

2023

Fleet Technology Trends Report

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connect

Fleet technology is a stabilizing force amid intensifying challenges.

Technology adoption helps fleets navigate operational obstacles.

Throughout 2022, fleets faced many challenges. Topping the list was a dramatic increase in fuel costs. Record-high costs affected fleet fuel budgets, making the largest fleet expense even larger. Inflation impacted costs for other fleet essentials too, like parts, fluids and replacement vehicles.

Supply chain issues plagued fleets as well, making it difficult to get parts and vehicles.

Making matters more complicated was the labor shortage. Drivers, trade professionals and technicians were hard to come by.

In a year where so much seemed to be out of control, technology appears to have been the north star, according to respondents to the most recent Fleet Technology Trends Survey, which was conducted between June 16, 2022 and July 11, 2022 for Verizon Connect by Bobit Business Media, publishers of leading trade publications such as Automotive Fleet, Business Fleet, Government Fleet and Heavy Duty Trucking.

The survey showed significant year-over-year increases in using GPS to accomplish fleet goals, with productivity, routing, maintenance and fuel consumption topping the list.

These goals tie directly back to the key challenges fleets faced in 2022, suggesting that technology is

Top 3 challenges to daily business (all respondents)

	2023 report	2022 report	2021 report
Increasing costs	80%	63%	44%
Driver shortage/ Lack of quality workers	59%	54%	40%
Meeting customer demand	52%	49%	50%

helping them better manage the things they can control, despite a volatile environment.

When asked about the challenges they face, survey respondents indicated pressure is mounting for fleets. The degree to which respondents rate common fleet challenges to be extremely or very challenging has risen each year since 2021 – and in some cases, dramatically.

Key takeaways

- 96% of fleets using GPS fleet tracking software found it beneficial.
- Increasing costs were reported as the biggest challenge, followed by labor shortages and meeting customer demands, all of which grew year over year.
- Adoption of asset tracking has risen by 6% to 29% since the 2022 study.
- Respondents in the services industry indicate increasing use of field service management technology, with 38% of fleets scheduling jobs through dedicated software (compared to 19% the previous year) and 33% using an app to communicate with the field (compared to 12% last year).
- In the face of inflation, fleets are cutting costs by using GPS fleet tracking: respondents reported an average 9% decrease in fuel costs, a 17% reduction in accident costs and a 12% decrease in labor costs.

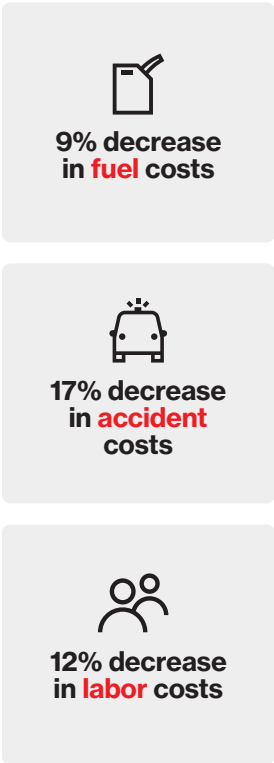
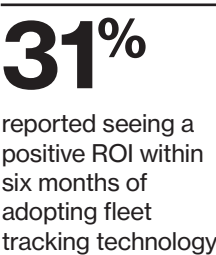
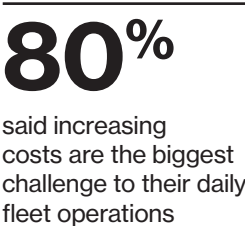
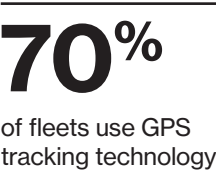
Fleet technology continues to be widely adopted among fleets.

GPS tracking is here to stay.

