

2019

# TELEMATICS BENCHMARK REPORT

CONSTRUCTION  
EDITION

TELETRAC NAVMAN



[TeletracNavman.com](http://TeletracNavman.com)

# FOREWARD

The Teletrac Navman Telematics Benchmark survey was conducted online between April 8 and May 7, 2019.

A variety of fleet management and fleet operations professionals participated in the survey, bringing expertise from the construction, mining and oil and gas industries. The report examines best practices, trends and current issues influencing fleet management around the world.







## METHODOLOGY AND SAMPLE

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The 2019 Teletrac Navman Benchmark Survey includes responses from more than 2,100 fleet operations and fleet management professionals from around the world. Of the total survey respondents, 549 indicated that their primary industry was construction, mining or oil, and gas. Respondents span operations in for-hire and private fleets, government agencies and other fleet operations. This report provides an understanding of best practices and fleet management trends in business, general telematics, emerging technology, transportation, external factors and talent. Results may not amount to 100 percent due to questions with multiple selections. For reporting purposes, all statistical values have been rounded to the nearest whole number.

# EXECUTIVE SUMMARY



## NEW FLEET, UPGRADES

Companies' top investment focus area is new fleets / fleet upgrades to drive profits and reduce operational costs. Majority of companies are planning such increases in the next year.



## INVESTING IN PEOPLE

Investments in people also rank high, as companies seek to retain, grow and attract talent to meet business demands.



## MATERIAL & LABOR COSTS

Increasing material and labor costs are a top concern and are threatening companies' cost management efforts and bottom lines, making it difficult to realize top business goals of increasing profits and reducing operational costs.



## TRAFFIC CONGESTION

Traffic congestion is cited as the biggest external industry threat. Route planning telematics can help drivers navigate alternate routes.





A close-up photograph of a yellow industrial machine, possibly a lathe or mill, showing various mechanical components like gears, bolts, and a metal rod. The machine is heavily used, with some black grease or oil visible on the surfaces. A semi-transparent orange rectangular box is centered over the image, containing the text "BUSINESS GOALS AND CHALLENGES" in white, bold, uppercase letters.

**BUSINESS GOALS  
AND CHALLENGES**

# CONSTRUCTION CONCERNS AND OPPORTUNITIES

Increasing material and labor costs remain the top concern, and commercial construction the biggest opportunity.



## Downward Trends

Worries about fuel prices, aging equipment, and environmental regulations have decreased considerably since 2018.

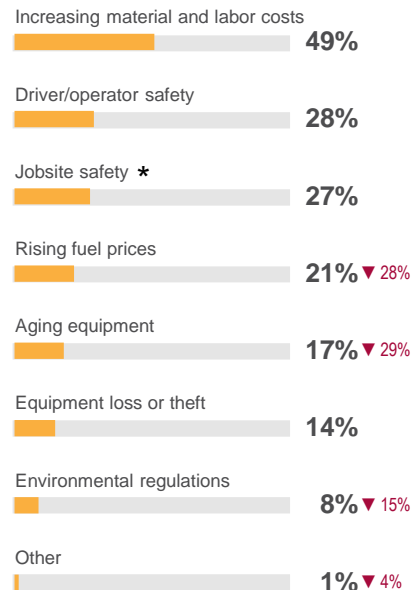
Opportunities in residential construction, while similar to levels in 2018, have declined markedly since 2017.

Heavy construction opportunities are significantly sparser compared to 2018.

On average,  
**9%**  
of equipment fails each year.

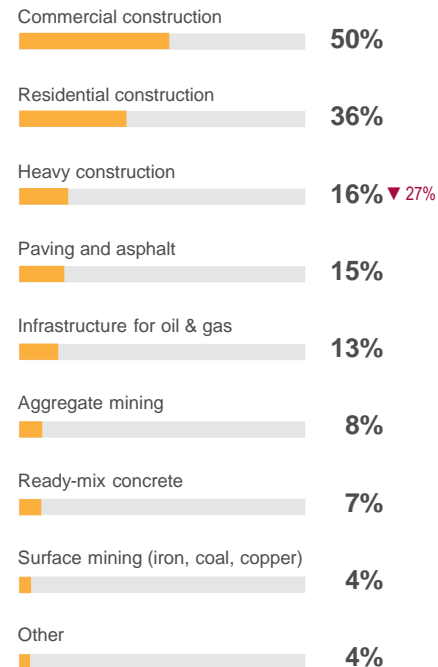
## BIGGEST CONSTRUCTION CONCERNS FOR 2019

Select up to 2



## BIGGEST CONSTRUCTION SEGMENT GROWTH OPPORTUNITIES

Select up to 2



# BUSINESS CHALLENGES AND EXPENSES

Managing costs (down vs. 2018) remains the top business challenge, and payroll the biggest expense.



Significantly fewer report talent, business expansion, risk management, customer retention, and regulatory change challenges vs. 2018.

