

Uber Freight

Chemical Current

Supply chain newsletter for
chemical shippers

October 18, 2023



October 2023 overview



Executive summary

As we enter Q4, the freight market remains soft despite tightening in the LTL sector (due to Yellow Freight's departure) and increased wages for parcel workers (thanks to UPS workers' new contract). In its mid-year update, the [American Chemistry Council](#) forecasted a decline in chemical production in 2023 and a modest increase (1.2%) in 2024.

The chemical market met some resistance in Q3 due to a drop in housing starts (despite an increase in building permits) and labor shutdowns at some automotive manufacturing facilities. Oil is showing strength, but rig counts are declining ([down 16% Y-o-Y](#)) in North America suggesting a shift to yield versus volume for upstream energy suppliers.

Bulk transportation rates continue to be flat, and package hazmat spot rates mirror the overall truckload market with a summer decline. These factors underscore overcapacity in the chemical shipper market.

Chemical industry news and updates

M&A activity gaining momentum

- Early 2023 saw an uptick in both value and volume of chemical deals (per PwC)
- **Key drivers:**
 - Strategic reinvention of portfolios
 - Sustainability/ESG compliance
 - Supply chain transformation and collaboration
 - Divestiture from non-core assets and products

STB's new rail proposal

- The Surface Transportation Board has issued a new proposal to reform its reciprocal switching rules.
- Due to outdated policies, shippers served by single railroads are unable to switch their freight away from carriers with high prices and recurring service failures.
- This change will promote competitive pricing amongst rail carriers and, most importantly, reliability.



Labor costs increased significantly across the board

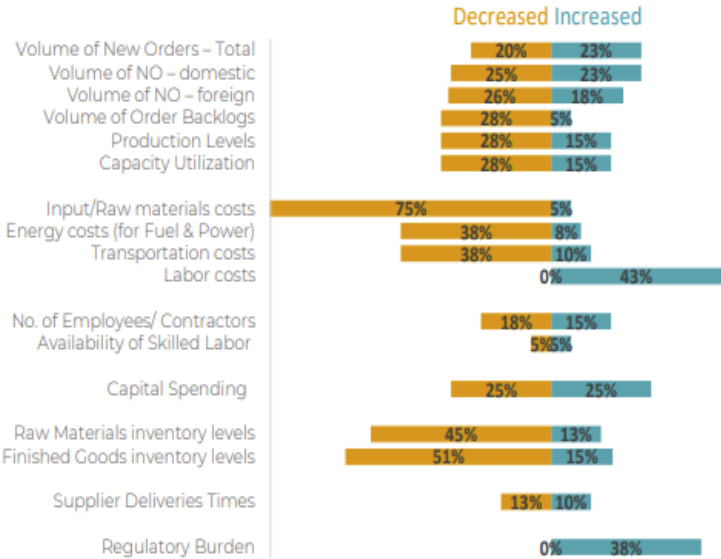


New order growth was stagnant



Chemical production declined in Q2

Chemical Manufacturers Assessment of their US Business, Q2 2023 vs Q1 2023



Source: American Chemistry Council (9/22/23)

Supply chain innovation:

2023 Accessorial Benchmarking Report



Benchmarking study scope

Shipper participants

The Uber Freight accessorial database includes shippers from a wide variety of industries and sizes.

In this study, shippers are classified into nine main industry categories and broken out by freight spend and mode.

Transportation spend

Annual transportation spend for shippers is exceeding \$36 billion.

Transportation Spend	
Spend Bracket	Participant Breakdown
\$0 - \$25 million	35%
\$25 - \$100 million	36%
\$100 - \$250 million	15%
\$250 - \$500 million	9%
> 500 million	4%

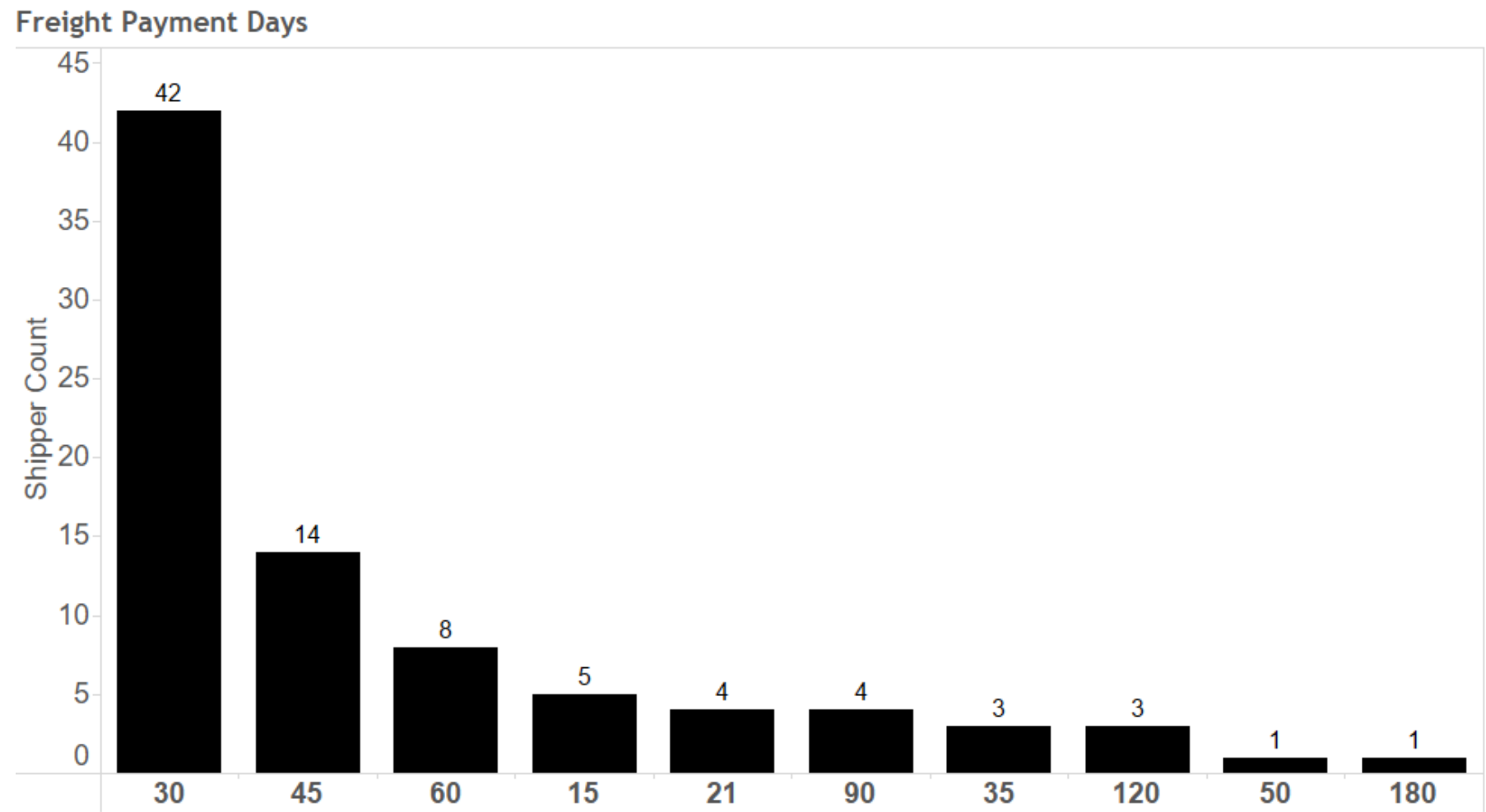
Shippers by industry

Shippers Per Industry	
Classification of Industry	No. of Shippers
Manufacturer	117
Food & Beverages	98
Retailer	68
Paper Packaging	59
Chemical, Oil & Gas	57
Consumer Packaged Goods	61
Automotive & Parts	28
High Tech	24
Other	40
Total Industry	552