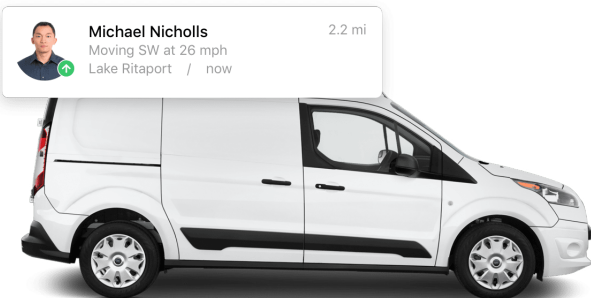
The number of respondents who use GPS tracking technology has held steady over the last three years, with nearly three-fourths of respondents reporting they currently use it.

On average, respondents using GPS tracking reported a:

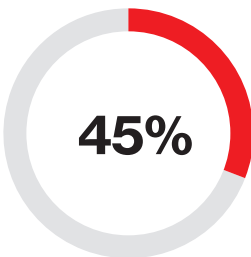
Fleet technology trends quick hits



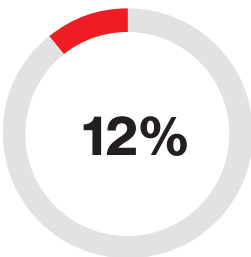
ROI for fleets using GPS tracking technology



Less than 1 year

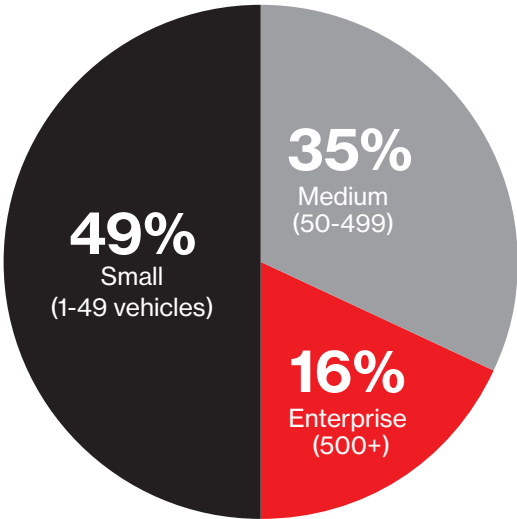


More than 1 year



Who responded to the study?

Fleets of all sizes



Respondents from diverse industries

Government	21%
Transportation	14%
General freight	13%
Construction	8%
Retail/Wholesale	6%
Manufacturing	5%
Food production/Distribution	5%
Services	4%
Utilities	3%
Petroleum products	3%

Fleets utilizing a variety of technologies

	Small (1-49 vehicles)	Medium (50-499 vehicles)	Enterprise (500+ vehicles)
GPS tracking	64%	78%	83%
In-cab video (including front-facing and driver- facing cameras)	36%	43%	23%
Field service/ Workforce management (scheduling, dispatch, communication)	32%	40%	43%
Asset/Trailer/ Equipment tracking	24%	33%	44%
None of the above	25%	17%	11%

Individuals with varying job functions

Fleet management	31%
Upper management	25%
Executive	23%
Risk/Safety	5%
Finance/Procurement	3%

Who is benefiting from GPS fleet tracking software?

Overall, 70% of respondents are using GPS fleet tracking software, a percentage that increased with the onset of the pandemic and has held strong ever since. Of those users, 75% said GPS tracking is extremely or very beneficial.

- The transportation industry has the highest GPS tracking adoption rate at 78%, followed by fleets in the government (72%) and construction (68%).
- Among individual industries, those in transportation (83%) and construction (82%) found GPS to be the most beneficial. These percentages are up from 2022: transportation has risen 11% from 2022 and construction grew by 13%.

These trends signal an increase in regard to the value fleets across industries place on GPS tracking software. As challenges with costs, labor, parts, supplies and acquisitions rise, fleets are making the most out of the technology they have at their disposal.

With the majority of fleets of all sizes and across industries using and finding value in GPS fleet tracking, the technology has become the rule rather than the exception.