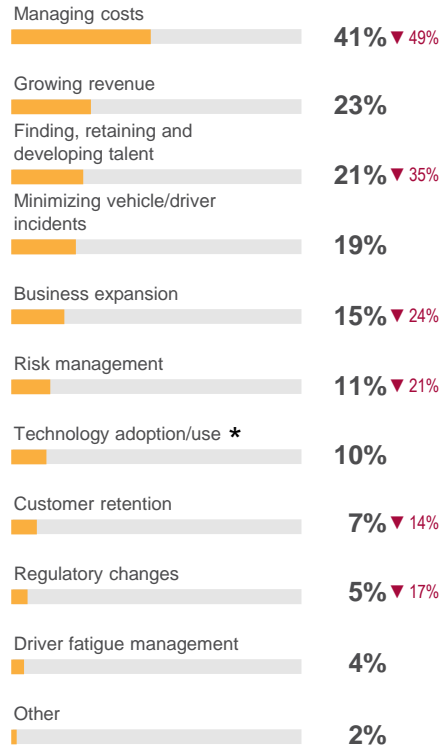


New equipment/vehicle purchase expenses are less pervasive than they were in 2018.



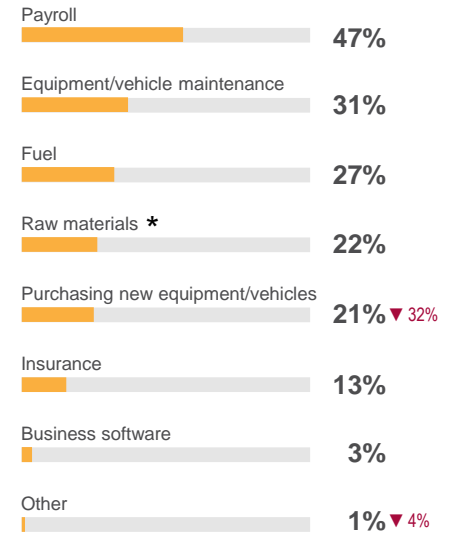
## TOP BUSINESS CHALLENGES

Select up to 2



## LARGEST EXPENSE AREAS

Select up to 2





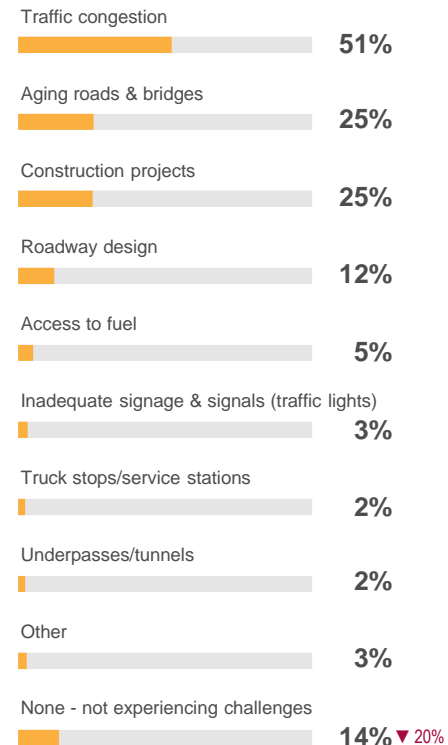
# INFRASTRUCTURE CHALLENGES

Traffic congestion reigns as the biggest infrastructure challenge while the number of respondents not experiencing any infrastructure challenges dwindles.



## MOST CHALLENGING INFRASTRUCTURE ISSUES

Select up to 2





# BUSINESS GOALS AND INVESTMENTS

Not surprisingly, increasing profits and reducing operational costs are top goals for construction. Fleet upgrades are a top investment area for meeting these goals.



## A FOCUS ON PEOPLE

Talent attainment, retention, and development (though lesser priority vs. 2017 and 2018) and customer experience are other key focus areas.



## TECHNOLOGY TURNDOWN

More efficient GPS tracking and regulatory compliant technology (presumably because compliance mandates have passed) are also lower priority.

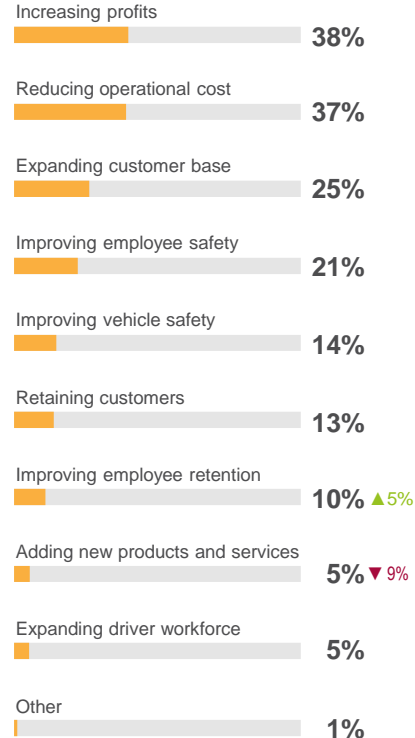


## BRAND AWARENESS

Levels are similar to 2018 levels but have declined significantly since 2017.

