

An aerial photograph of a multi-lane highway bridge spanning a body of water. The water is a deep teal color with visible ripples. The bridge's surface is light gray with a yellow center line. The text 'Holman' is overlaid in white, with a green horizontal bar underneath it.

Holman

ECONOMIC TRENDS | 2023

Insights and initiatives to position your
fleet for success.



Executive Summary

Recent news and events in Q3 of 2023 regarding economic inflation have led fleet managers and executives to inquire about how these inflationary pressures affect their fleet expenses. As the market continues to fluctuate, Holman Consulting Services (HCS) aims to provide an updated status on the conditions relevant to fleet expense. Leveraging both internal and external resources, this analysis provides an update on key market pain points within the four stages of vehicle management– Buy, Drive, Service, Sell.

KEY FACTORS IDENTIFIED AS CAUSES FOR RISING FLEET COSTS INCLUDE:

- Borrowing costs on the rise as Federal Reserve increases rates by ¼ percentage points Page 2
- Vehicle invoice costs continue to rise up to 20% since 2021 Page 3
- Continued immediate delays in ICE vehicle ordering, manufacturing, and vehicle deliveries, OEMs are prioritizing increasing EV productions. Page 4
- Amidst semiconductor chip and raw material shortages, light vehicle production is forecasted to grow 5% in 2023 Page 4
- Average cost of steel has increased 14% since 2022 Page 5
- Cost of fuel decreased 27% since its peak in June 2022 Page 6
- CPI for maintenance and repair is increasing at a slower rate since peak in Jan 2023 Page 8
- Maintenance parts are still 10–20% higher than the 2020 standard Page 9
 - Labor rates are driving maintenance cost increases. Page 9
- Importance of planning for extended vehicle lifecycles Page 10
- Black book retention value has increased 39% since 2019 Page 12

Given these new challenges, it is vital that fleet managers understand the causes and budget accordingly.

BUY

Lease Payments

In 2023, lease payments (depreciation) continues to be pressured by high acquisition and borrowing costs.

Monthly lease payments are up 39% from 2020 to 2023.

Principal payments have risen 25% while **Interest and Admin costs are up 208%***



*B*Based on Ford Transit 150 van (148WB:Mid-Roof) on 60-month lease tied to 5-Year SWAP rate and \$0.55/\$1,000 Admin cost.

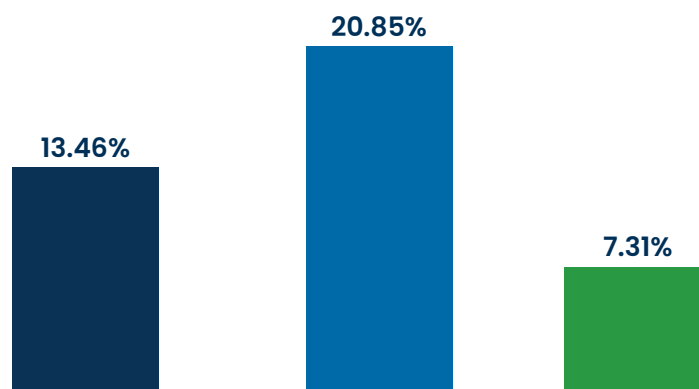
To put the above scenario into context, a van fleet with an annual acquisition budget of \$1M would be able to finance 135 vehicles in 2020. However, in 2023, the same budget would finance 97 vehicles, reducing the number of replacement orders by 38 units. In order to maintain the same level of acquisition volume at 2023 costs, the fleet would need to increase the acquisition budget by nearly \$386,720.

RIISING INTEREST RATES CONTINUE TO INCREASE THE BORROWING COSTS AND PRESSURE DEPRECIATION BUDGETS

The Federal Reserve raised the target range by 25 basis points to 5.25% during their May 2023 meeting. It marks a 10th consecutive rate hike, which continues to raise borrowing costs. Consequentially, swap rates for vehicle leasing and financing will remain high throughout the year. **Whether the Federal Reserve will eventually pause with rate increases this year remains unclear**, as sources indicate uncertainty both in the markets and in signals from the Federal Reserve itself.

