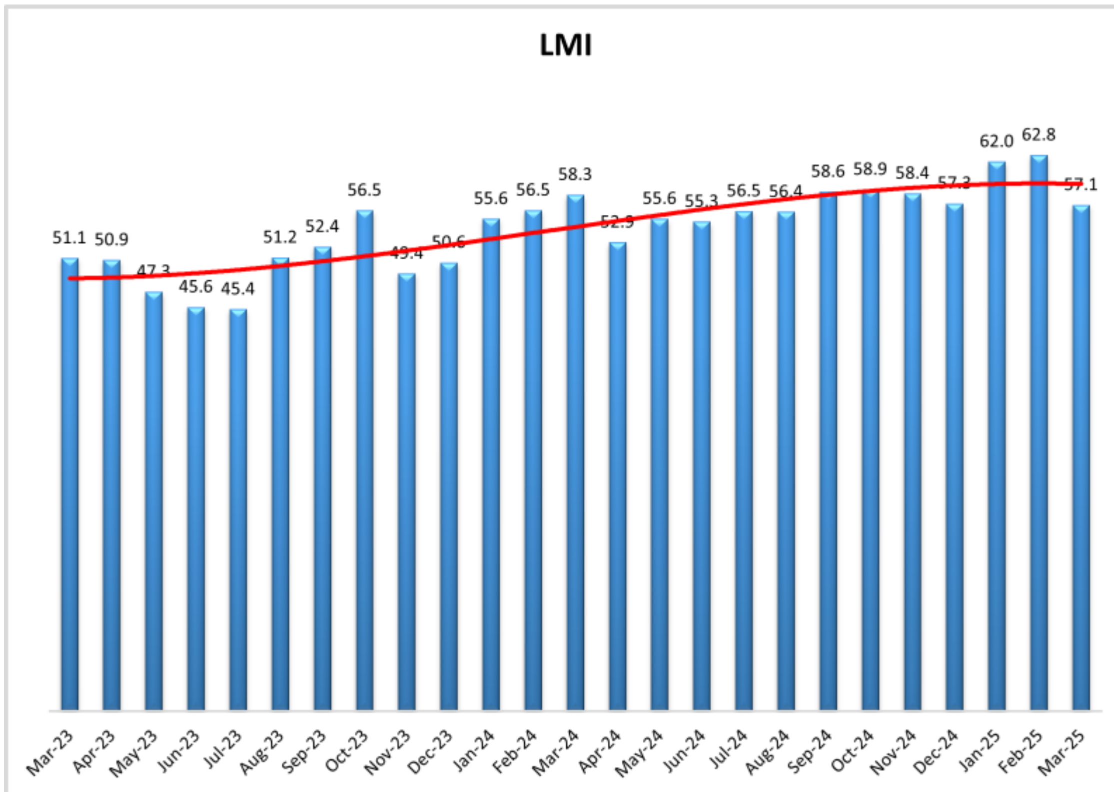
We are happy to release the March 2025 Logistics Managers' Index.

The March Logistics Manager's Index reads in at 57.1, down (-5.6 from February's reading of 62.8. The January and February readings represented the fastest rate of growth in the overall index since June of 2022. March's reading is departure from this trend, as this is the lowest overall reading for the index since August of 2024. The contraction in the overall index was driven by a sharp decline in all three of the price/cost metrics. In January, all three metrics were up significantly, with all three of them reading in above 70.0 for the first time since 2022. This trajectory continued into February for Inventory Costs and Warehousing Prices. Many of those shifts reversed this month, with Inventory Costs (-6.7 to 70.6), Warehousing Prices (-16.0 to 61.0), and Transportation Prices (-9.0 to 56.4) all down significantly in March. This suggests that supply chains revved up in February and early March to bring goods in, but have slowed in more recent weeks as more trade controls have been implemented. Logistics costs in February were high, so if the Inventory Costs and Warehousing Prices stay where they are now and don't go down it may represent stabilization, further contraction could be an issue though. It is a different story for Transportation Prices, which fell significantly in the second half of the month from 60.5 in early March to 51.1 (close to no expansion) later in the month. This reading of 51.1 was lower than Transportation Capacity's late-March reading of 54.9, indicating a slight freight inversion at the end of the month. Traditionally, a negative freight inversion (in which Transportation Capacity expands faster than Transportation Prices) signals a downturn in the transportation market. To be clear, we need to see several full months of this continued dynamic to declare a freight recession. It is possible that this is a one-time blip that will flip back in April and that the market will continue the positive trend it has demonstrated over the last 11 months. It will be critical to continue monitoring this situation over the next few months. Dynamics in the transportation market are often a leading indicator for movements in the overall economy. If we see a sustained pullback in freight, it may signal coming issues in the overall economy.