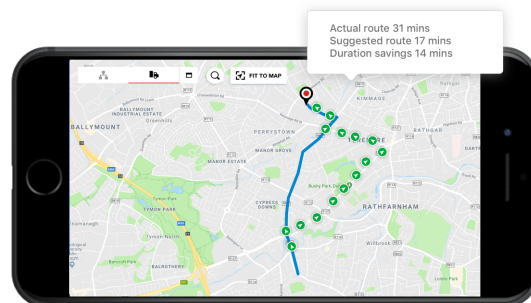


Use and value of GPS fleet tracking

	GPS use	GPS is extremely or very beneficial
All industries	70%	75%
Transportation/Distribution	78%	83%
Construction	68%	82%
Government	72%	63%

Top 5 goals achieved after implementing GPS tracking

Fleets are finding a variety of ways to use fleet technology. Drilling down into the specific goals achieved by using GPS tracking, respondents indicated the top five are productivity, customer service, routing, maintenance and fuel consumption, all of which have increased year over year.



Goals achieved by using GPS tracking (all respondents)

	2023	2022
Productivity	50%	46%
Customer service	50%	48%
Routing	47%	42%
Maintenance	47%	44%
Fuel consumption	36%	29%

Technology helps fleets address challenges.

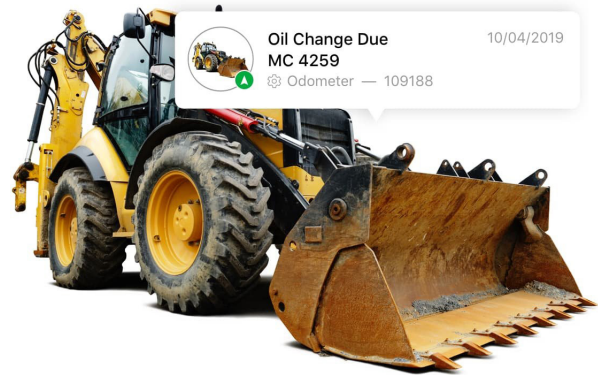
In the current environment, achieving these goals becomes more important than ever.

- **Productivity:** Automating manual processes and giving drivers easy-to-use technology is key to helping streamline operations and improve productivity.
- **Customer service:** Meeting customer demand remains a high priority for fleets faced with an array of obstacles, and GPS tracking can help streamline customer interactions.
- **Routing:** Effective routing addresses two challenges: labor and fuel costs. Using GPS tracking, fleets can optimize routes to reduce unnecessary miles and save fuel while also fitting in more stops per driver.
- **Maintenance:** With parts availability strained, keeping up on maintenance becomes increasingly important to prevent breakdowns and avoid downtime due to unavailable inventory.
- **Fuel consumption:** Efficient fuel economy and use is critical in the face of record-setting fuel costs. GPS tracking can help reduce idling, combat fuel fraud, identify the most inefficient vehicles in the fleet and more.

Asset tracking is rising in popularity.

This year, asset tracking emerged as the technology to see the highest percentage increase of new users. The number of respondents indicating they are currently using the technology jumped from 23% last year to 29% this year.

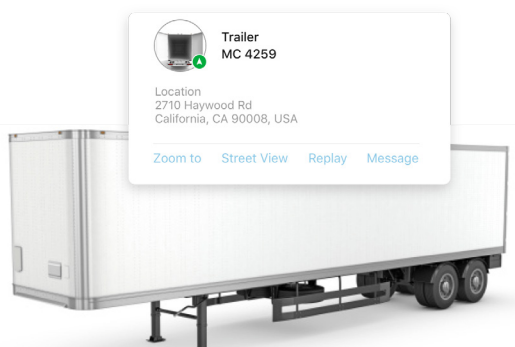
Between improved productivity, utilization and security, fleets can fully utilize their valuable assets – both equipment and employees – while helping to reduce the likelihood of losing them as well. Asset tracking technology adoption is providing a positive ROI. Survey respondents reported improved equipment/trailer utilization (66%) and improved efficiency/productivity for drivers/workers (59%). In fact, 55% of those surveyed reported seeing a positive ROI in less than a year of implementing asset tracking solutions.



