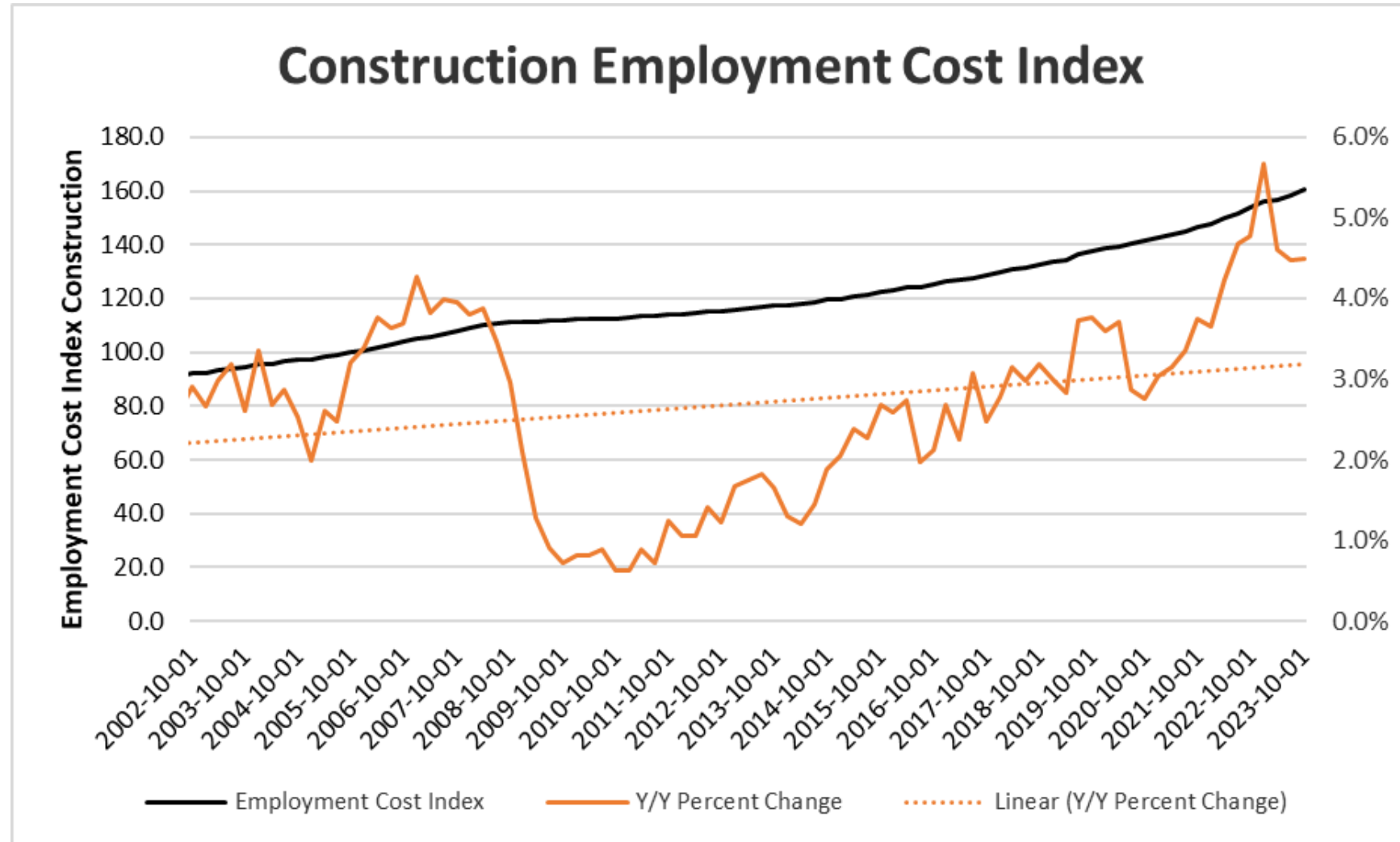
Once Again, Construction Job Shortages Are High

- Job openings remain high at 413,000 through January (41% higher than January of 2023).
- The peak was 488,000 in Dec. of 2022.
- New government spending projects kicking in during 2024 will likely keep the labor market tight.



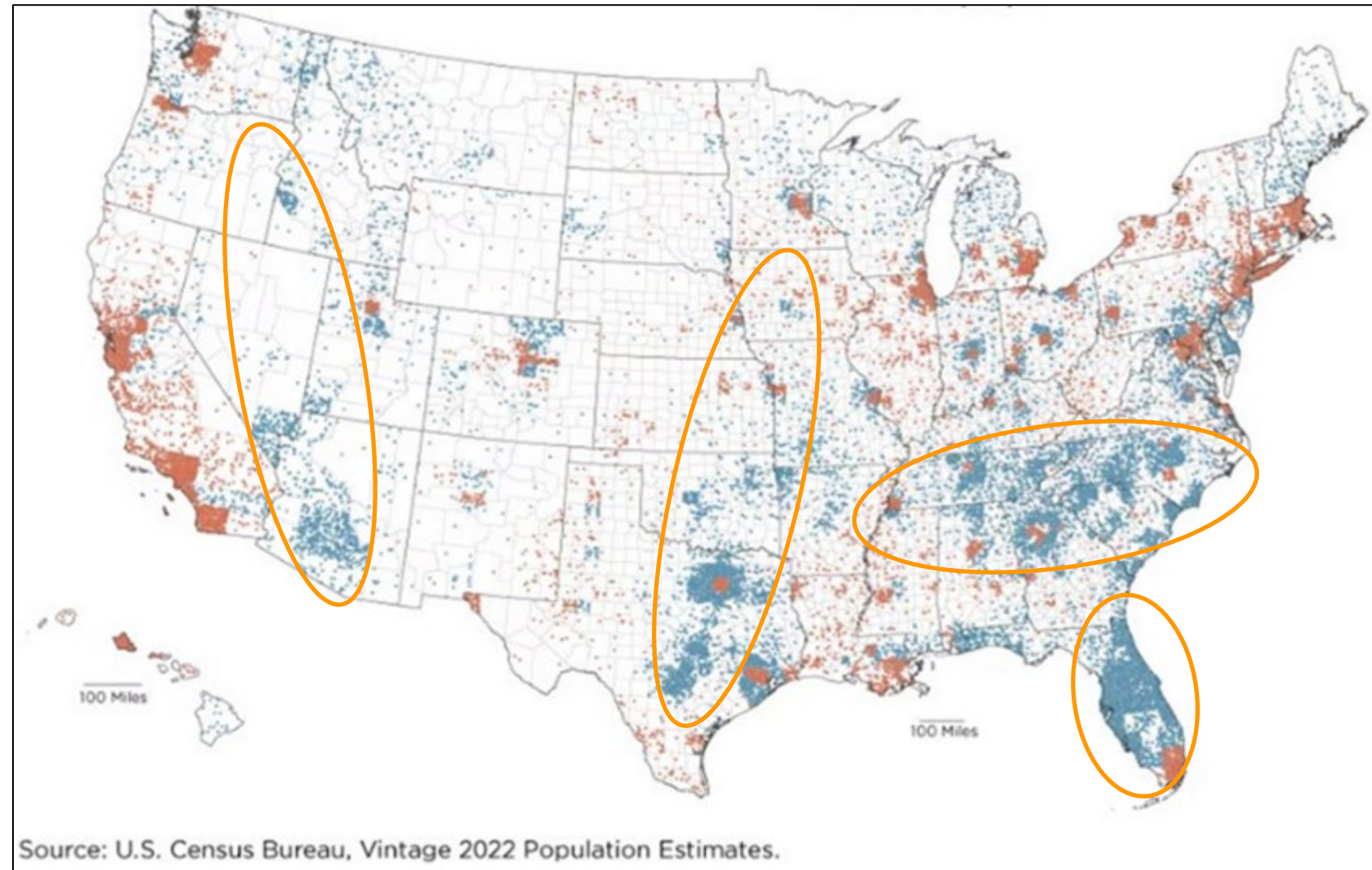
Construction Employment Cost Index (Latest)

- The construction ECI was growing at a 4.5% annual rate through Q4 (latest available).
- This is back in-line with national rates that are growing at about the same rate.



