

# TD Cowen/AFS Freight Index

April 2023



# AFS is one of the most experienced 3PLs in the country; leveraging Freight Audit and Payment data enables AFS to unlock unrivaled insights into the overall freight market.



**\$11B**

- AFS has over \$11B in transportation spend across multiple modes flowing into our systems annually creating maximum visibility.



**1,800+**

- The freight data comes from over 1,800 clients of all sizes and industries, representing a comprehensive view of the overall market.



**41 YRS**

- With AFS's deep expertise and 41 years of experience across all transportation modes, we have significant market insights to project future trends and industry patterns.



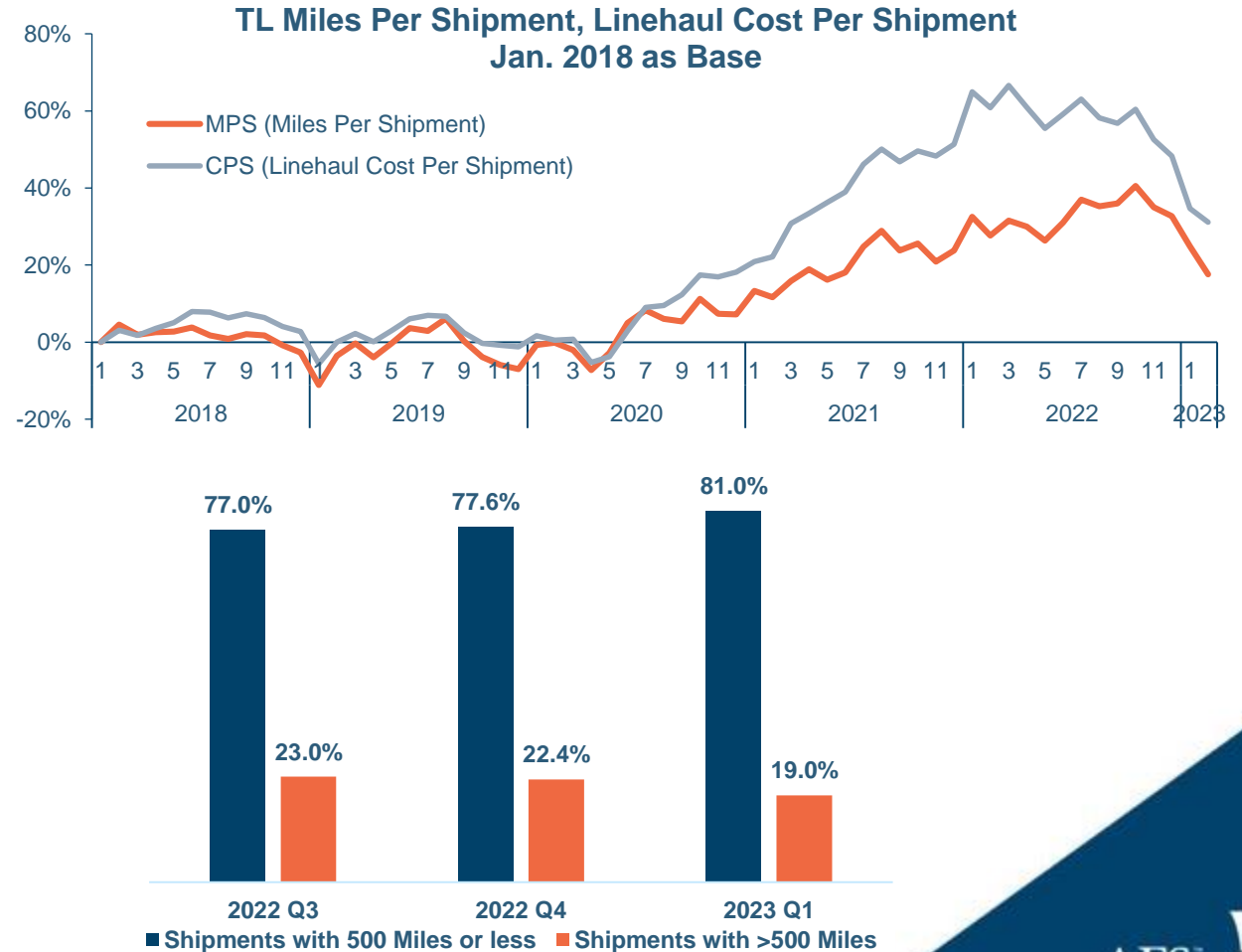
**Truckload**  
**LTL**  
**Parcel**

- AFS's team of Data Scientists and Analysts applied Machine Learning algorithms and modeling techniques to examine the historical data for Truckload, LTL and Parcel since 2018.
  - The following rate indices are developed for these modes and quarterly rate predictions are provided using both AFS freight data and macroeconomic variables.