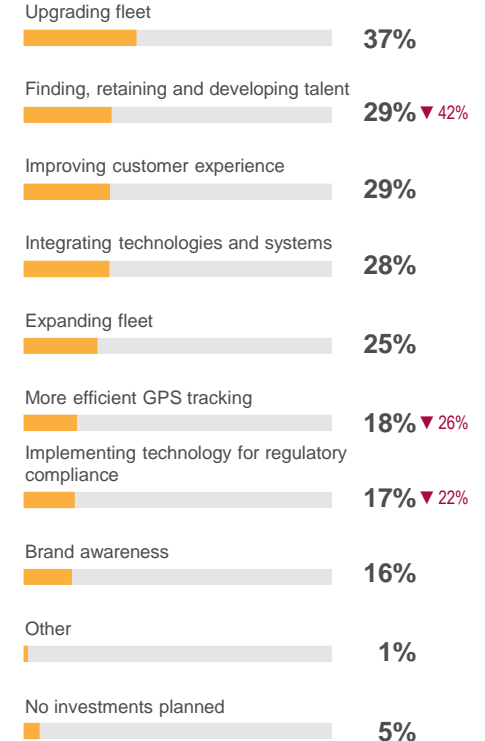
## TOP BUSINESS GOALS FOR 2019

Select up to 2



## INVESTMENTS PLANNED FOR 2019

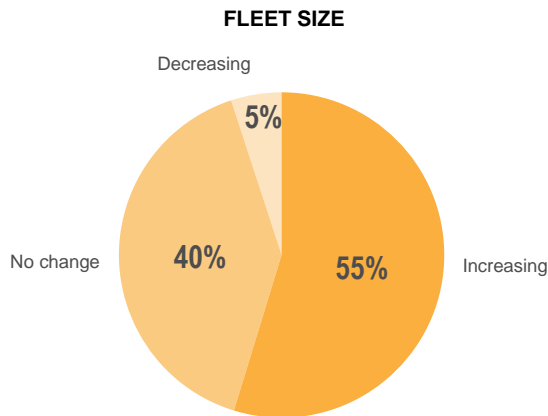
Select all that apply



# ECONOMIC GROWTH INCREASING FLEET

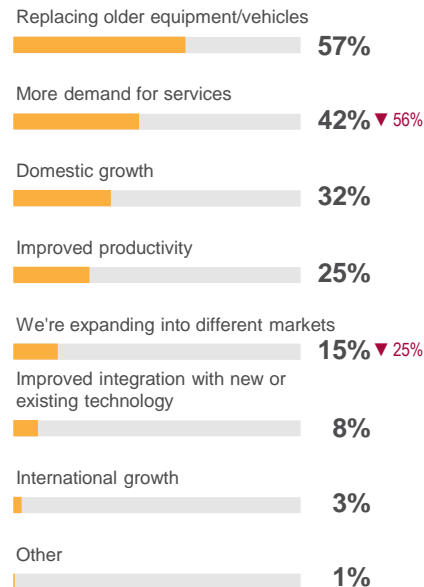
Majority of respondents have plans to increase equipment / fleet size over the next year, primarily by making new outright purchases to replace aging vehicles/equipment.

Service demands and market expansion are significantly less influential to fleet size increases than they were in 2018.



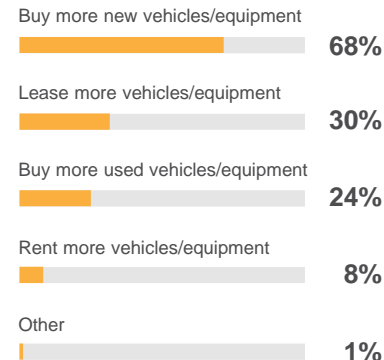
## REASONS FOR INCREASING FLEET SIZE

Select all that apply



## HOW FLEET SIZE WILL INCREASE

Select all that apply



A photograph of a construction site under a clear blue sky. In the foreground, a yellow wheel loader is parked on a dirt area next to a concrete curb. In the background, another yellow excavator is visible. A semi-transparent yellow rectangular box is overlaid on the center of the image, containing the word 'TELEMATICS' in white, bold, uppercase letters.

**TELEMATICS**



# TELEMATICS USAGE

Telematics usage has risen 11% since 2018 and continues to be used primarily to track vehicles and equipment, with monitoring of most other behaviors and practices on the decline.

Telematics functionality is, however, grossly underutilized, with companies using 3 (of 12 tested) features, on average.