Researchers at Arizona State University, Colorado State University, Florida Atlantic University, Rutgers University, and the University of Nevada, Reno, and in conjunction with the Council of Supply Chain Management Professionals (CSCMP) issued this report today.

***Results Overview***

The LMI score is a combination of eight unique components that make up the logistics industry, including: inventory levels and costs, warehousing capacity, utilization, and prices, and transportation capacity, utilization, and prices. The LMI is calculated using a diffusion index, in which any reading above 50.0 indicates that logistics is expanding; a reading below 50.0 is indicative of a shrinking logistics industry. The latest results of the LMI summarize the responses of supply chain professionals collected in March 2025.

| LOGISTICS AT A GLANCE | | | | | |
|---|---|---|---|---|---|
| **Index** | **March 2025 Index** | **February 2025 Index** | **Month-Over-Month Change** | **Projected Direction** | **Rate of Change** |
| LMI® | 57.1 | 62.8 | -5.6 | Expanding | Slower |
| Inventory Levels | 61.2 | 64.8 | -3.6 | Expanding | Slower |
| Inventory Costs | 70.6 | 77.3 | -6.7 | Expanding | Slower |
| Warehousing Capacity | 52.3 | 50.5 | +1.8 | Expanding | Slower |
| Warehousing Utilization | 59.7 | 65.5 | -5.8 | Expanding | Slower |
| Warehousing Prices | 61.0 | 77.0 | -16.0 | Expanding | Slower |
| Transportation Capacity | 53.6 | 55.1 | -1.6 | Expanding | Slower |
| Transportation Utilization | 54.0 | 57.8 | -3.8 | Expanding | Slower |
| Transportation Prices | 56.4 | 65.5 | -9.0 | Expanding | Slower |

The LMI read in at 57.1 in March, down (-5.6) from February's reading of 62.8. Both February and January's reading (62.1) had been the highest for the overall index since June of 2022. March's reading is the lowest since August of 2024. The 5.6-point decline is the third largest in the history of the index. The only greater occurrences were a 6.6-point drop in April 2022, which was the month after Russia invaded Ukraine and set off inflation; and a 7.6-point drop in April of 2020, which was the first reading after COVID-19 lockdowns. That being said, a reading of 57.1 does still indicate a level of expansion that is within half a standard deviation of the all-time average of 61.6. The dip to 57.1 is not troubling in a vacuum, the major point of concern is that it represents a deviation from the direction in which the logistics industry had been trending since reaching a low point in July 2023. If logistics activity stabilizes around its current levels, it would represent slow steady expansion. If however this movement is the start of a new pattern, and we see a drift towards contraction, it could spell trouble from a logistics industry that has only recently gotten back on its feet after a half decade dealing with COVID and painful inflation.

Nervousness regarding the direction of the overall economy is apparent places other than this report. The University of Michigan's Survey of Consumers showed that consumer sentiment is 57.0. This is down 11.9% from last month and down 28.8% lower than the same reading last year. Sentiment has trended down all through 2025. Once again, the dip is driven by fears of renewed inflation, which at 5.0% are at their highest levels since November of 2022[1]. Relatedly, the Conferences Board's monthly survey of forward-looking expectations for income, business, and labor market conditions dropped to 65.2, which is below the "expected recession threshold" of 80.0 and marks its lowest level in 12 years. Respondents indicated that the twin threats of tariffs and continued inflation were significant contributors to their pessimistic predictions[2].