Truckload

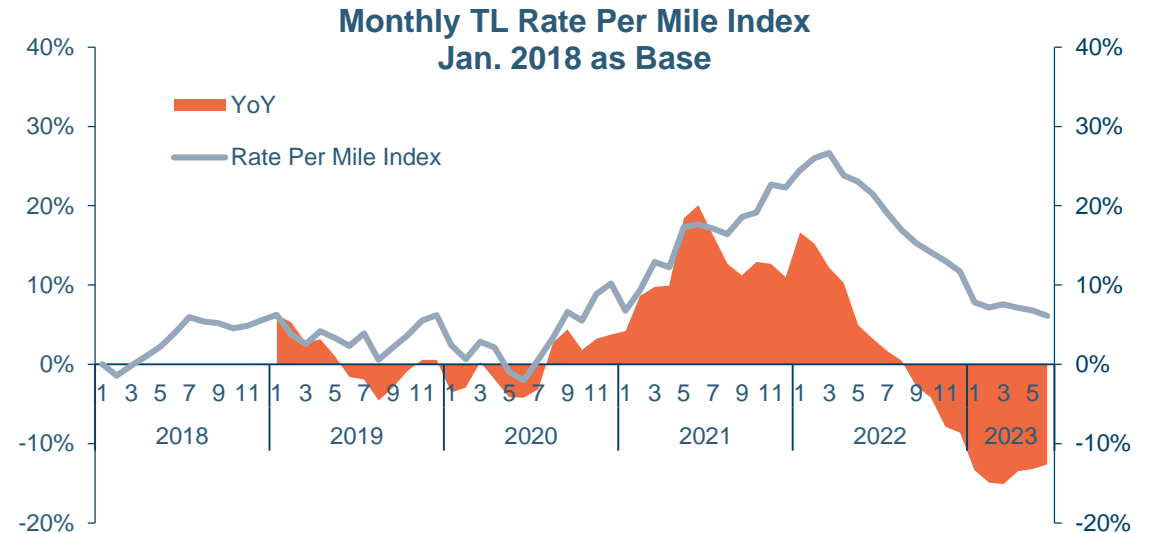
# The Truckload (TL) average Linehaul Cost Per Shipment experienced a significant decrease in Q1:2023, dropping by 13.8% QOQ and 19.1% YOY.

- The correlation between the price (Linehaul Cost Per Shipment) and distance (Miles Per Shipment) remained strong but the gap continued to narrow in Q1:2023.
  - Both Linehaul Cost Per Shipment (CPS) and Miles Per Shipment (MPS) grew substantially from Jan. 2018 baseline till Q2:2022.
  - The disparity between these two metrics began shrinking in Q2:2022 and has continued.
    - This is strong indication of carriers using rates as the primary lever to gain volume, thus masking the impact of other pricing factors.
    - The mix of short-haul shipments increased by 3.4 percentage points to 81.0% in Q1:2023, contributing to the QOQ CPS decrease.
    - This may be indicative of inventory levels and placement “normalizing”
- Linehaul Cost Per Shipment went down 19.1% YOY -- its first negative YOY change since Q3:2020.



# The downward trajectory of TL Rate Per Mile has persisted; the TD Cowen/AFS Truckload Freight Index is forecasting a YOY decline of 13.1% to reach 6.6% in Q2:2023.

- With the uncertainties surrounding the current economic outlook, the TL Rate Per Mile Index is expected to continue to drop in Q2:2023.
  - The Federal Reserve continued to leverage interest rates to fight inflation, with another increase of 25 basis points in March 2023.
  - With purchasing power negatively impacted by high interest rates and high inflation, demand significantly decreases, especially on consumer durables.
- The forecasted index of 6.6% for Q2:2023 is 0.8% below Q1:2023 level.
  - The pace of QOQ decline is expected to slow down.



