

# 2018 TELEMATICS BENCHMARK REPORT

TELETRAC NAVMAN



GLOBAL CONSTRUCTION EDITION



## Foreword

The Teletrac Navman 2018 Telematics Benchmark Survey was conducted in January 2018. More than 2,400 fleet operations and fleet management professionals participated in the survey, with 646 contributing their expertise in construction, mining, oil and gas to form this report. Their responses help identify trends and best practices in the industry on a global scale.

A review of the procedures used to compile these results can be found in the survey overview and methodology section at the end of this report.

This year, near-future safety technology is the trend, instead of pioneering “futuristic” technology like autonomous vehicles and artificial intelligence. Big data also took a hit this year as organizations focus more on tangible concerns such as equipment theft. Other major themes are below.

### KEY THEMES



For a second consecutive year, managing costs and payroll remain at the top of the list for construction organizations as their main business challenge and expense, respectively.



Traffic congestion continues to be the most challenging infrastructure issue facing organizations.



More than three-quarters of respondents either currently use telematics or plan to do so in the next year. Of the respondents who have implemented telematics, more than half have realized fuel cost savings.



Driver warning/alerting technology takes the lead as emerging technology that is both top of mind for organizations in 2018 and expected to have the greatest impact on business operations in the future.



Increasing material and labor costs remains the top construction concern, while commercial construction became the primary growth opportunity in the industry.



Finding, retaining and developing talent is the second biggest challenge for organizations after managing costs. The main incentive organizations implement to address driver/operator shortage and retain current drivers/operators is financially oriented.



## Organizations' top business challenges in 2018

Managing costs remains at the top of the list. Finding, retaining and developing talent increased by 13 percent from last year. Of the current respondents, New Zealand (43 percent) and the United States (39 percent) are the regions facing the greatest issues around talent acquisition and management.

### TOP BUSINESS CHALLENGES

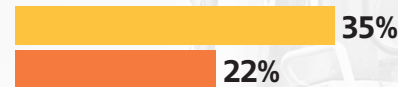
(Respondents could select up to two answers. Driver fatigue was a new answer choice in 2018.)

2018  
2017

#### Managing costs



#### Finding, retaining and developing talent



#### Growing revenue



#### Business expansion



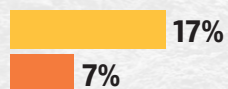
#### Minimizing vehicle/driver incidents



#### Risk management



#### Regulatory changes



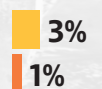
#### Customer retention



#### Driver fatigue management



#### Other



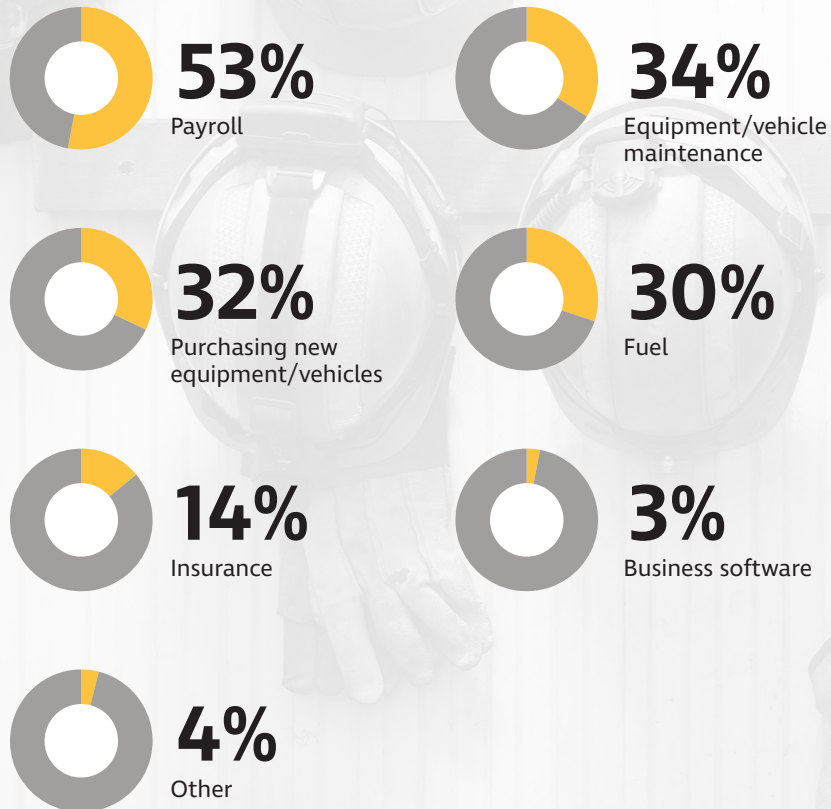
Three other categories also experienced significant increases: minimizing vehicle/driver incidents, risk management and regulatory changes.

