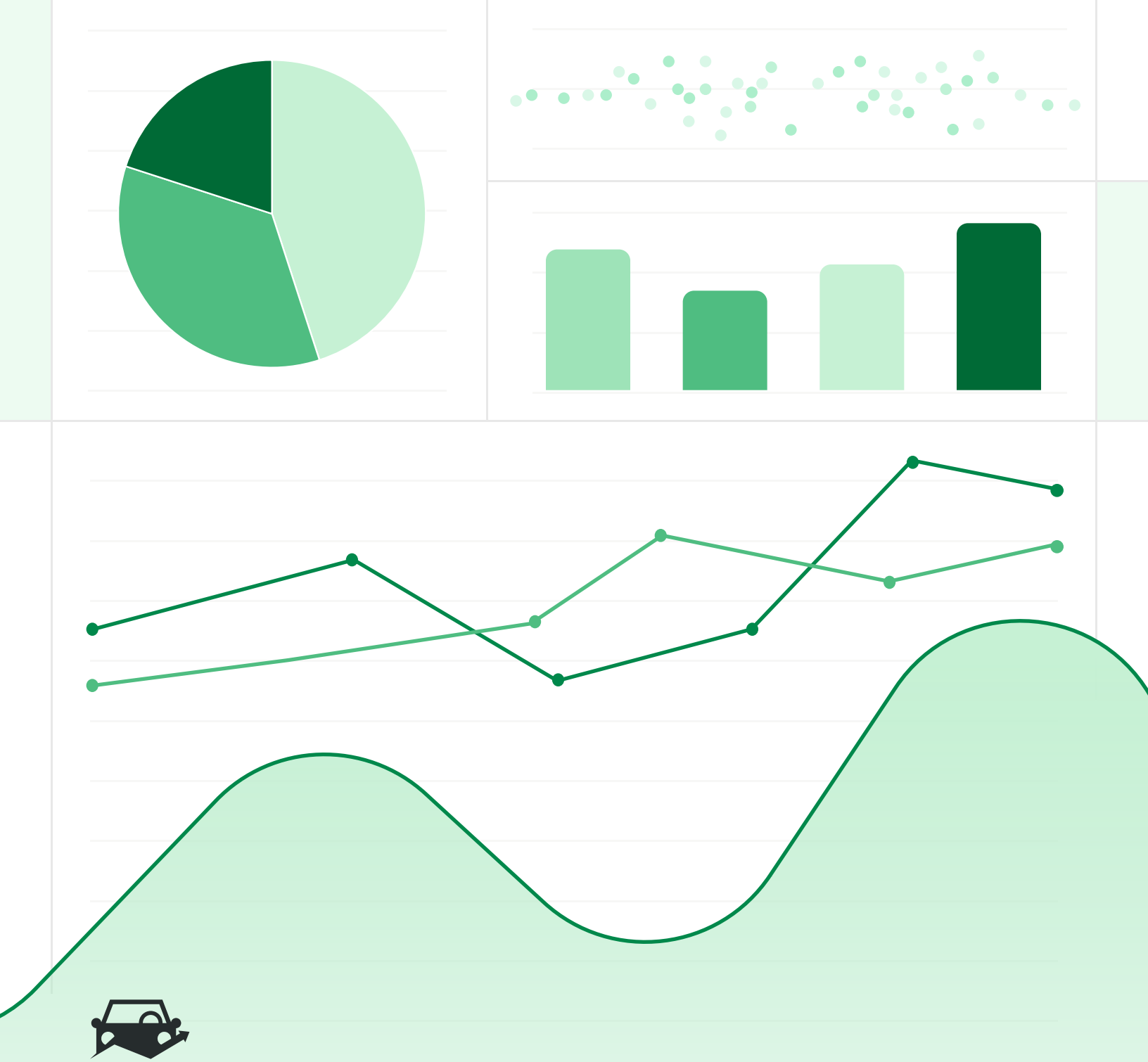

Fleet Benchmarking Report

2024

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How did we create the fleet benchmarking report?

This report is constructed from the aggregate data of real Fleetio customers, including vehicle information, odometer readings and recorded expenses, as well as the applied learnings from that data. We evaluated a selection of our overall vehicle profile to bring together the most relevant data points that accurately summarize the state of a wide variety of fleets across multiple industries. We have worked to validate customer-generated data as much as possible, and metrics are reflected as both averages and medians where relevant.

A Note from CEO Jon Meachin

Data sits at the heart of everything we do here at Fleetio. Since our founding in 2012, we've understood that the greatest differentiator between a good fleet and great fleet is sound vehicle and maintenance data, and every feature we've developed over the years has been another step toward helping fleets find, organize and utilize that data, leading them to the game-changing insights and operational efficiencies they need to reach their full potential.

Now, we want to open up a new data flow to the fleet industry. Fleetio is fortunate to steward a great deal of data around the customers we serve. While respecting our customers' privacy is always our utmost concern, we have an incredible opportunity to aggregate and anonymize that data and share it back with you, so you can see not just how you're performing from your own data, but how your performance ranks against your peers.