**Composite Truckload Rate Per Mile Freight Index**

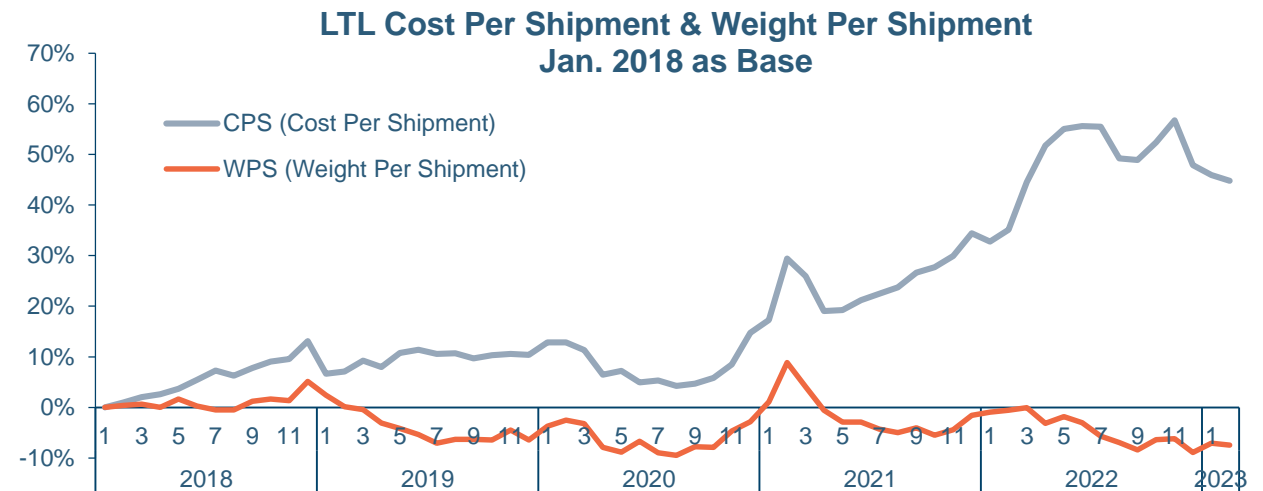
Year	Q1	Q2	Q3	Q4
2020	2.0%	(0.4%)	3.5%	8.0%
2021	9.9%	15.7%	17.4%	21.3%
2022	25.7%	22.8%	17.1%	13.1%
2023	7.5%	6.6%		

Jan. 2018 = Base, Q2:2023 forecasted

LTL

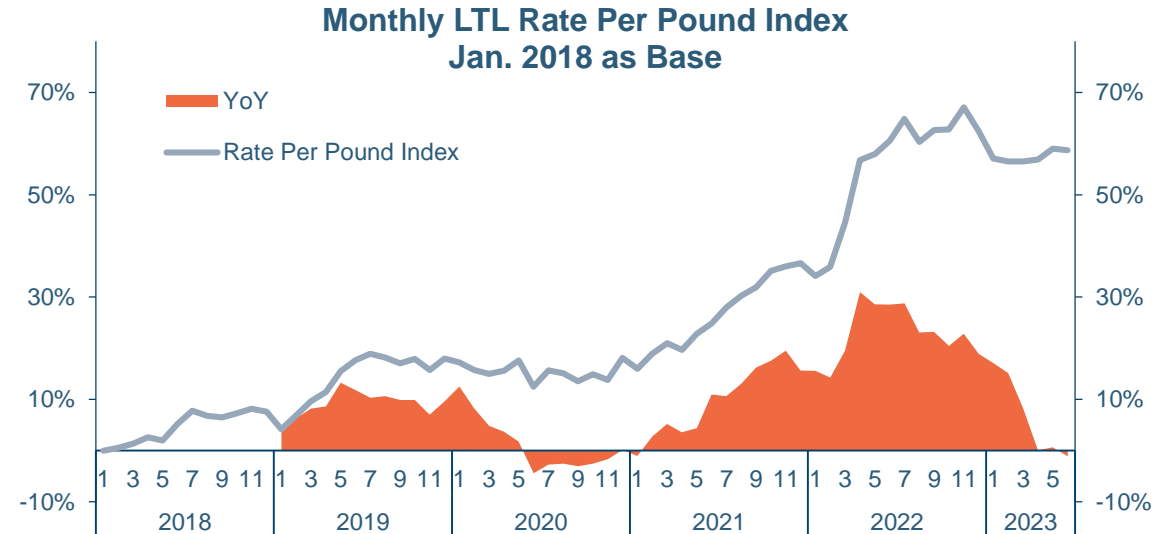
In Q1:2023, LTL Cost Per Shipment decreased by 4.6% QOQ while Weight Per Shipment stayed relatively flat -- representing a YOY increase of 5.4%.