## Average Fuel Reduction

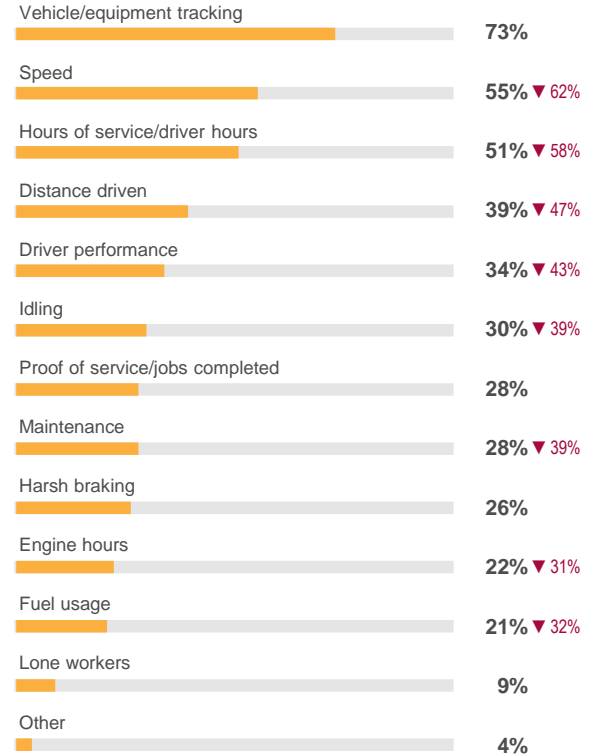
Average **13.3**

5%-10%	35%
11%-20%	16%
21%-30%	8%
31%-40%	1%
More than 40%	2%
None	38%

Of the 3 in 5 respondents who monitor fuel usage, the average fuel reduction is **13%**

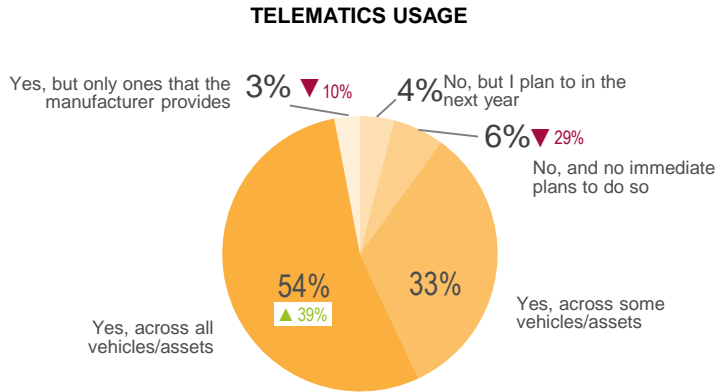
## WHAT IS MONITORED WITH TELEMATICS

Select all that apply



# TELEMATICS NON-ADOPTION

Few continue to resist telematics adoption; proportions of rejecters have declined 20% (29% vs. 10%) since benchmark tracking began in 2017. There has also been a sharp decline since 2018 in those unable to acknowledge the benefits of implementation.



Rejecters have decreased by 20% since 2017.

While resisters continue to cite cost as their biggest barrier, insufficient time to analyze results has climbed significantly since 2018.

## REASONS FOR NOT IMPLEMENTING TELEMATICS

Select all that apply

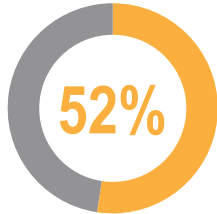


# TELEMATICS TOP BENEFITS

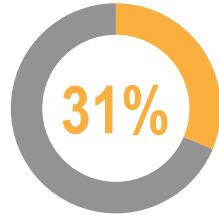
Select up to 3

Peace of mind around equipment and vehicle location is a top benefit and aligns with the primary reason for using telematics. Similar proportions of those who use telematics to monitor driver behavior indicate it is a top benefit, suggesting the technology works well for this purpose.

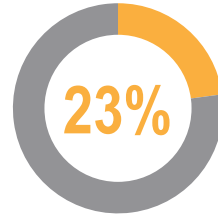
Peace of mind knowing where vehicles/equipment are



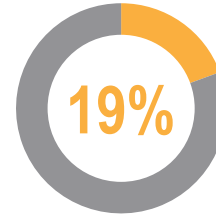
Improved driver/operator behavior



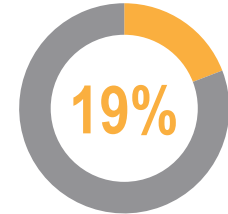
More efficient routing and dispatching



Time/cost savings



Improved driver safety



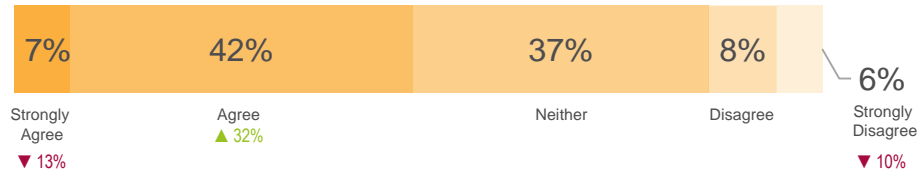
\*go to appendix Chart A to see all response options



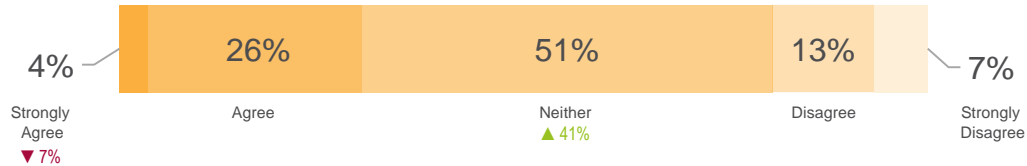
# TELEMATICS IMPACT

Uncertainty about quantifying revenue impact has grown. While half of companies agree they use telematics to improve jobsite performance, far fewer are able to quantify its impact. Strongly agree scores for both metrics have declined.