We hope to empower you not only with data but with direct insights and best practices as well, so you can truly make that data actionable. Thank you for downloading this resource, and we hope to continue to provide the fleet community with valuable data that can drive us all forward.

Jon Meachin

Why Fleet Data Matters

When you're running a fleet, there are a few questions that will naturally come up as you look for ways to optimize your operation: When should I replace my vehicles? How do I know I'm not over-spending on maintenance? Are my assets spending too much time in the shop? Good data has the power to answer these questions with incredible specificity, so you know you're making the right decisions for the right reasons.

That's why we've compiled these insights into our Fleet Benchmarking Report – so that you can use the learnings of other data-oriented fleets to measure your performance against theirs and find some commonalities and deviations that might help you answer your most pressing operational questions about your fleet.

Fleet data plays an important part in enabling efficient and effective fleet management, driving operational improvements, minimizing costs, ensuring compliance and ultimately enhancing the overall performance and success of fleet operations.

Performance Monitoring

Monitoring metrics such as fuel efficiency, maintenance costs and vehicle utilization allows fleet managers to identify areas for improvement and make informed decisions to optimize performance.

Cost Management

By analyzing fleet data, managers can identify cost-saving opportunities in fuel consumption, maintenance costs and route efficiency to lower expenses.

Safety Improvement

Fleet data can allow fleet managers to monitor driver behavior and vehicle performance and identify safety risks and trends, which means implementing proactive measures to reduce accidents and ensure compliance with safety regulations.

Regulatory Compliance

Maintaining accurate fleet data like vehicle inspections, emissions standards and driver hours-of-service regulations can help operations stay compliant and enable easy access to information during audits and inspections.

Asset Management

Fleet data provides valuable information about the condition, usage and lifecycle of vehicles in the fleet that can help managers make informed decisions about vehicle replacement, maintenance scheduling and asset allocation.

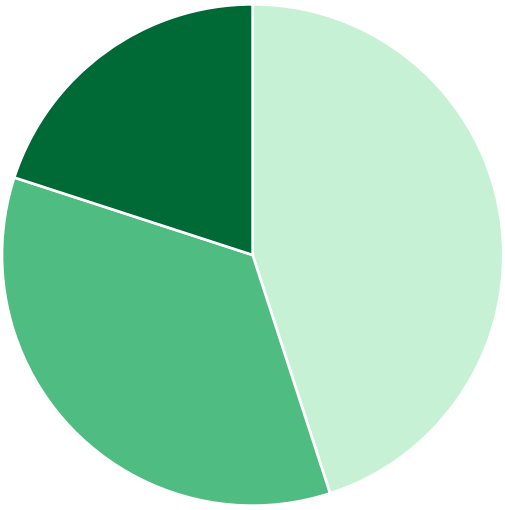
Strategic Planning

Analyzing historical fleet data can surface trends and patterns that can inform long-term strategic planning, including forecasting future fleet needs, evaluating the impact of technology upgrades and identifying opportunities for growth or expansion.

On the Road

Let's start by taking a look at the actual assets – how fleets are using their vehicles day-to-day and for how long, as well as how much they cost to operate.

Age of Vehicles Managed by Fleetio



Age of Vehicles in Years

1-4 YEARS	45%
5-7 YEARS	35%
8-10 YEARS	20%

FIG. 1

Of the 120,425 vehicles evaluated in this report, nearly 45% of fleet vehicles in Fleetio are less than four years old, which aligns with traditional retirement recommendations.

How old should your vehicles be?

This is a question that can have a variety of different answers depending on what kind of operation you run and what kind of assets comprise your fleet. Regardless, as assets age, it's important to have a predetermined timeline for how long you intend to keep them in your fleet and at what point you'll choose to retire them.

There are two primary ways fleets choose to organize their vehicle disposal plans: by time in service or by mileage. The general industry rule of thumb for standard light duty vehicles is to replace vehicles at around 48 months or 100,000 miles in order to maximize lifespan, minimize repair costs and improve resale value, though your mileage may literally vary depending on the assets that comprise your fleet.

Time in Service vs. Mileage-Based Replacement

Pros

Time in Service	Mileage
Predictable Replacement Schedule Time-based replacement provides a predictable schedule for vehicle replacement, making it easier to budget and plan for fleet expenses.	**Accurate Measure of Wear and Tear** Mileage is a direct measure of how much a vehicle has been used, making it a more precise indicator of wear and tear on components such as the engine, transmission and suspension.
Reduced Risk of Aging Components Vehicles deteriorate over time, regardless of mileage. Time-based replacement helps fleets avoid potential mechanical failures and safety concerns associated with aging components.	**Cost-Effective** Vehicles are replaced when they have reached a certain mileage threshold, allowing fleets to maximize the utilization of each vehicle and minimize premature replacements.
Compliance with Regulations Time-based replacement ensures fleets comply with regulations that mandate vehicle retirement after a certain number of years, regardless of mileage.	**Aligned with Maintenance Schedules** Mileage-based replacement often aligns with manufacturer-recommended maintenance schedules, which when adhered to can improve asset ROI/resale value.
Opportunity for Technology Upgrades Time-based replacement allows fleets to take advantage of technological advancements in newer vehicles, improving safety, fuel efficiency and overall performance.	**Resale Value Optimization** Vehicles are replaced before significant depreciation occurs due to high mileage, maximizing resale value and minimizing losses for the fleet.