- The gap between Cost Per Shipment and Weight Per Shipment in LTL narrowed in Q1:2023, once again.
  - Weight Per Shipment remained at Q4:2022 level, but Cost Per Shipment decreased by 4.6% QOQ.
  - Actual fuel cost per shipment paid by shippers dropped by 15.7% QOQ due to the sustained carrier fuel surcharge declines since Q2:2022.
  - There is no significant QOQ shift on the LTL shipment mix based on freight classes.
- The 5.4% YOY growth of LTL Cost Per Shipment marked the lowest YOY increase since 2021.



The Q2:2023 TD Cowen/AFS LTL Freight Index is anticipated to reach 58.3%, reflecting a QOQ increase of 0.8%, with no material change YOY.

- The TD Cowen/AFS LTL Freight Index is forecasted to be 58.3% for Q2:2023, returning to the same level from a year ago.
  - The sharp decline of Rate Per Pound in Q1:2023 from its historical high in Q4:2022 was primarily attributed to the change in diesel fuel prices.
    - Average diesel fuel price in Q1:2023 is 13% lower than Q4:2022.
  - Excess capacity also exerted pricing pressure, which was another contributing factor to the decline in Rate Per Pound in Q1:2023.
- The YOY change of the Rate Per Pound Index is expected to turn negative in the upcoming quarters in light of weakened demand and lower rates.



LTL Rate Per Pound Freight Index

Year	Q1	Q2	Q3	Q4
2020	16.0%	15.0%	14.8%	15.4%
2021	18.8%	22.4%	30.1%	35.9%
2022	38.4%	58.4%	62.5%	64.0%
2023	57.0%	58.3%		