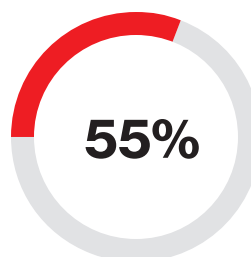
Goals achieved by using asset tracking (all respondents)¹

	% of fleets
Improved equipment/trailer utilization	66%
Improved efficiency/productivity for drivers/workers	59%
Improved equipment/trailer security	57%
Improved efficiency/productivity for office staff/management	54%
Reduced insurance costs	33%

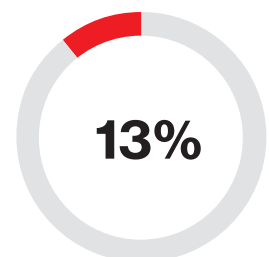
ROI for fleets using asset tracking



Less than 1 year



More than 1 year



More fleets are adopting video technology.

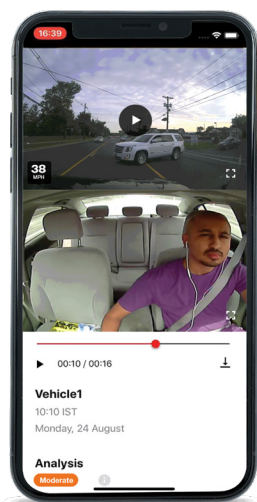
The risks of false claims and nuclear verdicts tend to be higher for transportation fleets, so it's no surprise the transportation industry has been a leading adopter of video technology over the last three years.

Among the top goals achieved through use of video technology, improved driver safety (70%) and protection from false claims (68%) topped the list for all respondents, followed by the reduction of accidents (44%) and insurance costs (37%).

Intelligent video solutions

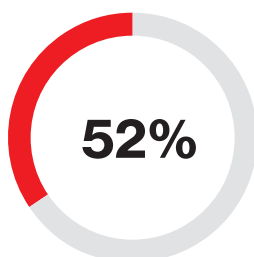
Video technology is advancing, with some solutions leveraging artificial intelligence (AI) and machine learning to provide better, faster safety insights that can help protect both drivers and fleets. For example, the use of AI-enabled driver-facing cameras can help reduce the likelihood of accidents by sending audible in-cab alerts for risky behaviors, like tailgating, distracted driving or driving while drowsy.

Furthermore, adding a video component to your GPS solution helps you get the whole story by seeing reliable video evidence alongside fleet data to help protect your fleet against false accident claims, exonerate drivers and reduce unnecessary expenses.

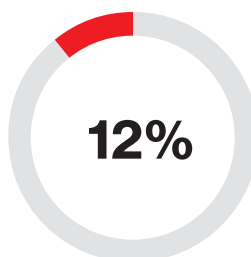


ROI for fleets using in-cab video

Less than 1 year



More than 1 year



68%

of all respondents currently using an in-cab video solution considered it extremely or very beneficial.

Field service management solutions help improve operational efficiency.

Many fleets are still scheduling jobs using a whiteboard (25%), spreadsheets (24%), or a shared digital document (14%), and they are communicating with the field via phone calls (72%) or text messages (60%).² However, we also found that many respondents have adopted the use of a field service management solution, whether it be a dedicated field service app or software (24%) or an integrated field service and fleet tracking solution (21%), and a little over one-fifth of respondents use a field

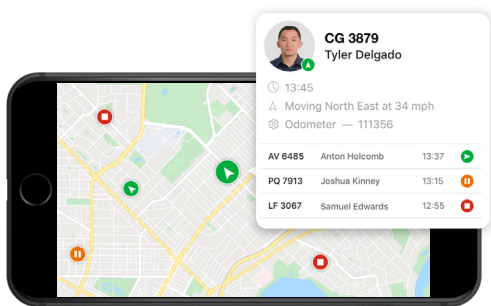
service app or software to communicate with drivers in the field.