Cons

Time in Service	Mileage
Potential for Premature Replacement Vehicles with low mileage but high age may still be in good condition, yet they might be replaced prematurely based solely on time criteria, leading to unnecessary expenses.	**Inconsistent Wear Patterns** Vehicles may accumulate mileage at different rates depending on factors such as driving conditions, route and driver behavior, leading to inconsistencies in wear patterns across the fleet.
Higher Operating Costs Older vehicles may require more frequent maintenance and repairs as they age, leading to higher operating costs compared to newer vehicles.	**Less Predictable Replacement Schedule** Mileage accumulation can vary depending on usage patterns, making it more challenging to predict when each vehicle will need to be replaced compared to a time-based approach.
Depreciation Impact Vehicles generally depreciate over time, regardless of mileage. Time-based replacement may result in higher depreciation costs compared to mileage-based replacement, as vehicles are replaced before reaching their maximum utilization potential.	**Limited Consideration of Environmental Factors** Mileage-based replacement may not adequately account for environmental factors such as emissions levels and fuel efficiency, which could lead to missed opportunities for fleet optimization and sustainability.

Whether you choose to base your replacement schedule on time in service or mileage is a matter of what is best for your fleet. For transportation and logistics fleets that rely on travel as a business model, mileage-determined retirement may be the best option to avoid rising maintenance costs, while an education fleet may find time in service to be the best way to prioritize safety and reliability.

Here are a few other best practices for determining optimal replacement timelines:

1. **Utilize total cost of ownership (TCO) analysis** – Consider the total cost of owning and operating a vehicle over its lifespan, including acquisition costs, fuel, maintenance and depreciation, to make informed replacement decisions.

2. **Establish replacement criteria** – Define clear criteria for when vehicles should be replaced, taking into account factors such as make and model, age, mileage and maintenance costs.

3. **Track vehicle performance** – Regularly monitor key performance metrics, like fuel efficiency, maintenance costs and reliability, to identify vehicles that may be candidates for replacement.

4. **Consider lifecycle costs** – Assess the lifecycle cost of each vehicle, including initial purchase price, operating costs and resale value, to determine the most cost-effective replacement schedule.

5. **Plan for technology upgrades** – Anticipate advancements in vehicle technology and industry regulations when developing a replacement strategy to ensure fleets remain competitive and compliant.

6. **Balance age and mileage** – Strive to strike a balance between vehicle age and mileage to optimize resale value and minimize maintenance costs.

Median Cost Per Mile by Industry

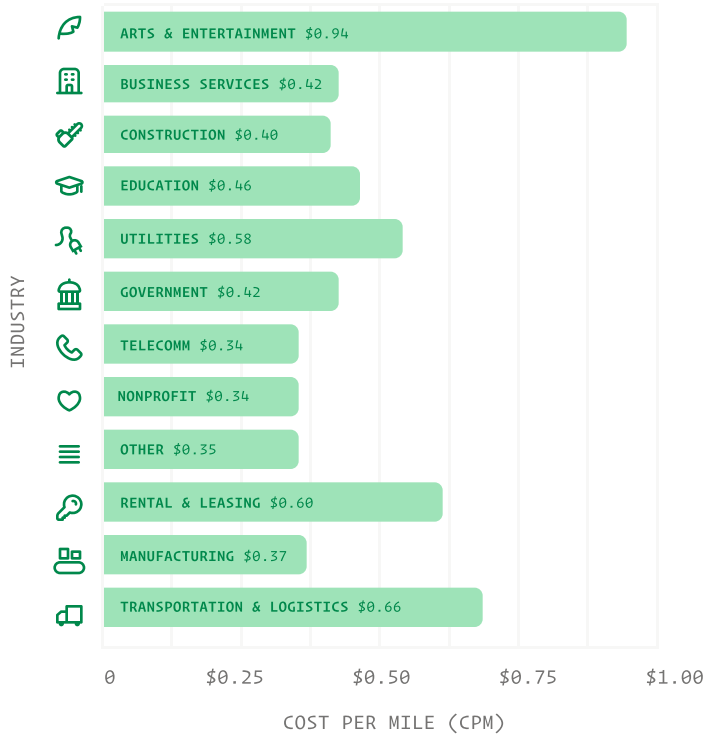


FIG. 2

The Arts & Entertainment sector leads in median cost by a significant margin, followed by Transportation & Logistics and Rental & Leasing, where vehicle health is directly tied to business productivity.