***The above section is an excerpt from Uber Freight data.*

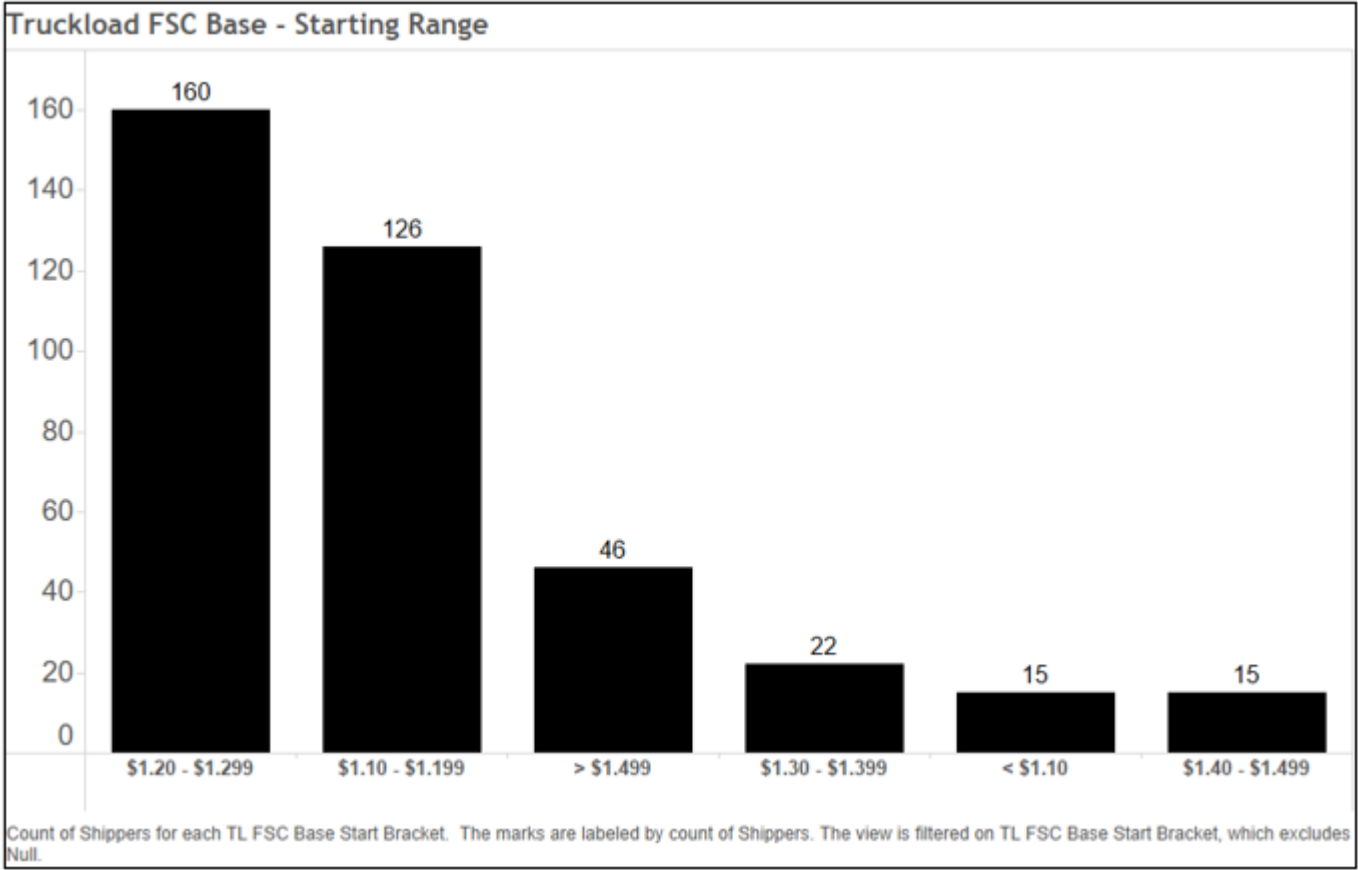
Freight payment terms

The **best practice** is to maintain 30-day payment terms.



Truckload fuel surcharge

The best practice is to utilize a starting base of \$1.20 to \$1.29 with \$0.06 increments for both dry van, bulk, reefer, and flatbed.



Intermodal fuel surcharge

The **best fuel surcharge increment** to use for intermodal is \$0.06 with a start range of \$1.10-\$1.199. Chemical shippers are most often using \$0.06 or greater as the pricing increment.

IM Load FSC		
IM FSC Increment	IM FSC Base Start Bracket	
<\$0.05	<\$1.10	4
	\$1.10 - \$1.199	5
	\$1.20 - \$1.299	6
	\$1.30 - \$1.399	1
	> \$1.499	5
\$0.05	<\$1.10	5
	\$1.10 - \$1.199	9
	\$1.20 - \$1.299	5
	\$1.30 - \$1.399	2
	> \$1.499	2
\$0.06	<\$1.10	1
	\$1.10 - \$1.199	25
	\$1.20 - \$1.299	17
	\$1.30 - \$1.399	2
	\$1.40 - \$1.499	1
	> \$1.499	1
>\$0.06	<\$1.10	1
	\$1.10 - \$1.199	5
	\$1.20 - \$1.299	4
	\$1.30 - \$1.399	3
	\$1.40 - \$1.499	2
	> \$1.499	1

Count of Shippers for each IM FSC Base Start Bracket broken down by IM FSC Increment. The marks are labeled by count of Shippers. The view is filtered on IM FSC Increment and IM FSC Base Start Bracket. The IM FSC Increment filter keeps <\$0.05, >\$0.06, \$0.05 and \$0.06. The IM FSC Base Start Bracket filter excludes Null.

Intermodal Fuel Price Increment				
Industry Type	No. of Shippers			
	<\$0.05	\$0.05	\$0.06	>\$0.06
Automotive & Parts	0	1	5	1
Chemical, Oil & Gas	0	4	6	5
Consumer Packaged Goods	0	2	9	
Food & Beverages	6	5	8	5
High Tech	3	2	2	0
Manufacturer	3	1	14	1
Other	2	1	4	0
Paper Packaging	1	5	8	1
Retailer	5	4	10	3
Total Shippers	20	25	66	16

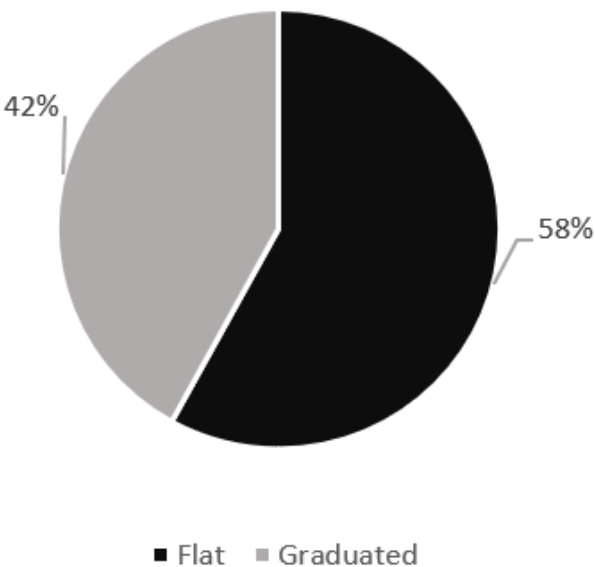
Stop-off charges

- **The best practice** is to utilize a flat stop-off charge versus a graduated charge.
- Out of 356 shippers, 58% favored a flat charge vs. the 42%.

Graduated stop-off charges:

- Out of 552 reported shipper accessorials, 202 have graduated stop-off charges. The most common rate schedule started at \$50 for the first charge and maxed out at \$100 per stop after the third stop. This is most common for dry van shippers that choose to use graduated stop-off charges in favor of flat charges.
- The best practice for refrigerated and intermodal shipments is to use graduated stop-off charges.
- Intermodal graduated charges start at \$150 and max out at \$300 starting on the second stop.
- Reefer graduated charges start at \$100 and max out at \$150 starting on the second stop.

Stop Off Charge Structure

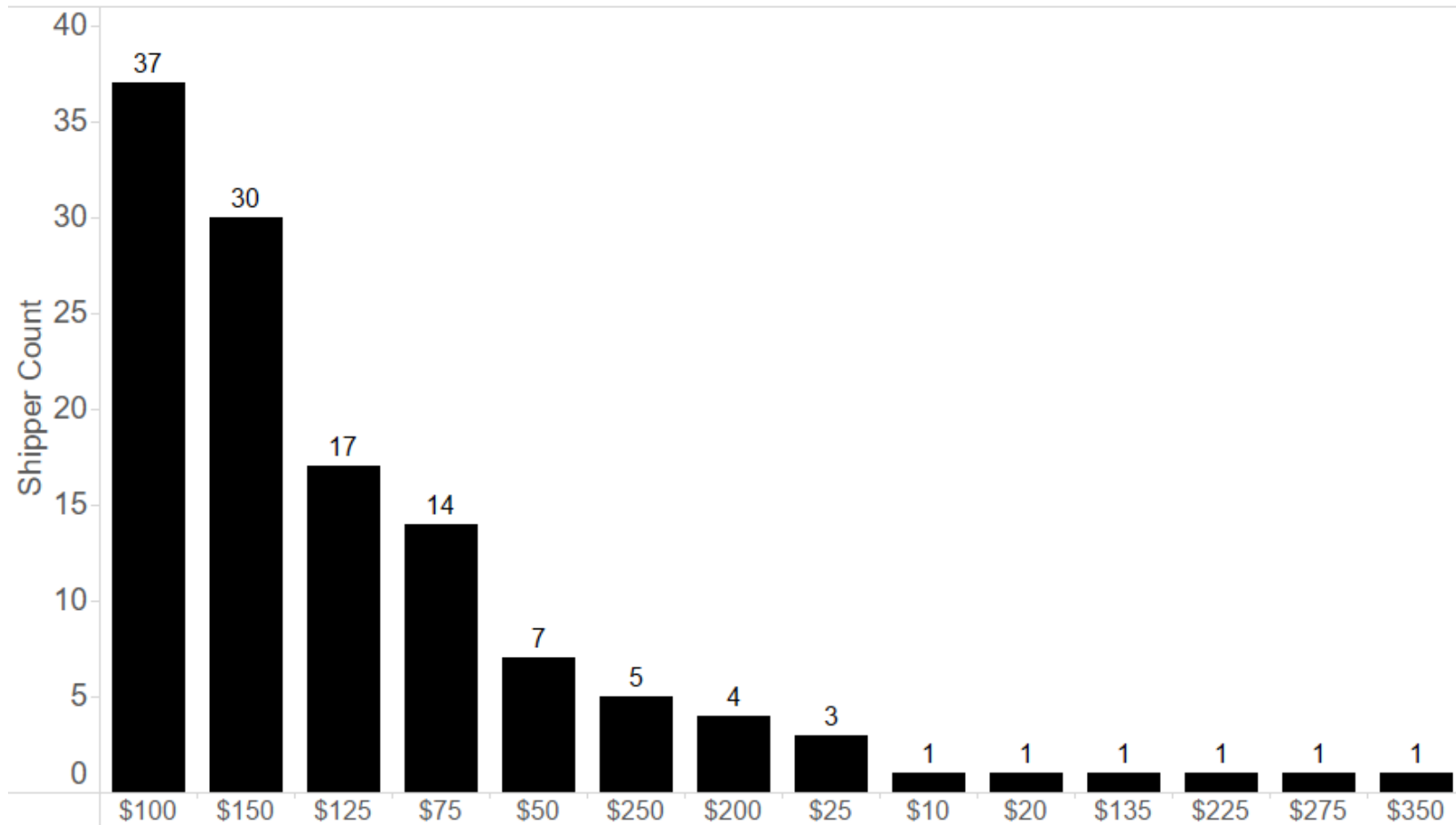


Stop Off		
Industry	No. of Shippers (Flat)	No. of Shippers (Graduated)
Automotive & Parts	10	10
Chemical, Oil & Gas	32	16
Consumer Packaged Goods	28	26
Food & Beverages	38	45
High Tech	12	8
Manufacturer	70	34
Other	23	9
Paper Packaging	29	24
Retailer	24	30
Total Shippers	266	202