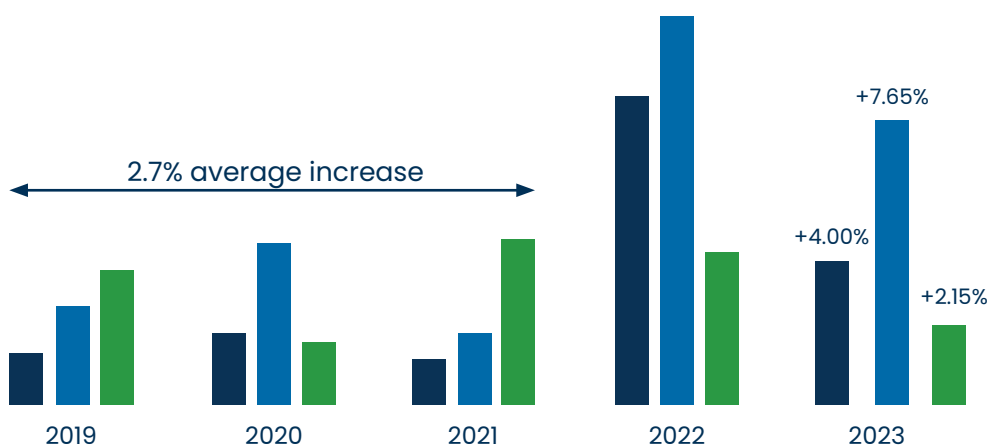
¹ Swap rate: In an interest rate swap, it is the fixed interest rate exchanged for a benchmark rate such as SOFR or the Fed Funds Rate plus or minus a spread.

Invoice Prices for new **Trucks**, **Vans** and **SUVs** have risen 7%-20% between model year 2021 and 2023



Invoice prices for Model Year 2023 **Vans** have surged.

Trucks and **SUVs** have realized a more modest, but consistent price increase.

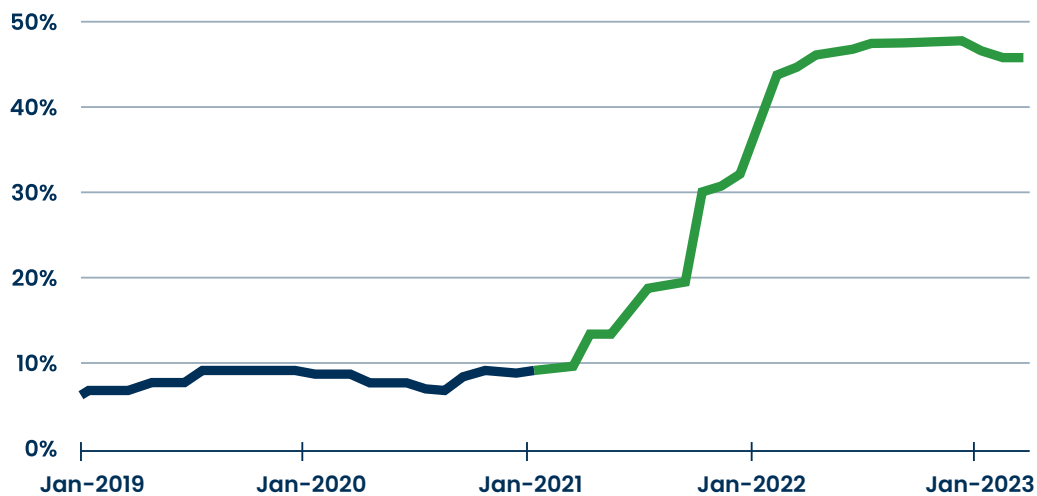


Additionally, Holman Vehicle Supply Chain continues to observe the trend of OEMs restricting the volume and size of vehicle purchase incentives, even for clients with long-standing relationships. This can add significant costs to new fleet acquisitions. The reductions observed in 2022 are plateauing, but will likely be constrained throughout 2023 and into 2024. Fleet managers should continue to factor this into their order strategy planning and budgeting.

Historically increased invoice prices driven by high production costs are stabilizing.

The cost of vehicle production surged in 2021 due to supply chain issues, including **raw materials**, **chip shortages**, **expensive backlog in orders**, and **OEM shutdowns**. Though vehicle manufacturing costs have drastically increased since 2021, early 2023 has seen this cost plateau.

The Cost of Manufacturing a Vehicle January 2019 – March 2023



Percentage of change based on 2018 baseline, Source: Bureau of Labor Statistics, FTR

While vehicle upfitting costs have also seen an increase of 20% since 2020, these costs are beginning to stabilize and will continue to stabilize throughout the remainder of 2023.