Where Is It? Population Changes 2021 – 2022

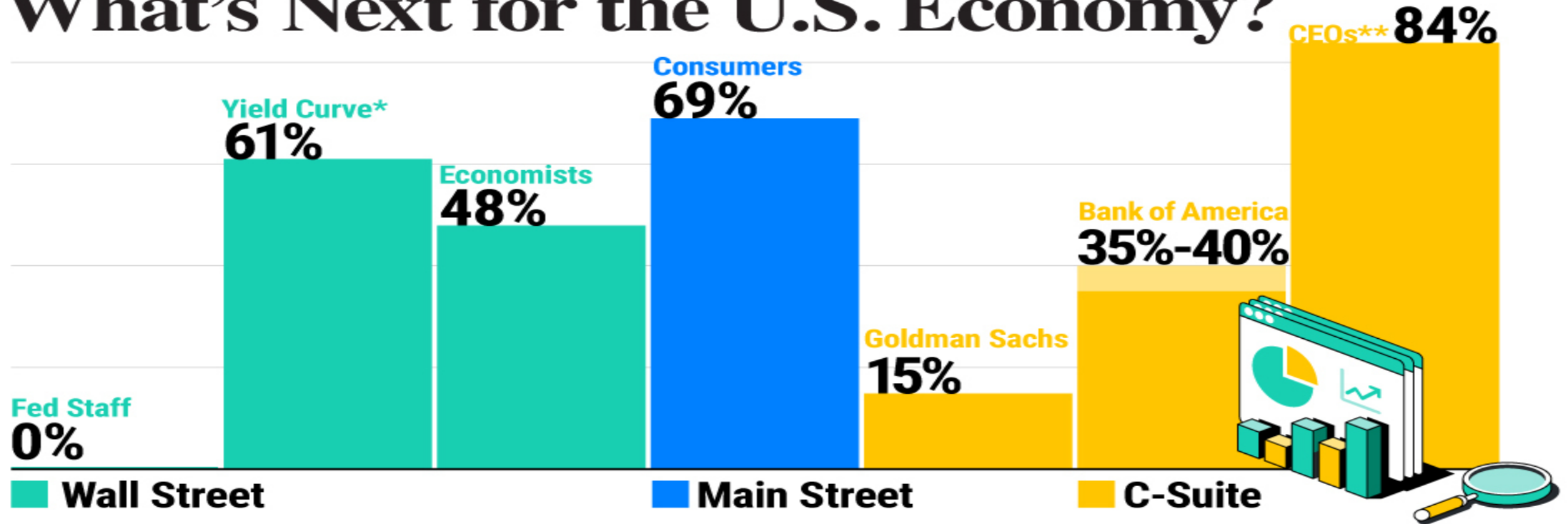
- Note the flight even out of popular (but dense) population centers like downtown Dallas and Miami, but flight to suburbs in those regions are among the fastest growth rates in the country.
- Corridors seem to be continuing to get population influxes...
 - I35 corridor
 - Tennessee Valley Region +Atlanta
 - And Florida



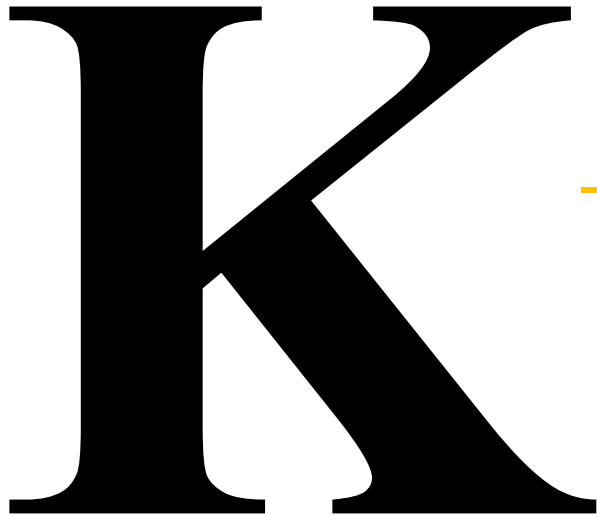
Not Much Consensus on United States

2024 PROJECTIONS

What's Next for the U.S. Economy?



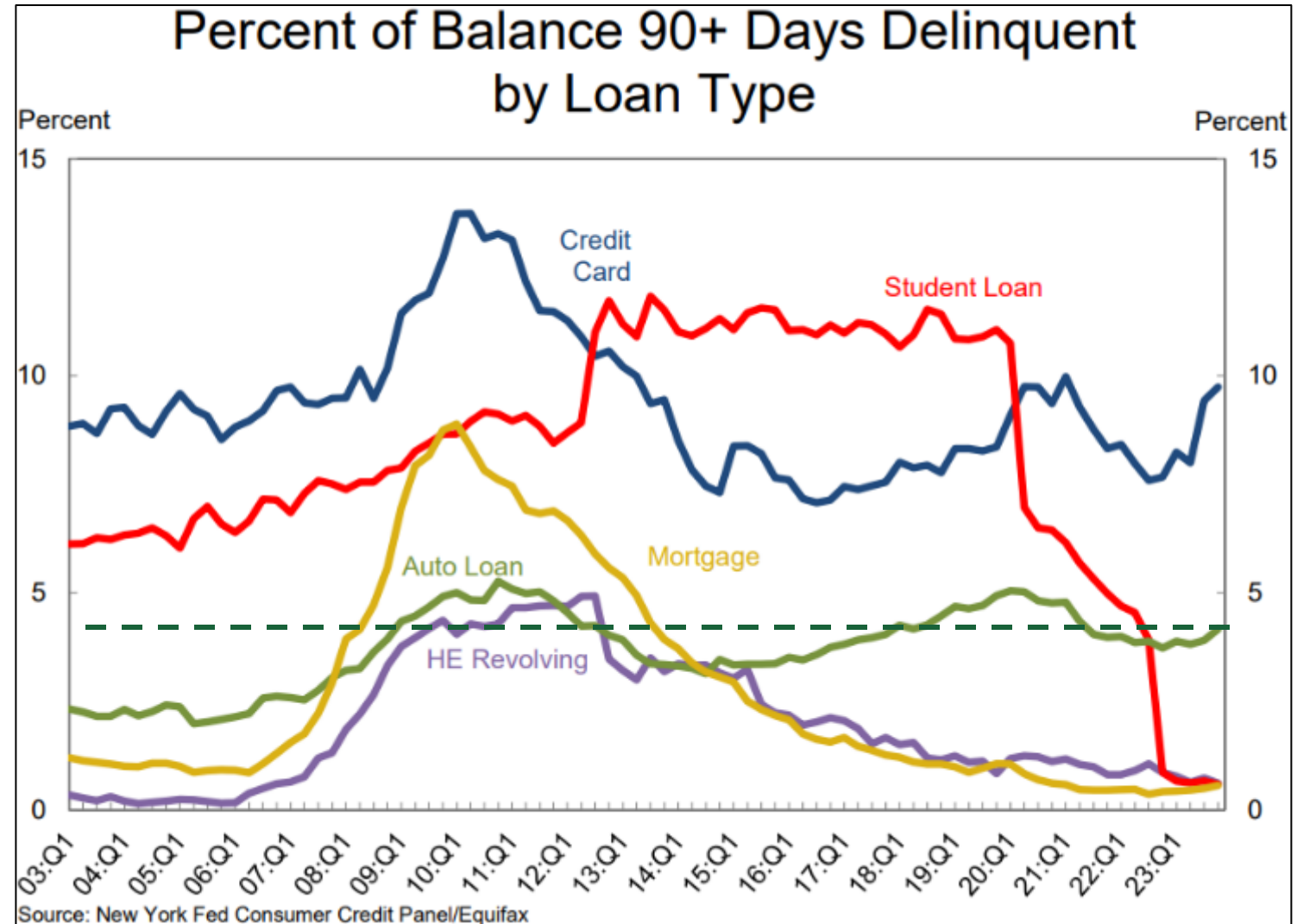
Here is the Problem: The K Shaped Recovery



- Upper Income Households doing very, very well
- Many companies in various sectors breaking historic profit and revenue thresholds
- Middle segments are the question
- 55% Living Check-to-check
- Lower income sectors have always struggled, but are finding it more difficult under the weight of inflation
- 85% are living check-to-check

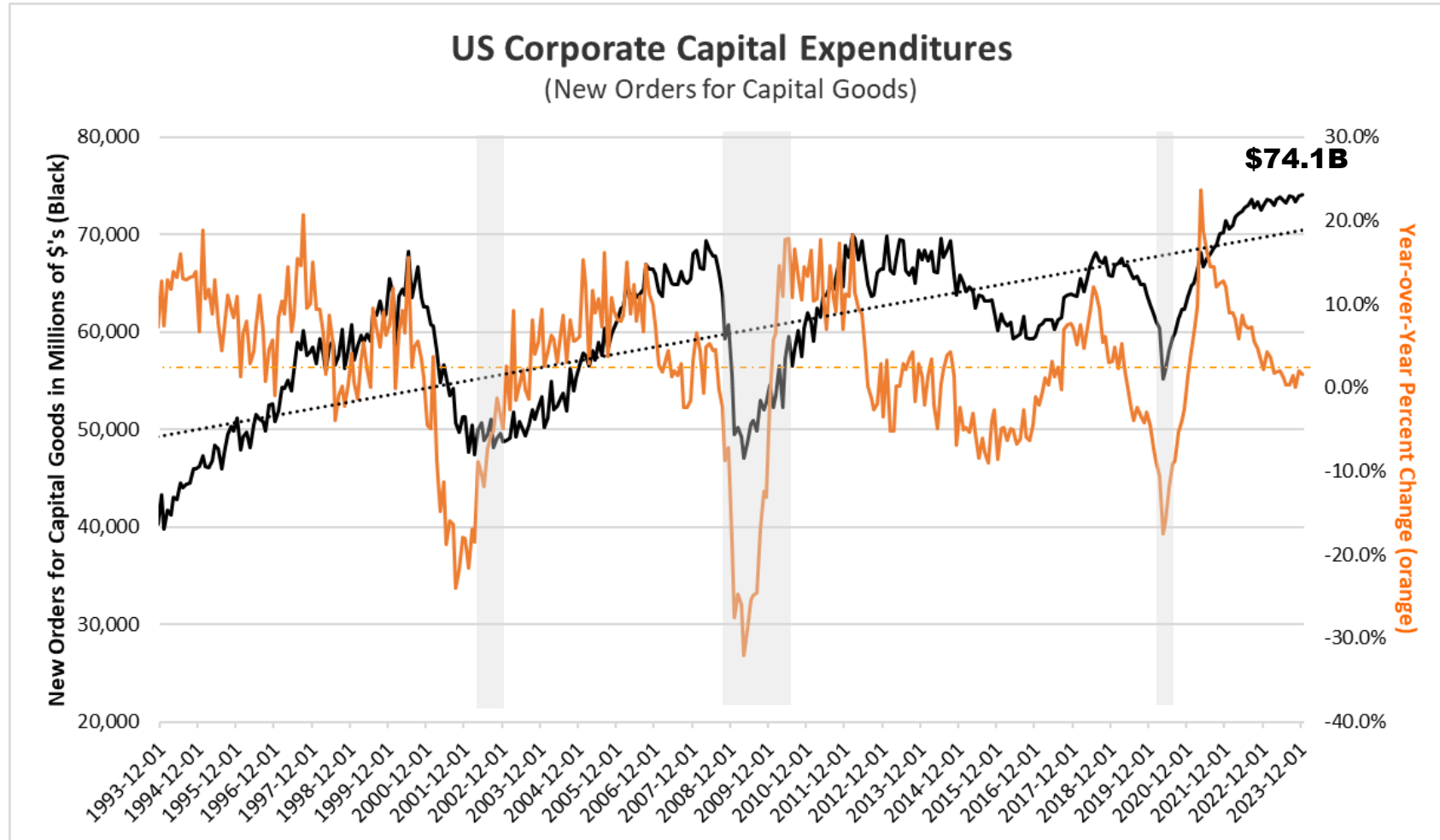
Fed Eyeing Loan Delinquency. Rates Are Rising, But...