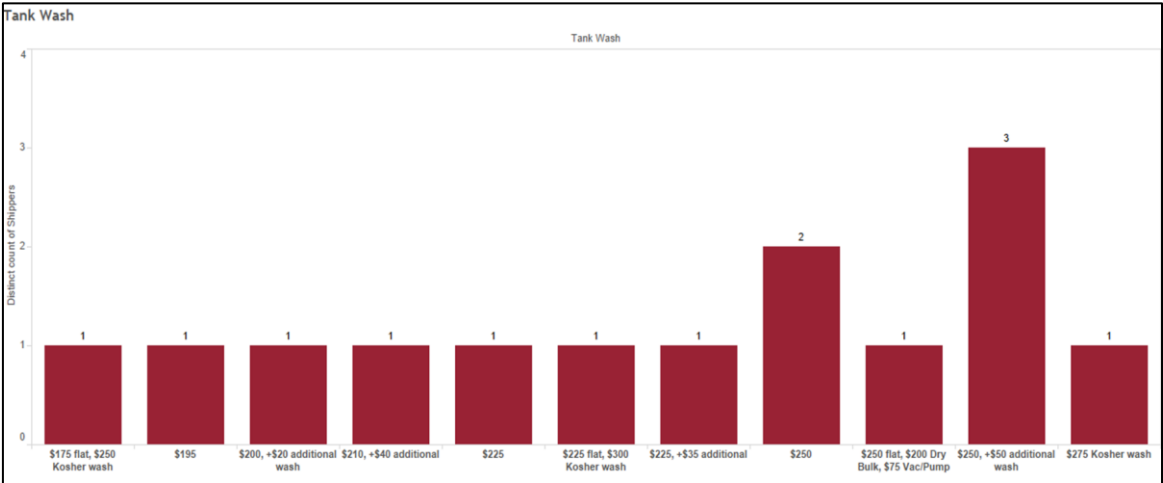
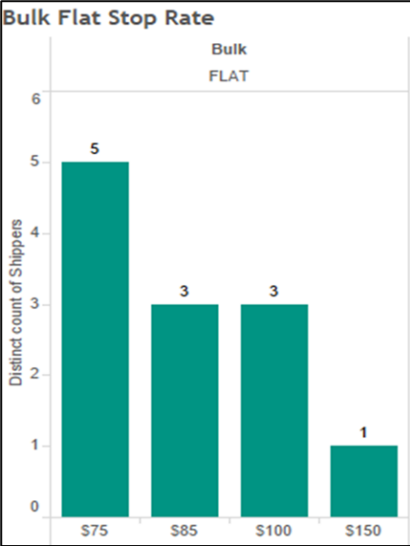
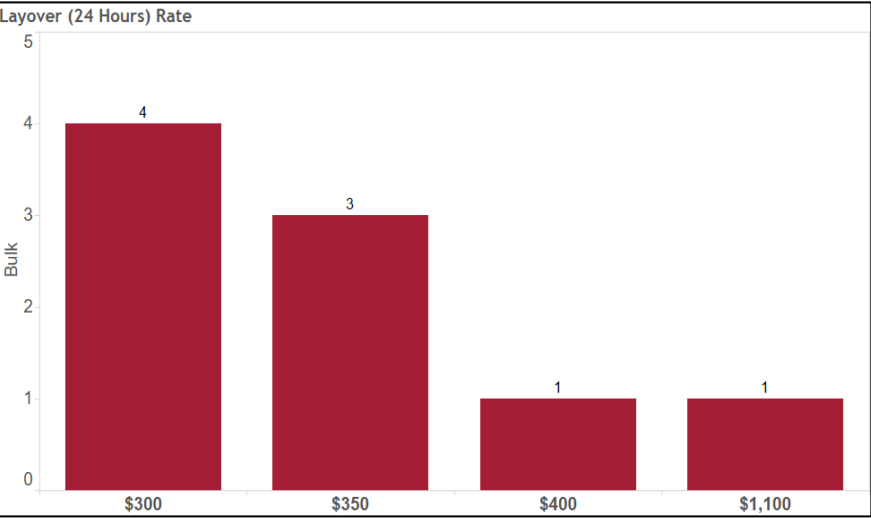
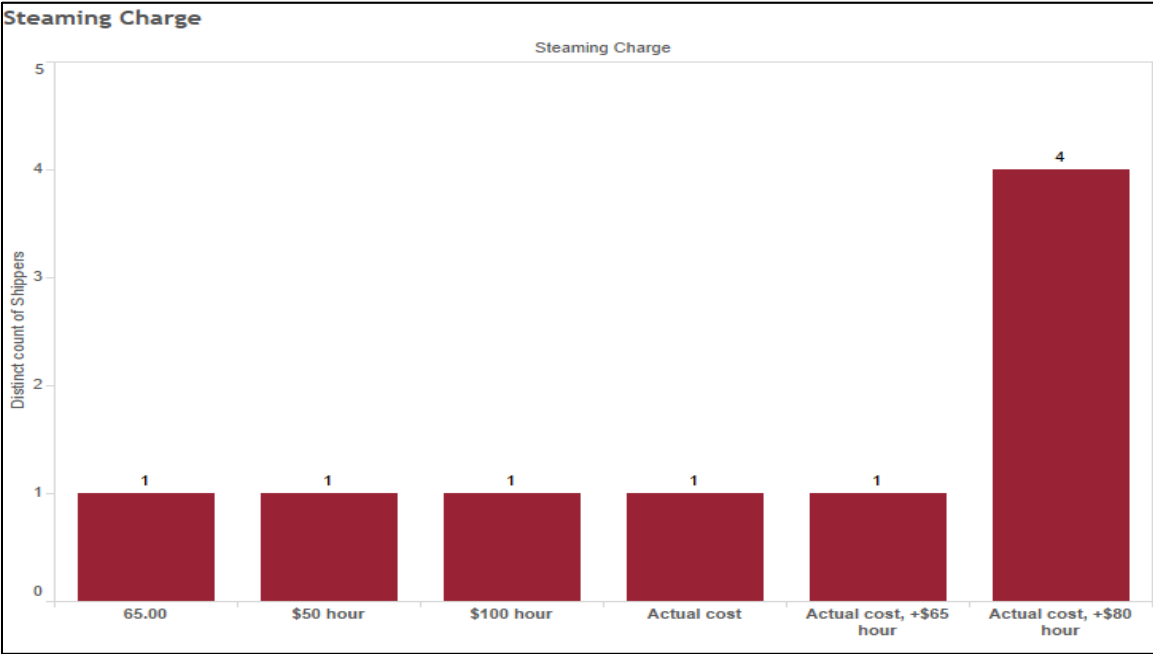
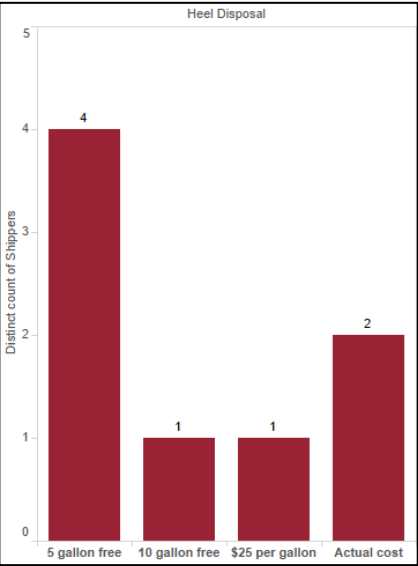
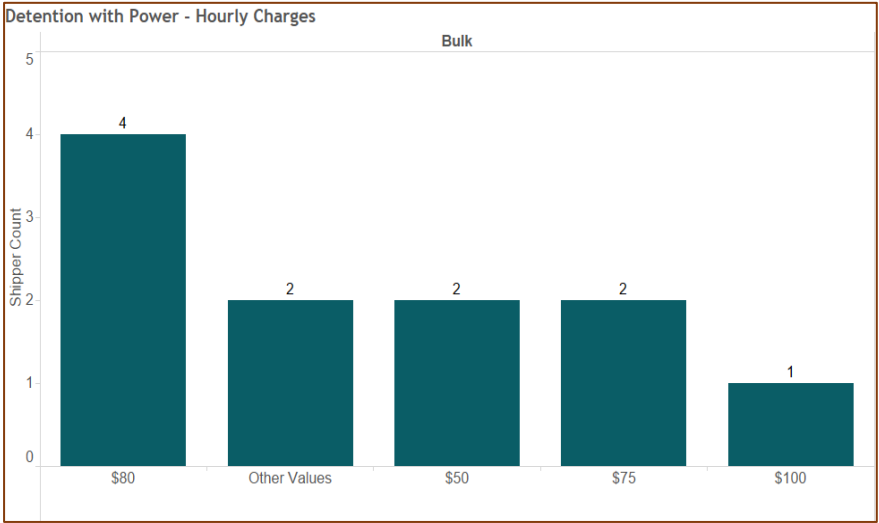
Hazardous materials

- **The best practice** is to pay \$100 per hazmat shipment (if itemized).
- Chemical, oil, and gas are the most common shippers with flat rates above \$100.

