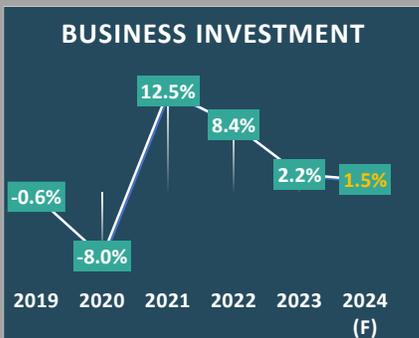
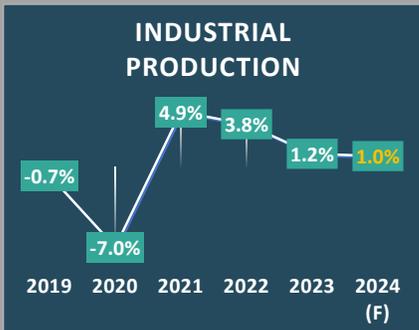
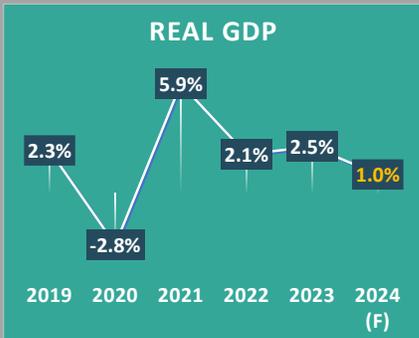


Selected Indices



Executive Summary – March '24

Big Items

GDP: The initial expectation for Q1 GDP was anemic – less than 1.0% growth. But then again, the estimates for GDP growth through all of 2023 were off and significantly. The latest suggestion is that first quarter growth will be at 2.8% and that is up from the 2.3% estimate of just a couple of weeks ago. The consumer keeps powering the economy at a pace that was expected to slow by this juncture.

Industrial Production: Industrial production trended up slightly from January’s decline. The index fell by 0.5% in January and was up 0.1% in the following month. The big gains were seen in manufacturing (up 0.8%) and mining (up 2.2%). Both of these sectors benefited from an improved weather situation, but mining is basically oil and gas and as pointed out later in this report there has been renewed interest in the fossil fuel sector. The utilities numbers fell quite a lot – down by 7.5% due to the warmer temperatures around the country.

Housing Starts: The prospects for single family housing have improved significantly. Some of this is seasonal to be sure but there has also been a reaction to the much higher rents that have come to dominate. It has made home ownership a better option for many. Starts were up 10.7% over the revised January numbers and 5.7% above what they were a year ago at this time. Single family starts alone were up 11.6% and these growth numbers have been fairly well distributed around the country with the highest rates still in the Southwest and Southeast.

Home Improvement Retail: The home improvement season has started to get underway, and the numbers have been reflecting these gains. This has been driven to some degree by the livelier single home market as more people are starting to put their existing homes on the market so they can build new ones. There is also a major surge in outdoor activity this time of year.

Manufacturing: The US manufacturing sector has now crested above the 50 line for the Purchasing Managers’ Index for two month in a row and that has taken the US to 52.2. Canada is still in contraction at 49.7 while Mexico keeps growing at 52.3 (up from 50.2 the month prior). As the industrial numbers above suggest the improved weather situation has had an impact but so has steady consumer demand and the latest improvements in the construction arena.

Big Risks

Inflation and Recession Potential: The most important shift is not quite a done deal but there are now murmurs within the Fed that suggest that an interest rate reduction may not be in the cards for the end of the year after all. There are still signs of persistent wage inflation and little to suggest that the Fed needs to be in a hurry. Still, the Fed’s dot plot estimates are still showing 2-3 quarter-point cuts. At this stage, it will be meeting by meeting, and data-driven based on current conditions.

What to Watch

Deflation in China – We go into more detail in the next piece, but China is facing a rapid drop in prices and now worries that they are going the same direction that Japan went in for so many years. This has meant that Chinese overproduction is likely to hit the global markets at very low prices. This will be positive for those that import from China but not such good news for those that compete with Chinese production.

Macroeconomic Viewpoints

- Dr. Chris Kuehl

Two Significant “Trigger Points” – At the Armada analytical nerve center (which is usually the nearest coffee shop) we often talk about “trigger points”. These are events and developments that will likely change the outlook for the economy. There are currently two such developments that are changing assumptions regarding the economy this year.

The first is a series of hints that the Federal Reserve may not lower rates by three quarters of a point before the end of the year. They are still stating that this is on the table but there have been comments from the more influential members pointing out that there is no real urgency given the current data. Unemployment numbers are still very low, the economy is still moving along at over 2.0%, the markets are still surging, the latest PMI is better than the month prior. On top of that there have been persistent signals regarding inflation – it went up a bit in the last reading and there has been no letup in the pace of wage growth. In other words, the Fed may be able to leave rates where they are for a while longer and that is exactly the position that Chris Waller has taken, and he is arguably the most influential economist at the Fed. The bottom line is that a rate cut is not guaranteed by the end of 2024.

The second development involves China and its impact on the US and global economy. While the rest of the world is contending with inflation threats, the Chinese are worrying about deflation. Prices have been falling fast as the nation contends with the collapse of the property market and subsequent fall in the stock market. These factors have wiped out billions in the consumer sector and suddenly there is little growth to speak of. The desire to build the Chinese economy on the back of consumer spending has been thwarted and at the same time that these consumer prices have tumbled, so have the prices for Chinese exports. China has no choice but to continue producing – even if the market for that output has tumbled (at least domestically). The Chinese industrial sector has been building inventory for months now and must get rid of it somehow. This means a new cascade of cheap Chinese goods hitting the global export market. The US and other states have rules to prohibit dumping, but this is extremely hard to prove. Dumping is deliberately selling at a price that is less than the cost of production, but the fact is that producing is cheaper in China and their manufacturers can sell cheap and still make money.

The impact on the US is that Chinese goods will become more competitive and cheaper than ever and that will inhibit that reshoring movement that started with the pandemic crisis. There are still issues of transportation (worse now with all the recent crisis situations) but the reality is that there will be some major bargains available out of China and that will benefit those that import these goods but at the expense of those that produce these items domestically in the US and Europe. The shift back to US production will not end but the pace of that shift will doubtless slow.

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Reader Question of the Month

Q: What is Happening in the Oil Sector?

A: There is a great deal of controversy when it comes to energy (so what else is new). The driver for much of this now centers on the future of fossil fuel and transportation. Once upon a time the motivation for an electric vehicle was the near certainty that gasoline would skyrocket in cost. Predictions at one time asserted that a barrel of oil would hit between \$150 and \$180 and that a gallon of gas would crest near \$10. That was sufficient for people to surge towards any alternative – no matter what the challenges. Today the assertion is that per barrel prices will remain in the 70s and 80s indefinitely and that means gas at the pump in the \$3.00 to \$3.75 range. Suddenly the motivation for electric is more of an ideological concern – reacting to climate change. The share of the transportation sector accounted for by EVs is less than 15%. Investors that flocked to alternatives are pulling back and returning to fossil fuel development despite the aggressive attempts by government to influence that transition.

The bottom line is that alternative energy development will coincide with continued development of fossil fuel. The Energy Information Agency asserts that fossil fuel will dominate until the year 2080. It is clear there are good reasons to diversify and embrace electric vehicles where the infrastructure supports it, but this also means that traditional fuels will be ubiquitous for decades to come. Most assert that electric vehicle use will focus on fleet needs and in parts of the country where there is more congestion, shorter commutes, mass transit options and an infrastructure that supports mass adoption of EVs.

Key Commodity Outlook

The following section includes viewpoints on key commodities. Wherever possible, the Producer Price Index (PPI) is used as a gauge of prices for specific commodities. The PPI is derived from monthly Government surveys of those that purchase specific products and services. The PPI includes views on both spot and contract pricing for a given product or service and is more representative of general changes in street-level pricing trends.