At the end of March this year, one OEM shut down one of its truck assembly facilities for two weeks. With new vehicle production increasing but demand stabilizing, the halt was an attempt to maintain steady and constrained inventory levels on dealer lots. The reduced output provides the OEMs pricing power, which could signal an overall softening demand that is forecasted to continue with higher rates discouraging consumers.

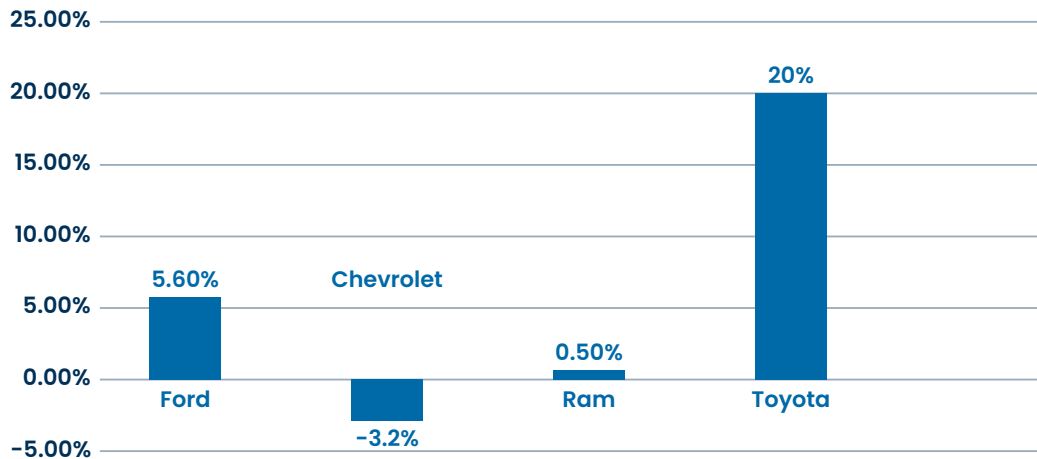
Amid continued delays in ICE vehicle ordering, manufacturing, and vehicle deliveries, other OEMs are prioritizing increasing EV productions. In the EV space, the passing of the Inflation Reduction Act has offered tax incentives for individuals and businesses purchasing qualifying new vehicles. Qualified vehicles can receive up to \$7,500 in credits for vehicles weighing less than 14,000 pounds and \$40,000 for those weighing more.

Although most of the global supply chain has recovered from the pandemic, it has been difficult for manufacturers to keep up with the demand for semiconductor chips. With chip shortages severely influencing global vehicle production in early 2021, legislation was introduced in August 2022, which provided funding of \$54.2 billion to support the domestic production of chips in the United States. Since March of 2023, the U.S. began disbursing this funding. Globally, manufacturing of semiconductor chips has since resumed at full capacity. With EVs requiring around double the chips than their ICE counterparts, the automotive industry's appetite for chips is trending to grow in the coming years.

Material component shortages have caused North American **vehicle production to decrease by 23% in 2021² compared to 2018** levels. North American data shows OEMs are overcoming majority of the production challenges. In 2022, light vehicle production closed out at 9.8M and a forecasted 10.3M will be produced in 2023. This production is an increase of 5% from 2022 and 9% from 2021, respectively.

² Percentage change sourced from Statista.com - www.statista.com/statistics/204208/north-america-vehicle-production-since-1990/