- Autos not alarming
- Mortgage and Home Equity loans in-line
- Credit card delinquency starting to create concerns (but it is the easiest to get under control)
- Student loan payment moratorium just now starting to give us visibility into real delinquency



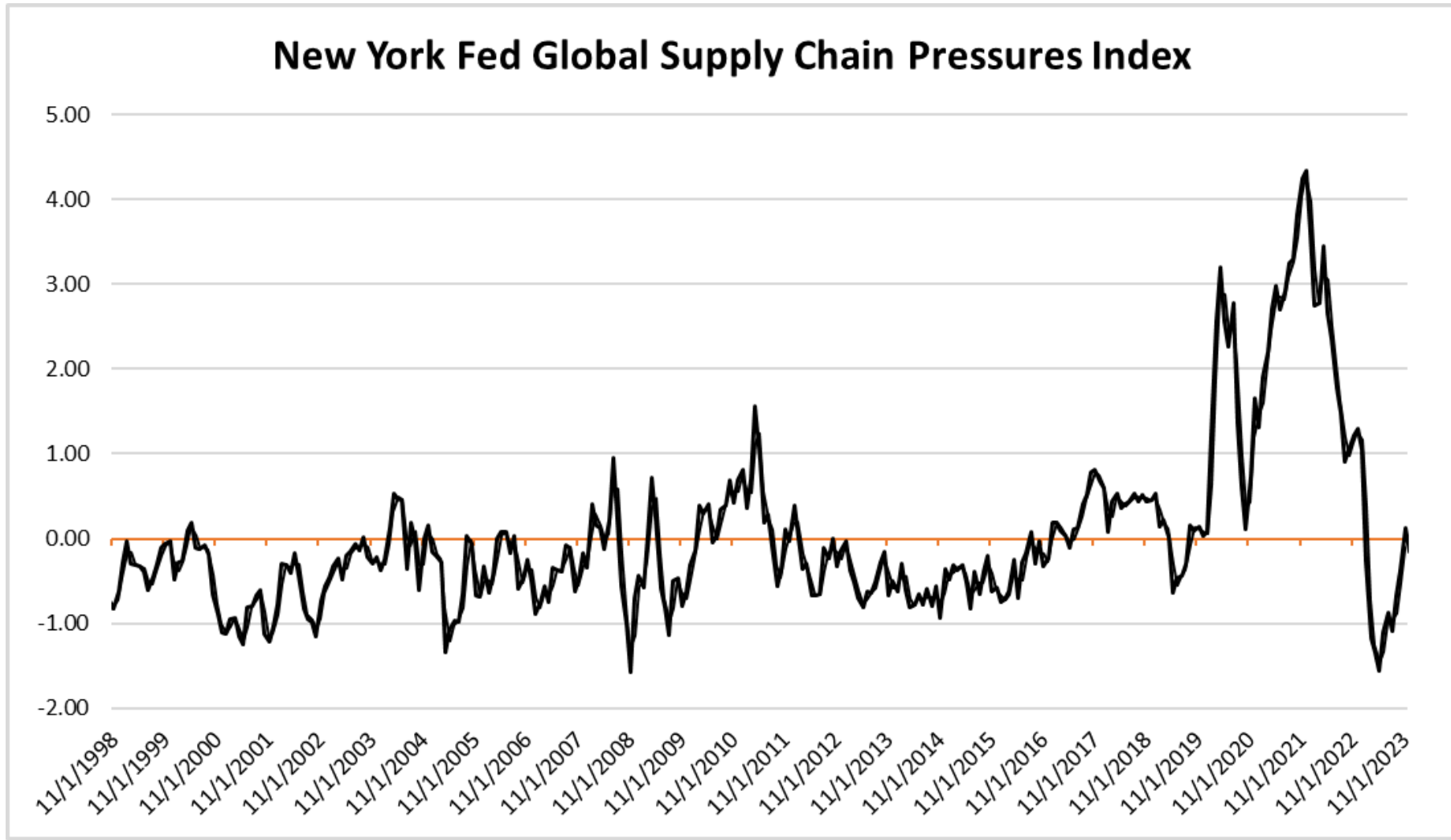
Growth: Corporate Investment Remains Steady

- Small business surveys show investment has started to decline, but still not showing in this view of the national data yet



Source: Federal Reserve

Global Supply Chain Pressures Index Snaps in Dec./Jan.



Headwind BLUF: Global Manufacturing Highlights



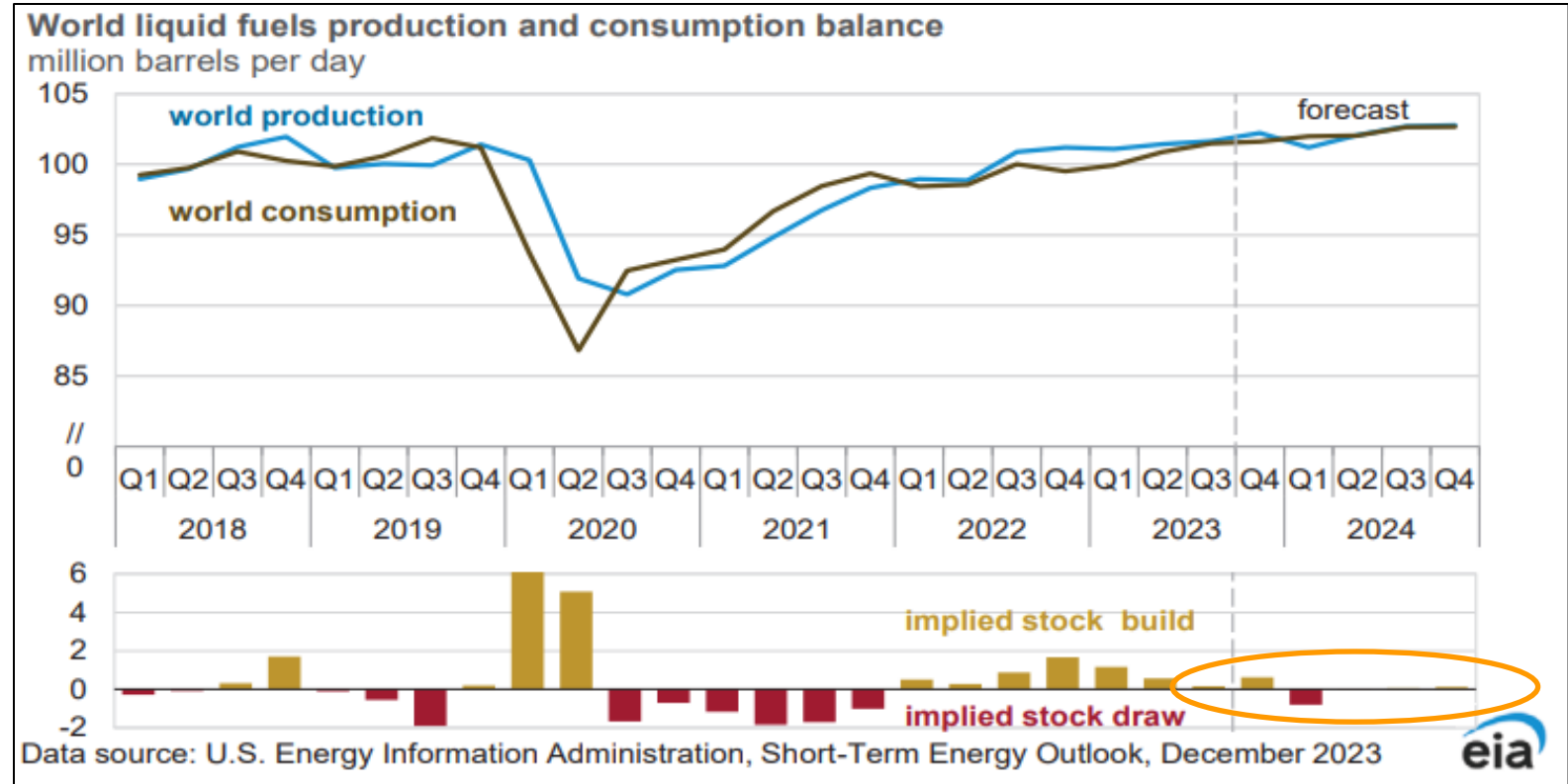
- 12 countries had manufacturing sectors in contraction in Feb.
- Europe still in recession.
- Asia is reeling from lack of demand in NA and Europe.
- India is booming – because of shifting sourcing patterns.
- Canada in contraction, U.S. and Mexico expanding for now.
- Raw material demand and the impact of the Red Sea are big questions.