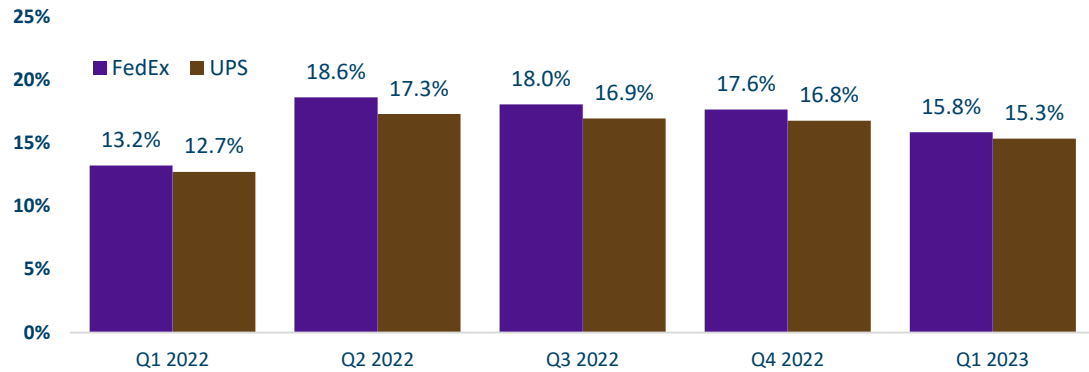
Jan. 2018 = Base, Q2:2023 forecasted



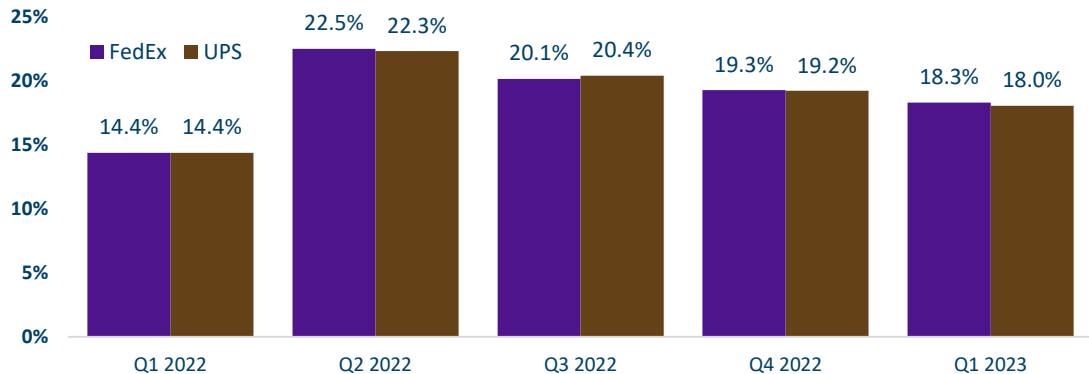
Parcel

# Fuel surcharges for Express and Ground Parcel continued to decline in Q1:2023, but with the changes made in 2021 and 2022, the drop was less than the fuel price indices.

**FDX and UPS Fuel Surcharge - Ground**



**FDX and UPS Fuel Surcharge - Express**

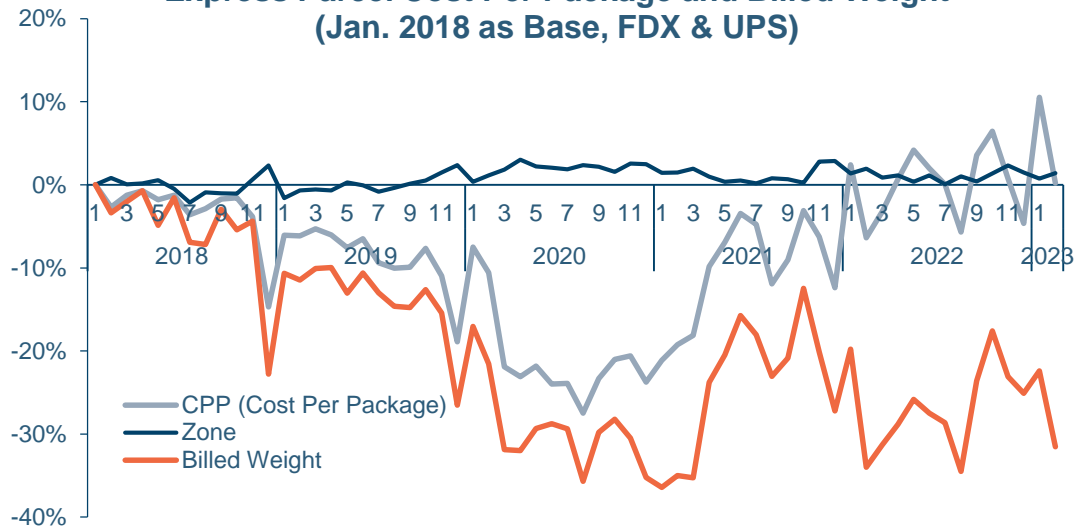


- In Q2:2022, the fuel surcharges for Express and Ground Parcel reached their peak. Since then, the fuel price indices have decreased by 22% for Express and 18% for Ground Parcel. However, the corresponding decreases in fuel surcharges have been less significant, with Express Parcel surcharge dropping only by 19%, and the Ground fuel surcharge dropping by 13%.
- The Ground fuel surcharge has experienced a YOY increase of 20%, much higher than the 8% increase observed in the On-Highway Diesel Fuel Index.
- When comparing YOY data, the average fuel surcharge for Express Parcel showed an increase of 26% in Q1:2023, significantly higher than the 16% uptick reflected in the USGC Kerosene-type Jet Fuel Index.

## Express Parcel

Despite decreases in both average Billed Weight and average Zone, Express Parcel rates increased by 4.6% QOQ, mostly driven by the record-high GRI of 2023.