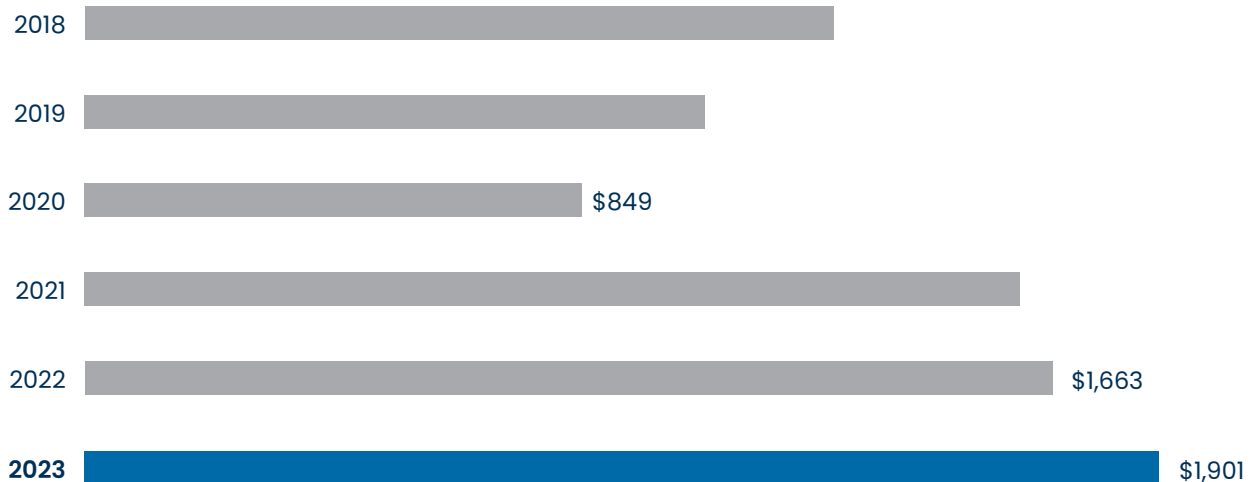
Ford, Ram and Toyota all forecast an increase in vehicle production for 2023
Chevrolet is forecasted to continue to see a decrease in output



Overall, manufacturers' cost of labor increased 11.5% since 2020, but in 2022 and 2023, so far, the cost of labor has risen only modestly. This shift in labor trends suggests the rapid increase in cost seen in the past may have come to an end.

In terms of raw material, the World Steel Association reports that approximately **55% of a vehicle's weight comes from steel**. Due to that relationship, the shortage and rising cost of raw materials have negatively affected market supply and amplified expenses on truck manufacturing costs.

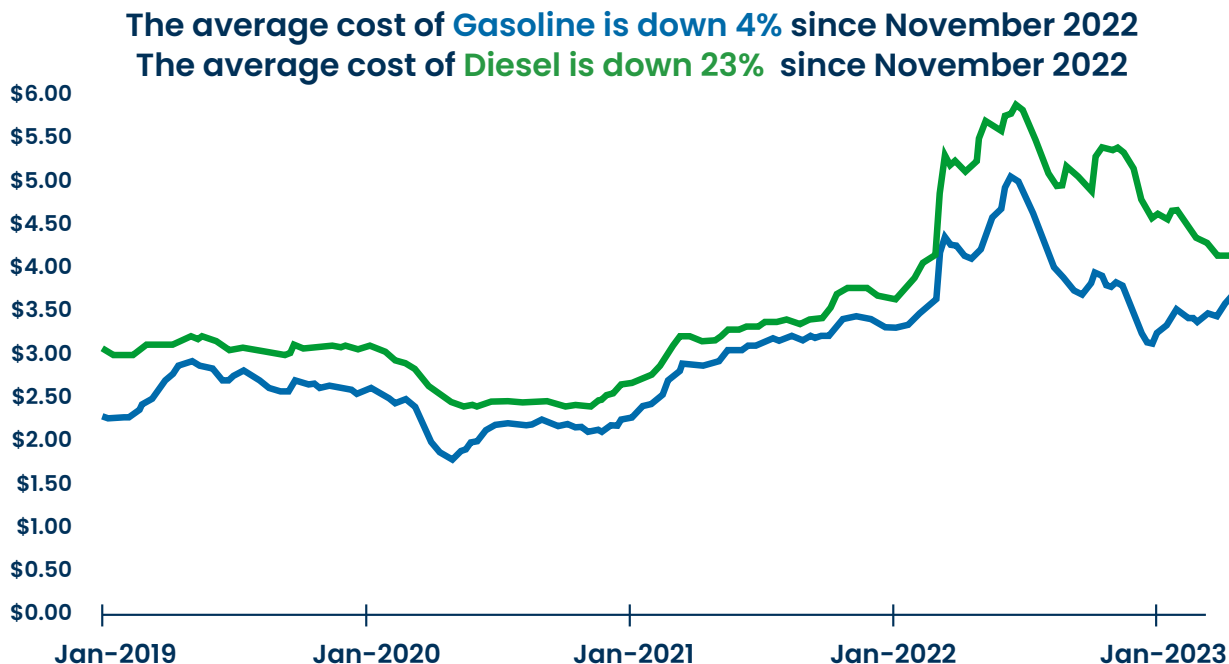
On average the **price of steel is up 14% since 2022**



Data from Wall Street Journal Steel Index

The cost of steel continues to rise which will directly impact the costs of new vehicles. The constrained market has made it difficult for manufacturers to maintain an adequate supply of material components resulting in upward pressure on margins.