Flat HazMat Charges



Liquid bulk specific accessorial charges

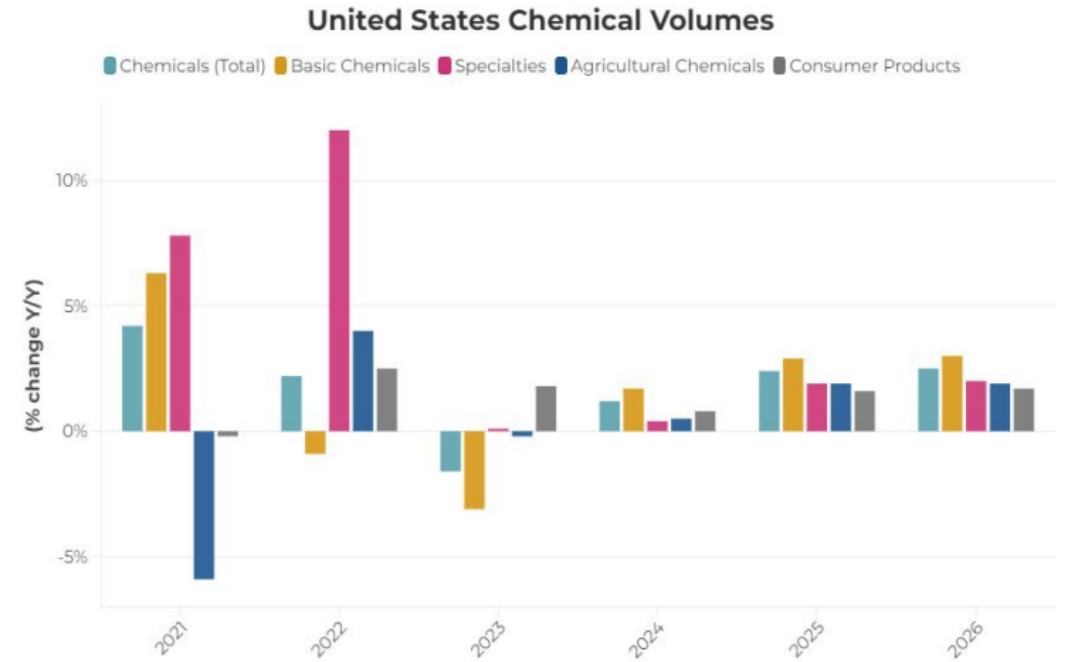


Chemical transportation trends



Inventory levels

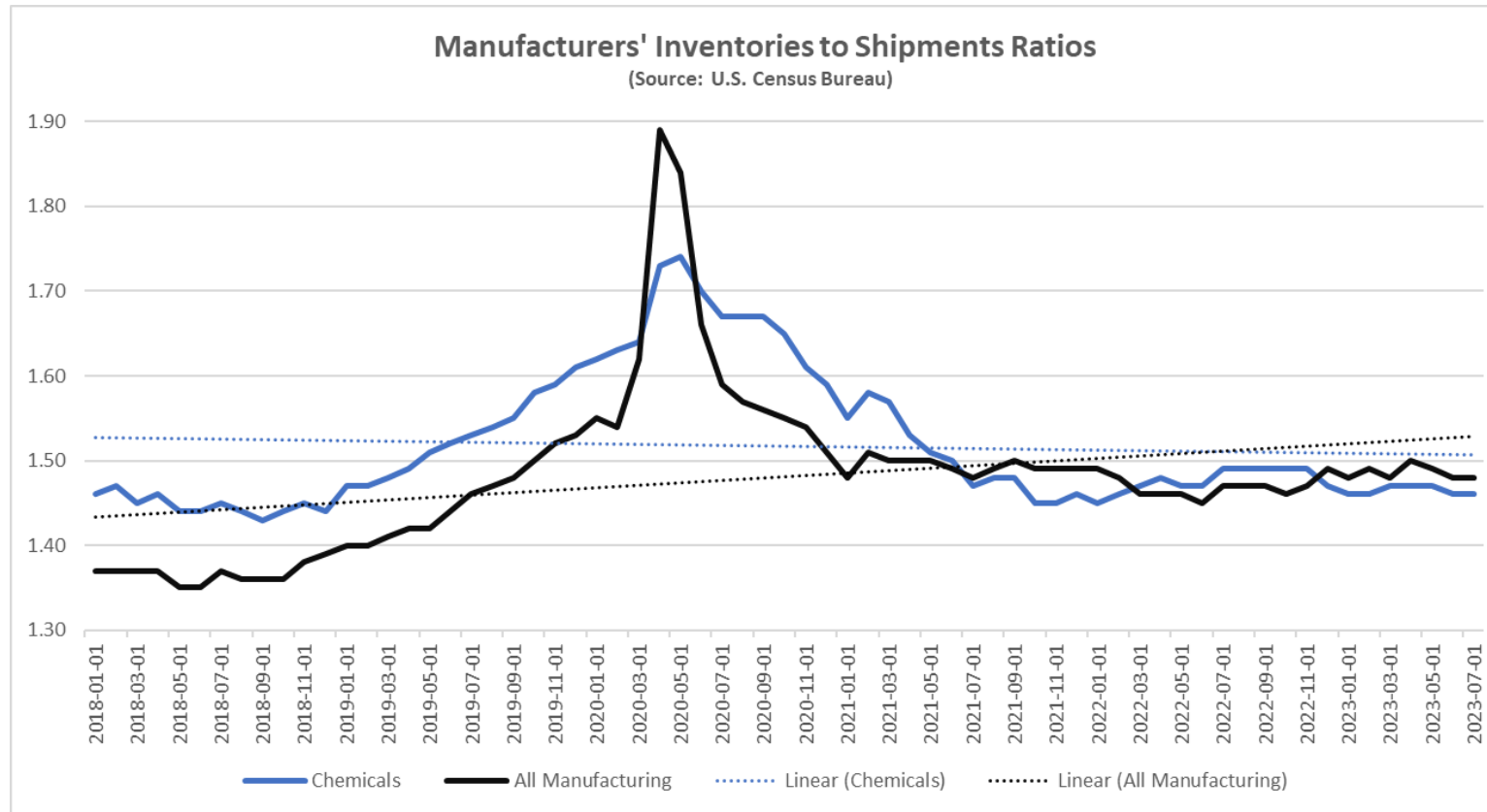
- The entire value chain continues to hold too much inventory.
- Destocking began late in Q1 and accelerated in late Q2 due to weaker than expected demand for the remainder of 2023.
- Finished goods and raw material inventories saw declines in Q2.
- The chemical industry outpaced manufacturing overall in reducing Covid-related excess inventory.