## Organizations' top business goals reflect largest expenses for 2018

Payroll remains the biggest cost for construction organizations for a second year. Echoing expense areas, financial considerations are tied at the top for key business objectives respondents will pursue this year. The results suggest respondents are trying to be more efficient with their current fleet to improve margins.

### LARGEST EXPENSE AREAS

(Respondents could select up to two answers.)



### TOP BUSINESS GOALS

(Respondents could select up to two answers.)



## Organizations seek to invest in talent

Expanding fleets increased by nine points from last year's results, while brand awareness dropped by eight points. With the construction market anticipated to grow at 4.2 percent CAGR from 2018 to 2023<sup>1</sup>, finding, retaining and developing talent will continue to be a theme as fleets expand.

### PLANNED INVESTMENTS

(Respondents could select all that apply.)

2018  
2017

Finding, retaining and developing talent



Upgrading fleet



Integrating technologies and systems



Expanding fleet



Improving customer service



More efficient GPS tracking



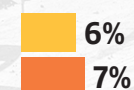
Implementing technology for regulatory compliance



Brand awareness



No investments planned



Other

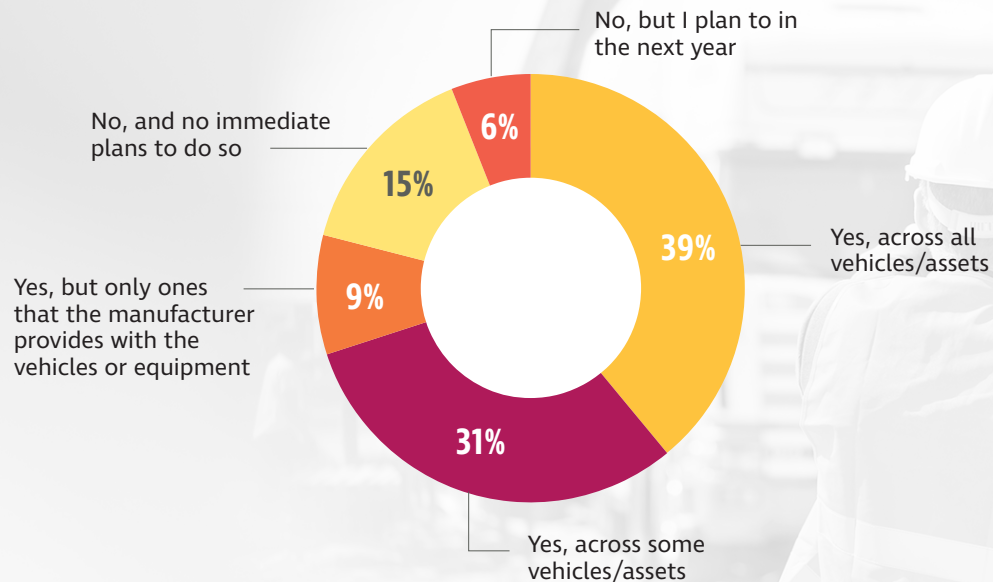


1. <https://www.researchandmarkets.com/research/sb5fmj/growth?w=5>

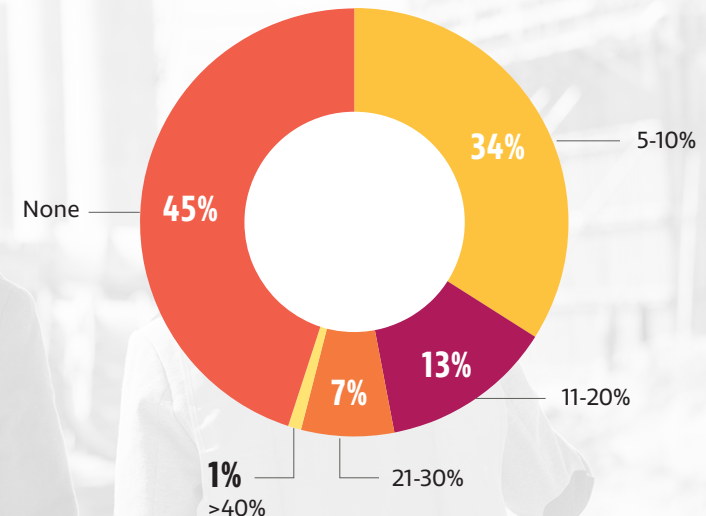
## Implementing telematics creates cost savings

Eighty-five percent of organizations either currently use telematics or plan to do so in the next year. Of the respondents who have implemented telematics, more than half (55 percent) have reduced fuel costs across their fleet.