Country	Current Month	Manufacturing			M/M Change	Current Month	Services		
		Latest Month PMI	Prior Month PMI	M/M Change			Latest Month PMI	Prior Month PMI	M/M Change
Global PMI	Feb	50.3	50.0	0.3	Jan	52.3	51.6	0.7	
Eurozone PMI	Feb	46.5	46.6	-0.1	Jan	48.4	48.8	-0.4	
US	Feb	52.2	50.7	1.5	Jan	52.5	51.4	1.1	
China	Feb	50.9	50.8	0.1	Jan	52.7	52.9	-0.2	
Canada	Feb	49.7	48.3	1.4	Jan	45.8	44.6	1.2	
Mexico	Feb	52.3	50.2	2.1					
Japan	Feb	47.2	48.0	-0.8	Jan	53.1	51.5	1.6	
Germany	Feb	42.5	45.5	-3.0	Jan	47.7	49.3	-1.6	
South Korea	Feb	50.7	51.2	-0.5					
UK	Feb	47.5	47.0	0.5	Jan	54.3	53.4	0.9	
France	Feb	47.1	43.1	4.0	Jan	45.4	45.7	-0.3	
India	Feb	56.9	56.5	0.4	Jan	61.8	59.0	2.8	
Italy	Feb	48.7	48.5	0.2	Jan	51.2	49.8	1.4	
Taiwan	Feb	48.6	48.8	-0.2					
Brazil	Feb	54.1	52.8	1.3	Jan	53.1	50.5	2.6	
Spain	Feb	51.5	49.2	2.3	Jan	52.1	51.5	0.6	
Russia	Feb	54.7	52.4	2.3	Jan	55.8	56.2	-0.4	
Netherlands	Feb	49.3	48.9	0.4					
Ireland	Feb	52.2	49.5	2.7	Jan	50.5	53.2	-2.7	
Greece	Feb	55.7	54.7	1.0					
Poland	Feb	47.9	47.1	0.8					
ASEAN	Feb	50.4	50.3	0.1					
Vietnam	Feb	50.4	50.3	0.1					
Philippines	Feb	51.0	50.9	0.1					
Australia	Feb	47.8	50.1	-2.3	Jan	49.1	47.1	2.0	
Switzerland	Feb	44.0	43.1	0.9					
Hong Kong	Jan	49.9	51.3	-1.4					
Singapore	Feb	50.6	50.7	-0.1					
Indonesia	Feb	52.7	52.9	-0.2					
Thailand	Feb	45.3	46.7	-1.4					

Sources: S&P Global, Caixin, JP Morgan, Jibun Bank, Nevi, BME, CIPS

Oil and Gasoline – Fairly Balanced for 2024

- Fairly balanced outlook through 2024.
 - Anecdotal evidence suggests that many new wells have been built and are ready for production – but are shut-in and waiting on demand to resurface before starting production.
- The United States may have officially hit a “dynamic production” zone in which production can quickly keep pace with demand. That could lead to oil prices hovering in the \$70 range in perpetuity.



Crude forecast:	
• 2021	\$68.21
• 2022	\$94.91
• 2023	\$77.63
• 2024	\$78.07

Diesel forecast:	
• 2021	\$3.29
• 2022	\$5.02
• 2023	\$4.22
• 2024	\$3.95

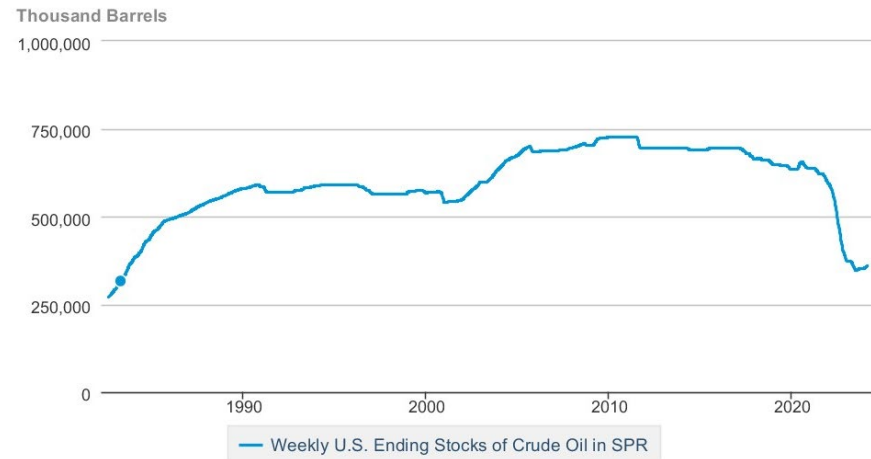
Gasoline forecast:	
• 2021	\$3.02
• 2022	\$3.97
• 2023	\$3.53
• 2024	\$3.36

Source: EIA; Baker Hughes; Conoco-Philips

U.S. Production Touching New All-Time Highs at 13.31M BPD

- Prior record was 13M BPD in Nov of 2019.
- Significant shut-in capacity is ready and could be tapped at any time. Again, oil prices remaining in the \$70-\$80 per barrel range is optimum for producers.
- SPR inventories still at 1980's lows. Officials state that it can only be refilled at a specific rate because of limitations on storage facilities.

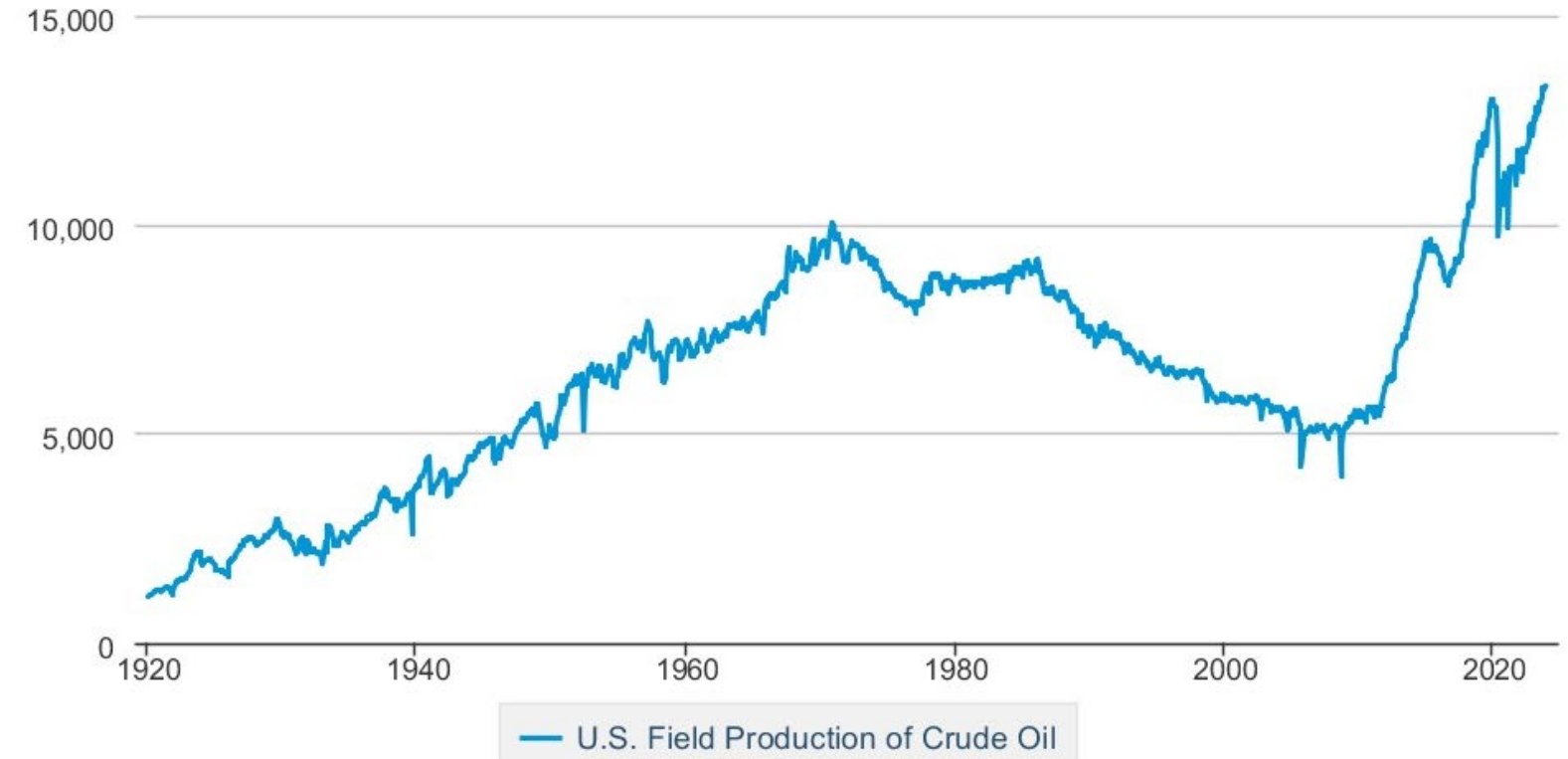
Weekly U.S. Ending Stocks of Crude Oil in SPR