FUEL PRICES ARE DECREASING CREATING LESS PRESSURE ON FLEET OPERATING BUDGETS



The price of gasoline at the pump has decreased by 27% since its peak in June 2022. Similarly, diesel has seen a reduction in average cost since its last peak.

Impact to Fleets:

- With fuel commonly being one of the largest fleet expenses, fleet managers can expect to see a plateau in fuel spend in 2023 compared to 2022, given the same size fleet.
- With the average price at the pump falling from \$4.96 per gallon in June 2022 to \$3.60 per gallon in May 2023, **fleet managers can expect to see a projected decrease in fuel expense of \$1800 per vehicle per year³.**
- This equates to a 37% increase in annual fuel cost YOY.

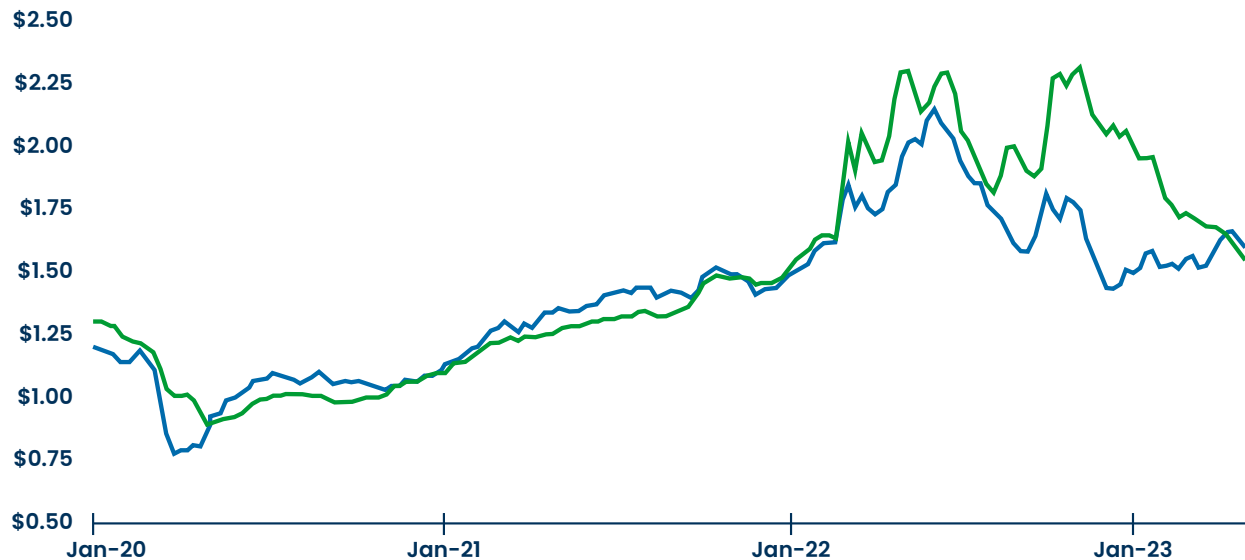
Moving Forward:

- On April 19th, the EIA forecast retail gasoline prices this summer to average \$3.50/gal, which is about 80 cents/gal less than last summer.
- There has been a decrease in the cost of diesel since November 2022. The EIA projects the price of diesel to continue to decline throughout 2023 before decreasing even further to \$3.70/gal by the end of 2023.
- Overall projections signal a decrease in prices based upon the expectation of lower demand growth for diesel and gasoline with continued higher production of both products.

³ Assumes a van at 15 MPG, traveling 20,000 miles annually

CANADIAN FUEL TREND:

The average cost of **Gasoline** is down 10% since November 2022
The average cost of **Diesel** is down 32% since November 2022



The price of **gasoline** in Canada has hovered in the \$1.50 – \$1.60 range in 2023.