ORGANIZATIONS CURRENTLY USING A TELEMATICS SOLUTION



FUEL COST REDUCTION SINCE IMPLEMENTING TELEMATICS



In addition to saving on fuel, organizations have been able to assess the overall effect on revenue on their job site with telematics. Provided a 5-point "Agreement" scale where 1 is "Strongly Disagree" and 5 is "Strongly Agree", respondents scored their level of agreement on whether or not they can quantify the revenue impact

telematics has on their job site. Their scores resulted in a mean average of 3.08, indicating that they are fairly likely to be able to measure the revenue impact of telematics at their site. The number of respondents who strongly agree increased four points from last year.



## Vehicle/equipment tracking takes the lead as the top telematics monitoring metric

Of the respondents who have implemented telematics, a variety of use cases are realized for their organizations. While there are dramatic shifts in 2018 with increases for idling and harsh braking, and a significant decrease in proof of service/jobs completed, the majority of companies are only using a fraction of telematics functionality.

### WHAT ORGANIZATIONS MONITOR WITH TELEMATICS

(Respondents could select all that apply. Lone worker was a new answer choice in 2018.)

2018  
2017

#### Vehicle/equipment tracking



#### Distance driven



#### Maintenance



#### Engine hours



#### Other



#### Speed



#### Driver performance



#### Fuel usage



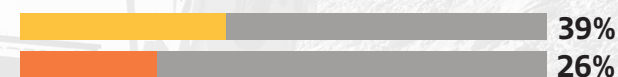
#### Proof of service/jobs completed



#### Hours of service/driver hours



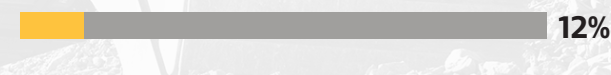
#### Idling



#### Harsh braking



#### Lone workers



With the implementation of the electronic logging device mandate by the United States Department of Transportation in December 2017, the U.S. is the most likely region (67 percent) to monitor driver hours while Australia is the least likely

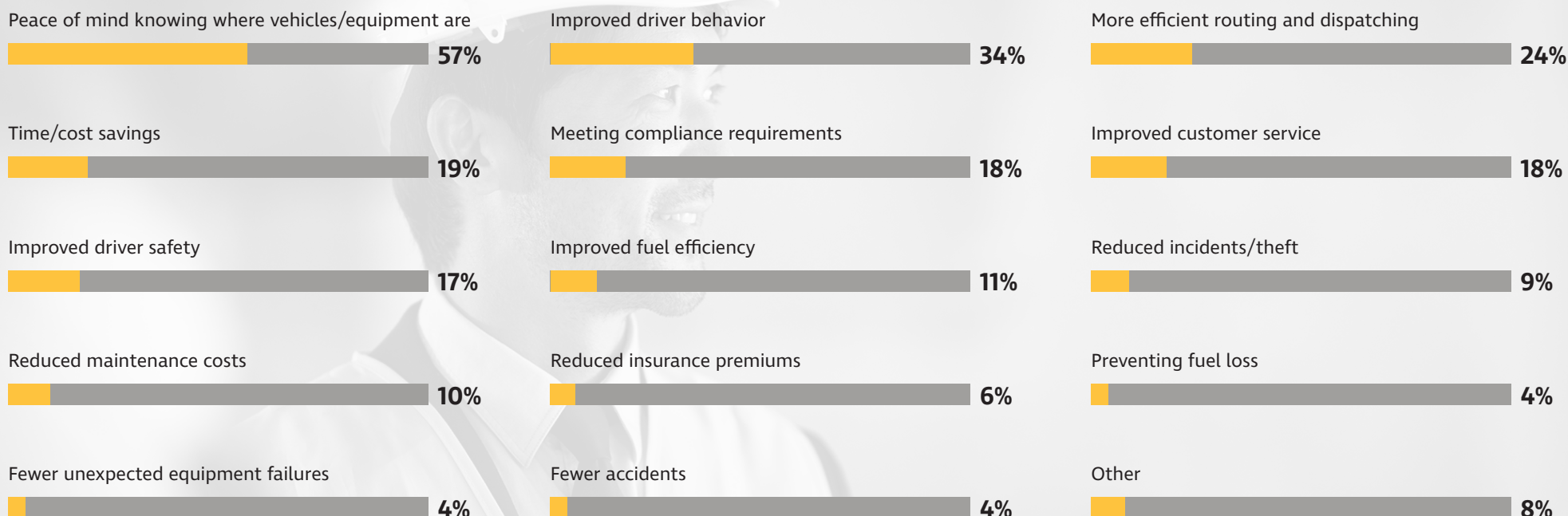
(33 percent) to use telematics to monitor Hours of Service. Construction organizations in the U.S. are largely adjusting the way they plan transportation logistics for over the road drivers as ELDs might prolong transit times.