Copper Prices (WPUSI019011)

- The price of copper has been fluctuating since last month and is trading at \$4.08/lb. (\$3.83/lb. last month).
- The Producer Price Index (PPI) for February (latest PPI available) was 509.514, up month-over-month by 0.6% (-7.5% last month). It was down 5.2% year-over-year (-5.8% last month). The ten-year index high was 572.0 in May 2022 and the low was 302.9 in 2016.
- **Looking Ahead:** Copper prices are in a higher range and are sitting just below the 5-year average (but well below \$4.93 hit in February 2022) on a broad basis. Distribution challenges throughout the Red Sea region have temporarily delayed some shipments, but the bigger culprit is the demand for electrical supplies – which has pushed copper up 4.5% YTD.

General Commodities Discussion:

Nickel: (WPU102504)

- LME Nickel Prices have moved up over the past 30 days and were @\$7.51 per lb. (\$7.18 in the last update). Produce prices for nickel were 4.6% higher month-over-month through February (latest available) but were still 6.2% lower than last year at this time.
- **Outlook:** *“Work plans are slow to be approved by the Indonesian government, which could slightly reduce output in the near term. Indonesia still supplies nearly half of the world’s nickel and officials want to keep the ore flowing efficiently to ensure that it remains a key focus for EV battery producers (to keep them from pursuing alternatives too aggressively). In the near term, this delay in increasing output is pushing prices up marginally.”*

Carbon Steel: (WPU101706)

- NYMEX Domestic Hot-rolled Coil steel prices ([CRU-HRCc1](#)) were slightly higher over the past 30 days and were \$865.00 per ton in early April (\$800 per ton in the last update). This is still down from a peak of \$1,943 hit in August of 2021.
- Producer Prices for steel pipe and tube were higher in the latest data from the end of February (latest available). They were up 1.2% month-over-month (up 2.2% last month). Year-over-year, the PPI was 8.0% lower (-13.4% Y/Y in the last update) against much more difficult comparisons.
- **Outlook:** *“Carbon steel futures are down 3% this month and 30% year-to-date. International markets are seeing more stress than domestic, as historically high interest rates in Europe have put massive pressure on inventories. Overall economic skepticism on the part of Europe hasn’t done much to prop up carbon steel pricing. As has become customary, landed carbon steel pipe price trends are nearly mirroring those of hot-rolled coil futures. Absent any outside forces, we suspect that to continue. It is worth mentioning that steel prices have recovered from their 2023 lows.”*

Stainless Steel: (WPU10170674)

- The Producer Price Index for stainless pipe and tube were down in February (latest available). Producer prices for stainless pipe fell by 0.3% month-over-month (up 0.3% last month); and they were down 10.4% Y/Y (down 10.2% last month).
- **Outlook:** *“Stainless fittings continue to be flat with pricing, but domestic raw material pricing is moving upward in April. The surcharges are reflecting higher costs for nickel and chrome. Inventory remains strong and projects are showing signs of activity.”*

Ferrous Metal Scrap: (PPI: PCU4299304299301)

- Producer prices for ferrous metal scrap fell in February vs. the prior month, coming in with an index of 512.39 (535.71 last month). This was lower by 3.4% M/M (-1.4% last month). Year-over-year it was down by 3.4% Y/Y (+5.9% in the last update). The highest producer price prior to this was in July of 2008 when the index hit 731.4 points.
- **Outlook:** Data from the rail sector shows growth in ferrous metal scrap shipments of 3.9% YTD (4.1% YTD in the last report) against the same time frame in 2023 – suggesting that more scrap is moving in the nation’s distribution system than did last year. It was nearly 10.2% higher than the same week in March vs. last year.

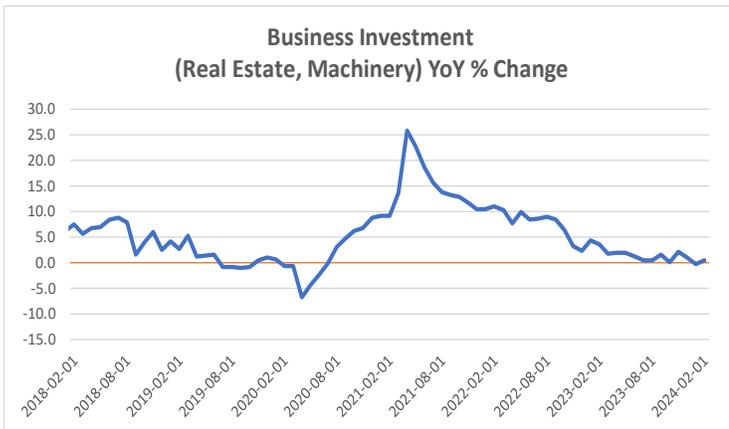
Additional commodities and finished product pricing are addressed in the Producer Price Index review on the next page.

Producer Price Index – Key Industry Products

The Producer Price Index (PPI) for key supply industry metrics is listed in the chart below including month-over-month and year-over-year comparisons. To the degree that the PPI is derived from monthly Government Surveys of actual purchasers and users of the following products, it provides a more accurate street-level pricing viewpoint. Some data is delayed and may not have been updated by the time of publication.

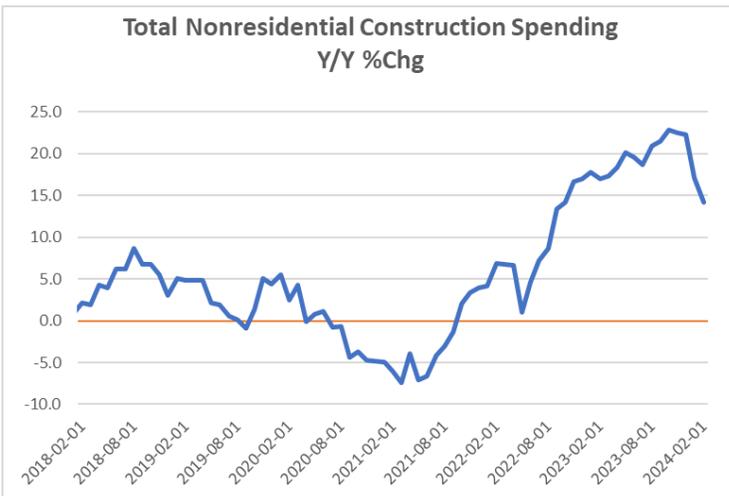
Producer Price Index - Key Industry Products						
Category	PPI Code	Feb-24	Jan-24	M/M% Chg	Feb-23	Y/Y % Chg
Pipe, Valves and Fittings						
Metal valves, except fluid power	WPU114902	439.4	437.4	0.4%	427.3	2.8%
Gates, globes, angles and check valves	WPU114902011	170.5	169.3	0.7%	163.3	4.4%
Ball valves	WPU11490202	557.3	553.7	0.6%	557.9	-0.1%
Butterfly valves (formerly W2421490203)	WPU11490203	322.2	310.0	3.9%	297.4	8.4%
Industrial plug valves	WPU11490204	317.9	317.9	0.0%	297.7	6.8%
Plumbing and heating valves (low pressure)	WPU11490205	389.8	389.8	0.0%	393.4	-0.9%
Solenoid valves	WPU11490208	372.2	372.2	0.0%	372.2	0.0%
Other industrial valves, including nuclear	WPU11490209	399.3	396.3	0.8%	394.2	1.3%
Automatic valves	WPU11490211	261.3	261.3	0.0%	248.9	5.0%
Metal pipe fittings, flanges and unions	WPU11490301	475.7	476.0	0.0%	486.6	-2.2%
Steel pipe and tube	WPU101706	394.1	389.4	1.2%	428.4	-8.0%
Steel pipe and tube, alloy	WPU10170673	109.5	109.5	0.0%	109.5	0.0%
Steel pipe and tube, stainless	WPU10170674	139.5	140.0	-0.3%	155.8	-10.4%
Copper & copper-base alloy pipe and tube	WPU10250239	342.9	341.3	0.5%	371.9	-7.8%
Plastic pipe	WPU07210603	189.0	189.6	-0.3%	206.5	-8.5%
Plastic pipe fittings and unions	WPU07210604	321.6	320.6	0.3%	320.2	0.4%
Plumbing Fixtures, Fittings and Trim	WPU105402	400.0	400.0	0.0%	394.6	1.4%
Bath and shower fittings	WPU10540211	286.7	286.7	0.0%	286.7	0.0%
Lavatory and sink fittings	WPU10540218	207.7	207.7	0.0%	203.5	2.1%
Enameled iron and metal sanitary ware	WPU1056	284.5	284.5	0.0%	283.1	0.5%
Steam and Hot Water Equipment	WPU1061	428.5	428.5	0.0%	407.7	5.1%
Cast iron heating boilers, radiators and convectors	WPU10610106	289.7	289.7	0.0%	279.2	3.8%
Domestic water heaters	WPU106601	571.3	571.3	0.0%	570.6	0.1%
Electric water heaters	WPU10660101	564.6	564.6	0.0%	564.3	0.1%
Non-electric water heaters	WPU10660114	348.2	348.2	0.0%	347.7	0.2%
Warehousing, Storage and Related Services	WPU321	141.0	138.2	2.0%	140.6	0.3%