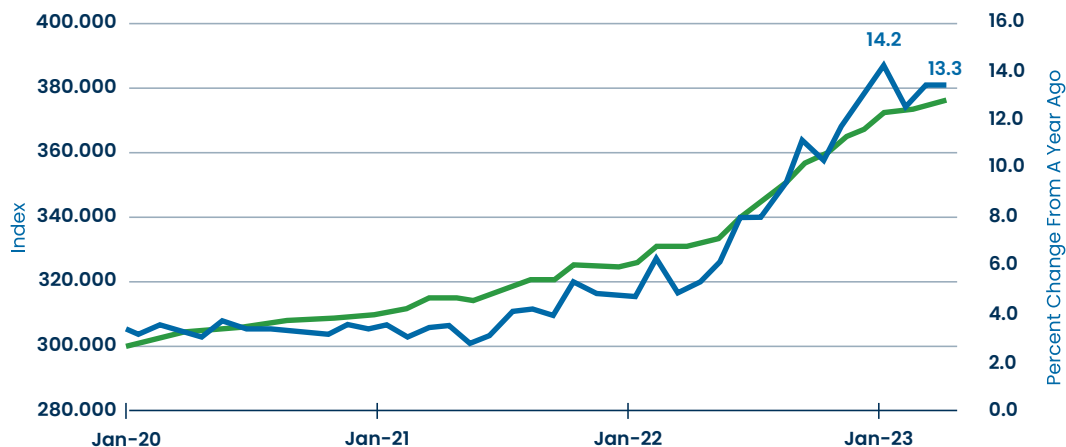
The price of **diesel** has been on a steady decline since its previous high point of \$2.30 per liter at the end of 2022.

SERVICE

CONSUMER PRICE INDEX FOR MAINTENANCE AND REPAIR INCREASE AT A SLOWER RATE

According to the Federal Reserve in St. Louis, the percentage rate of change for the Consumer Price Index (CPI) for motor vehicle maintenance and repair in the United States as of April 2023 was 13.31%. This was a decrease in the rate of change from a year ago compared to its peak in January 2023, when it was at 14.23%. The rapid increase in CPI over the last two years resulted in respective parts price hikes across the automotive industry. Thus, as the CPI continues to increase, the rate of growth in the automotive industry is starting to stabilize going into Q2 of 2023.

The Consumer Price Index for motor vehicle maintenance and repair continues to grow at a reduced rate of increase



MAINTENANCE COSTS ARE INCREASING DUE TO PARTS SUPPLY PRESSURES, INCREASING LABOR COSTS AND AGING FLEETS

Market research and internal data reveal that automotive components shortages continue to be an issue.

In addition to expected demand, new vehicle order backlogs continue to increase demand for existing vehicle components, which has further driven shortages. With new vehicle orders delayed and allocations reduced, fleets are forced to repair existing units and keep them in service longer, further compounding the parts demand.

Part	Price Increase Since 2020
Air Filter	13%
Alternator	17%
Brake Pads	17%

In mid-2022, the automotive industry recognized an **average parts price increase between 20%-30% since 2020**. However, per the above table, this trend as of Q1 2023 has stabilized and softened a bit since its peak.

These parts constraints are causing repair jobs to take longer to complete, thus lengthening fleet vehicle downtime, and increasing associated fleet costs with extended rental expenses.

According to data from the Federal Reserve Bank Of St. Louis, which tracks car rental vehicles, average car rental costs have gone from a peak of \$258 in July 2022 to \$189 in April 2023. This equates to a 26% decrease in average rental expense from 2022 to mid-2023.