eia Data source: U.S. Energy Information Administration

U.S. Field Production of Crude Oil

Thousand Barrels per Day



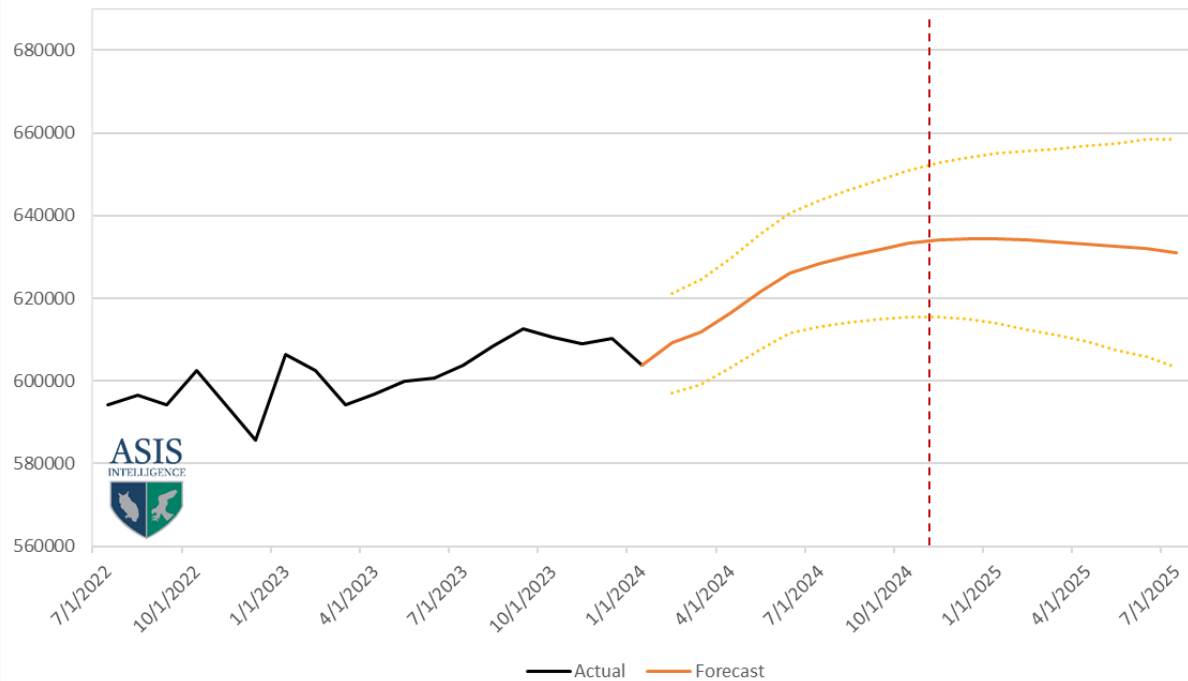
eia Data source: U.S. Energy Information Administration

Forecast Growth: Retail Spending (Consumer Spending)

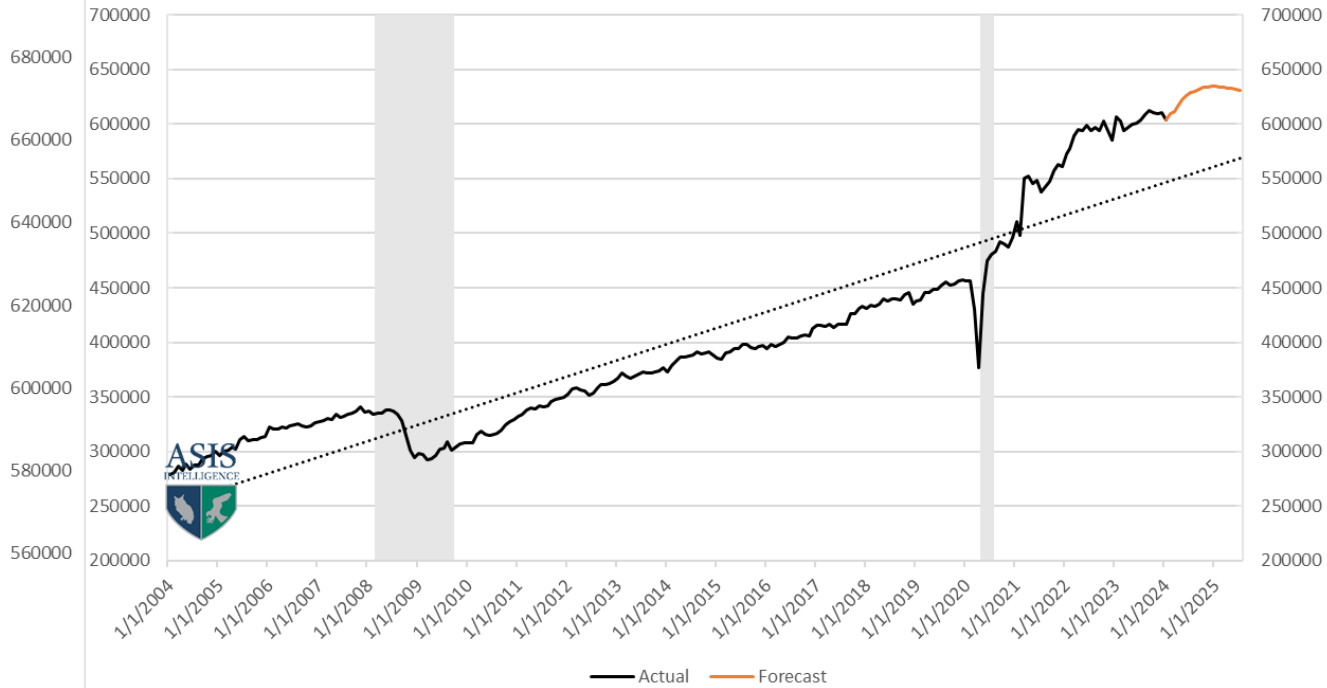
Forecast from The Watch



Advance Retail Sales: Retail Trade (RSXFS)
Forecast as of 03/13/2024



Advance Retail Sales: Retail Trade (RSXFS)
Forecast as of 03/13/2024



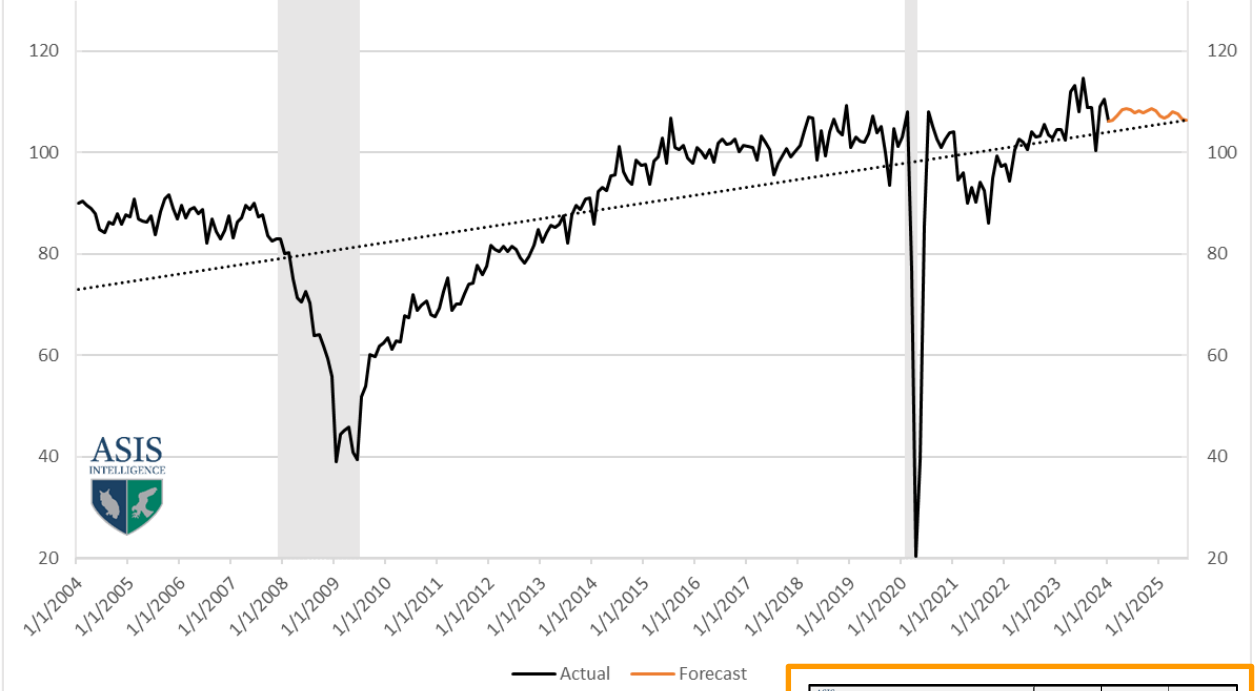
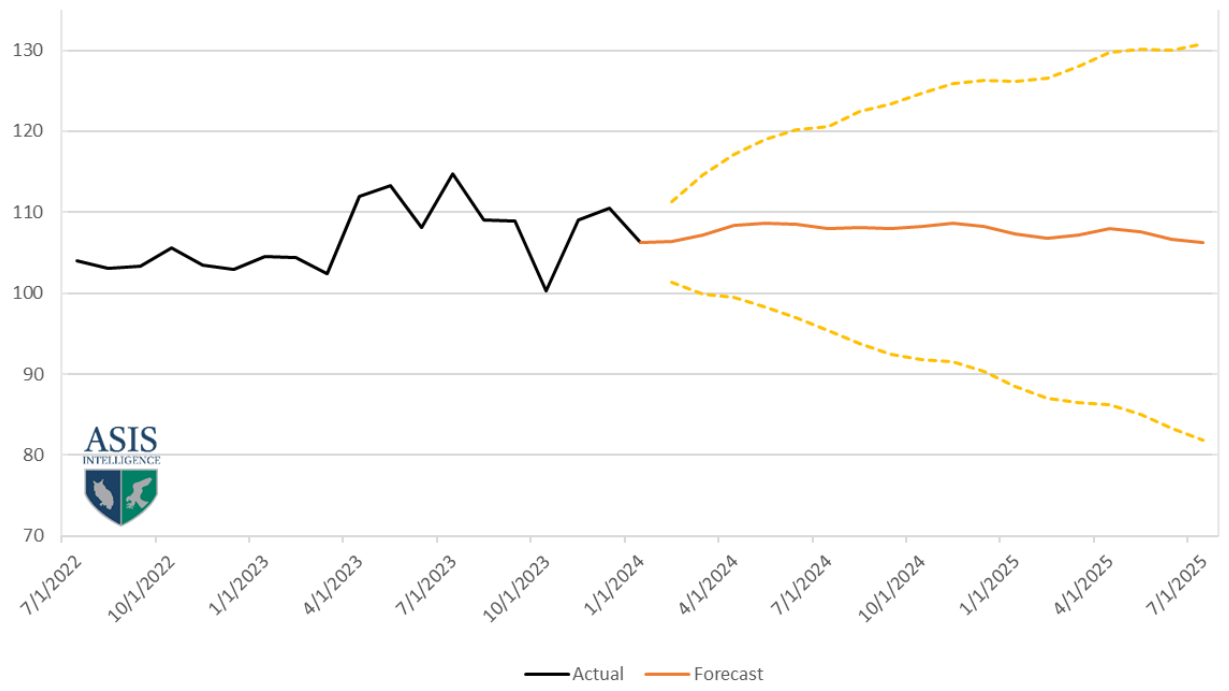
	1 mo	3 mo
TRUCK D11	94.72%	93.70%
RAILFRTCARLOADSD11	98.88%	99.75%
RSXFS	98.68%	97.89%
PNRESCONS	94.40%	93.99%