A field service or mobile workforce management solution offers fleets an automated way to manage and dispatch jobs, and communicate with the field. This valuable technology is helping many organizations manage their fleet and achieve various goals.

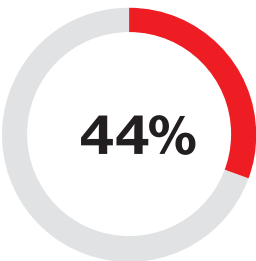
Goals achieved by using a field service management solution (all respondents)¹

	% of fleets
Improved operational efficiency	65%
Improved communication with techs/drivers	57%
Improved scheduling	57%
Improved visibility into near real-time location of techs/drivers	38%
Improved communication with customers	37%
More jobs per tech/driver	25%

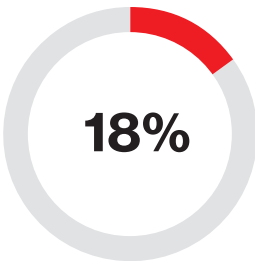
ROI for fleets using field service/workforce management solutions



Less than 1 year



More than 1 year



Technology can help fleets address challenges and drive down costs.

This year's fleet challenges are comparable to last year's challenges on many levels. Ongoing operational issues include driver shortages, hiring stalls due to applicants without appropriate qualifications, rising operating costs and struggles to fulfill customer expectations. However, there is an upside. Organizations using fleet tracking technology are seeing gains that help ease daily operating challenges.



Increasing costs

The percentage of fleets that reported increasing costs to be extremely or very challenging nearly doubled in just a few years, from 44% two years ago to 80% this year. Perhaps that's not surprising considering the impact of inflation on costs for critical fleet purchases, including fuel, parts, vehicles and more.



Driver shortage/quality

Second only to increasing costs was driver shortage/quality, which 40% of respondents considered very or extremely challenging in two years ago compared to 59% this year.



Customer demands

Meeting customer demands was the third greatest challenge and also saw significant increases in recent years. In 2021, 40% of fleets considered customer demands to be very or extremely challenging. This year, that percentage rose to 52%.

Fleet management technology can serve as a countermeasure for inflation.

Saving on fuel, labor and accident costs can help fleets offset the effects of inflation. As fuel prices fluctuate, fleet management software helps fleet managers identify ways to cut costs and reduce fuel use. This same technology can be used to promote safety and productivity, as shown by savings in accident and labor costs.

How much fleet management software helps reduce costs



All industries



Transportation



Construction



Government

	All industries	Transportation	Construction	Government
Average fuel cost reduction	9%	10%	10%	7%
Average accident cost reduction	17%	21%	17%	12%
Average labor cost reduction	12%	12%	17%	9%



The bottom line

In a time where complex challenges are straining budgets, complicating order timelines and forcing fleets to operate with fewer resources, many fleets may find it difficult to maintain operations as they are, let alone improve them. While it's likely the current challenges won't be resolved overnight, focusing on the factors within a fleet's control can help calm the chaos. Fleet management technology is a powerful tool that equips fleets with the data they need to make better decisions, navigate challenges and help improve fleet performance.

Methodology

An email invitation to participate in an online survey was sent to those in the Automotive Fleet, Business Fleet, Work Truck, Government Fleet, Fleet Financials, Business Fleet, Metro, LimosForSale and HDT (Heavy Duty Trucking) databases. As an incentive, a \$25 Amazon gift card was offered to the first 350 respondents who qualified and completed the survey. A total of 657 responses (432 completed and 225 partially completed surveys) were collected between June 16, 2022 and July 11, 2022.

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¹Respondents could choose more than one goal.
²Respondents could choose more than one method for scheduling jobs and/or communicating with the field.
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