Source: American Chemistry Council's 2023 Mid-Year Situation & Outlook

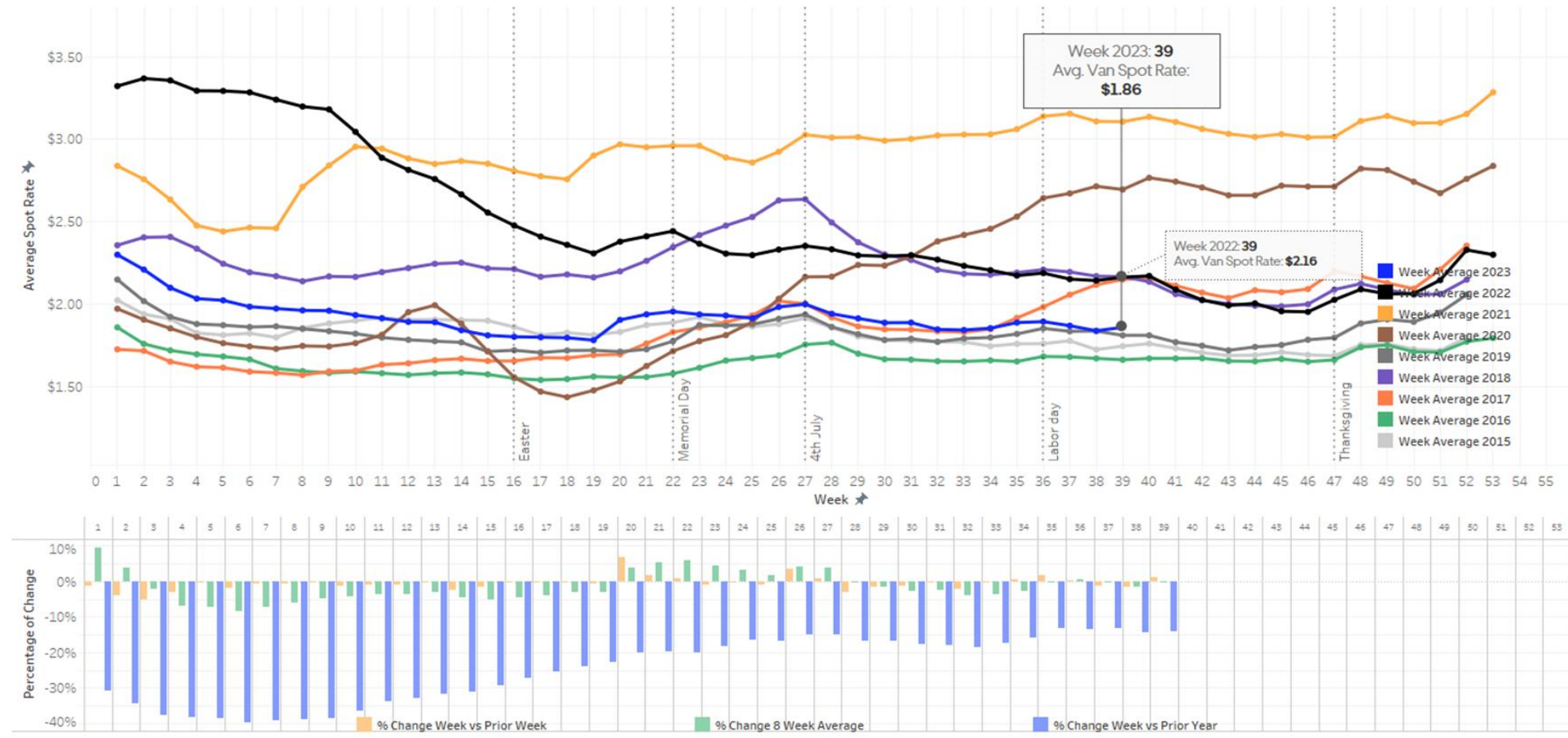


Inventory levels



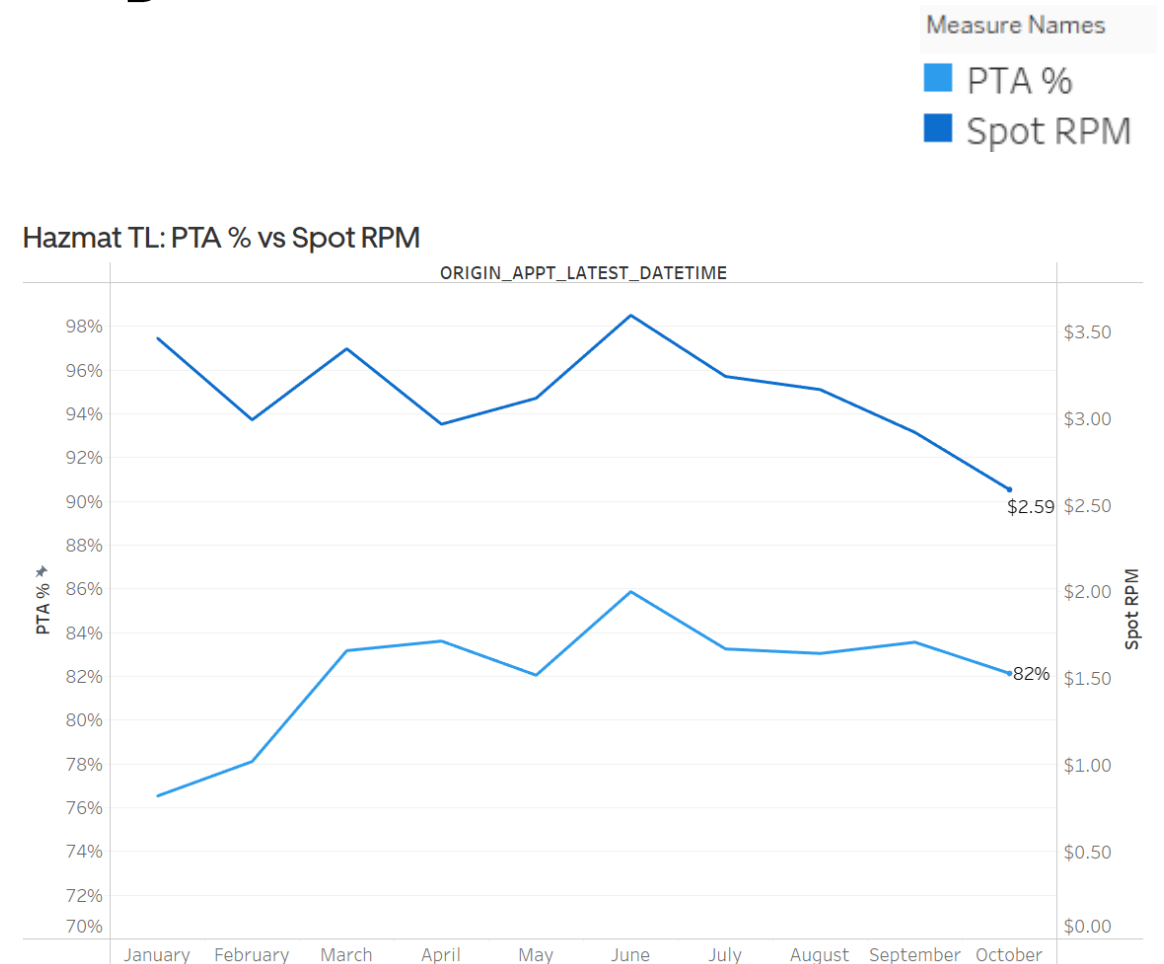
- In July 2023, chemical manufacturers achieved inventory levels 5% below pre-pandemic levels (compared to July 2019).
- All manufacturers are carrying 8% more inventory than 2018 (according to sales/shipments), while chemical manufacturers inventory to shipment levels are near flat compared to 2018 (up only 0.7%).

Truckload(TL) pricing trends – week 39 dry van spot rate index



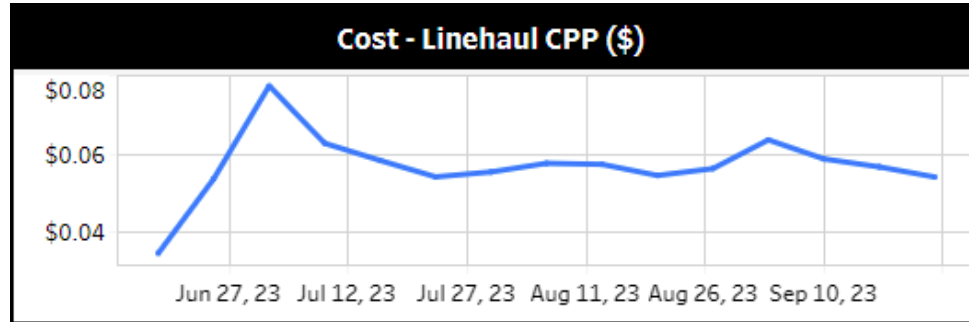
Hazardous materials tendering trends

- Primary tender acceptance (PTA) for package TL hazmat shipments have stabilized in Q2 2023 above 80%.
- Hazmat still lags the overall market in PTA by 5-7%.
- Spot rate per mile (RPM) for package hazmat loads has declined significantly in Q3 2023 and currently sits at \$2.59.
- Package hazmat TL RPM has a 14.1% premium on average to non-hazmat shipments (as of September 2023).
- Hazmat licensed drivers represent a smaller subset of the overall market, providing chemical shippers an early glimpse of when they can expect to come out of a freight recession.



LTL trends

LTL cost per pound chemical shipments: Q3



LTL only

Carrier updates

- Yellow ceased operations on July 30 after being in business for 99 years, representing 9% of market share as the third largest LTL carrier.
- Due to Yellow's exit from the market, carriers are closely monitoring additional volume flowing within their network to ensure profitability & service don't deteriorate.
- Knight Swift advised they will be actively looking to grow their network via the additional terminals that will be on the market due to Yellow's shutdown.
- In May, FedEx Freight announced they are closing 29 terminals (most are small terminals that will be absorbed by larger terminals that are nearby).
- UPS, T Force, and ABF all agreed to a new term with the Teamsters in advance of their labor contract deadlines.
- XPO announced a new COO, Dave Bates, who was the former Senior Vice President of Operations at ODFL.

The Yellow shutdown's market impact

- Yellow comprised three regional carriers (Reddaway, Holland and New Penn) and one national carrier (YRC). At the time of the shutdown, the company was preparing to combine into one super regional carrier.
- Overall, Yellow represented the lowest cost national carrier from an OR and revenue/shipment perspective.
- The shutdown will result in less competitive pricing offerings from remaining national carriers.

Pricing outlook

- During H1 2023, the majority of contractual renewals resulted in a 3%-5% increase.
- Expect medium to high single-digit increases throughout the remainder of 2023.
- Isolated carriers and incidents may occur, requesting immediate higher increases due to current market conditions.
- Some national carriers are avoiding new opportunities, while others are actively pursuing new opportunities and using this situation to grow their customer base.