Automotive Production Forecast from The Watch



Industrial Production: Motor Vehicles and Parts (IPG3361T3S)
Forecast as of 03/13/2024

Industrial Production: Motor Vehicles and Parts (IPG3361T3S)
Forecast as of 03/13/2024

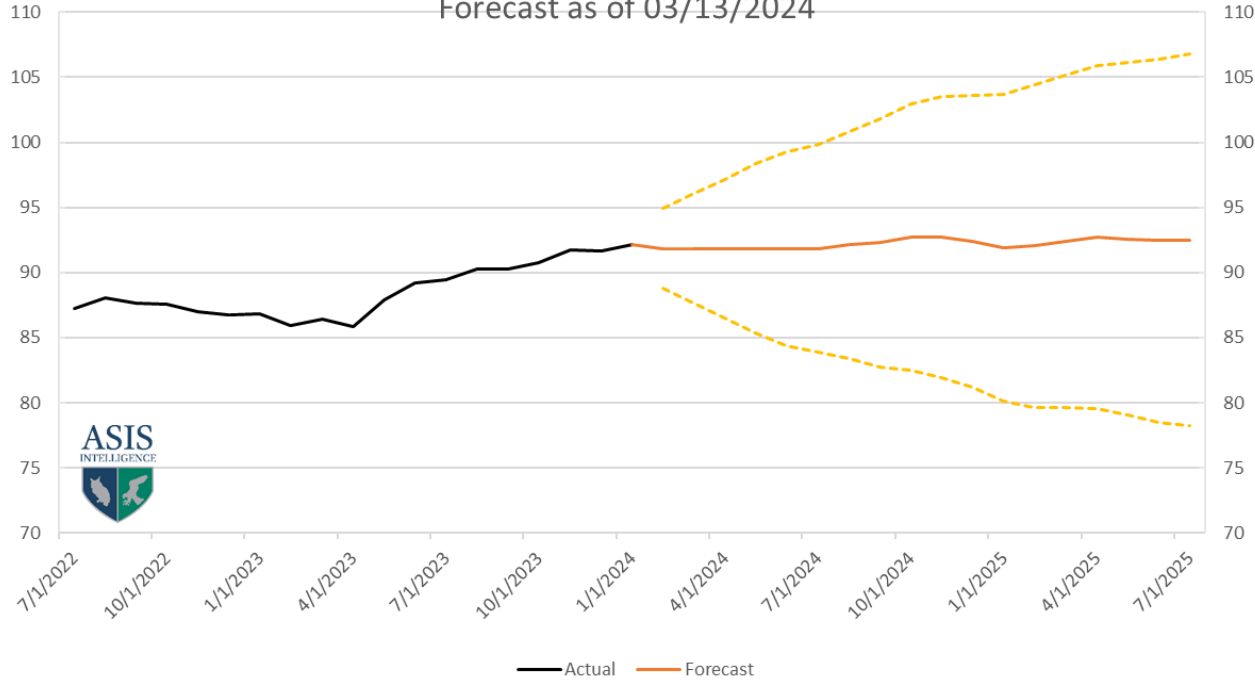


ASIS INTELLIGENCE	1-month	3-month	6-month
Industrial Production: Manufacturing	99.806%	97.303%	99.332%
Aerospace and Miscellaneous Transportation Equipment	99.197%	99.548%	99.771%
Computer and Electronic Product	99.305%	97.993%	98.874%
Electrical Equipment, Appliance, and Component	98.540%	98.215%	92.380%
Fabricated Metal Product	98.485%	94.130%	96.570%
Machinery	98.462%	98.859%	98.339%
Motor Vehicles and Parts	96.998%	91.727%	99.618%
Primary Metal	98.570%	93.495%	99.415%
Average	98.670%	96.409%	98.037%

Aerospace Production Forecast from The Watch



Industrial Production: Aerospace and Miscellaneous Transportation Equipment (IPG3364T9S)
Forecast as of 03/13/2024



Industrial Production: Aerospace and Miscellaneous Transportation Equipment (IPG3364T9S)
Forecast as of 03/13/2024