PHCP & PVF



Capital Goods New Orders (NEWORDER)

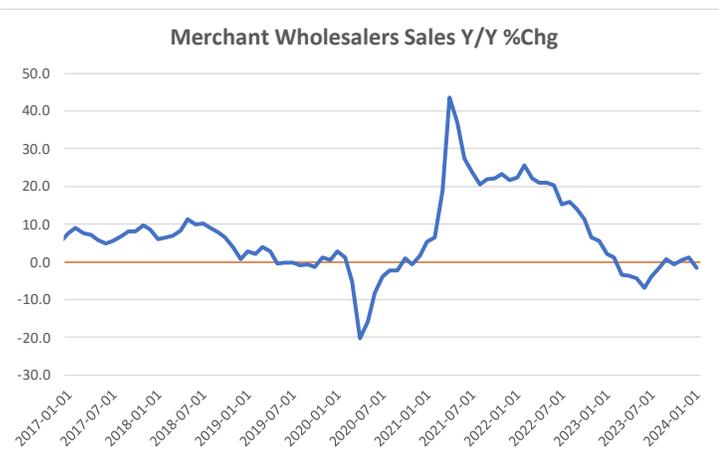
- The value of manufacturers' new orders for capital goods went up 0.9% in February M/M (-1.3% last month). They remained up by 0.5% Y/Y (down 0.4% last month) and continued to be stable overall.
- **Outlook:** Capital investment is beginning to flatten, and some reports suggest that corporations are tightening in some areas but are investing in others. Purchases of automation and productivity improvement technology is driving much of it, but expansions of facilities is also on tap, especially in the industrial sector. Business investments in reshoring production continue, and total spending in manufacturing construction are still running 4 times higher than an average rate prior to the pandemic.



Total Non-Residential Construction

(TLNRECONS)

- Total Non-Residential Construction activity in February (latest available) was 14.2% higher than it was a year ago (17.1% higher last month) and was 1.0% lower M/M (down 5.2% in the last report). Overall spending was at a new all-time high of \$1.178T (the prior annualized run rate peak of \$900B was in September of 2022).
- **Outlook:** Public infrastructure projects now make up a significant number of the fastest growing subsectors of nonresidential construction. Manufacturing and industrial facility construction projects are still the fastest growing at more than \$223 billion in annual spending (more than 4 times the average amount as mentioned). Commercial and office are slower, but power, sewer and wastewater, and other infrastructure sectors are growing at double-digits.



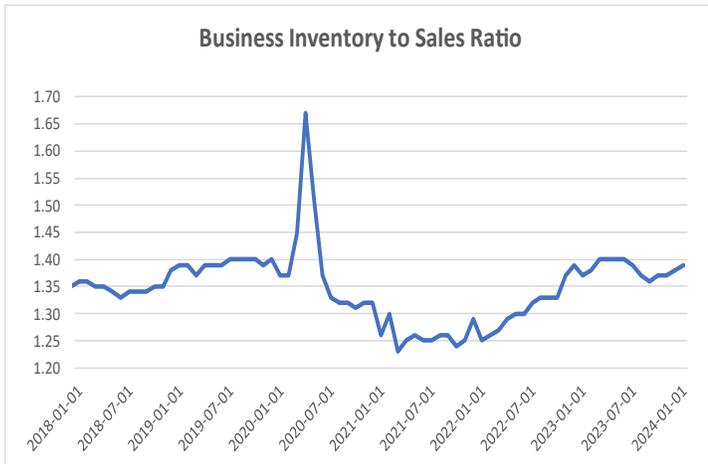
Wholesale Trade (WHLSLRMSA, WHLSLRIMSA)

- Merchant wholesalers' sales were down 1.5% Y/Y through January (latest available; up 1.2% Y/Y in the last update). Month-over-month, sales were decreasing by 2.7% (+0.8% last month).
- Wholesale inventories were down 2.5% year-over-year in January (latest available; down 2.7% last month).
- **Outlook:** There continue to be some improvements in estimated inventory levels in the past 30 days for the sixth month in a row. Some products in the wholesale market are still in a stockout situation (primarily electrical panels and transformers), and that is holding up the movement of other wholesale products because it delays construction projects. With inventories lower, new order demand will increase the demand for global raw materials and upstream products.



Manufacturing (AMTMNO)

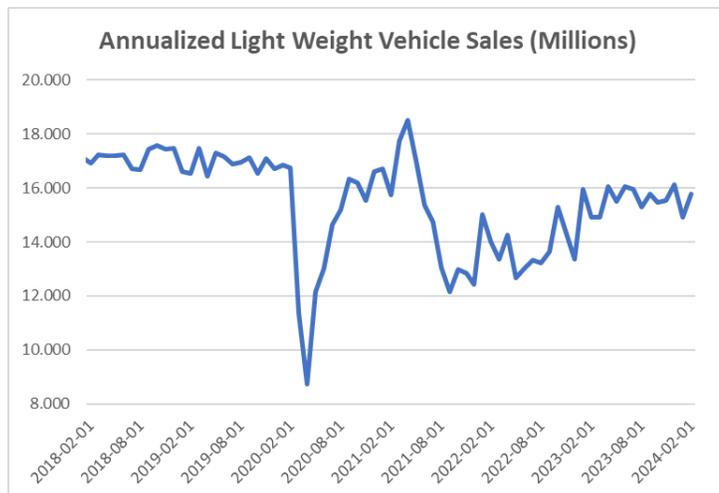
- Federal data on manufacturing was up 1.0% Y/Y (-2.1% last month) through February (latest available). It was also up sequentially 1.4% month-over-month (-3.8% last month).
- The S&P Global US manufacturing PMI came in at 52.2 in February, up from 50.7 in January.
- **Outlook:** Global data from the Purchasing Manager's Indexes showed 14 countries had manufacturing sectors remaining in contraction through February (March data will be released soon). Flash reports for the month show that manufacturing may have slowed in the month of March in the wake of the Lunar New Year. Global demand for products may not be as strong as early indications led us to believe.



Business Inventory to Sales Ratio (ISRATIO)

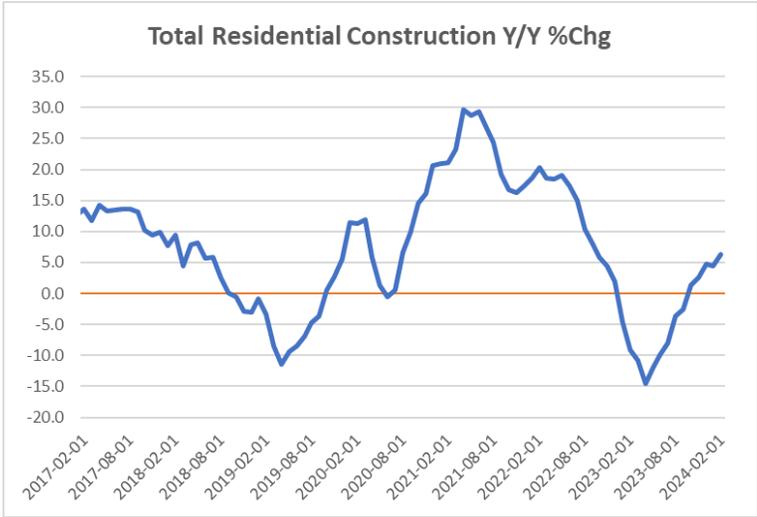
- The current inventory to sales ratio for all businesses is at 1.39 months of inventory on hand in January (latest available; 1.38 last month). Relative to sales, inventories are about where they should be, this month's ratio was 1.5% higher Y/Y (-1.4% last month).
- **Outlook:** Approximately 60% of the goods producing and moving industry are still facing inventory levels that are between 3% and 25% higher than they were in the entire decade prior to the pandemic (when supply chains were in-cycle). But anecdotes continue to suggest that inventories across the board are getting more balanced (which is shown in the data), and that could help reset the global supply chain. This will increase demand for raw materials and energy, feeding into the manufacturing supply chain.