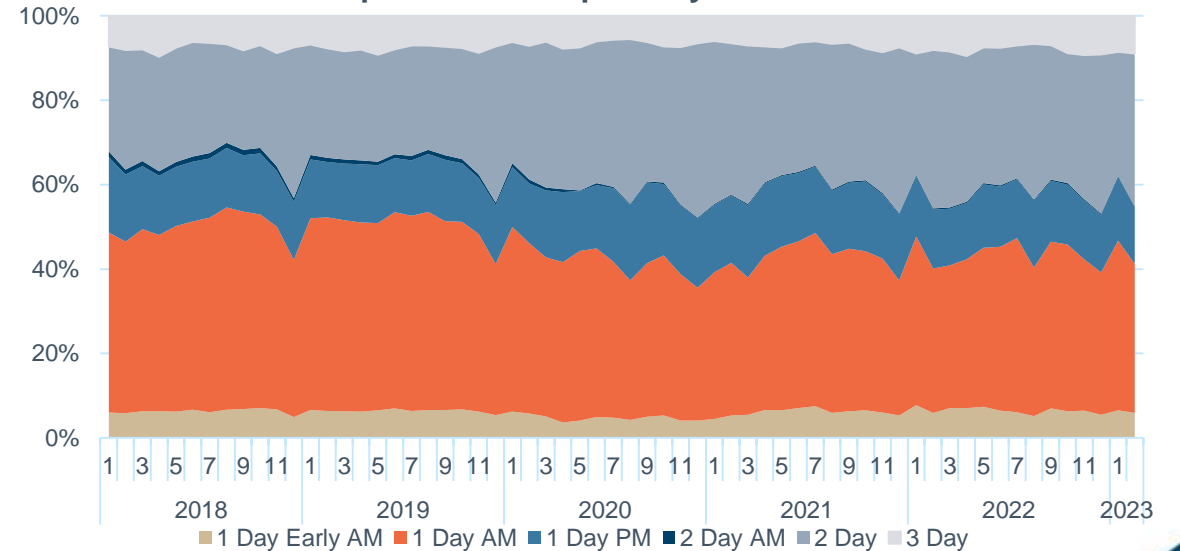
Express Parcel Cost Per Package and Billed Weight  
(Jan. 2018 as Base, FDX & UPS)



- The record high GRI had driven Express Parcel Cost Per Package to a higher-than-expected increase in Q1:2023.
  - Although the average weekly fuel surcharge rate dropped by 5.6% QOQ, the average fuel cost shippers paid per package increased by 5%.
  - Average accessorial cost per package increased 6.8% QOQ.

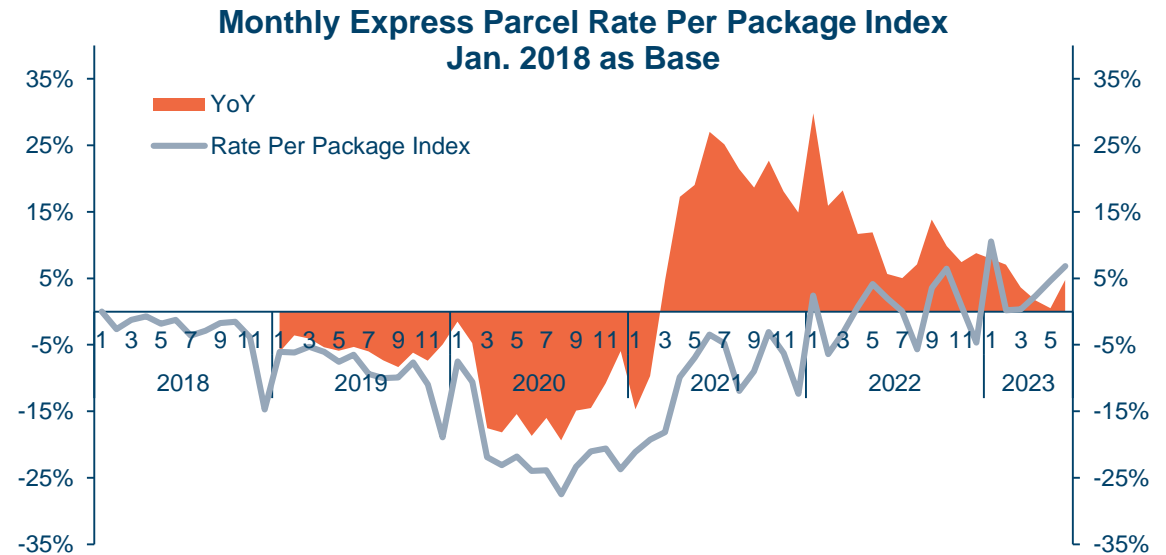
- The slight increase in the premium service mix during Q1:2023 also contributed to the increase in Cost Per package.