I use telematics to improve jobsite performance



I can quantify the revenue impact telematics has at my site



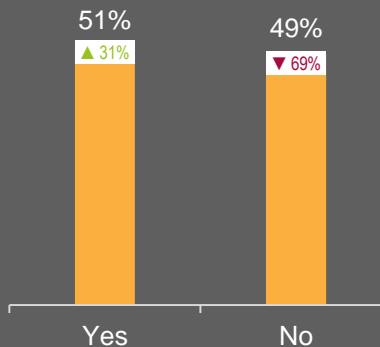
# TELEMATICS SAFETY

Telematics' impact on incident reduction has climbed significantly vs. years past, with a notable upward shift in incident insight and details.

More than a quarter cite driver monitoring, speed prevention, and driver productivity as top telematics-related safety benefits.

## FEWER INCIDENTS SINCE TELEMATICS ADOPTION

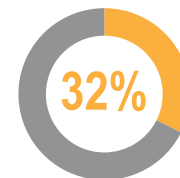
Impact on safety has grown significantly, with driver safety ranked 5<sup>th</sup> overall for telematics benefits.



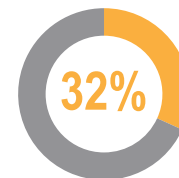
## TOP SAFETY BENEFITS OF USING TELEMATICS

Select up to 2

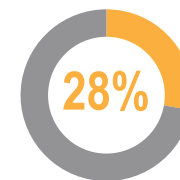
Monitoring and benchmarking driver behavior



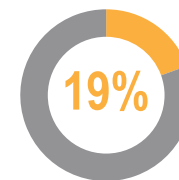
Speed prevention



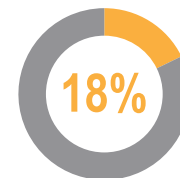
Improved driver productivity/efficiency



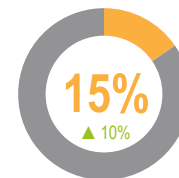
Monitoring hours to prevent driver fatigue/exhaustion



More insight into vehicle performance/maintenance needs



Incident insight/details



A large yellow wheel loader is positioned in the foreground, facing right. Behind it, a grey dump truck is parked. The scene is set in a dark, rocky mine tunnel with a high, textured rock ceiling and a floor covered in dark material. A large, semi-transparent orange rectangle with a white border is centered over the image, containing the text "TECHNOLOGY AND SECURITY" in white, bold, uppercase letters.

# TECHNOLOGY AND SECURITY





# TECHNOLOGY IMPLEMENTATION & IMPACT

Driver warning / alerting tops the list of technologies to be implemented, with nearly one-quarter considering it, and is expected to have the greatest operational impact.

Very few plan to implement autonomous driving vehicles and feel the nascent technology won't affect business until about 2028.

**9.6**  
 AVERAGE YEARS UNTIL  
 AUTONOMOUS DRIVING  
 EXPECTED TO IMPACT  
 BUSINESS



## POTENTIAL 2019 IMPLEMENTATION

Select up to 2

Driver warning/alerting technology	23%
Fatigue monitoring	15%
Big data analytics	10%
Drones	8%
Artificial intelligence	5%
Machine vision technology	4%
Platooning	2%
Autonomous/self-driving vehicles/equipment	2%
Smart cities	1%
Other	2%
None	50%

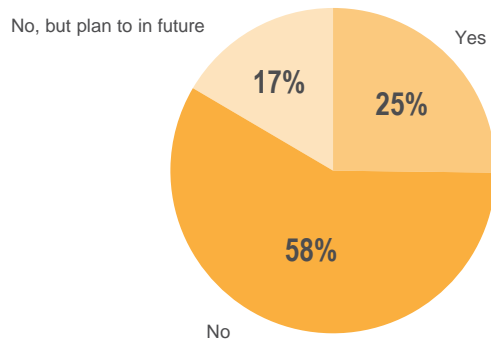
## GREATEST IMPACT ON OPERATIONS

Driver warning/alerting technology	34%
Fatigue monitoring	16%
Big data analytics	12%
Drones	8% ▼ 14%
Artificial intelligence	10%
Machine vision technology	4% ▼ 11%
Platooning	0%
Autonomous/self-driving vehicles/equipment	14%
Smart cities	6%
Other	1%
None	24%

# BIG DATA ANALYTICS USAGE

One-quarter are using big data analytics to guide strategic business decision making, up significantly vs. 2017. However, using big data to forecast hiring needs is a distant second to manual processes, but has been climbing. Lack of internal expertise / resources may be to blame.

**BIG DATA USED FOR STRATEGY DEVELOPMENT**



## Forecasting Business Hiring Needs

Select all that apply

Manually pulling records/paper-based processes  
42%



Tools for big data analysis  
20%

Guessing  
12%

Other  
6%

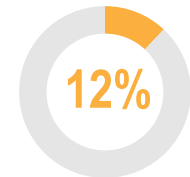
Not currently doing this  
29%

Big Data is becoming more common place as companies look for ways to improve efficiencies and increase profits. More businesses see Big Data as an important tool for success.