PHCP



Auto Sales (ALSALES; AISRSA)

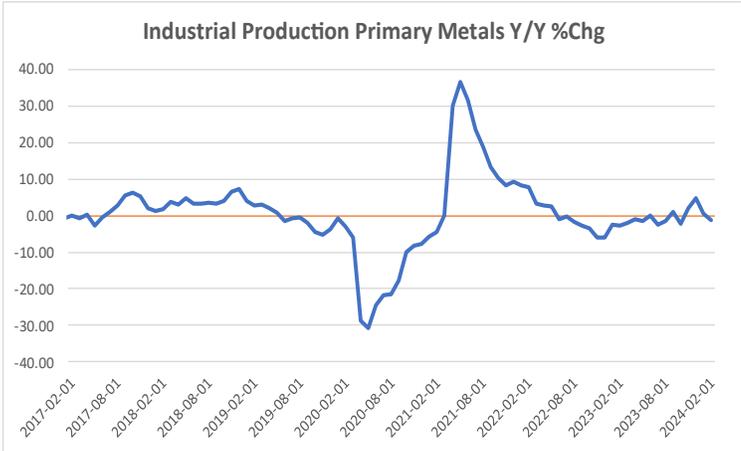
- US auto sales were trending at a 15.795-million-unit annual rate (14.976M last month) through February (latest available). This is up 6.2% year-over-year (-1.2% in the last update).
- The domestic auto inventory to sales ratio was up 122.8% Y/Y in January (latest available). On a monthly basis, it was up 47.4% (down 30.3% last month).
- **Outlook:** Automotive output rebounded in February and is expected to remain stable in March. However, dealer inventories are now growing, and sales are somewhat slowing. Some segments of the population are struggling to handle inflation, and household capacity to take on higher automotive payments is difficult (especially for lower middle-income and lower-income households). Dealers are noticing an uptick in voluntary repossessions and payments delinquencies are moving up.



Total Residential Construction (PRESCONS)

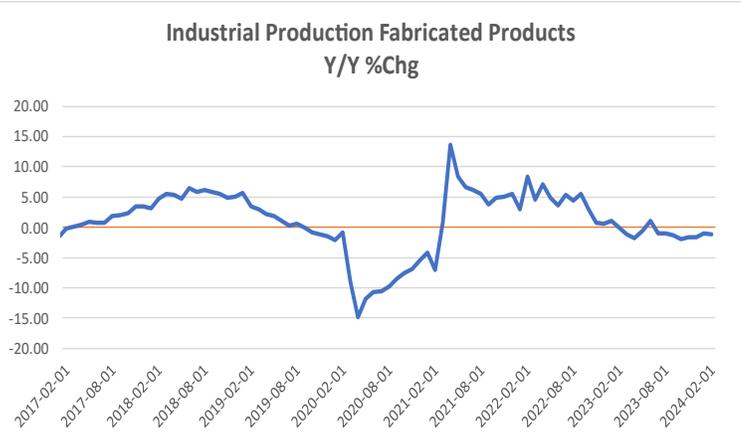
- Total residential construction in February (latest available), was up by 6.3% Y/Y (up 4.5% last month). It was up 0.7% M/M (+0.1% last month).
- **Outlook:** Housing activity has rebounded in the past month, partly due to better weather available to builders and some softening of mortgage rates. And even though housing inventory has improved in many markets, some pockets of the country continue to have some mild housing shortages despite higher interest rates. In general, builders are getting more optimistic about the near future as is pointed out later in the MER. The Federal Reserve signaling that this year could bring 2-3 interest rate cuts have also helped boost optimism.

PVF



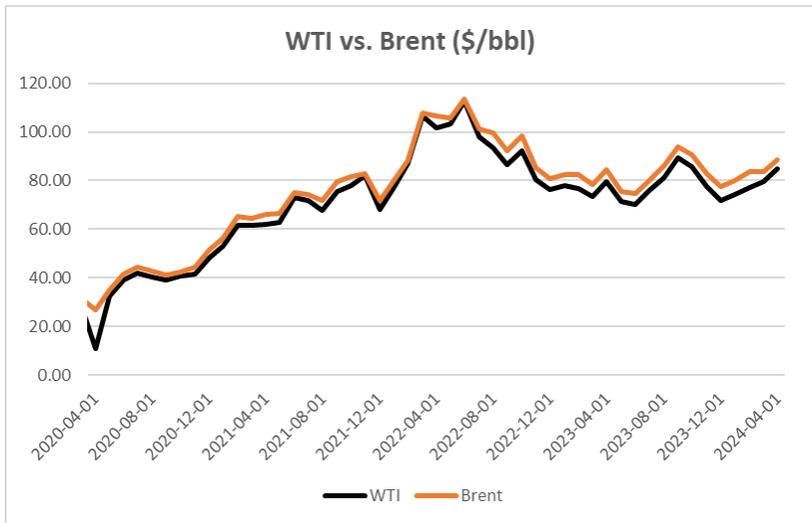
Industrial Production Primary Metals (IPG331S)

- Industrial production for primary metals was down 1.3% Y/Y through February (up 0.5% in the last update). It was down 1.8% M/M (down 4.3% M/M in the last update).
- **Outlook:** Some forecasts show a weaker trend for primary metal manufacturing late in 2024 and early in 2025. That could change, this is one of the more volatile sectors for demand and historical swings in activity are common. Given the volume of global reconstruction activity that is likely to start taking place at some point in 2024/2025, and the competition for raw materials and inputs into global construction activity should lift demand overall – offsetting those forecasts for weaker output.



Industrial Production Fabricated Metals (IPG332S)

- Fabricated metal industrial production was down 1.2% Y/Y through February (down 1.0% last month). It was down 0.2% on a month-over-month basis, (down 0.6% in the last update).
- **Outlook:** Fabricated metal production is a key feeder into other sectors of manufacturing and activity through March was still trailing slightly behind last year’s volumes. Models that forecast fabricated product manufacturing still show it improving through most of 2024 and volumes continue to remain stable (but flat) through the first half of 2025.



WTI and Brent

- WTI is currently at \$84.97 a barrel (\$74.15 last month) and Brent is at \$88.66 (\$80.12 last month).
- **Outlook:** Geopolitical events and a host of changes in the global oil market have added a geopolitical premium to oil prices. In addition, some real supply concerns are starting to emerge. Ukrainian strikes on Russian oil refinery infrastructure are adding concern about global oil supplies. Russia has vowed to support OPEC+ cuts in output (which is further being hampered by attacks on infrastructure). Where Russian oil is lacking on the global market, supplies from alternative sources will have to fill gaps – tightening global oil supplies in the process. At the time of writing this month’s briefing, some heightened tensions in the middle east were also increasing supply risk, causing a near-term spike in prices. Wall Street analysts have boosted oil price outlooks, pushing the price per barrel closer to \$100 a barrel by summer.