Change in Cost Per Mile of Fleetio Vehicles YoY

FIG. 3

Aside from the second year of ownership, fleet cost per mile (CPM) increases considerably year over year, starting at $0.36 per mile in the first year and rising to $0.57 by Year 8.

How do fleet costs change over time?

There are a few factors that influence fleet asset costs, and those factors can look different throughout the asset's lifespan:

Year 1

Acquisition

Acquisition has become more expensive for fleets, with new vehicle prices nearly $10,000 higher in 2023 than in 2020, according to Kelly Blue Book (KBB), which will have a bigger impact on TCO.

Depreciation

Assets typically experience the highest depreciation in their first year as vehicles lose most of their initial value at the time of purchase.

Fuel Costs

Fuel costs will start lower as vehicles are new and more fuel-efficient.

Subsequent Years

Acquisition

Acquisition is a one-time upfront cost that won't be encountered again, but will be one of the baseline contributions for TCO.

Depreciation

Depreciation generally continues, but at a slower rate, and will depend on factors such as mileage, condition and market demand.

Fuel Costs

Fuel costs may increase as vehicles age and fuel efficiency decreases due to wear and tear. Rising fuel prices and changes in driving habits can also impact fuel costs year over year.

Year 1

Maintenance & Repairs

Maintenance costs can be lower as vehicles are under warranty and require minimal repairs.

Insurance Premiums

Insurance premiums may be higher for new vehicles due to their higher value and replacement cost.

Registration & Taxes

Registration fees and taxes are typically higher for new vehicles.

Financing Costs

Financing costs are typically higher for new vehicles due to higher purchase prices and interest rates.

Technology Upgrades & Add-Ons

Additional costs may be incurred initially for fleet technology upgrades and add-ons, such as GPS systems, telematics and safety features.

Environmental Regulations

Costs associated with compliance with environmental regulations – things like emissions testing and retrofitting – will fluctuate depending on changes in regulations and the implementation of new technologies.

Subsequent Years

Maintenance & Repairs

Maintenance costs increase as vehicles age and require more frequent repairs such as brakes, tires and batteries. The cost of scheduled maintenance may also rise as vehicles gain more mileage.

Insurance Premiums

Insurance premiums may decrease slightly as vehicles depreciate, but this can vary depending on factors such as the vehicle's safety features, driver history and insurance provider policies. In recent years, per mile insurance premiums have been higher than average by about 50%, according to the American Transportation Research Institute.

Registration & Taxes

Registration fees will likely drop as vehicles age, but taxes may stay consistent or decrease gradually over time.

Financing Costs

As outstanding loan balances drop, so do financing costs and interest payments. Refinancing options may also be available to lower financing costs.

Technology Upgrades & Add-Ons

These costs will vary based on fleet management decisions and technological advancements in the industry but can help to improve the resale value of a car depending on what technologies are added.

Median Fuel Cost in 2023 by Industry

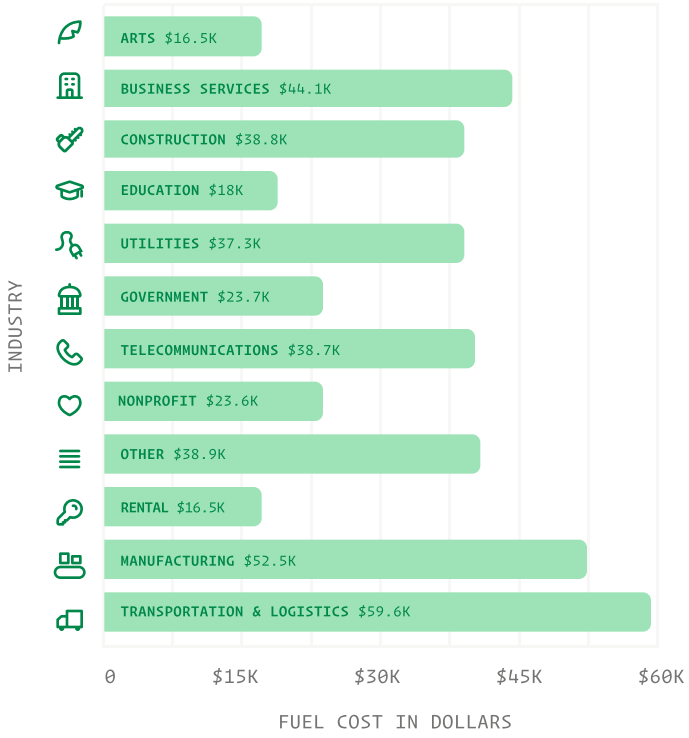


FIG. 4

Transportation & Logistics fleets decidedly lead in fuel spending, followed by Retail, Wholesale & Manufacturing.