A major source of worry regarding inflation is the uncertainty surrounding tariffs. In late March, the U.S. announced plans to implement a 25% tariff on imported vehicles. Officials stated that this would represent an additional 25% on top of other recently-implemented tariffs. Analysts suggest that this could add approximately $6,000 of costs to vehicles assembled in Mexico and Canada. The announcement of these tariffs had significant negative effects on the shares of most automotive manufacturers[3]. Germany and France have pledged to take retaliatory measures against these tariffs. Because European automakers currently have limited ability to expand their manufacturing footprint in the U.S., some are predicting a $12,000 increase in European cars. This will significantly impact cross-border traffic, as many of these automotives are currently assembled in Mexico[4]. This would be particularly troubling for Germany, with officials predicting that Europe's economic engine could slide into recession if the proposed "tectonic changes" in global economic policy are fully implemented[5]. Taken all together these shifts will make the European Central Bank's job "more complicated" as they continue working to bring down inflation on the continent[6].

On the domestic front, the Federal Reserve once again left interest rates constant after their March meeting. Chairman Power stated that "further progress may be delayed" on inflation getting down to the Fed's goal of 2% due to uncertainty surrounding trade policy. Interestingly, this announcement came a week after a report showing that U.S. inflation came in at 2.8% in February. While this was an increase of 0.2% on a monthly basis, it was slower growth than we saw in January[7]. There was also positive news regarding wholesale prices as the producer price index (PPI) showed no gain in February after increasing by 0.6% in January[8]. It is important to point out that both of these measures would only reflect the initial 10% tariffs that were placed on China in early February and would not yet have captured costs associated with any other changes in trade policy. It will be interesting to see whether inflation rates continue slowing on this trajectory or not, and how any movements impact the Fed's opinion on interest rates at their next meeting.

One of the primary challenges with readjusting supply chains to account for changes in trade policy is the uncertainty surrounding them. For instance, in late March President Trump stated that China approving the sale of TikTok could lead him to consider reducing tariffs between them and the U.S.[9]. The administration is also going back and forth on whether or not to implement reciprocal tariffs or a 20% flat tariff across the board[10]. This speaks to the uncertainty underlying the current round of tariffs. If 20% tariffs might be eliminated due to a policy change on one specific social media company – something that had not previously been listed as a demand tied to trade and could happen any time ] – firms may be reticent to make significant investments to move manufacturing out of China. Firms can work around tariffs if they become a long-term part of their supply chain (see the 60 years of steadiness in the U.S. pickup truck market post-"chicken tax"). However, it is exponentially more difficult for firms to adjust to significant new rules when it is unclear whether or not they will be permanent.

This uncertainty is reflected in the changing approach to inventories. Inventory Levels continued to increase at 61.2, though at a slightly slower rate (-3.6) than we observed in February. A bevy of statistics suggests that the inventory pull-forward in the first few months of the year was significant. For instance, nearly 480,000 TEUs passed through the Port of Savannah in February, marking its busiest February on record. While March is not complete at the time of this writing, it appears that the business continued through at least the first half of the month[11]. Commodities are a major component of the pull-forward of inventory. For instance, the U.S. will import approximately 500,000 tons of copper in March, over 6X above the 70,000 tons we would see imported in a normal month[12].