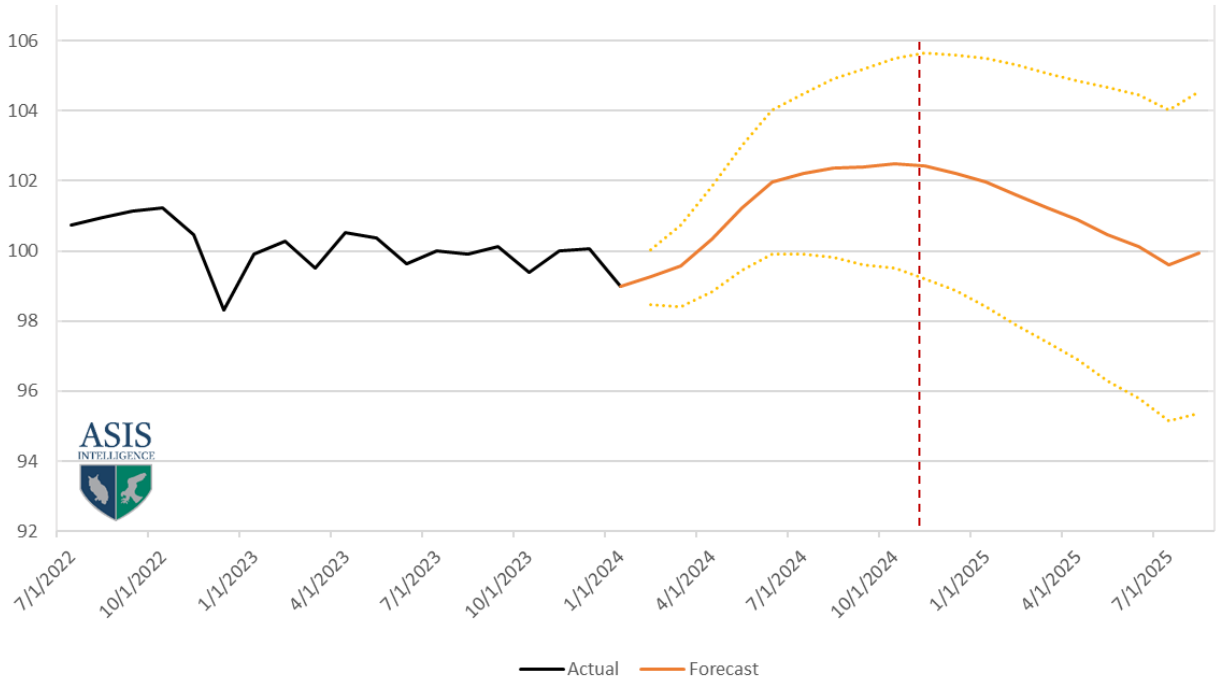


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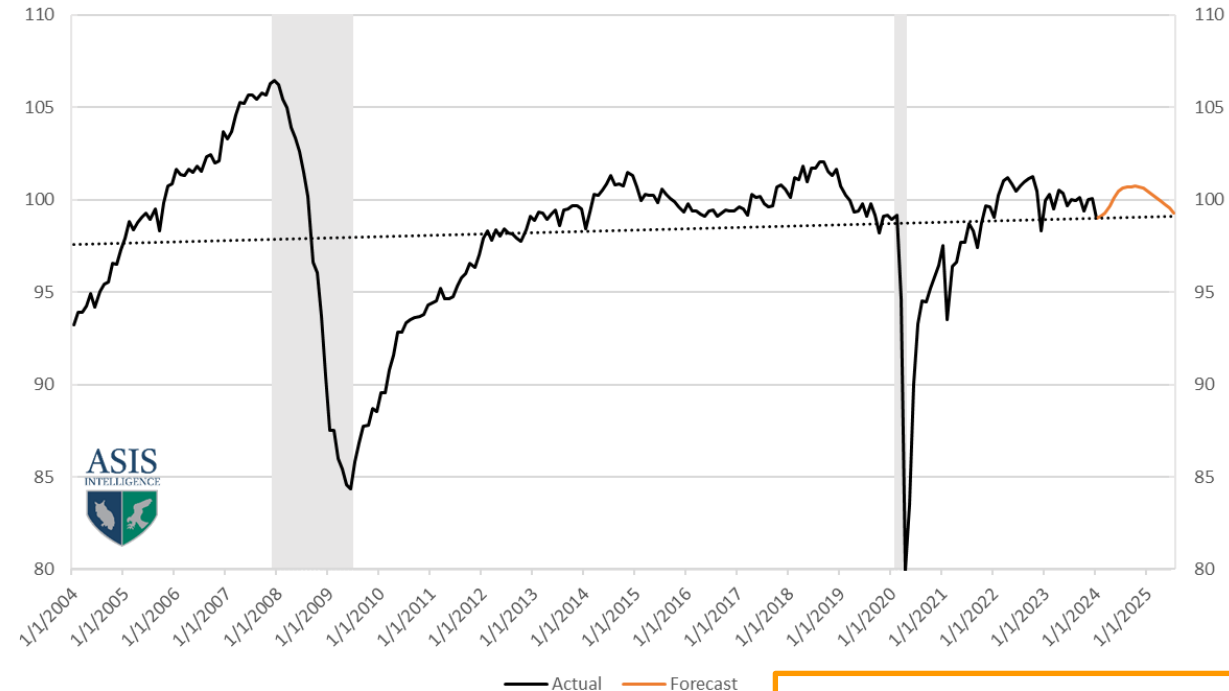
Broad Manufacturing Forecast from The Watch



Industrial Production: Manufacturing (IPMAN)
Forecast as of 03/13/2024



Industrial Production: Manufacturing (IPMAN)
Forecast as of 03/13/2024

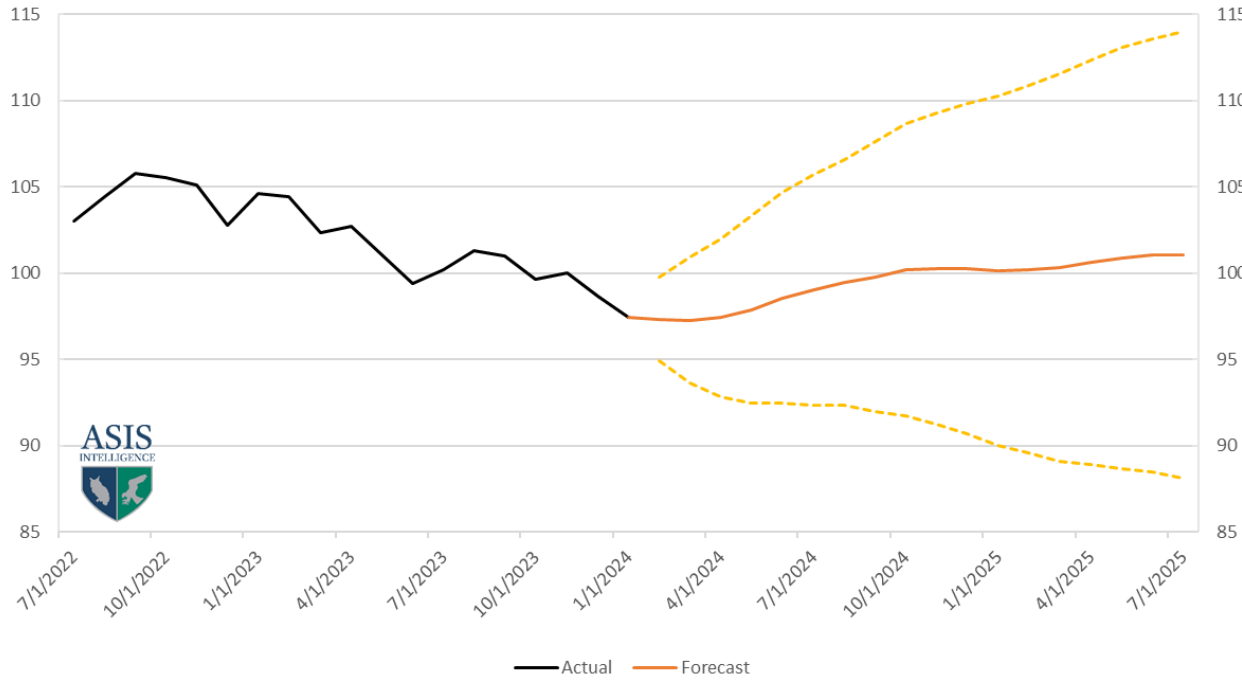


	1-month	3-month	6-month
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Motor Vehicles and Parts	96.998%	91.727%	99.618%
Primary Metal	98.570%	93.495%	99.415%
Average	98.670%	96.409%	98.037%

Machinery Production Forecast from The Watch



Industrial Production: Machinery (IPG333S)
Forecast as of 03/13/2024



Industrial Production: Machinery (IPG333S)
Forecast as of 03/13/2024

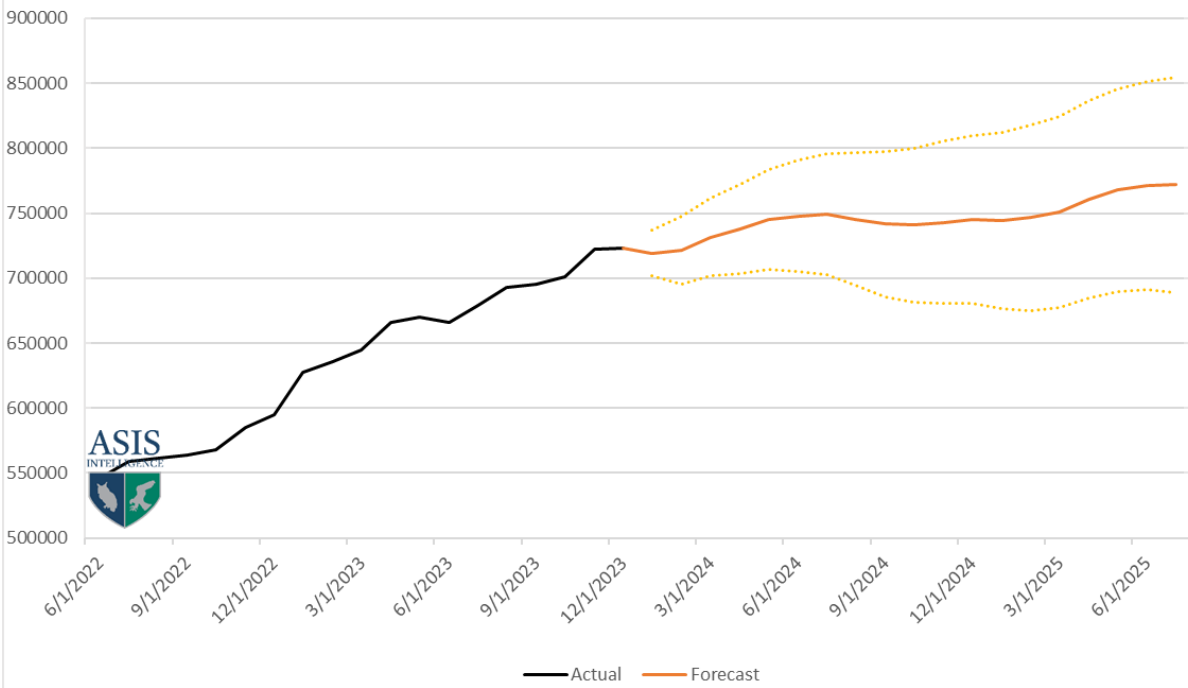


ASIS INTELLIGENCE	1-month	3-month	6-month
Industrial Production: Manufacturing	99.806%	97.303%	99.332%
Aerospace and Miscellaneous Transportation Equipment	99.197%	99.548%	99.771%
Computer and Electronic Product	99.305%	97.993%	98.874%
Electrical Equipment, Appliance, and Component	98.540%	98.215%	92.380%
Fabricated Metal Product	98.485%	94.130%	96.570%
Machinery	98.462%	98.859%	98.339%
Motor Vehicles and Parts	96.998%	91.727%	99.618%
Primary Metal	98.570%	93.495%	99.415%
Average	98.670%	96.409%	98.037%