Median Distance Traveled in 2023 by Industry

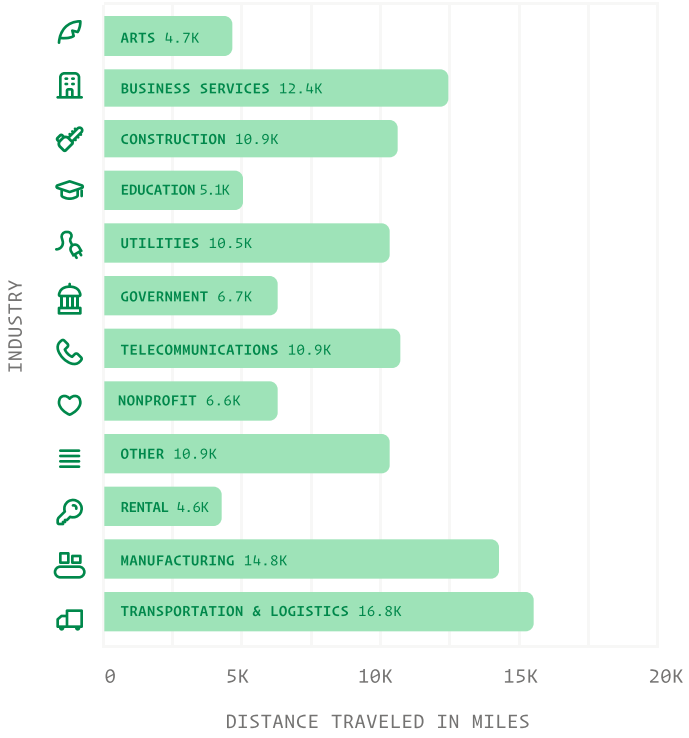


FIG. 5

Unsurprisingly, Transportation & Logistics assets covered the most ground last year, followed closely by Retail, Wholesale & Manufacturing.

How can fleets reduce fuel costs?

Fuel is one of those inevitable facts of life in the fleet world – you simply can't run a fleet without it. And often, the amount of fuel you use is directly tied to your specific sub-industry (no one is going to try to convince a delivery company to drive less). So what can you do to ensure that your fuel costs are as optimized as possible without sacrificing the quality of your services?

Invest in fuel-efficient vehicles

Upgrading to vehicles with high fuel efficiency ratings can go a long way in ensuring your acquisition strategy benefits you down the road. Look for models with features like hybrid or electric powertrains, aerodynamic designs and advanced engine technologies to maximize fuel savings.

Conduct driver training and monitoring

Monitoring driver behavior with telematics and providing thorough training can help encourage fuel-friendly behaviors in your drivers and discourage those that can hurt your fuel efficiency, like idling, rapid acceleration and harsh braking.

Optimize routing and scheduling

Route optimization software solutions through your GPS and telematics providers can help you plan the most efficient routes for your fleet, minimizing mileage, reducing fuel consumption and avoiding roads with hazards that may cause more wear and tear. Consider factors such as traffic patterns, road conditions and delivery schedules when planning routes.

Stick to regular maintenance

Keeping fleet vehicles properly maintained ensures they can operate at peak efficiency. Maintain optimal tire pressure, replace filters regularly and stick to a strict PM schedule to maximize fuel economy.

Monitor fuel consumption

Fuel cards and solutions, telematics systems and fleet management software are great tools to track fuel consumption across your fleet, allowing you to quickly spot exceptions and discrepancies, including those caused by mechanical issues or driver behavior.

Reduce vehicle weight

Try minimizing unnecessary weight in fleet vehicles to improve fuel efficiency by removing excess cargo and equipment when not needed, and avoid overloading vehicles beyond their recommended capacity.

Regularly review and adjust strategies

Continue to monitor fuel usage and efficiency metrics, and regularly review and adjust your fuel-saving strategies as needed. Stay informed about industry advancements and best practices for maximizing fuel efficiency in fleet operations.

Go electric

Explore adding electric vehicles to your fleet as you replace traditional combustion engine assets.