Interestingly, we do observe that Downstream Inventory Levels are growing 7.8 points faster than their Upstream counterparts at a rate of 66.7 to 58.9. This is notable because it is the inverse of what we saw last month, Upstream inventories were expanding 11.1 points faster at a rate of 69.6 to 58.5. As one would expect, this has also led to higher Inventory Costs Downstream (75.9) than Upstream (68.1). This inversion suggests that the bulk of the pull-forward may have happened already, with firms now waiting to see exactly what the new regulations will be. Many firms are in a difficult position because they want to build up inventories quickly to stay ahead of tariffs, but at the same time they are nervous to build inventories up too much as it could lead to a repeat of some of the problems of 2022 when firms were bogged down by goods and supply-inflation spiked[13]. Imports will not continue at this pace without some certainty; partially due to cost. Inventory Costs were down (-6.7) but still expanded at a rate of 70.6, which we consider to be a significant level of expansion.

There is already some evidence of a slowdown in inbound goods. Joachim Goller, a senior VP at Kuhne + Nagle stated that cross-border traffic between the U.S. and Mexico dropped significantly upon the announcement of the tariffs and has not yet recovered. Several importers have been hit with duties that add significant cost to their orders, leaving many firms (especially smaller ones) to look for alternative methods of import[14]. This could be further impacted by the proposed fees on Chinese cargo ships calling at U.S. ports, which could to add $600 to $800 of cost per container, and approximately $20 billion to shipping overall. This has led to petitions not only from importers, but from exporters – like farmers – as well. Carriers may choose to frequent fewer ports. Meaning that agricultural products which often ship out of the Port of Oakland may instead have to be shipped down to Southern California to limit the number of stops that ships have to make (and therefore fees they will need to pay)[15]. A shift in patterns could also impact volume in certain lanes (e.g., eastbound on Interstate 80), shifting the prices OTR carriers will be able to charge. Ocean carriers are nervous as well, with Atlantic Container LineCEO Andrew Abbot predicting that this will send prices up and that his firm may end up shutting down as a result[16].

Several retailers, including Walmart, Delta, United, Southwest, and Dick's Sporting Goods, have cautioned investors of the possibility of decreased demand due to uncertainty and potential higher costs related to tariffs[17]. One countermeasure they may take to get around this is to alter their product mix. Many retailers suffered during inflation of 2022-2023 as consumers shifted spending to essential items such as food and fuel. Target is adjusting their product mix, and warehouse network, to prepare in case a similar dynamic emerges in the future. They have opened three new grocery distribution centers over the past two years and will open another in Colorado in 2025[18]. Because groceries often require temperature control, specialized facilities are often needed (e.g. a firm cannot just repurpose a vacant warehouse without climate control). This investment represents an effort to diversify (and perhaps inflation-proof) their product mix. Walmart and Amazon have also made investments in grocery distribution over the last few years, suggesting that retailers are increasingly seeing grocery, and by relation the cold chain, as a key competency.

Warehousing Capacity loosened up slightly overall, increasing (+1.8) to 52.3. This capacity is tighter Downstream, where it is contracting at a rate of 47.9, lower than the mild rates of expansion (53.9) reported Upstream. In general, demand for warehousing space is up. Asian logistics service providers (LSPs) have emerged as a significant source of demand in the U.S. warehousing market. Warehouse leasing by Asian LSPs doubled year-over-year in some U.S. markets, as firms too advantage of lower price growth in 2024. Prologis reports that Asian LSPs accounted for 20% of all U.S. warehouse leases through the first three quarters of last year. This surge is attributable to several factors including relatively low costs in 2024, the fear of tariffs in 2025 (which would – and seemingly have – led some firms to stock up quickly), and the facilitating of drop-shipped, De Minimis imports from Asian e-commerce firms such as Schien and Temu[19]. Regarding the latter, increased warehousing footprints in the U.S. allow those firms to achieve domestic economies of scale, helping to control costs after the expense of air-shipping goods across the