<https://bakerhughesrigcount.gcs-web.com/rig-count-overview>

	Last Count	Count	Change from Prior Count	Change from Last Year
U.S.	28-Mar-24	621	-3	-134
Canada	28-Mar-24	151	-18	12
International	Feb-24	958	-7	43

Rotary Rig Counts (Baker Hughes)

- Baker Hughes US active rig counts were down 134 Y/Y (-150 in the last update) at 621 (1,049 in 2019); Canadian counts were down by 128 Y/Y (down 17 in the last update). International counts are up by 43 Y/Y (+64 in the last update).
- **Outlook:** The EIA still shows the balance between global oil supply and demand to remain balanced through 2024, assuming the production of oil continues to grow at current rates. That flies in sharp contrast to current events as mentioned earlier, and risks to global supply. But in the US, even though rig counts are lower, modern wells are so much more efficient that total US output per day is higher. As US crude exports increase this year, there should be an increase in US domestic production. Strategic Petroleum Reserves are still lower, and the risk of an active hurricane season potentially in the Gulf could keep US production off-balance through part of the year.

Construction Outlook

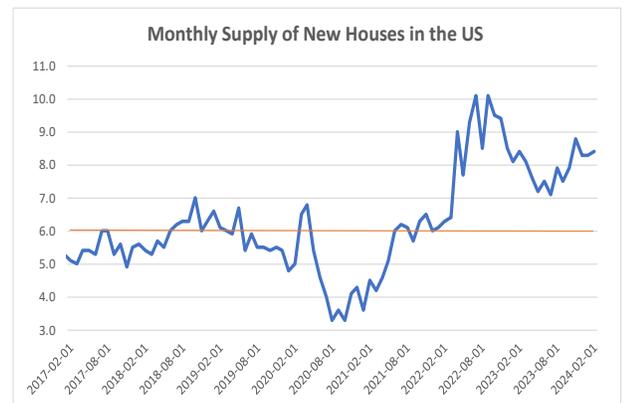
Residential construction: 30-year national average mortgage rates fell through late March to 6.79% (6.94% in the last update). Home builder confidence surged again in March, rising by 15.9% according to the [NAHB/Wells Fargo index](#), it jumped to 51 points (up from the February reading of 48) and the strongest since July. The all-time high was 90 points in November of 2020. Builders' confidence has started to improve as buyers slowly jump back into the market and the Federal Reserve appears poised to ease interest rates at least 2-3 times in 2024.

NAHB/Wells Fargo National and Regional Housing Market Index (HMI)												
NATIONAL												
(Seasonally Adjusted)	2023							2024			M/M	Y/Y
	Mar.	Jul	Aug	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar		
Housing Market Index	44	56	50	44	40	34	37	44	48	51	6.3%	15.9%
Housing Market Index Components												
Single Family Sales: Present	49	62	57	50	46	40	41	48	52	56	7.7%	14.3%
Single Family Sales: Next 6 Months	47	59	55	49	44	39	45	57	60	62	3.3%	31.9%
Traffic of Prospective Buyers	31	40	35	30	26	21	24	29	32	34	6.3%	9.7%
REGIONAL HMI												
(Seasonally Adjusted)	2023							2024			M/M	Y/Y
	Mar.	Jul	Aug	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar		
Northeast	46	60	55	48	46	53	55	55	62	61	-1.6%	32.6%
Midwest	36	46	42	38	37	31	35	35	38	49	28.9%	36.1%
South	50	58	55	48	43	35	39	49	50	52	4.0%	4.0%
West	36	54	46	42	36	28	29	38	47	45	-4.3%	25.0%

On a year-over-year basis, the NAHB/Wells Fargo Housing Market Index was up 15.9% against March of 2023 (up 6.3% month-over-month).

Adjusted housing inventories increased in February (latest available), coming in at 8.4 months of inventory on hand. This is higher than the "ideal range" of 6 months of inventory on hand and is still marginally lower than the 9.5 month peak we saw last October.

The housing market is highly regionalized, and each region has different levels of housing activity, but macro demand is still being tempered by lack of affordable single-family housing inventories and steep housing prices which are only easing in some markets.



New housing starts are volatile right now and came in at a 1.521-million-unit rate on an annualized basis (higher than last month's adjusted 1.331 million annual rate); and the outlook for the rest of 2024 is flat based on current industry trends.

Single family starts were sharply higher in February by 11.6% M/M (latest available) and were up 35.2% Y/Y against easier comparisons. Multi-family starts are volatile and were up 8.6% M/M and down 35.9% Y/Y.

National Outlook: The Federal Reserve continues to pause rate hikes as expected, but officials still expect 2-3 rate cuts in 2024, a total of three-quarters of a point bringing the Fed Funds Rate down to 4.75%. Inflation is cooling, but at a slow pace. At the same time, economic growth remains stable, despite some slowing in consumer spending. Surveys continue to show that lack of access to financial funding is the primary hindrance to many non-residential projects' starts (roughly 62% of project start delays are still due to funding difficulties). Banking records still show the lowest volume of bank credit being extended since the Great Recession, a sign of tighter credit conditions.

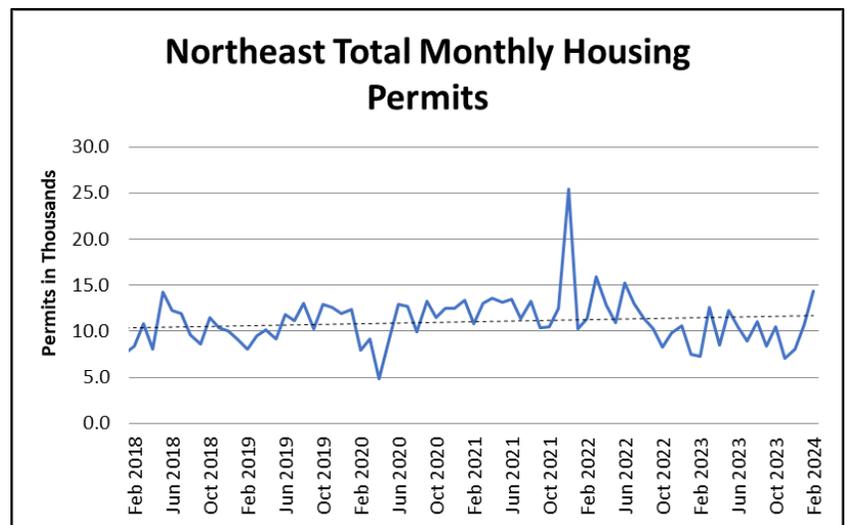
Housing and Interest Rate Forecast, 03/12/2024							
	2019	2020	2021	2022	2023	2024	2025
Housing Activity (000)							
Total Housing Starts	1,292	1,397	1,606	1,551	1,415	1,381	1,393
Single Family	889	1,003	1,132	1,004	943	1,016	1,048
Multifamily	403	394	474	547	472	365	345
New Single Family Sales	685	833	769	637	668	759	782
Existing Single-Family Hor	4,746	5,057	5,420	4,530	3,673	3,811	4,259
Interest Rates							
Federal Funds Rate	2.16%	0.36%	0.08%	1.68%	5.03%	5.14%	3.89%
Treasury Yield:							
Ten Year Maturity	2.14%	0.89%	1.44%	2.95%	3.96%	4.00%	3.64%
Fixed Rate Mortgages	3.94%	3.11%	2.96%	5.34%	6.81%	6.61%	6.01%
Prime Rate	5.28%	3.54%	3.25%	4.85%	8.19%	11.75%	9.90%

[For more forecast details, visit www.nahb.org.](http://www.nahb.org)

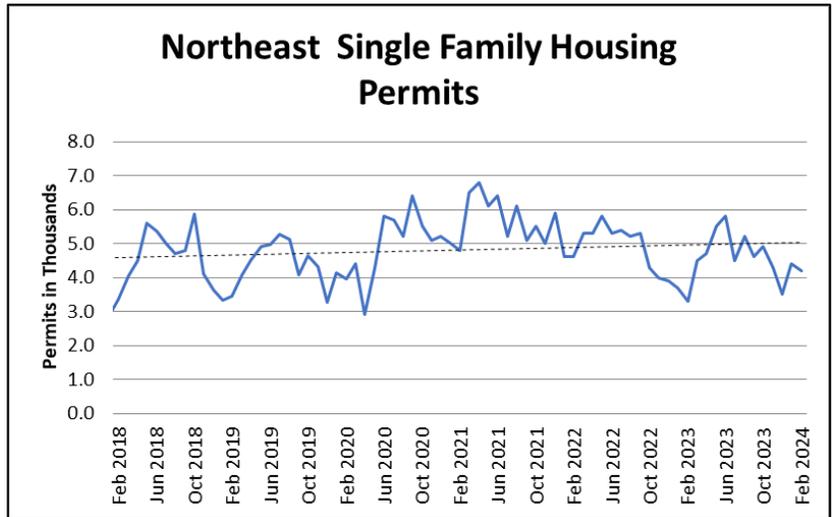
The following section provides monthly housing permit data for each major region in total, single family, and multi-family units.