## CONSIDERING IMPLEMENTING BIG DATA ANALYTICS IN 2019



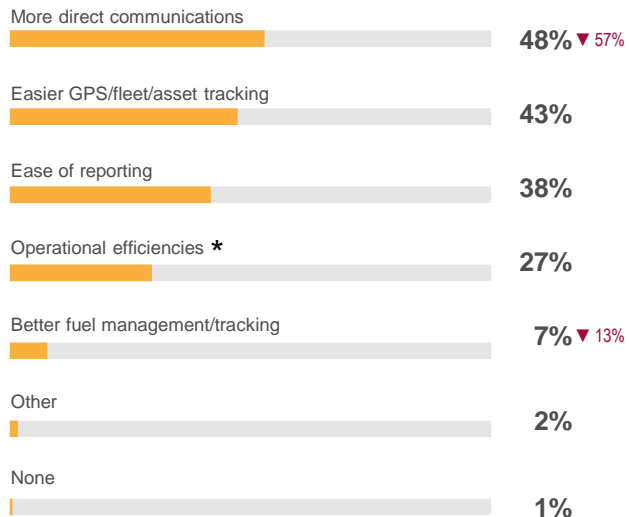
## BIG DATA ANALYTICS WILL HAVE GREATEST IMPACT ON BUSINESS OPERATIONS



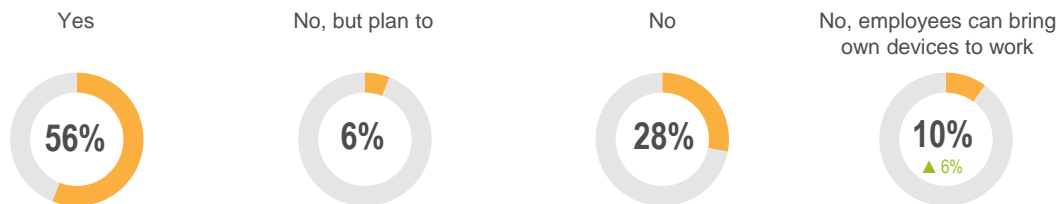
# TECHNOLOGY / MOBILE DEVICES

## MOST IMPORTANT MOBILE TECHNOLOGY EFFICIENCIES/ BENEFITS

Select up to 2



## MOBILE DEVICES/TECHNOLOGY ARE OFFERED TO DRIVERS/EQUIPMENT OPERATORS FOR FLEET ASSET MANAGEMENT



Majority of companies offer mobile technology to drivers and operators facilitating direct communications and improved asset tracking.





# SECURITY CONCERNS

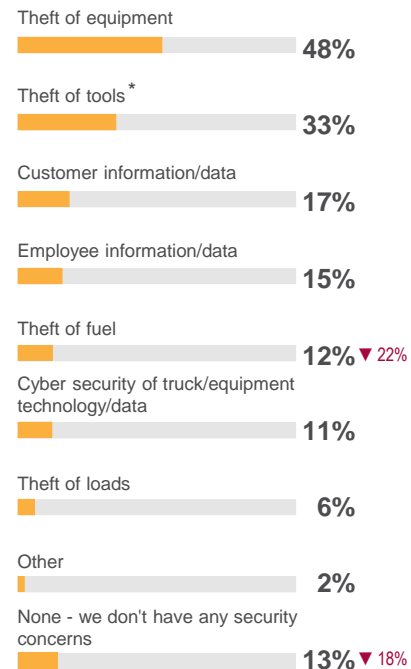
Physical theft of equipment and tools top the list of security concerns.

Fuel theft concerns have declined considerably since 2018.



## BIGGEST SECURITY CONCERNS

Select up to 2



A photograph of a worker in profile, wearing a yellow hard hat and a safety vest, talking on a mobile phone and holding a tablet. The background shows an industrial facility with power lines and towers under a clear sky. A semi-transparent orange box with a white border is overlaid on the image, containing the word "TALENT" in white capital letters.

TALENT

# TALENT RECRUITMENT

Half plan to increase drivers and equipment operators. Fleet and equipment operations additions, which have been steadily climbing, are up significantly compared to the past two years.

Primary recruitment methods are online job boards and referrals.

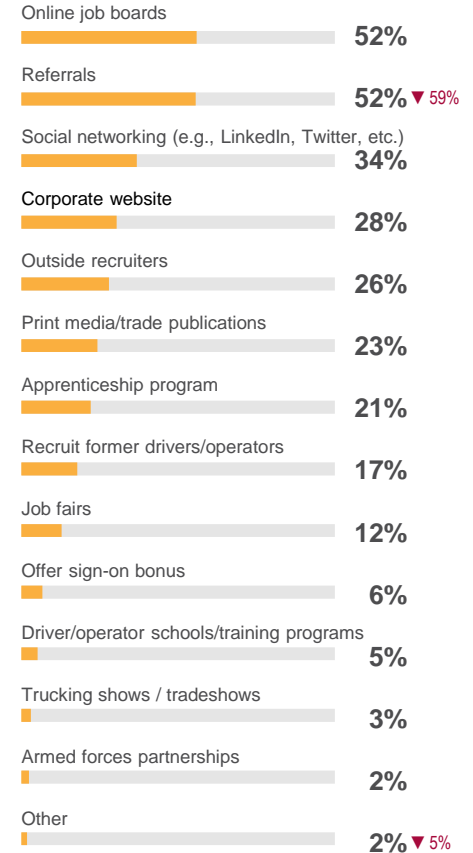


## Planned Staff Increases

Select all that apply

Drivers/Equipment operators	51%	
Fleet/Equipment operations	20%	▲ 13%
Maintenance managers/professionals	18%	
Safety/Compliance professionals*	11%	
Telematics professionals	6%	
Dispatchers	6%	
Technology experts	6%	
Other	1%	
None	30%	