Pacific. That being said, warehousing demand is coming from multiple places. Prologis estimates that the growth of e-commerce (up 8% in 2024) will necessitate an additional 250 million to 300 million square feet of space by 2030. E-commerce focused space is often located at more expensive real estate closer to population centers, meaning the incoming wave of storage space may come with a high price tag[20]. This is reflected in the sky-high predictions for future Warehousing Prices by Downstream retailers, who are forecasting a growth rate of 81.3 over the next 12 months – significantly higher than the prediction of 61.4 from their Upstream counterparts. The Upstream predictions are very similar to the current reading of 61.0, which is down significantly (-16.0) from February's reading of 77.0, which was the highest reading in several years (and more consistent with Downstream predictions). Warehousing Utilization was also down (-5.8) to 59.7. It should be pointed out however that this decline in the rate of expansion was primarily fueled by readings early in the month, as Warehousing Utilization read in at a fairly pedestrian 54.2 in early March, before rebounding to a more robust rate of expansion at 66.3 in the second half of the month.

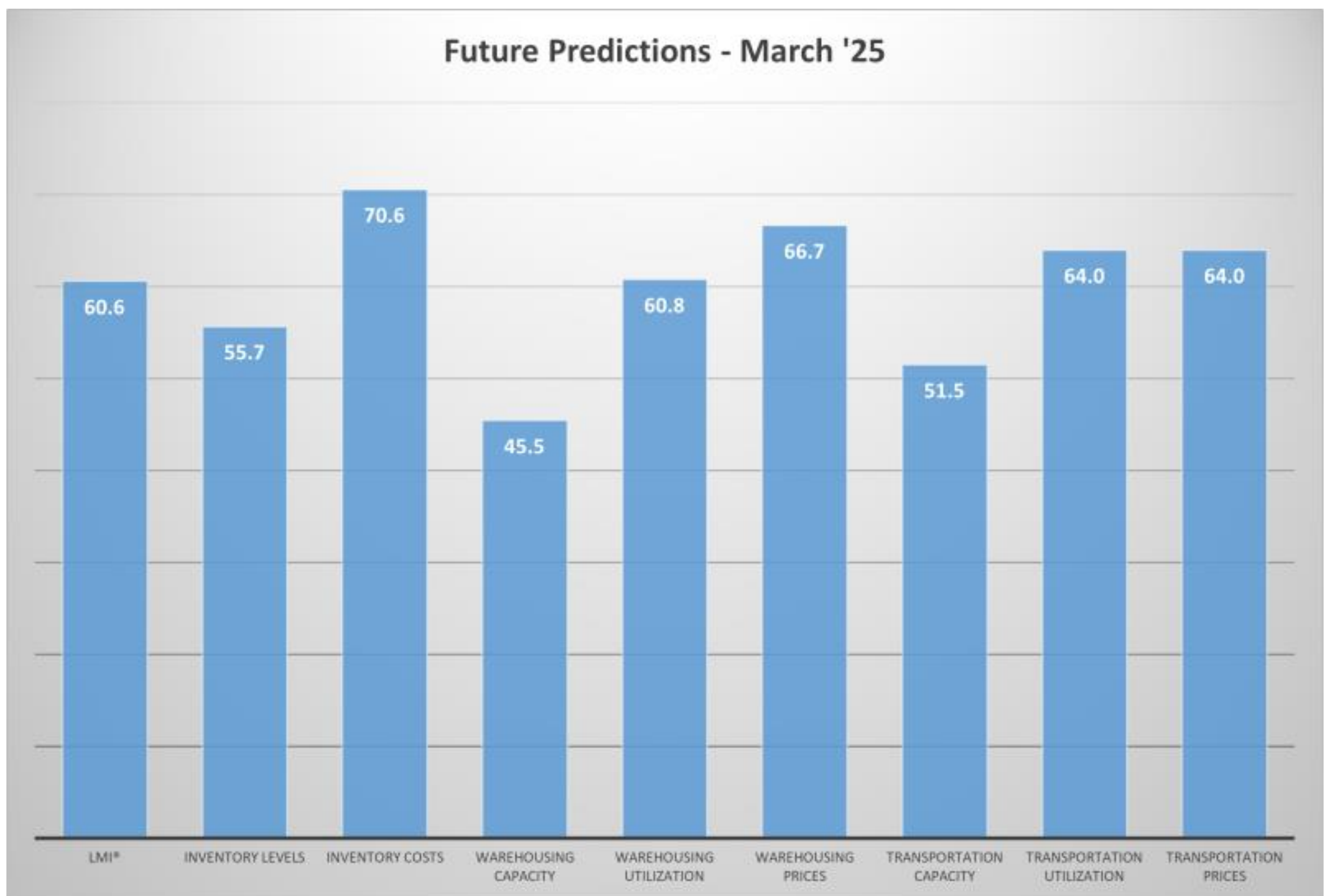
As mentioned above, there were interesting shits in our transportation metrics in March. Most pronounced among these were the movements in Transportation Prices. Similar to our other cost metrics, Transportation Prices were down significantly (-9.0) in March, dropping to 56.4 which is their lowest level since April 2024, when they were in active contraction following the Fed's decision to hold off on lowering interest rates. The 9.0-point drop is the largest since July of 2022 when Transportation Prices moved from expansion to contraction, signaling the start of what we now know was an 18-month freight recession. The bulk of this movement happened later in the month, as Transportation Capacity went from robust expansion at 60.5 in the first half of March, to anemic expansion bordering on no movement at 51.1. As mentioned above, this dip coincided with Transportation Capacity coming in at 53.6 (-1.6) overall and at 55.6 in the second half of the month. This means that in the second half of March there was a negative freight inversion. The most recent negative freight inversion was in April of 2024, which was the 21st out of 22 months where Transportation Capacity had grown faster than Transportation Prices. The positive freight inversion that occurred in May 2024 reversed this dynamic, marking and end to the freight recession of 2022-2024. Interestingly, Upstream firms anticipate that Transportation Prices will be up robustly (66.9) in the next 12 months (as compared to a future prediction of 56.9 Downstream) so it could be the case that the market will rebound and we will avoid a prolonged pullback in transportation.