Shipper contingencies

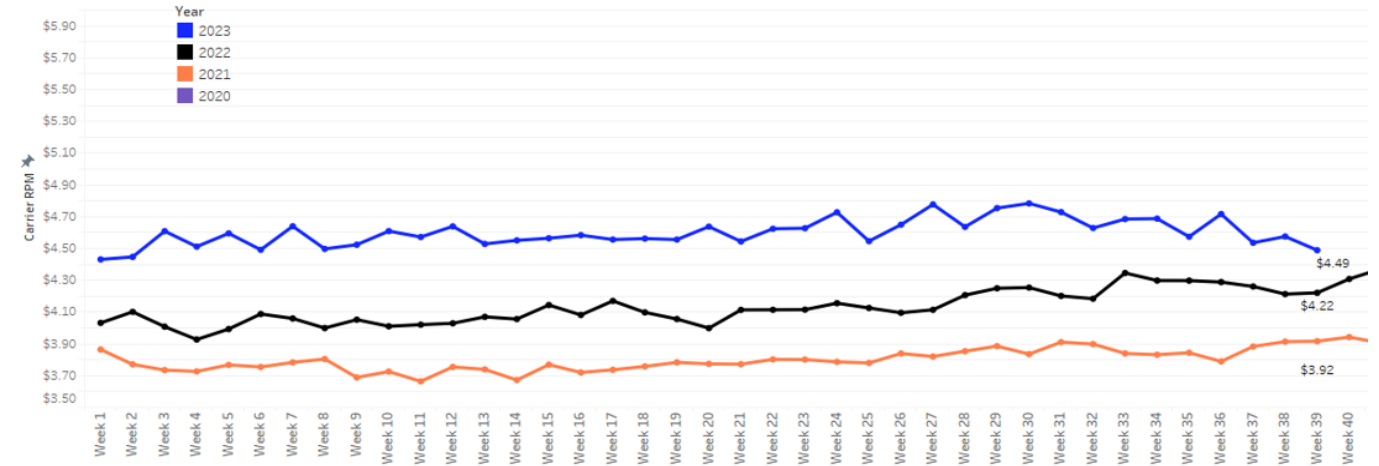
- Expect service deterioration (pickup delays, pickup embargoes, and delivery delays).
- Build flexibility within the network to proactively react to market changes by recovering with carriers that have capacity and guaranteed shipments for delivery.
- Communicate with carrier bases to understand areas of undercapacity and overcapacity, service instability, and network changes.
- Implement Uber Freight's Preferred Shipper best practices: network collaboration and optimization, origin optimization, timely freight payment, pricing strategy, carrier collaboration, and packaging improvements.

Bulk pricing trends

Key factors impacting supply

- Overall utilization remains down. We're forecasting flat for the remainder of 2023, before it tightens through 2024.
- Carriers continue to focus on utilization.
 - They're seeking "safer" regional and short-haul freight.
 - They're seeing more cases of empty miles built into one-way pricing.
- RFP activity is starting to increase.
 - Some shippers are conducting their first RFPs in three years.
 - Carriers are looking to optimize their networks through the RFP process.

Bulk Average LH RPM 2020-2023



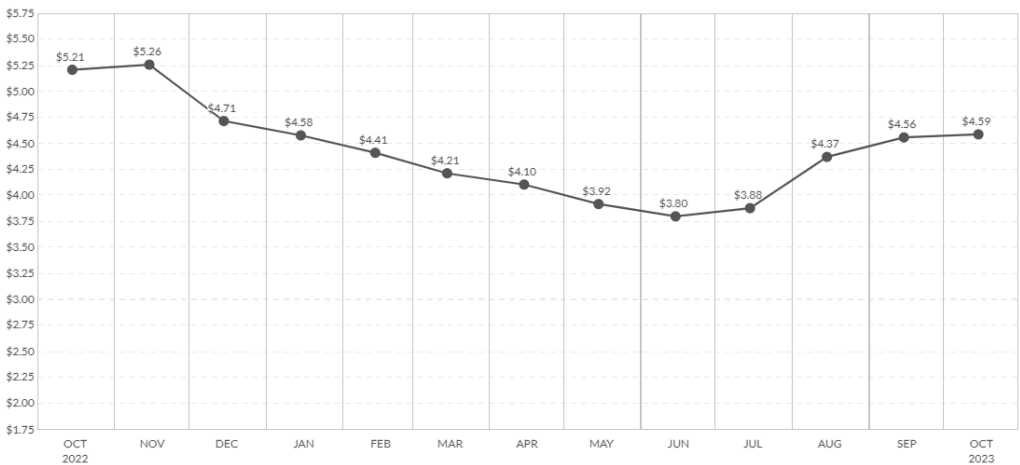
*Chart shows historical data from 2020 up to 2023

Diesel fuel pricing trends



Current national diesel price – **\$4.593**
(As of October 9)

1 Year National Averages



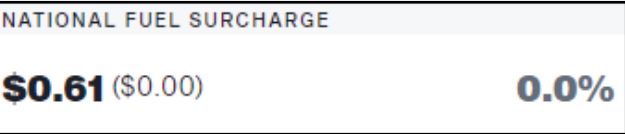
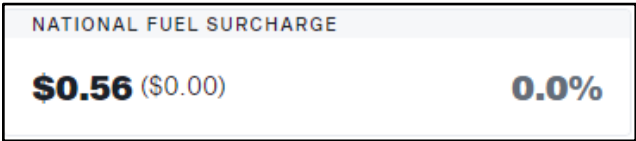
Source: DAT (as of 10/9/23)

	Last Year	Last Week	This Week	Change W/W
Brent Oil (\$/bbl)	\$95.00	\$95.38	\$85.42	▼
Henry Hub (\$/mm Btu)	\$6.76	\$2.95	\$3.16	▲
Competitiveness ratio*	14.1	32.3	27.0	▼
Natural Gas Stocks	3,088	3,359	3,445	▲
U.S. Oil & Gas Rigs	763	625	618	▼

Source: American Chemistry Council (Energy prices as of 10/5/23; Rig count as of week ending 9/29)

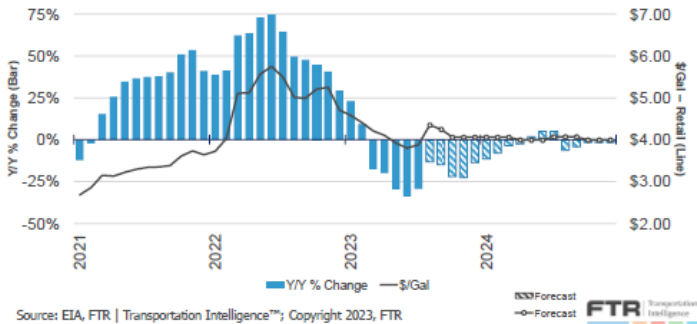
- OPEC production cuts led to a significant increase in crude oil prices in early July but have since retreated from the recent peak in late September.
- Government data showing weaker demand for gasoline in the U.S. has catalyzed an even steeper decline in crude prices for the week of October 2.

Current dry van fuel surcharge



Current reefer fuel surcharge

Diesel Price Outlook

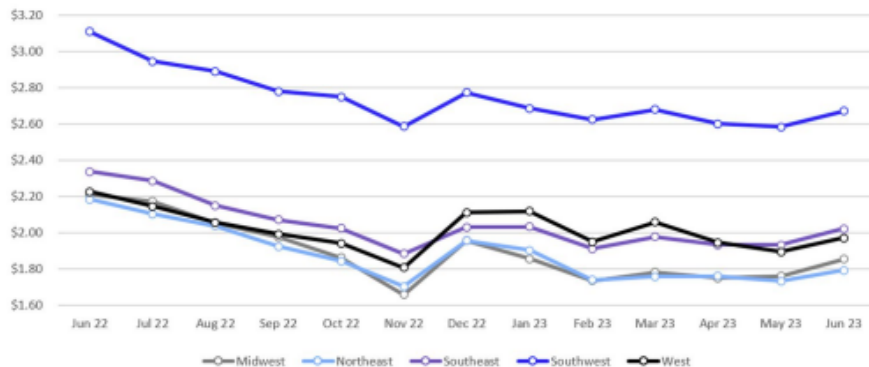


Nearshoring – Mexico

Transportation cost and capacity

- High U.S. equipment (trailer) availability persists in Mexico for door-to-door loads.
- The northbound versus southbound trade balance gap between the U.S. and Mexico continues to grow.
- We expect the imbalance to increase to six northbound per one southbound shipment next year.
- After 15 continuous months, spot rates slightly increased by the close of H1 2023.
- Laredo's load:truck ratio had an average of 4.5:1 in June.

Laredo Northbound spot rates

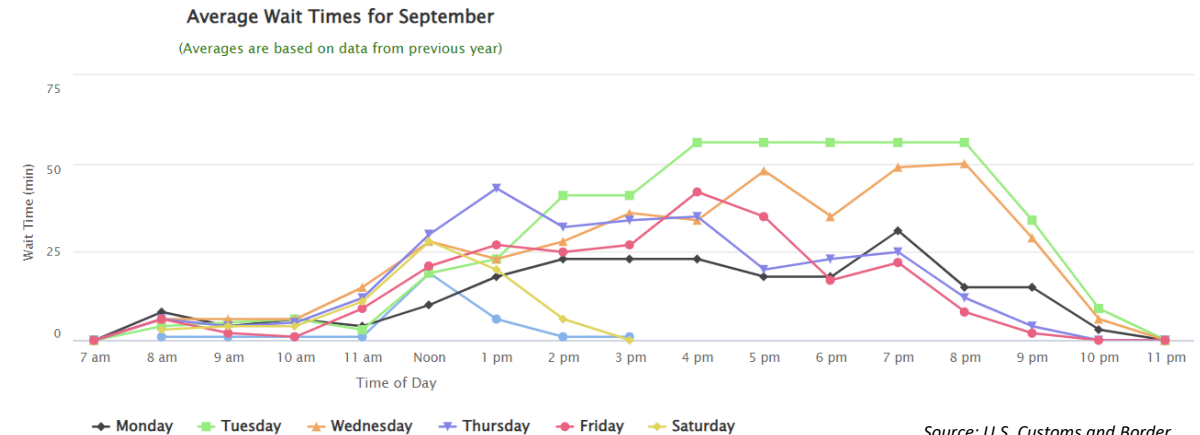


Source: DAT, w/o fuel

Mexico and U.S. trade

- Mexico ranked as the top U.S. trading partner during the first five months of 2023, with a 3.5% increase year over year.
- Nuevo Leon state is investing \$1.3 billion USD in an integral modernization of highways, reinforcing its connectivity with Laredo.
- Nuevo Leon's government is investing \$26 million USD in Colombia's port of entry, growing the number of toll booths from seven to 12. This port is only 22 kilometers from Nuevo Laredo and is becoming a great alternative for carriers, as border crossing times are significantly less (10 min) than Laredo's (30-45 mins).
- Mexican carriers are starting to request rate increases for rates in USD as a result of the "super peso." If this trend continues, shippers need to closely monitor the exchange rate behavior and might need to adjust budgets.
- For cross-border, the market is shifting again after three years of being a carrier-dominated market. Now, customers are taking advantage of the low rates and direct carriers' capacity.