Regional market outlook: Northeast

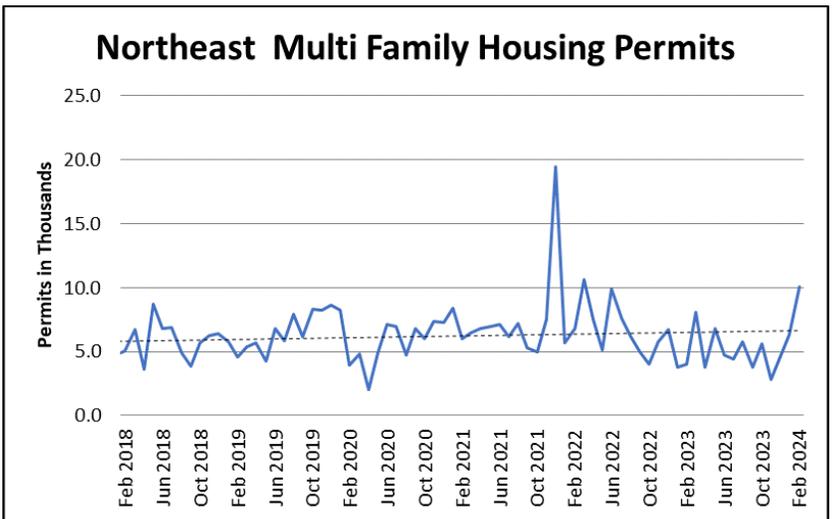
- Northeast total housing units authorized for construction were up in February by 33.6% M/M (32.1% last month). February was the latest regional data available throughout this series.
- The 3-month moving monthly average was up 26.6% (4.6% last month).
- On a year-over-year basis, permits were up 95.9% (42.7% in the last update).



- Month-over-month single family permits were down 4.5% (25.7% last month).
- On a 3-month moving average basis, permits were up 0.9% (down 1.7% last month).
- Year-over-year permits were up 27.3% (18.9% last month).

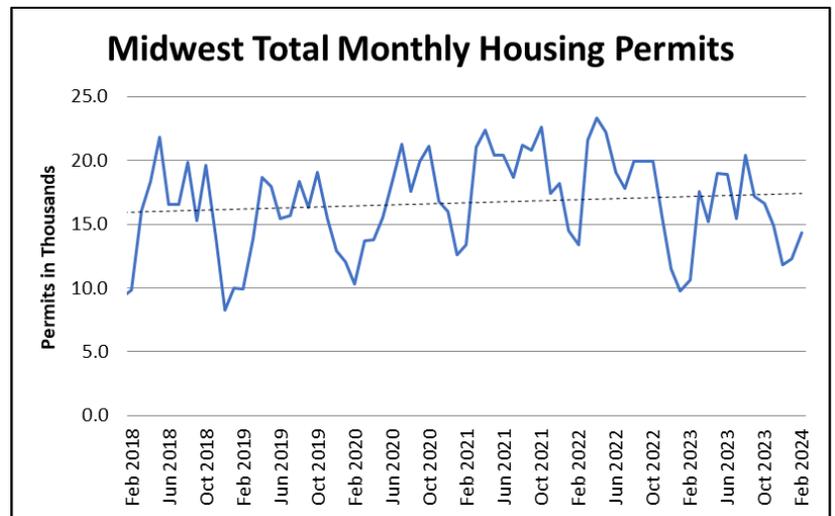


- Multi-family housing permits authorized for construction were up 60.3% M/M (37.0% in the last update).
- They were up 53.9% on a rolling 3-month average (17.1% last month).
- On a year-over-year basis, they were up 152.5% (65.8% in the last update). Weather and lower comparisons from last year were factors here.
- These figures are based on a small number of units so the percentages can seem higher and more volatile.

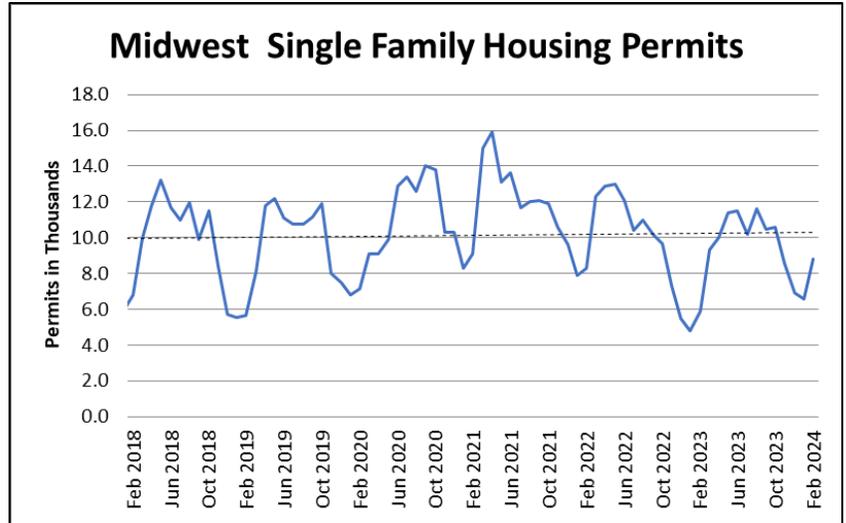


Regional market outlook: Midwest

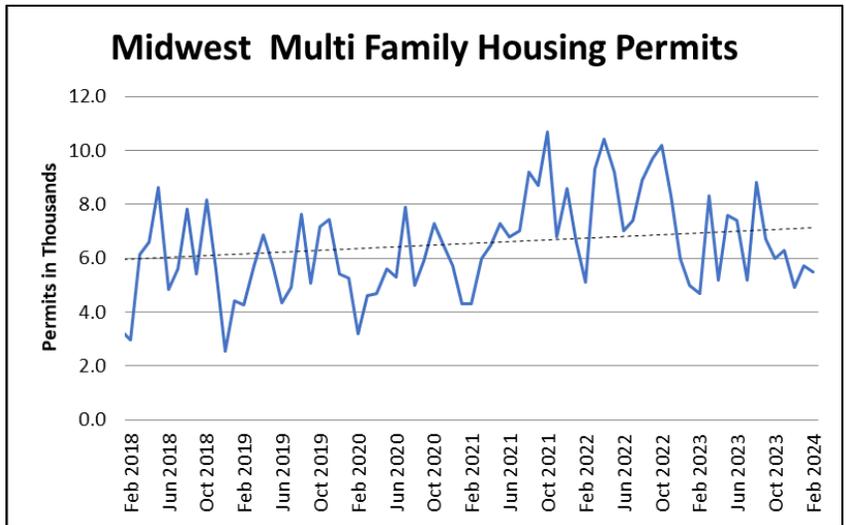
- Midwest total housing permits were up 16.3% month-over-month (4.2% in the last update).
- The 3-month average was down 0.1% (-8.9% in the last update).
- On a year-over-year basis, permits were up 34.9% (25.5% in the last update).



- M/M permit volumes were up 33.3% (-4.3% last month).
- The 3-month rolling average shows that permits were up 3.1% (-14.3% in the last update).
- Year-over-year, single family homes authorized by permits were up 49.2% (37.5% in the last update).