## RECRUITMENT METHODS *Select all that apply*

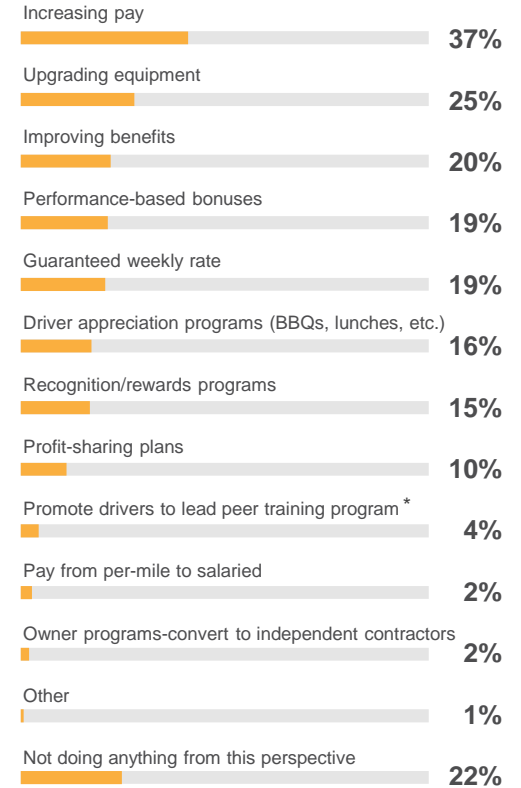


# TALENT RETENTION

Although not a top business goal, improving employee retention is up vs. 2018. Primary retention tool is pay increases. Four of the top five tactics are monetarily-linked.



## RETENTION METHODS *Select all that apply*



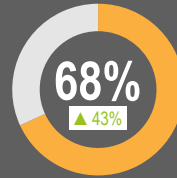


# DRIVING BEHAVIOR

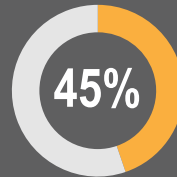
Majority of companies are monitoring driving, with nearly half rewarding drivers, a practice that has been steadily gaining momentum since tracking began in 2017. Such rewards have resulted in improved safety and retention.



## MONITORING DRIVER BEHAVIOR

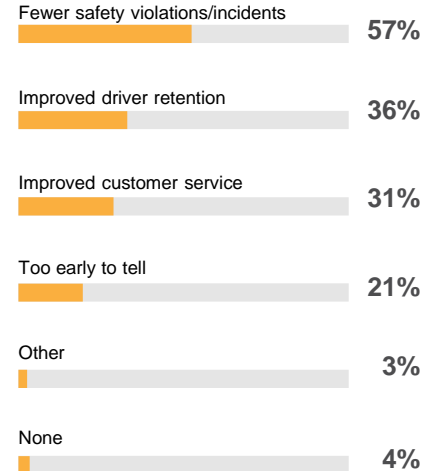


## REWARDING SAFE DRIVING



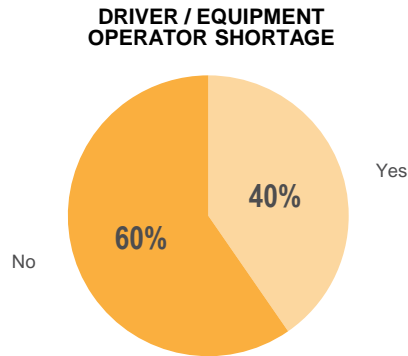
## RESULTS OF SAFE DRIVER REWARDS

Select all that apply



# DRIVER SHORTAGES

While less than half are currently experiencing operator shortages, pay increase is a top talent lure in times of need. Increased demand, if addressed at all, is solved by outsourcing both workers and equipment.