Express Parcel Spend By Service Mix



All labor issues aside, the TD Cowen/AFS Express Parcel Freight Index shows a 2.3% YOY increase and 1.1% QOQ increase, reaching 4.6% in Q2:2023.

- The Express Parcel Freight Index is expected to continue to rise in Q2:2023, largely driven by seasonality.
- The Index is expected to exhibit a YOY growth rate of 2.3% in Q2:2023, which represents the lowest YOY increase observed in the last two years.
- Both FedEx and UPS are experiencing a shortage in demand, and their strategies for adapting to this situation will have a significant impact on the levels of Express Parcel rates.
  - Per the UPS Earnings Release on Jan 30, 2023, the average daily volume for UPS air services decreased 7.1% YOY in 2022.
  - Based on the latest quarterly release on Mar 16, 2023, FedEx observed an 8.6% YOY decline in its fiscal Q3:2023 (Dec. 2022 – Feb. 2023) results.



**Express Parcel Rate Per Package Freight Index**

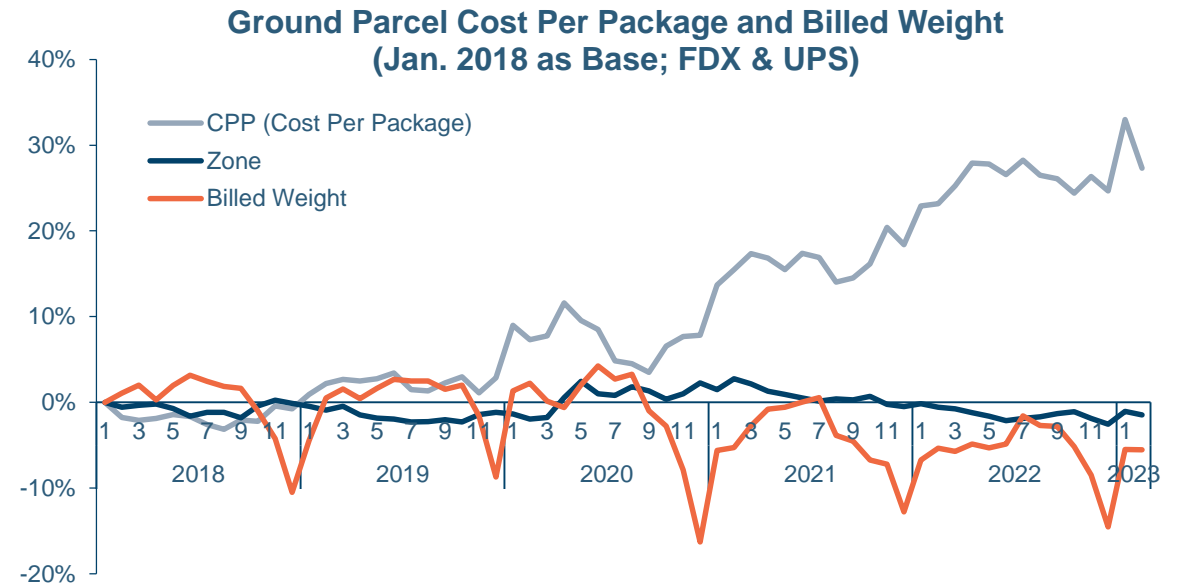
Year	Q1	Q2	Q3	Q4
2020	(13.9%)	(23.0%)	(25.0%)	(21.9%)
2021	(19.5%)	(6.7%)	(8.9%)	(7.6%)
2022	(3.0%)	2.3%	(1.3%)	0.4%
2023	3.5%	4.6%		