March's softening in price came despite U.S. diesel prices being up slightly (+$0.018 per gallon) in the last week of March. Although it should be pointed out that this is down 47 cents per gallon from the same period a year ago[21]. Ocean shipping costs slowed as well as ocean container rates are down year-over-year as imports from China have slowed[22]. This comes after large ocean shippers such as Cosco (+32.3%) saw significant increases in revenue in 2024. Shipping prices between Asia and Europe went down 11% year-over-year, and Asia-Mediterranean prices are down 9%. Both of these pale in comparison to the 18% drop for Asia-North American routes[23]. Essentially the demand for durable goods that characterized much of the last year has subsided slightly due to economic uncertainty[24].

Transportation Utilization was down (-3.8) to 54.0 in March. This was primarily driven by Upstream firms, who reported no movement at 50.0, whereas Downstream retailers reported robust expansion at 64.3. This is a similar dynamic to what we saw with Warehousing Utilization and adds further support to the hypothesis that the large volumes of inventories that came in earlier this year are now moving downstream to the retail level. We also see that FreightWaves' flatbed tender rejection rate spiked up to the mid-30's in early March. This was largely driven by imports of things bulky items like Canadian lumber ahead of tariffs[25]. The pull-forward of inventories is also evident in increased volumes coming through ports and being moved inland through intermodal transport. International intermodal was up in early March as well, with exports coming in from Mexico and Canada to avoid

duties[26].

Respondents were asked to predict movement in the overall LMI and individual metrics 12 months from now. Respondents continued to predict expansion in March, though at a slower (-5.6) rate than February's reading of 66.2 or January's prediction of 66.1. Respondents anticipate that Inventory Levels will grow at a very moderate rate of 55.7 – down significantly (-13.4) from February's future prediction of 69.1 and also down (-5.5) from the current expansion rate of 61.2. As a result of this slowdown, we also see more moderate predictions across all of our cost metrics, with Inventory Costs (70.6), Warehousing Prices (66.7), and Transportation Prices (64.0) coming in at a combined 34.1-points lower than last month's predictions. At the same time, Warehousing Capacity is expected to contract at a rate of 45.5. Taken all together, this suggests that the inventory buildup that has characterized the first quarter of 2025 will slow down within the next year, leading to lower costs and tighter storage availability. Generally, we would expect higher prices to go along with capacity that is this tight, potentially suggesting more static levels of inventory than what we have seen in the last year.