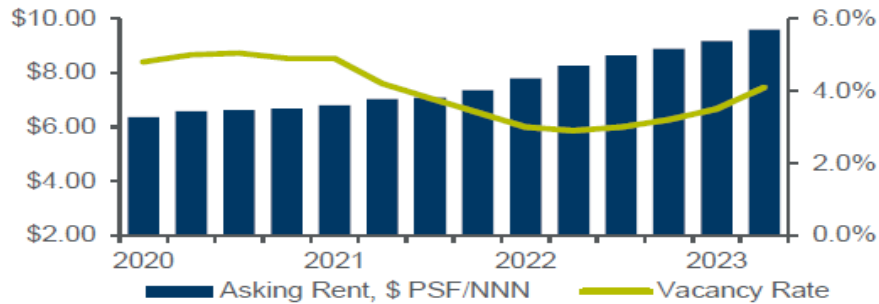
Laredo – World Trade Bridge wait times



Source: U.S. Customs and Border Protection

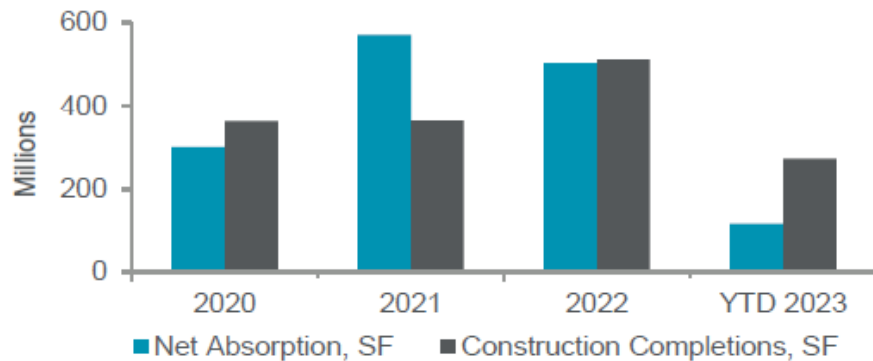
Warehousing trends

OVERALL VACANCY & ASKING RENT



Source: Cushman & Wakefield

SPACE DEMAND / DELIVERIES



Source: Cushman & Wakefield

Demand



- Consumer demand continues remain strong, with both durable and non-durable goods growing 1.4% and 12% above their pre-pandemic trendline.

Inventory



- Inventory continues to stabilize, which began in Q4 of 2022, after a massive runup from 2020 - 2022.
- Many shippers are still overstocked on non-core items.

Space



- Vacancies up from 3.6% in Q1 2023 to 4.1% in Q2 2023 as new construction is delivered.
- Vacancies remain below the historical average of 5.3%.
- Increasing interest rates with demand shifts have driven new construction down..

Labor



- Reduced demand for warehouse labor is reducing warehouse jobs after steady annual increases in the previous 5 years.
- Q2 2023 wages hit an all time high as worker availability continues to challenge employers.

2023 Q3/Q4 and second half 2023 outlook:

- The rate of warehouse capacity will continue to increase as additional construction deliveries are made to the market.
- Rent growth will moderate as demand drops and vacancies increase.
- If additional space is required, but has been delayed due to market capacity, now may be a good time to re-evaluate warehouse design.

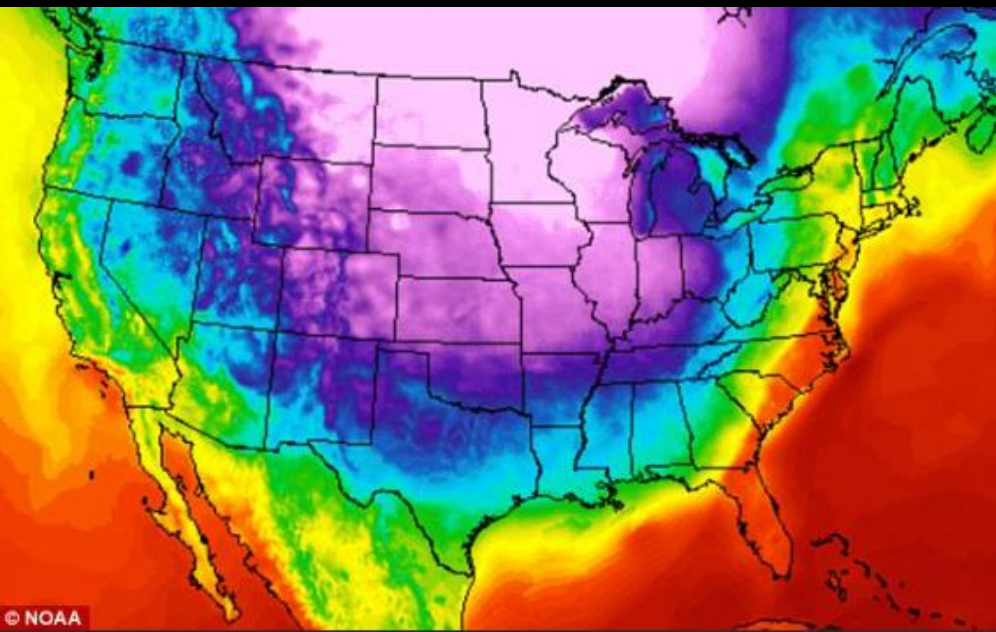
Chemical supply chain overview



Chemical industry news and updates

Winter is coming, and with that, so are weather related supply chain disruptions.

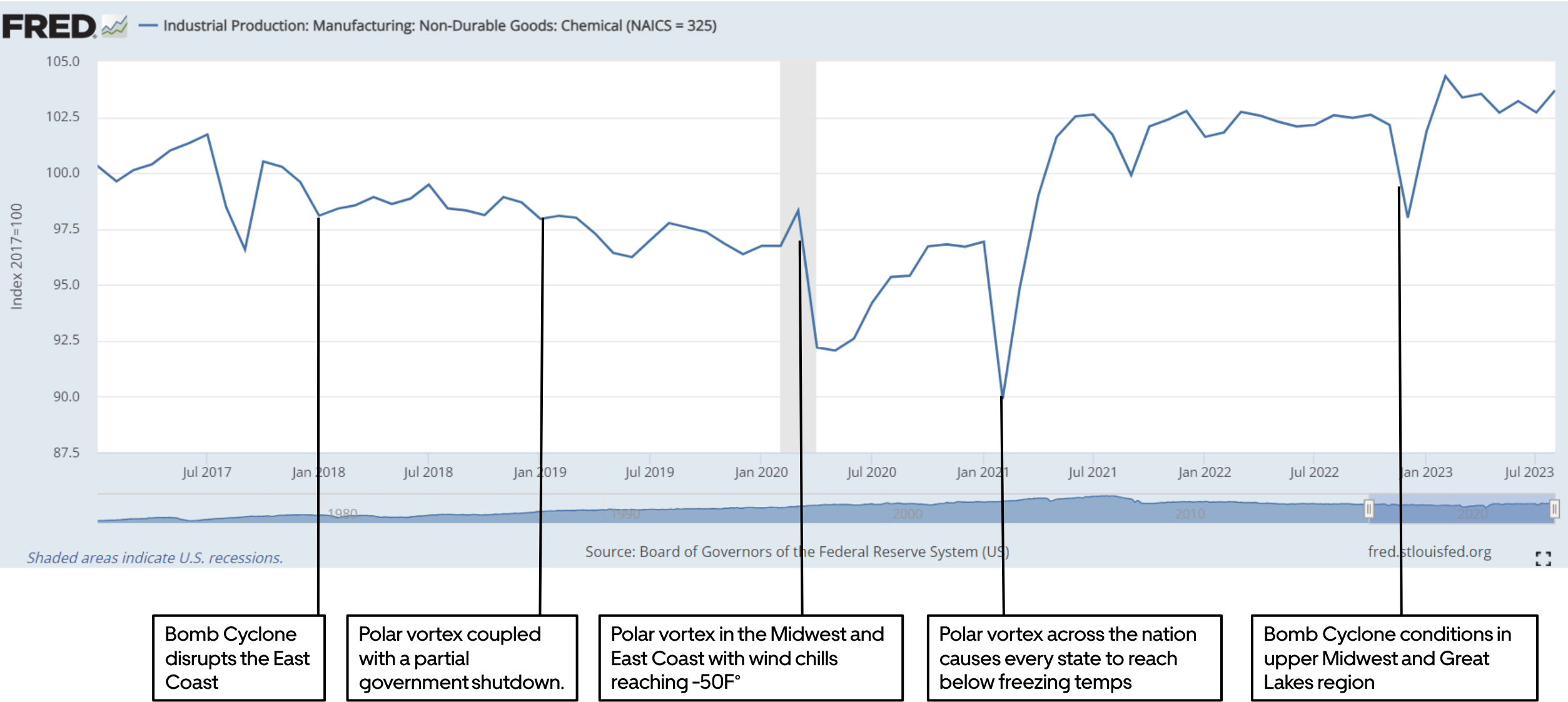
The Federal Reserve Bank of St. Louis reported the cost of delays and disruptions caused by the Polar Vortex in 2019 was estimated to be around \$1.4 billion.