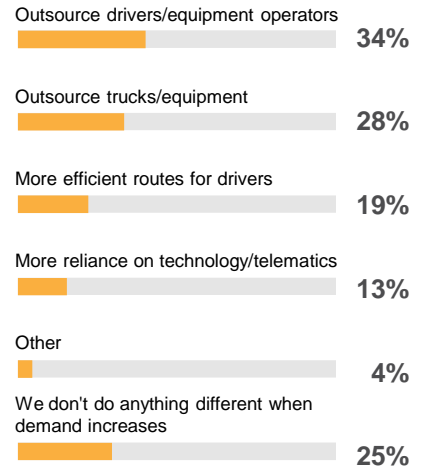
## HOW DRIVER/OPERATOR SHORTAGE IS ADDRESSED

Select all that apply



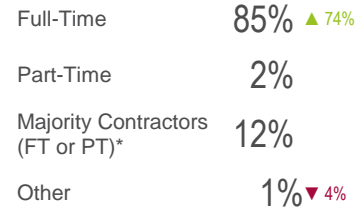
## METHODS FOR MANAGING INCREASED DEMAND FLUCTUATIONS

Select all that apply

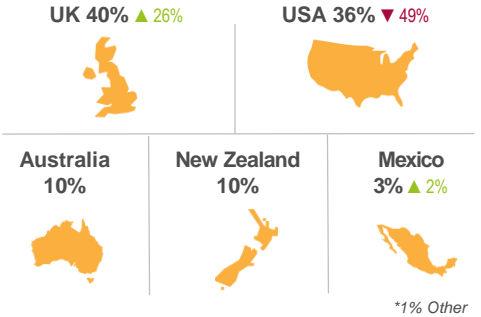


# RESPONDENT PROFILE

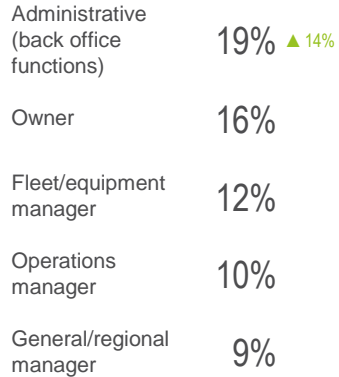
## DRIVER & EQUIPMENT OPERATOR WORKFORCE MAKE-UP



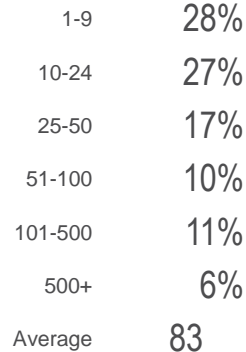
## COUNTRY



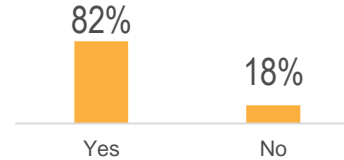
### ROLE\*



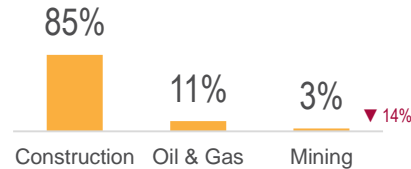
### VEHICLES IN FLEET



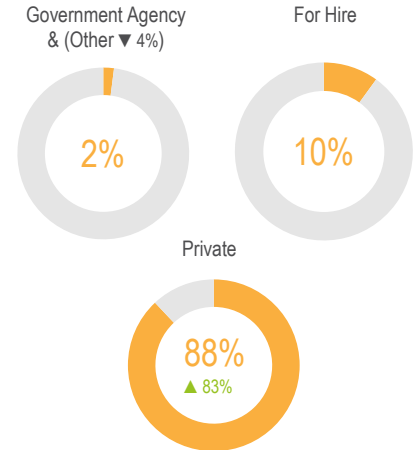
### MIXED FLEET



### INDUSTRIES



### FLEET OPERATIONS



\*See appendix Chart B for all response options

# APPENDIX

## Chart A

Top Telematics Solutions Benefits	
<i>Select up to 3</i>	
Peace of mind knowing where vehicles/equipment are	52%
Improved driver behavior	31%
More efficient routing and dispatching	23%
Time/cost savings	19%
Improved driver safety	19%
Improved customer service	17%
Meeting compliance requirements	16%
Reduced incidents/theft	9%
Fewer incidents	8% ▲ 3%
Reduced insurance premiums	7%
Reduced maintenance costs	7%
Improved fuel efficiency	6% ▼ 11%
Preventing fuel loss	5%
Fewer unexpected equipment failures	3%
Other	2% ▼ 8%
None*	4%

## Chart B

Role	
Administrative (back office functions)	19% ▲ 14%
Owner	16%
Fleet/equipment manager	12%
Operations manager	10%
General/regional manager	9%
Executive/vice president/managing director	6% ▼ 10%
Dispatcher/dispatch manager	6%
Safety manager	5%
Compliance manager	3%
Site manager	3%
Maintenance manager	2% ▼ 6%
Service technician/fleet maintenance	2%
Service manager	1%
Mine/quarry manager	<1% ▼ 2%
Production manager	<1% ▼ 2%
Other	6%



# TELETRAC NAVMAN



Teletrac Navman is a leading software-as-a-service (SaaS) provider leveraging location-based technology and services for managing mobile assets. With specialized solutions that deliver greater visibility into real-time insights and analytics, Teletrac Navman helps companies make better business decisions that enhance productivity and profitability. Its fleet and asset management technology uncovers information that would otherwise go unseen, helping customers reduce risk and confidently move their business forward with certainty. It tracks and manages more than 550,000 vehicles and assets for more than 40,000 companies around the world. The company is headquartered in Glenview, IL, with additional offices in the United States, United Kingdom, Australia, New Zealand and Mexico.

## CONTACT US

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