When interpreting our results, any value about 50.0 indicates growth and any value below indicates contraction. Higher Numbers = More Growth, Lower Numbers = More Contraction.  For a more comprehensive discussion of the March 2025 report, access the PDF version of the report here: March 2025 Logistics Managers' Index. The online version can be accessed here: March 2025 Logistics Managers' Index Online.

The Logistics Managers Index is a monthly cooperative research venture between several supply chain management universities and CSCMP. We collect data having to do with trends in Warehousing, Transportation, and Inventory across a wide spectrum of industries. If you would like to participate in the April 2024 Reading of this survey please use the link below.

Survey Link:
https://colostate.az1.qualtrics.com/jfe/form/SV_3WXHydQR4dHMtVz?Q_DL=TVCB1WIvdKqVfcE_3WXHydQR4dHMtVz_CGC_nNN1nLqZ9gmdNIV&Q_CHL=email

You can send Dr. Dale Rogers of Arizona State University a note at dale.rogers@asu.edu.

Thank you for your time and your expertise!

Click here to unsubscribe from the current survey mailing - to opt-out permanently please send a note to zac.rogers@colostate.edu

---

[1] Hsu, J. (2025, March 28). *Surveys of Consumers*. Survey of Consumer - Final Results for March 2025. http://www.sca.isr.umich.edu/

[2] Grossman, M. (2025a, March 25). *Consumer Survey's Decline Adds to Evidence of Gloom*. WSJ. https://www.wsj.com/economy/consumers/consumer-surveys-march-decline-adds-to-evidence-of-poor-sentiment-af39c303

[3] Bade, G., & Otts, C. (2025, March 27). *Trump Plans to Impose 25% Tariff on Imported Vehicles*. WSJ. https://www.wsj.com/politics/policy/trump-considers-more-limited-tariff-plans-09b36d26

[4] Alderman, L. (2025, March 27). Germany and France Say Europe Must Respond to Trump's Auto Tariffs. *The New York Times*. https://www.nytimes.com/2025/03/27/business/germany-trump-auto-tariffs.html

[5] Iordache, R. (2025, March 13). *U.S. tariffs could thrust Germany into recession, central bank governor says*. CNBC. https://www.cnbc.com/2025/03/13/us-tariffs-could-thrust-germany-into-recession-ecbs-joachim-nagel.html

[6] Kiderlin, S. (2025, March 27). *Trump's tariffs are making the ECB's interest rate path "more complicated," policymaker says*. CNBC. https://www.cnbc.com/2025/03/27/ecbs-wunsch-trump-tariffs-are-making-rate-path-more-complicated.html

[7] Smith, C. (2025, March 12). U.S. Inflation Eased More Than Expected in February. *The New York Times*. https://www.nytimes.com/2025/03/12/business/economy/inflation-cpi-february-economy.html

[8] Cox, J. (2025a, March 13). *Wholesale price measure was flat in February, compared with expected increase*. CNBC. https://www.cnbc.com/2025/03/13/ppi-inflation-report-february-2025-.html

[9] Parvini, S. (2025, March 26). *Trump says he would consider reducing China tariffs if there's a deal on TikTok*. AP News. https://apnews.com/article/trump-tiktok-china-tariffs-3bc8eef6fa75987c52bd86bab5eb6f05

[10] Bade, G., & Otts, C. (2025, March 27). *Trump Plans to Impose 25% Tariff on Imported Vehicles*. WSJ. https://www.wsj.com/politics/policy/trump-considers-more-limited-tariff-plans-09b36d26