TIRE COSTS ARE RISING MULTIPLE TIMES PER YEAR

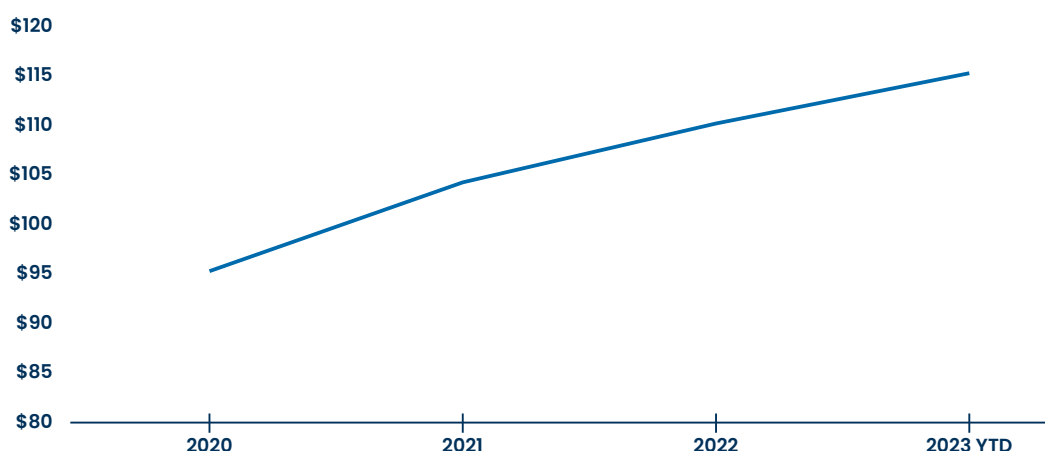
	Michelin	Bridgestone	Goodyear
Number of Price Hikes	5 since 2020	5 since 2022	3 since 2020
Total Percent Increase Since 2020	30%	24%	23%

Multiple tire price hikes have occurred across all tire manufacturers since the pandemic began in 2020. The upward price pressure is the result of a multitude of headwinds stemming from the global supply chain crisis. This includes higher raw material costs such as crude oil, higher freight and logistics expenses for finished goods, and increasing replacement tire demand as vehicles remain in service longer.

- To give fleet managers real-world context to the effects of increasing tire prices, a sampling of Holman data showed a **\$50 per tire increase (16%) from 2019 to Q1 of 2023⁴**.
- Bridgestone introduced an additional price hike of 9% to their passenger and light-duty tires, totaling a 24% increase since 2020.
- As fleets keep aging vehicles in service longer, fleet managers can expect to see the market forces noted above result in continued increases to their fleet's tire expense.

INCREASED LABOR RATES ARE DRIVING UP THE COST OF MAINTENANCE

Median Labor Rates have seen a 21% increase since 2020



Labor rates are increasing as a result of **the labor shortage and competitive job market**.

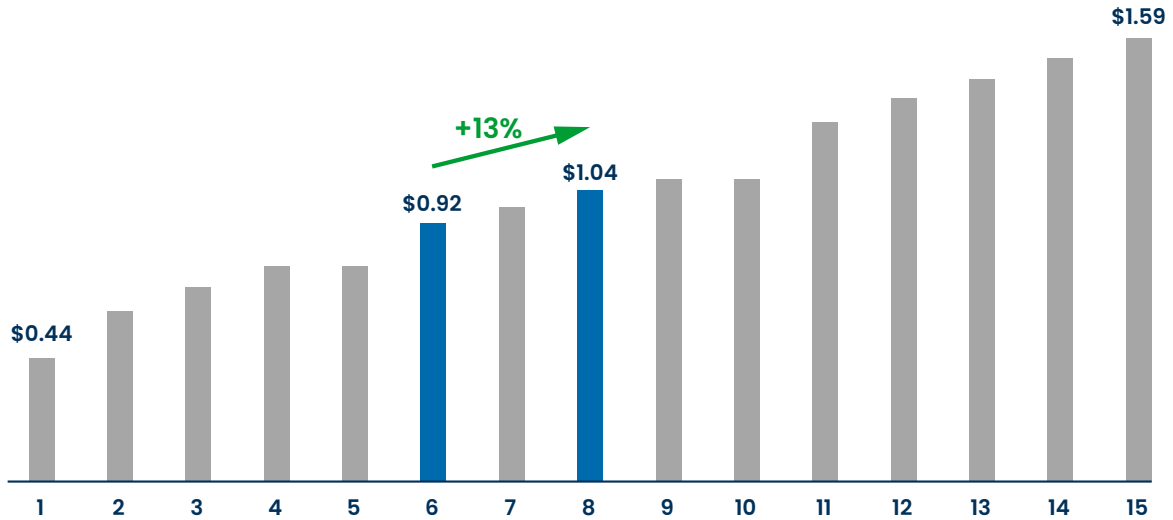
According to Auto Service World, the **industry will be short 642,000 automotive technicians by the end of 2023 and leading into 2024**.

Keeping highly skilled technicians has been a pain point as other industries are also in need of skilled labor and are competing for the same talent pool. The increase in compensation to hire and retain skilled labor is increasing the average repair bill and translating to higher maintenance expenses for fleets.

⁴ Based on review of van fleet data using 16-inch tires.