EV Asset Growth Since 2020

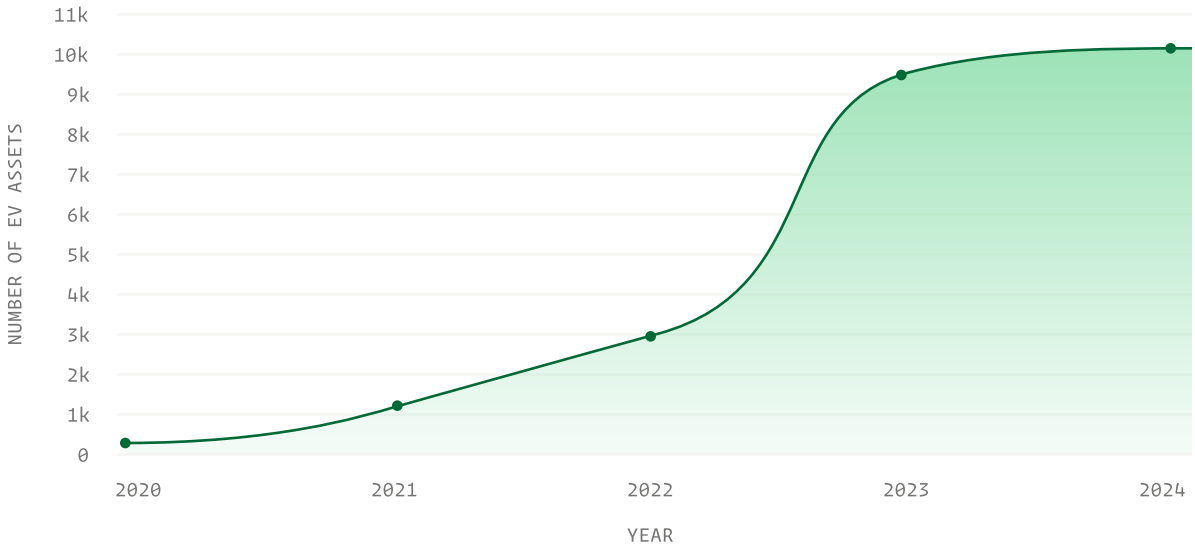


FIG. 6

EV asset growth year-over-year in Fleetio has increased by major strides over the past four years, with a 214% increase between 2022 and 2023.

More and more fleets are choosing to expand their EV assets. But even as the technology continues to expand and more options become available to fleets, the spread of EVs is still relatively limited to a handful of fleets in a few key industries. Let's dive into a few of the misconceptions around EV adoption and why fleets may have more and better reasons to integrate EV assets than they think.

What are some of the myths around EV adoption?

Myth

The upfront costs of EV adoption outweigh the long-term financial benefits.

It is true that electric vehicles (EVs) often require a little more capital at acquisition than their direct internal combustion engine (ICE) counterparts, but in addition to the myriad of cost savings that will come down the line after purchase, EV prices are dropping each year as the technology improves. There are also many government incentives and programs that can help offset some of the initial costs you'll incur, including tax breaks, rebates and low-cost financing.

Myth

You won't get the range you need out of an EV, especially with the lack of current charging infrastructure.

Range anxiety is a very real concern for fleet managers, and much of that stems from concerns around battery degradation, which might not be as big of a deal breaker as you might think – EV batteries are built with a failsafe that can compensate for the degradation that can occur during full charge cycles. On top of that, it's important to note the consistent improvements being made in EV battery manufacturing and production, meaning EVs may only become more reliable as time goes on.

Many state governments, especially in the pacific northwest and northeast, have made EVs an important cornerstone of environmental policy and are attempting to enact changes to advance the expansion of charging, and adoption of the North American Charging Standard by most manufacturers means guaranteed compatibility and faster charging with the most prevalent charging stations across the country.

Myth

Keeping EVs maintained costs more than an ICE asset.

Yes, maintenance on EVs will have a steeper price tag, but that is easily offset by a decreased need for maintenance. EVs will still need to be approached with a strategic preventive maintenance (PM) plan, but because they have fewer moving parts and a less maintenance-intensive engine, there are fewer points for mechanical failure. You might experience less competitive rates from third-party maintenance providers due to the specialized training shops will require to become proficient in EV repairs, but that will normalize over time as EVs become more common for both fleets and consumers.

Myth

The technology is changing faster than fleet acquisition can keep up with.

The rapidly expanding capacities of EVs, including connectivity, battery range, AV levels and even weight allowances, are more of a strength than a drawback – fleets have to offload their assets regularly anyway, which opens the door to upgrades in asset performance every time an EV asset needs to be replaced, similar to the upgrading you would normally hope to see with your ICE asset replacements. Charging standardization will also help to ensure that even as you see increased life spans from your EVs, you won't be completely behind the curve when it comes time to purchase a new asset.

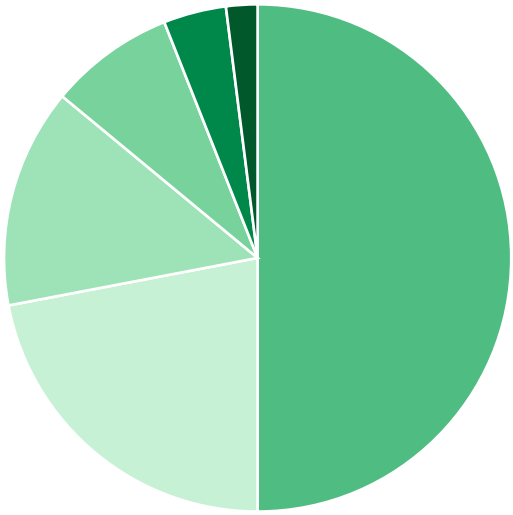
> *Fleetio is a very user-friendly application that is completely mobile... The many integration options keep all of our reporting in one easy to review place and allow us to see true dollar spend for each vehicle and our fleet as a whole.*

LISA L., SCOBEE POWERLINE CONSTRUCTION

In the Shop

Now let's pivot to the other side of fleet operations that happens off the road as we explore maintenance costs, downtime and standard service expenses.