How to polar-proof your supply chain

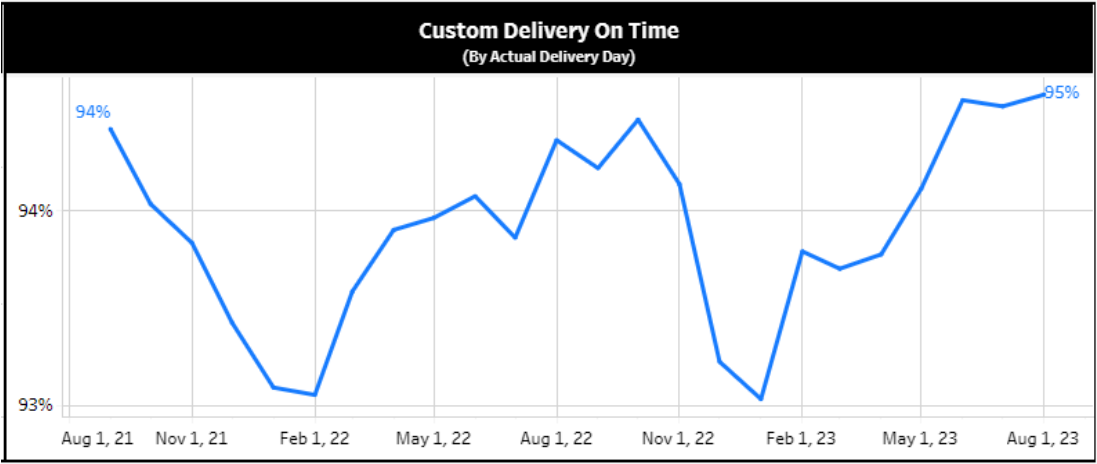
- Increase lead times: flexibility around scheduling allows for movement to avoid peak weather events.
- Increase safety stock of key items during winter months.
- Identify alternative shipping points for outbound goods to customers and diversify key raw material suppliers.
- Establish a protect from freeze (PFF) 3PL network and deploy a strategy that will keep this network engaged year-round, so you remain a priority during winter months.
- Add advanced forecasting tools into your supply chain planning process.
- Revisit product temperature requirements to ensure accuracy.

Polar vortex effect on chemical manufacturing

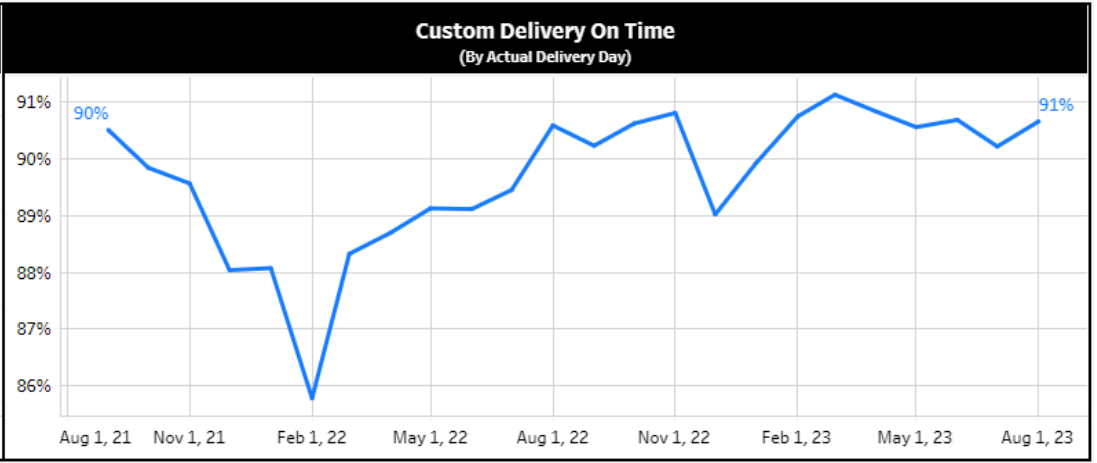


Chemical vertical on-time delivery by mode

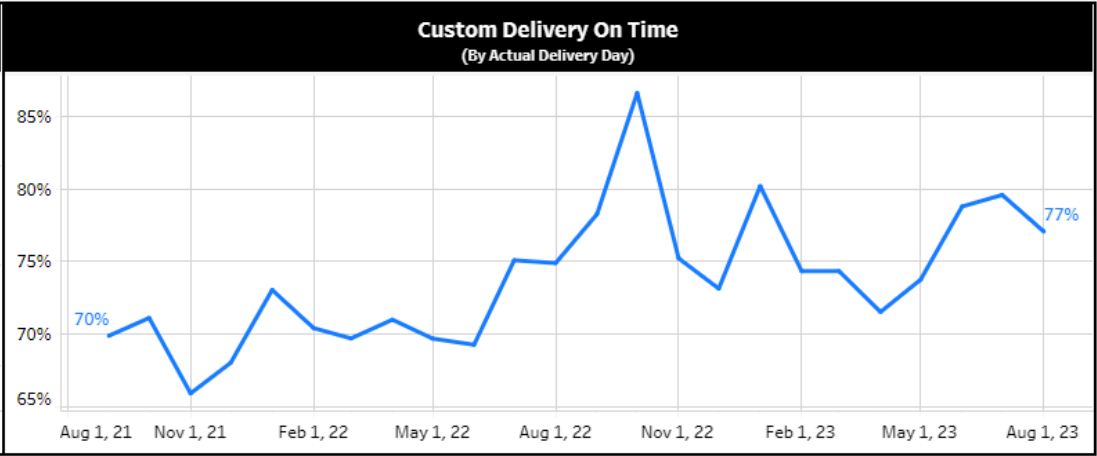
Truckload



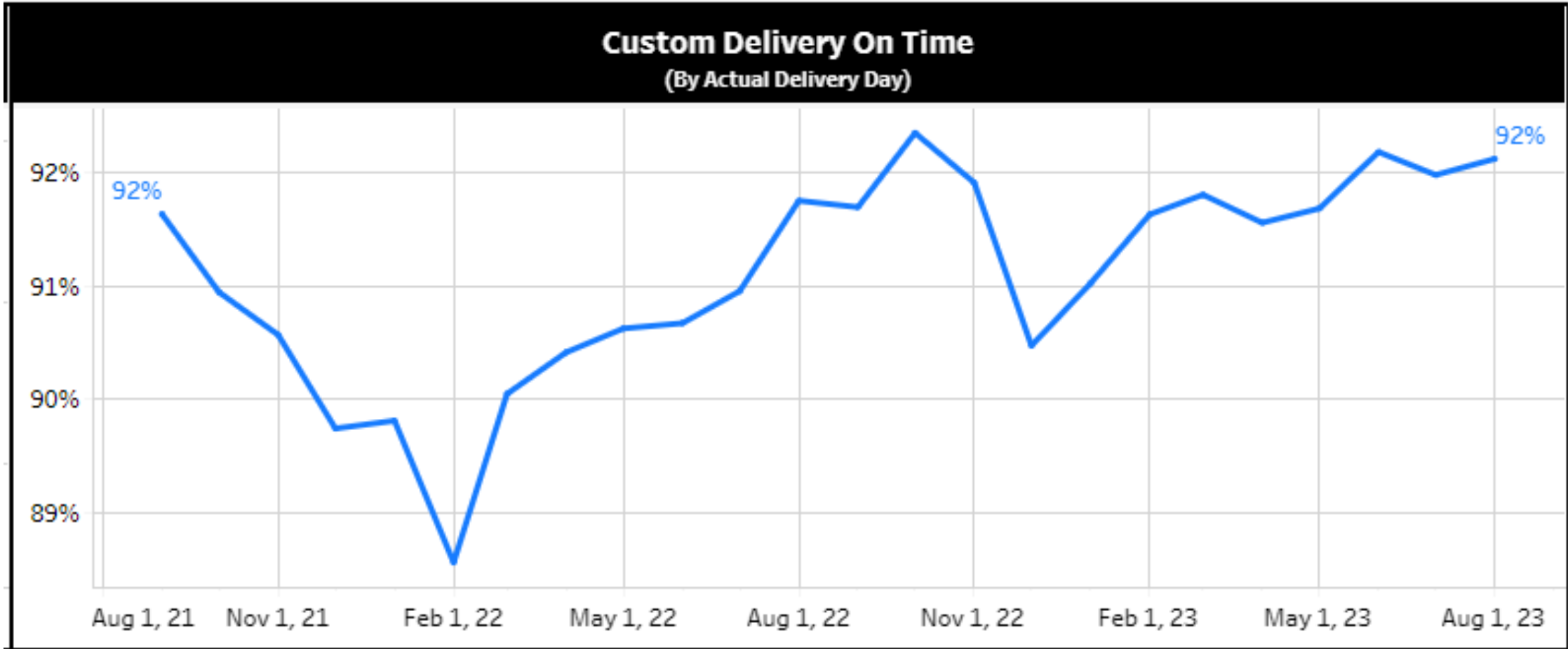
LTL



Other



Chemical vertical on-time delivery



Out of more than 150,000 shipments each month, including all modes and two-hour tolerance for delivery appointments

Uber Freight