Jan. 2018 = Base, Q2:2023 forecasted

## Ground Parcel

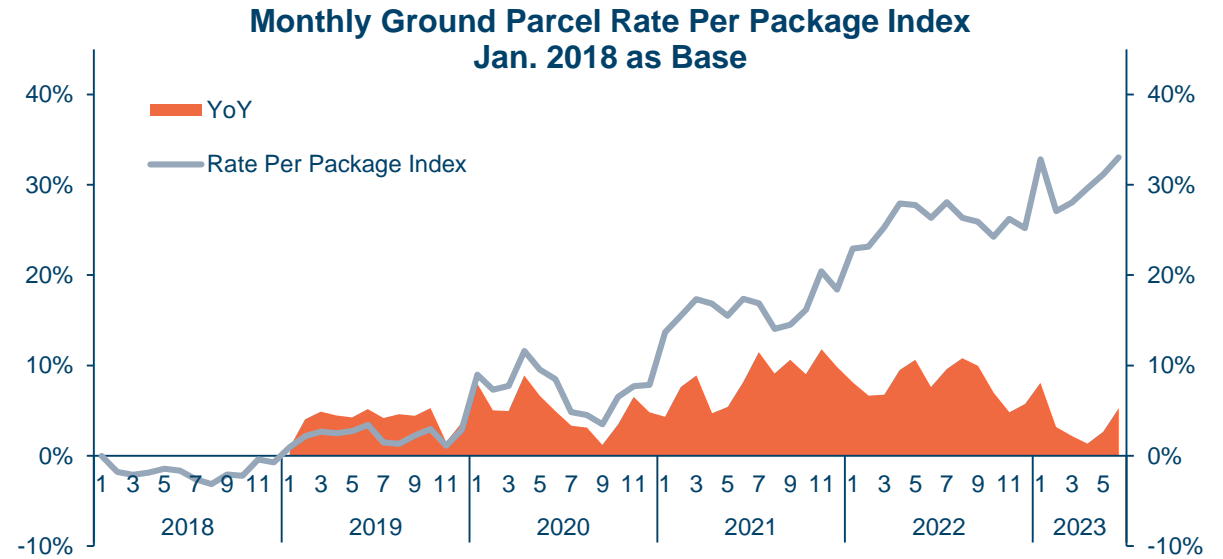
In Q1:2023, there was a 4.0% QOQ increase in Ground Parcel rates, accompanied by corresponding increases in both average Billed Weight and average Zone.

- The seasonal rebound of average Billed Weight Per Package led to a QOQ increase of 4.5%. Additionally, there was a slight increase of 0.6% on average Zone.
- The net effective fuel surcharge paid by shippers decreased by 3.3% QOQ, directly driven by the fuel surcharge decrease.
  - The notable 9% QOQ drop in carrier fuel surcharge, which was higher than the observed reduction in actual paid fuel surcharge, may suggest a shift in the mix of shippers towards small or medium-sized customers.



# The TD Cowen/AFS Ground Parcel Freight Index is expected increase 1.7% to reach 31.7% in Q2:2023.

- Ground Parcel Rate Per Package will continue to stay at historically high levels for Q2:2023.
- The TD Cowen/AFS Ground Parcel Freight Index is forecasted to reach 31.7% in Q2:2023.
  - The Q1:2023 Index was lower than the forecasted value from last quarter, primarily due to a decrease in fuel surcharge (down 9% QOQ).
  - It is worth noting that there was an average discount increase of 1.6% for Ground Parcel, which suggests that carriers had to raise discounts to counteract the impact of the 2023 GRI.



**Ground Parcel Rate Per Package Freight Index**

Year	Q1	Q2	Q3	Q4
2020	8.0%	9.8%	4.3%	7.4%
2021	15.6%	16.6%	15.1%	18.4%
2022	23.9%	27.4%	26.9%	25.2%
2023	29.5%	31.7%		

Jan. 2018 = Base, Q2:2023 forecasted



# Appendix



AFS is one of the most experienced 3PLs in the country, pioneering the space 41 years ago, enabling us to save our clients \$183M.



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AFS Logistics helps more than 1,800 companies across more than 35 countries drive sustained savings and operational improvements, while turning their logistics operations into competitive, customer-centric differentiators. As a non-asset based and non-asset biased 3PL, AFS provides a range of logistics services, featuring freight and parcel audit, parcel cost management, LTL cost management and transportation management, which includes freight brokerage and freight forwarding. Founded in 1982 and employing a team of more than 380 logistics teammates in eight major locations across the U.S. and Canada, AFS is regularly part of the Inc. 5000 list of fastest growing companies and was named a Top 100 3PL by Inbound Logistics in 2022.

To learn more, visit [www.afs.net](http://www.afs.net).