Average Fleet Budget Expenses



Standard Expenses

FUEL	50%
MAINTENANCE	22%
LEASE PAYMENT	14%
LOAN PAYMENT	8%
OTHER	4%
INSURANCE	2%

FIG. 7

Fuel and maintenance make up the vast majority of costs tracked by fleets in Fleetio with just under three quarters of the budget share.

How can fleets lower maintenance costs?

It goes without saying that fuel and maintenance universally make up the bulk of the operating costs for fleets. Much like fuel, maintenance is one of those costs that simply can't be avoided, but if fleets aren't careful, it can add up to an unnecessarily detrimental impact on their bottom line.

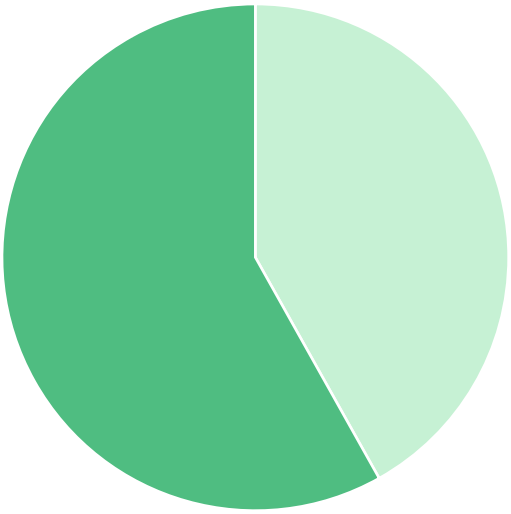
1. **Be diligent** – It might seem advantageous to only schedule maintenance when it's 100% necessary, but a few diagnostic fees every 2,000 miles are way easier to swallow than a one-time emergency engine repair. Create a strict PM schedule in line with OEM recommendations to ensure you stay ahead of any issues, and consider finding a way to access your sensor data to spot potential issues before they happen – a fleet management platform like Fleetio can help you with that.

2. **Get the best rate** – If you rely on outsourced maintenance, don't be afraid to shop around and find the best bang for your buck while maintaining quality control on your repairs. If you have an in-house shop, make sure that you are efficiently tracking parts and labor so you can reduce costs with technician optimization and vendor comparisons.

3. **Right size your fleet** – Pay close attention to your utilization rates to see if there are any opportunities to add to or subtract from your asset count. Overusing too few vehicles can lead to increased maintenance costs, and underusing too many vehicles can add up in lost efficiency and unnecessary PM cadences.

4. **Find your optimal replacement timeline** – Often, it is not worth it to continue stringing along an aging vehicle for the sake of avoiding buying a new asset. Consider metrics like cost per mile, resale value and utilization rate as you explore when it's best to offload a vehicle to avoid overspending on maintenance.

Outsourced vs. In-House Maintenance in Fleetio



Fleetio Service Entries by Category

OUTSOURCED	42%
IN-HOUSE	58%

FIG. 8

Fleetio customers are fairly evenly distributed across both maintenance approaches.

What's the functional difference between outsourced and in-house maintenance?

Outsourced, in-house or some combination of the two – any of these approaches are a valid way to handle fleet maintenance, so there's not one right answer for every fleet. Here are a few of the characteristics of in-house teams versus third party providers.

	In-House Maintenance	Outsourced Maintenance
Benefits	**Control** – A company-owned shop means that every variable of maintenance can be determined and set to preference, including things like technician specialty and preferred parts vendors. **Knowledge of the fleet** – Having consistently employed technicians means they understand the ins and outs of the assets and their past service histories from first-hand experience, not just documentation. **Cost-efficiency** – You get granular control over parts and labor costs, which means you can optimize both shop processes and fleet processes that contribute to maintenance costs.	**Deal hunting** – You can search for the best pricing available in your area to help control your maintenance costs. **Flexibility** – Outsourcing can provide more flexibility in scheduling maintenance and repairs on a quick turnaround, and you can seek out alternative providers if schedules don't line up. **Expertise** – It's easier to find a variety of providers with deeper knowledge of certain specialized services.
Drawbacks	**Labor cost and training** – Hiring and keeping a well trained staff, as well as maintaining an effective parts inventory, adds a financial burden to the operation. **Multi-point cost challenges** – Because maintenance and operational costs are so closely tied together, it may be hard to mitigate one without impacting the other. **Downtime** – When you have a pre-set headcount in your shop, downtime may increase with higher workload volumes, meaning you either take the hit to your uptime or outsource some repairs anyway.	**Decreased visibility** – Communication on work orders may not always be simple, which can lead to miscommunications and delays. **Availability** – You are beholden to another organization's schedule, which might not always have your ideal downtime in mind. **Quality of work** – If you use a portfolio of different shops to handle work based on availability or expertise, you might not always be able to guarantee the same quality of work on each work order.