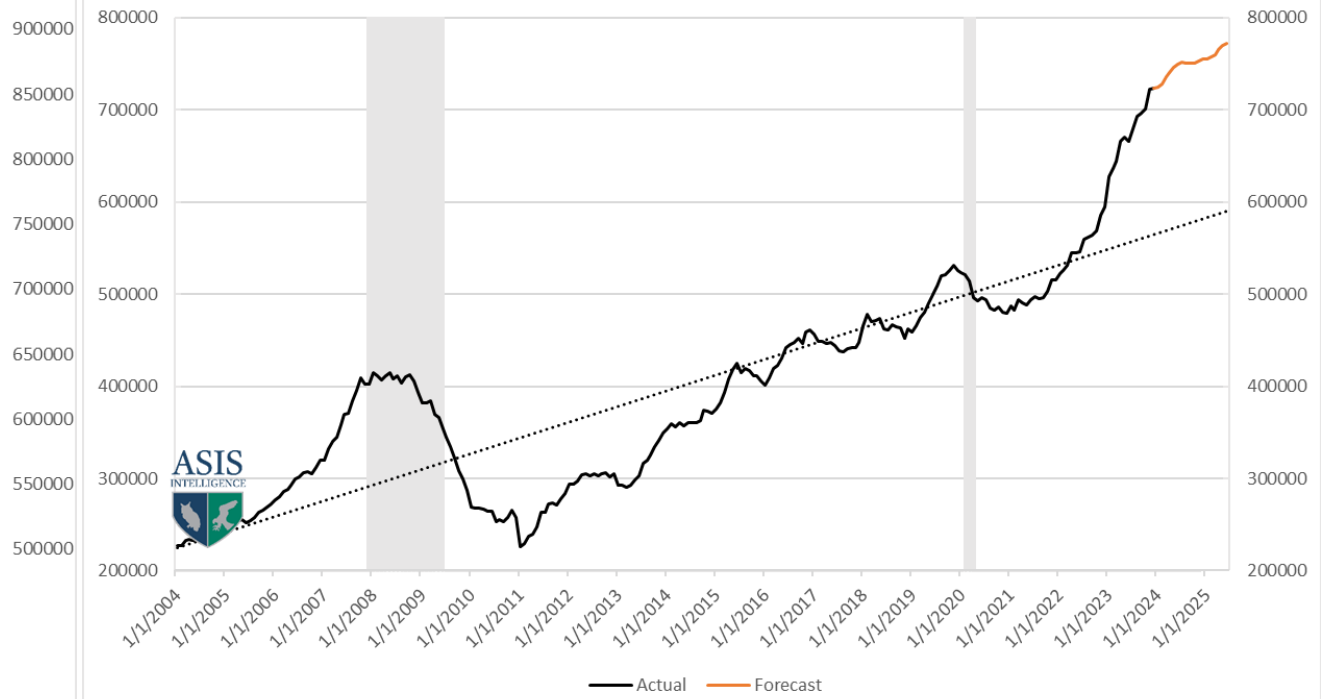
Growth Forecast: Nonresidential Construction Forecast from The Watch



Private Nonresidential Construction Spending (PNRESCONS)
Forecast as of 03/13/2024



Private Nonresidential Construction Spending (PNRESCONS)
Forecast as of 03/13/2024

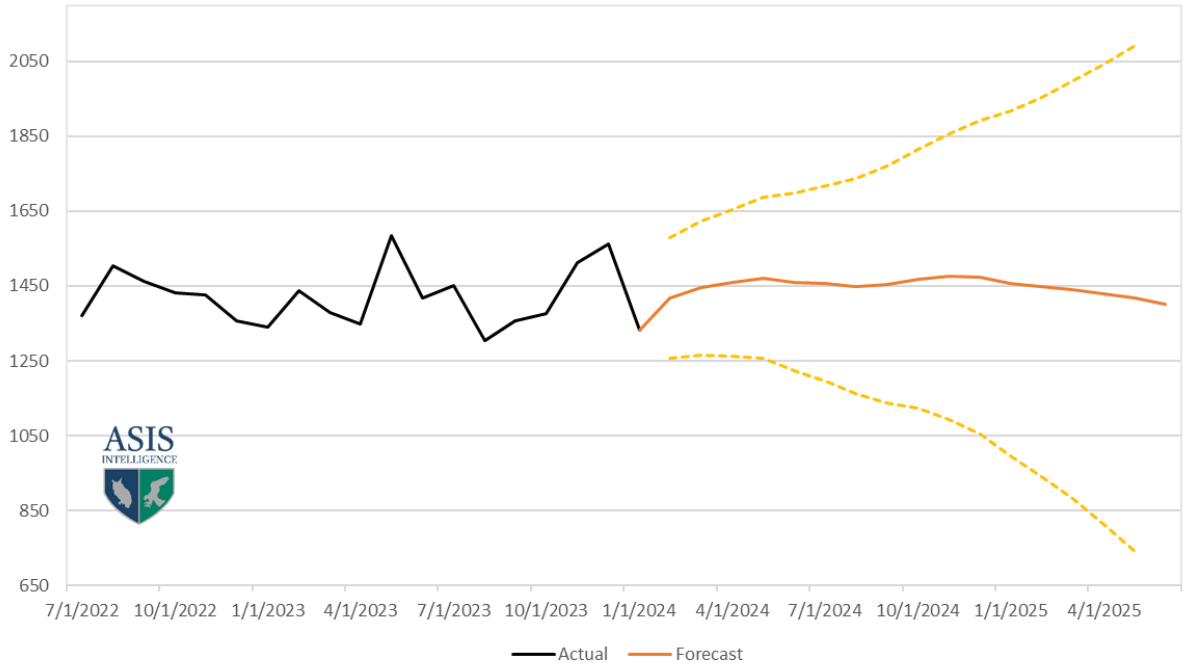


	1 mo	3 mo
TRUCK D11	94.72%	93.70%
RAILFRTCARLOADSD11	98.88%	99.75%
RSXFS	98.68%	97.89%
PNRESCONS	94.40%	93.99%

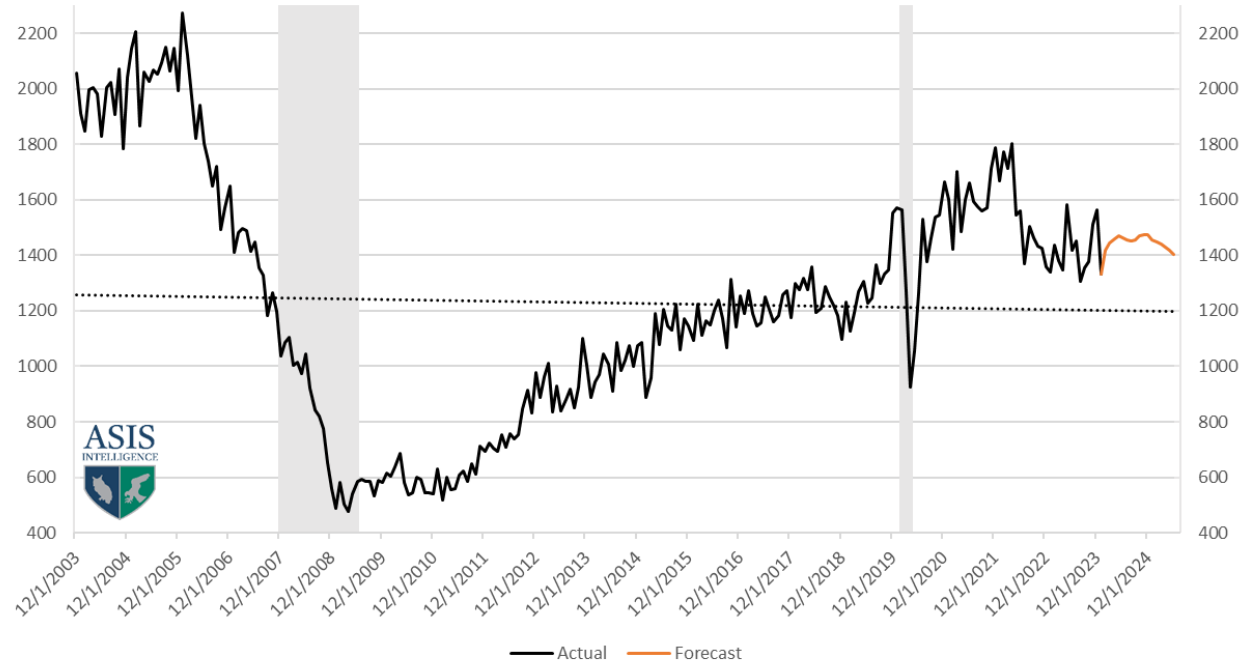
Growth Forecast: Residential Construction Forecast from The Watch



New Privately-Owned Housing Units Started: Total Units (HOUST)
Forecast as of 03/13/2024



New Privately-Owned Housing Units Started: Total Units (HOUST)
Forecast as of 03/13/2024



For More Enlightenment

Chris.kuehl@armadaci.com

Bonus Offer for Attendees –
Aren't You Excited? Proof that I am
as long-winded in print as in public!

Flagship – Three times a week
(MWF). \$7 per month but free trial
for a month

The Watch – \$44 monthly but free
trial for TWO months