OPERATING COSTS INCREASE AS VEHICLE LIFECYCLES ARE EXTENDED DUE TO NEW VEHICLE SUPPLY PRESSURES

A vehicle typically replaced at year 6 will cost 13% more in maintenance cost per gallon by year 8



Fleets will need to review their preventative maintenance practices to take into consideration these longer life cycles. **Fleets that have a history of poor preventative maintenance compliance will be forced to spend even more.**

SELL

RESALE MARKET OFFERS OPPORTUNITY TO FLEET MANAGERS

While the majority of cost increases continue to result from external global economic forces, some measures can be taken to help mitigate the effects of rising expenses. Fleets will need to focus on opportunities related to vehicle utilization, the resale market, and proper preventative maintenance scheduling.

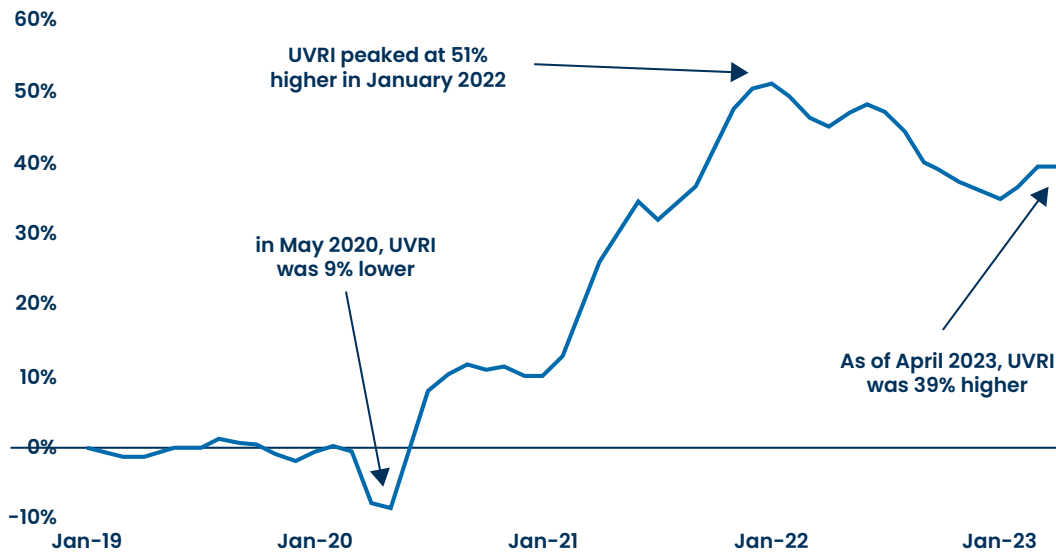
With the used vehicle market still well above pre-pandemic levels, there are immediate opportunities to review low or under-utilized vehicles. The sale of these vehicles will help offset new vehicle acquisition and/or operating expenses. **Used vehicle retention values peaked at 50% above pre-pandemic levels in early 2022 but were still above 35% and rising in early 2023.**

Right-sizing and cascading can help mitigate limited allocation and extended order-to-delivery times for new replacement vehicles. Fleet managers should be evaluating opportunities to move spare assets within their fleet to avoid extra capital or rental expenses.

Now more than ever it is vital to maintain a healthy and efficiently working fleet. To do so, fleet managers should strictly review their fleet's preventative maintenance schedules and compliance. This will assist in reducing the risk of major maintenance issues in older vehicles, which are forced to remain in service longer than planned.

After unprecedented wholesale values and used vehicle retention in 2021, prices experienced major fluctuations in the first half of 2022 but steadily declined into the end of the year. In early 2023, the wholesale market saw a similar increase in pricing that has started to decline since the end of April 2023. **With demand projected to remain strong and used vehicle inventory expected to become limited, declining but strong retention is expected to continue through to the end of 2023.**

Percentage change in Black Book UVRI versus January, 2019



The Black Book Used Vehicle Retention Index is calculated using Black Book's published Wholesale Average value on two- to six-year-old used vehicles as a percent of the original typically-equipped MSRP. Black Book's Wholesale Average is a benchmark value for used vehicles selling in wholesale auctions with the vehicle quality in average condition. The index is weighted based on used vehicle registration volume and adjusted for vehicle age, mileage, condition, and inflation (MSRP).