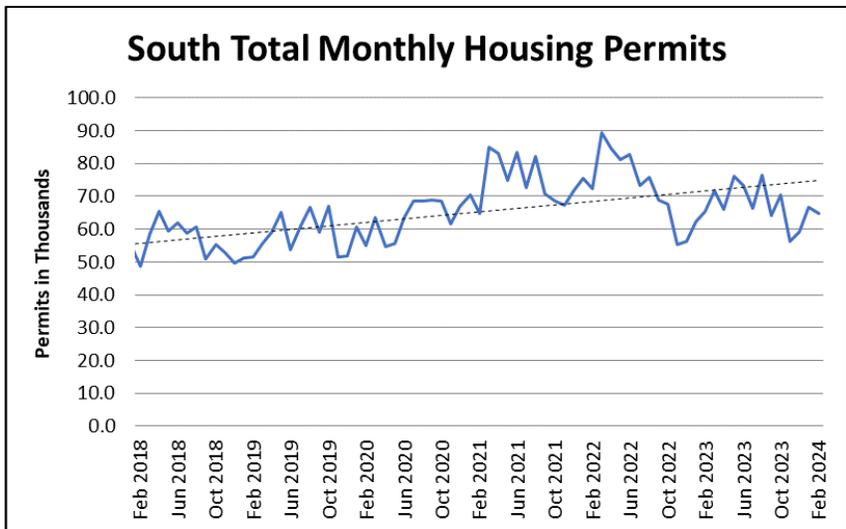


- Multi-family housing permits, again, are volatile month-over-month. This month, they were down 3.5% (16.3% last month).
- On a 3-month rolling average basis, they were down 3.1% (-0.3% in the last update).
- On a year-over-year basis, permits were up 17.0% (14.0% in the last update).

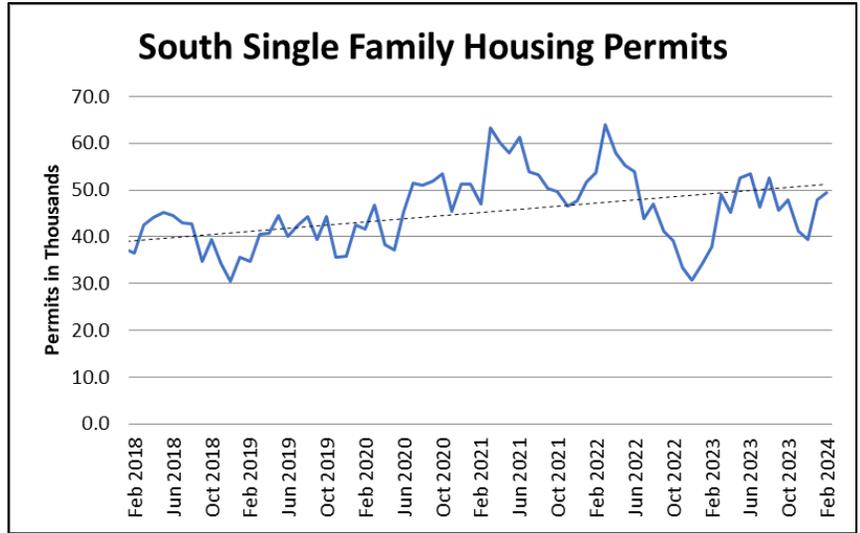


Regional market outlook: South

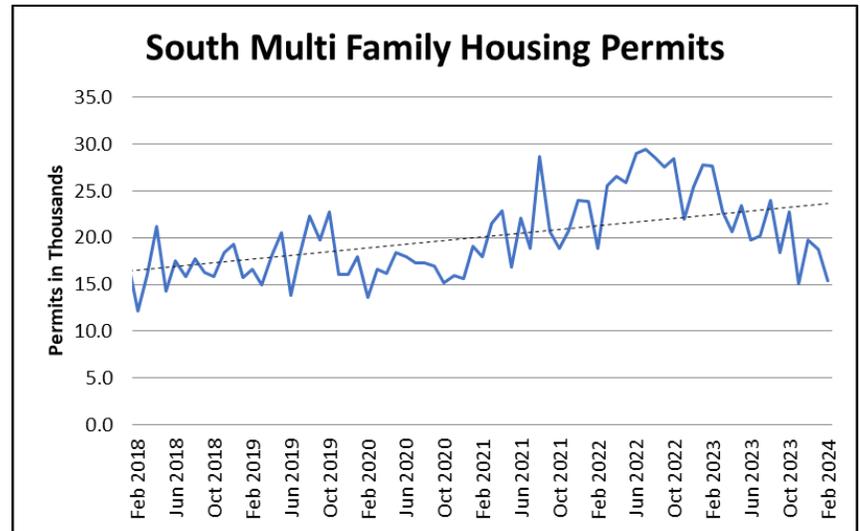
- Southern region housing permits were down 2.7% month-over-month (12.9% in the last update).
- On a 3-month rolling average basis, permits were up 5.1% (-0.8% in the last update).
- On a year-over-year basis, total permits were down 0.9% (7.2% in the last update).



- Southern region single family home permits were up 3.1% M/M (21.8% last month).
- On a 3-month rolling average, they were up 6.9% (1.2% in the last update).
- On a year-over-year basis, single family permits were up 31.0% (39.5% in the last update).

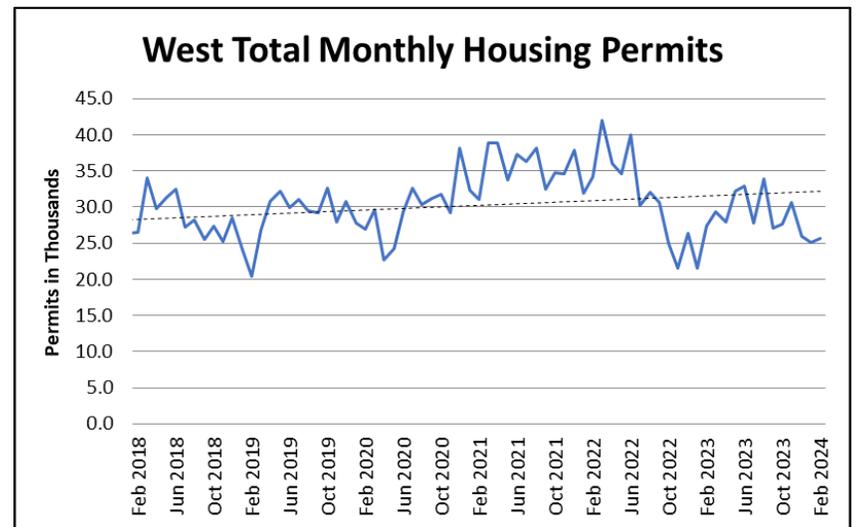


- Southern multi-family permits were down 17.6% M/M (-5.1% last month).
- On a 3-month rolling average basis, permits were up 2.6% (-2.8% last month).
- On a year-over-year basis, permits for multi-family housing were down 44.4% (-32.7% in the last update).