[11] Chirls, S. (2025c, March 26). *Port of Savannah sets record container, rail and truck moves in February*. FreightWaves. https://www.freightwaves.com/news/port-of-savannah-sets-container-rail-and-truck-moves-in-february

[12] Hampstead, J. P. (2025, March 26). *Trucking, copper, cocoa: Volatility roils commodities*. FreightWaves. https://www.freightwaves.com/news/trucking-copper-cocoa-volatility-roils-commodities

[13] Young, L. (2025b, March 24). *Retailers Bulk Up Inventories to Blunt Tariff Impact—WSJ*. The Wall Street Journal. https://www.wsj.com/articles/retailers-bulk-up-inventories-to-blunt-tariff-impact-dd6e964f?mod=hp_minor_pos14

[14] Young, L., & Berger, P. (2025, March 18). *For Importers Rushing to Beat Tariffs, It's Life on the Edge*. WSJ. https://www.wsj.com/business/logistics/for-importers-rushing-to-beat-tariffs-its-life-on-the-edge-6099f674

[15] Paris, C., & Berger, P. (2025, March 24). Farmers, Dockhands and Shipowners Fight Against U.S. Fees on Chinese Ships. *Wall Street Journal*. https://www.wsj.com/articles/farmers-dockhands-and-shipowners-fight-against-u-s-fees-on-chinese-ships-821e5698

[16] LaRocco, L. A. (2025, March 27). *If Chinese-built containership fines take effect, "we're out of business in U.S.," ocean carrier says*. CNBC. https://www.cnbc.com/2025/03/27/if-china-freight-ship-fines-hit-were-out-of-business-in-us-carrier-warns.html

[17] Josephs, G. F., Leslie. (2025, March 14). *U.S. consumers are starting to crack as tariffs add to inflation, recession concerns*. CNBC. https://www.cnbc.com/2025/03/14/delta-walmart-warn-about-consumer-spending-amid-tariffs-inflation.html

[18] Young, L. (2025a, March 12). Target Beefs Up Grocery Supply Chain as Consumer Spending Shifts. *Wall Street Journal*. https://www.wsj.com/articles/target-beefs-up-grocery-supply-chain-as-consumer-spending-shifts-e3c516c3

[19] Hadero, H. (2025, March 3). *Why Asian logistics operators are leasing more US warehouses*. AP News. https://apnews.com/article/trade-warehouse-china-online-shopping-eba5283b0762fa958ab90fb731370117

[20] Maiden, T. (2025, March 25). *E-commerce buildout supporting logistics space leasing activity*. FreightWaves. https://www.freightwaves.com/news/e-commerce-buildout-supporting-logistics-space-leasing-activity

[21] U.S. Energy Information Administration. (2025, March 24). *Gasoline and Diesel Fuel Update*. Petroleum & Other Liquids - March 24, 2025. https://www.eia.gov/petroleum/gasdiesel/index.php

[22] Baudendistel, M. (2025a, March 19). *Fear of more tariffs prolongs retail pull-forward*. FreightWaves. https://www.freightwaves.com/news/fear-of-more-tariffs-prolongs-retail-pull-forward

[23] Chirls, S. (2025a, March 21). *Trans-Pacific container rates below lowest 2024 levels: Freightos*. FreightWaves. https://www.freightwaves.com/news/trans-pacific-container-rates-below-lowest-2024-levels-freightos

[24] Chirls, S. (2025b, March 22). *China's largest shipping line sees stunning gains in revenue, profits*. FreightWaves. https://www.freightwaves.com/news/chinas-largest-shipping-line-sees-stunning-gains-in-revenue-profits

[25] Baudendistel, M. (2025b, March 26). *Flatbed market anything but flat*. FreightWaves. https://www.freightwaves.com/news/flatbed-market-anything-but-flat

[26] Baudendistel, M. (2025a, March 19). *Fear of more tariffs prolongs retail pull-forward*. FreightWaves. https://www.freightwaves.com/news/fear-of-more-tariffs-prolongs-retail-pull-forward