Average Issue Resolution Time

1.68 Days

What is the true cost of downtime?

For most fleet operations, vehicles are the key to your business model – which means they need to be up and running to effectively drive revenue. In that philosophy, every second of downtime is non-ideal, but downtime is a reality for every asset as they undergo both PM and unplanned repairs.

When considering the impact of downtime, it's important to look at both hard costs and soft costs. Hard costs are easily quantifiable, while soft costs may not have an attributable dollar value, but both contribute to how hard an asset's downtime will hit your business goals and productivity, especially for fleets in industries that work on a project or contract basis.

Hard Costs and Soft Costs of Asset Downtime

Hard Costs
Labor
Parts
Diagnostic fees
Towing
Additional asset rental
Overtime
Lost profit/revenue
Ongoing operational costs
Project change orders

Soft Costs
Loss of reputation or goodwill
Internal stress on project team
Higher utilization rate on other assets
Increased downtime on other assets due to emergency repairs

FIG. 9

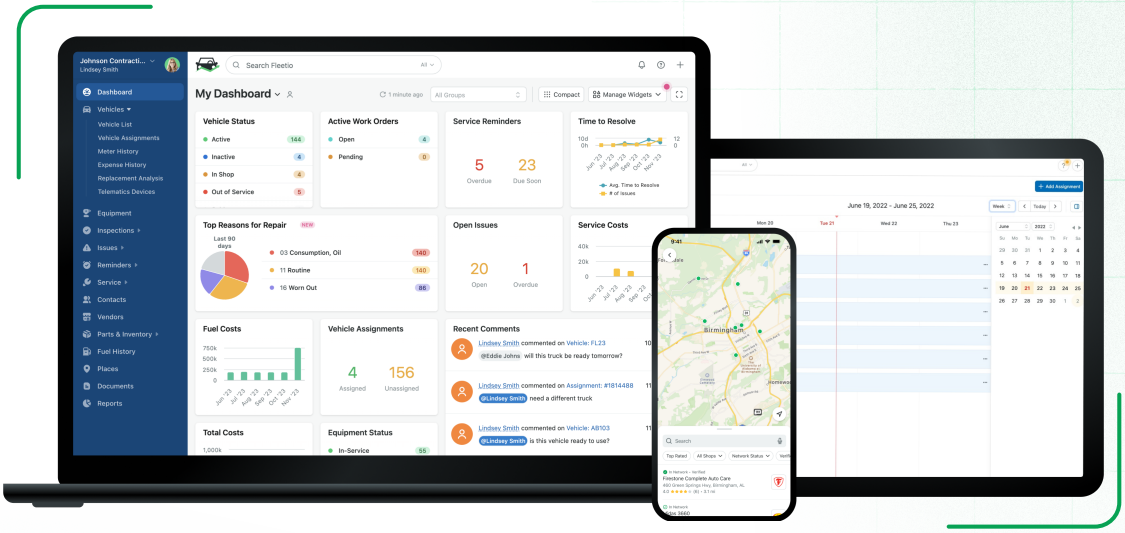
Hard costs are often the simplest to identify and track, and can be mitigated with effective productivity management and optimized PM schedules, whereas soft costs may come to fruition over time as a result of downtime from things like breakdowns and diagnostic problems.

Average Service Costs Recorded in Fleetio

Service Line Item	Cost
Battery	$151.01
Replace Brake Fluid	$80.21
Brake Pads (set of two)	$137.39
Brake Rotors/Discs (set of two)	$259.22
Brake Inspection	$9.90
Cabin Air Filter	$40.03
Coolant Flush	$86.61
Diagnostics	$181.46
DOT Inspection	$109.17
Air Filter Element	$38.87
Coolant Fill	$42.91
Full Synthetic Lube Oil Filter	$57.05
Oil Filter, Engine	$14.92
State / Province Inspection	$25.27
Shop Supplies	$25.15

Service Line Item	Cost
Spark Plug	$191.99
Wheel Balancing	$43.07
Tire Replacement	$452.27
Tire Disposal Fee	$10.31
Tire Mount / Dismount	$31.81
Tire Rotation	$17.70
Flat Repair	$19.62
Road Service	$215.42
TPMS Service Valve Kit	$10.66
Brake Line Hose	$132.81
Shipping / Freight Charge	$142.53
Alignment	$88.42
Windshield	$283.42
Washer Fluid	$5.89
Wiper Blade	$29.72

*These are average costs based on Fleetio customer data and may not accurately reflect the cost of every asset's preventive maintenance costs.



Take your data to the next level

Teams that want to get the most out of their data depend on Fleetio to be their ultimate source of truth for their fleet operations.

Fleetio is a modern fleet maintenance platform that allows you to bring your fleet data together in one centralized place. That means highly visible and highly actionable insights on things like Maintenance Costs, Inspection Results, Work Orders, Parts and Inventory, and more.

Try Fleetio for free today

fleetio.com/register