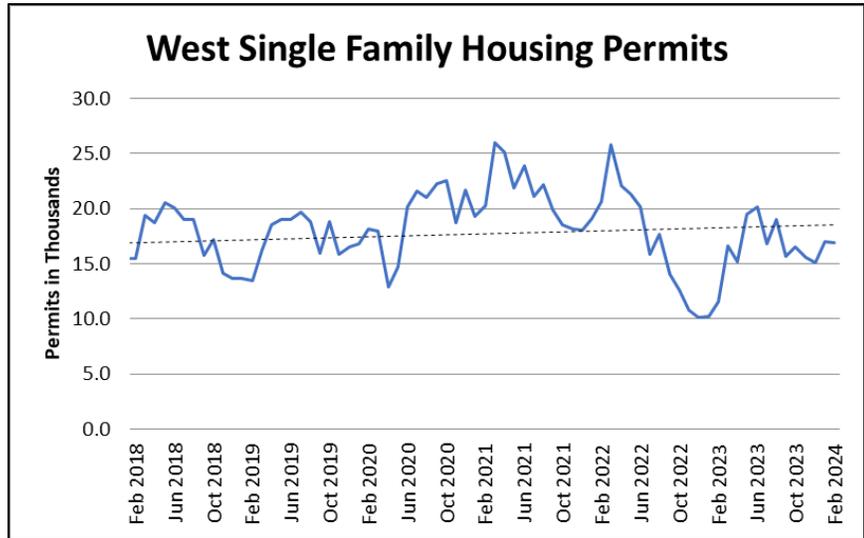


Regional market outlook: West

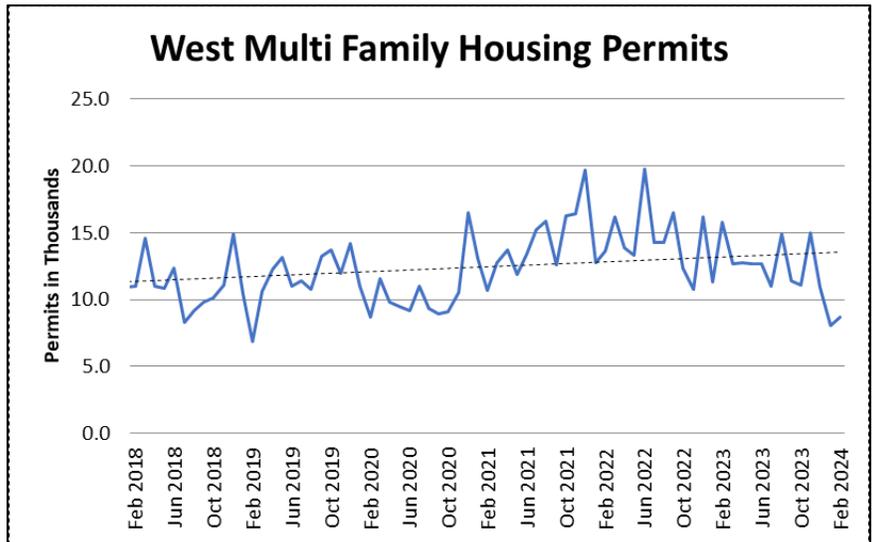
- Western region total monthly housing permits were up 2.0% M/M (-3.5% last month).
- On a 3-month rolling average basis, they were down 5.5% (-2.5% last month).
- On a year-over-year basis, permits were down 6.6% Y/Y (16.7% in the last update).



- Single-family permits were down 0.6% M/M (12.6% last month).
- On a 3-month moving average basis, permits were up 2.9% (1.3% in the last update).
- Year-over-year, single family permits were up 45.7% (66.7% in the last update).



- Multi-family permits were up 7.4% M/M (-25.7% in the last update).
- On a 3-month rolling average, it was down 15.2% (-6.0% in the last update).
- Year-over-year, multi-family unit permits were down 44.9% (-28.3% last month).



Industry Outlook

ASA Sales were higher by 3.9% Y/Y (-0.2% last month) in February (latest available). Year-to-date through February, sales were up 1.1% (-0.2% in the last update). For the trailing twelve months prior, sales were up 2.1% (1.1% in the last update). ASA Pulse Report findings are reported monthly. The following chart shows the breakdown by primary business type and region.

	February Y/Y % Change in Total Dollar Sales	YTD % Change vs. YTD 2023	Trailing Twelve Months % Change
All Businesses	3.9%	1.1%	2.1%
By Primary Business			
PHCP	4.5%	4.0%	1.9%
PVF	-3.7%	-4.9%	3.9%
PHCP & PVF	5.1%	-0.9%	1.1%
By Region			
1 (SWPD & WSA)	3.4%	4.3%	1.7%
2 (ASA Central)	8.1%	1.9%	1.7%
3 (SWCD)	-9.0%	-6.4%	4.1%
4 (NCWA)	3.2%	0.2%	3.4%
5 (ASA Northeast)	-2.6%	-2.4%	-0.4%
6 (SWA)	8.7%	2.3%	3.0%
*ISD - Insufficient Data			

The US Transportation Services Freight Index (TSIFRGHT), which typically leads ASA Sales by about five months. The last report available was from December (new report was delayed) and it showed that the TSI was at 139.1 for freight, up 0.9% M/M and up by 1.8% Y/Y (up 0.9% Y/Y last month).

More recent data (comparing similar industry data to the TSI) from other sources show much weaker data. DAT Trendlines was reporting at the end of March (latest available) that spot truck freight demand was **14.6% lower than it was a year ago**. Spot trucking rates have fallen 7.4% Y/Y, and now fuel surcharges are down -4.5% Y/Y.

Oil inventories continued to improve through February, but just as in the past year, they are still at the lower end of the 5-year average, and the Strategic Petroleum Reserves are still at the lowest levels since the mid 1980's and rebuilding activity is slow. There are hints that pockets of the global manufacturing recession are breaking after the Lunar New Year holiday. A slumping global manufacturing sector has kept total oil demand lower than expected, but as it continues to recover, demand will pick up.

The biggest change in the oil outlook is the risk of geopolitical events hampering output, along with some increases in Atlantic hurricane activity potentially in 2024. Recent attacks on Russian oil infrastructure are also impacting the outlook for supply. The US is still hovering above the all-time high of 13.1 million barrels a day in domestic production and this will help mask a tight global market that is being impacted by the Red Sea diversion, OPEC cuts, War in Ukraine, and civil tensions building in Venezuela, Guyana, and parts of Africa. Even a strong US dollar is not

slowing demand for US petroleum product exports because of mounting global supply concerns. Some Wall Street firms are now predicting oil prices between \$90-\$100 a barrel by July.

Retail sales were mixed in February (latest available) across many categories' month-over-month. Total retail sales were 0.6% higher month-over-month but were 1.5% higher year-over-year. Stripping out gas and automotive, they were 0.6% higher M/M and 0.8% higher Y/Y.

When adjusted for inflation, sales were flat month-over-month in February (rising by 0.1%) and were down by 1.6% compared to last year at this time (they were down by 3.0% year-over-year last month). Most forecasts for retail show them continuing to remain stronger than expected through early 2025. This is largely dependent on the labor market and companies resisting layoffs if top line sales remain sluggish.

Home improvement retail sales volumes rebounded slightly in February, they were higher by 2.2% M/M but they were lower by 6.1% against last year. Retailers noted that they were experiencing lower volumes but expected smaller home improvement projects to pick up momentum in Q2 (normal seasonality).

The first quarter GDP estimates are still trending better than expected on the back of stable consumer spending and growing gross domestic investment. Investment trends show broader private investment growing at a 3.1% rate early in Q1, and those factors combined are likely to push Q1 GDP to 2.8% growth. For the full year, if these trends continue, the full year will grow nearer to 2%.

There was no change in the outlook for Non-residential construction from last month, it is still expected to keep its current momentum throughout 2024 based on current models, which will continue to keep the supply industry chasing opportunities. Government investment from the Infrastructure Bill, CHIPS Act, and Inflation Reduction Act will likely keep spending steadily on construction activities in 2024. Private spending across many sectors is also expected to be strong spanning manufacturing, health care, lodging, and even logistics and transportation spending will pick up pace in the back half of 2024.

As mentioned last month, much of this will depend on the Federal Reserve and interest rate policy moving forward (and easing of interest rates could spur more growth). The latest estimates from the Fed suggest that some rate cuts could start as early as June, but those rate cuts are likely to be mild for the full year (now perhaps 2-3 three quarter-point cuts for the full year). Economic activity is still stable, and inflation (most importantly) is still hotter than target rates. The Fed has set a longer term rate target of 2.5% to 3% - likely hitting that in late 2025 or early 2026.

Kind of Business	Percent Change	
	Feb. 2024 Advance	
	from --	
	Jan. 2024	Feb. 2023
Retail & food services,		
total	0.6	1.5
Retail	0.6	0.8
Motor vehicle & parts dealers	1.6	1.4
Furniture & home furn. stores	-1.1	-10.1
Electronics & appliance stores	1.5	1.9
Building material & garden eq. & supplies dealers.....	2.2	-6.1
Food & beverage stores.....	0.1	0.4
Grocery stores	-0.1	0.2
Health & personal care stores	-0.3	1.7
Gasoline stations	0.9	-4.5
Clothing & clothing accessories stores	-0.5	1.3
Sporting goods, hobby, musical instrument, & book stores	0.0	-3.0
General merchandise stores.....	0.4	0.7
Department stores	-0.2	-4.4
Nonstore retailers	-0.1	6.4
Food services & drinking places	0.4	6.3