# Construction organizations recognize benefits of telematics

While more than half of companies indicate having peace of mind of knowing where their vehicles and equipment are located, many companies are leveraging advanced telematics functions to drive greater profit and efficiency.

## TOP BENEFITS OF USING TELEMATICS

(Respondents could select up to three answers.)



Doug King, Corporate Equipment Manager at Sherwood Construction shared how he was able to track down two pieces of stolen equipment using GPS asset tracking and experience cost savings. "The location data also let us locate one stolen loader

backhoe and one skid steer. That would have cost the company over \$160,000, and recovering either one of them by themselves would have paid for the entire system," said King.<sup>2</sup>

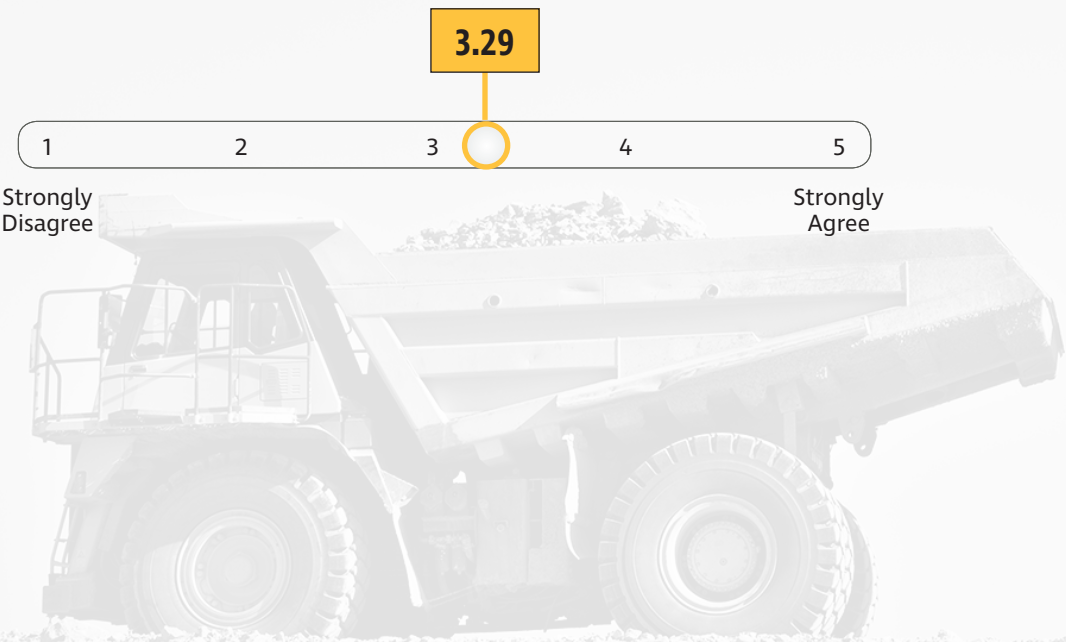
2. [https://www.telettracnavman.com/blog/outside\\_voices\\_sherwood\\_construction](https://www.telettracnavman.com/blog/outside_voices_sherwood_construction)

# Organizations realize improved site performance and safety with telematics

Seventy-nine percent of respondents indicated that they interact with their telematics solution for two hours or less per day. For this relatively short amount of time, companies are experiencing improved job site performance and a range of safety benefits by using telematics.

## ORGANIZATIONS USE TELEMATICS TO IMPROVE JOB SITE PERFORMANCE

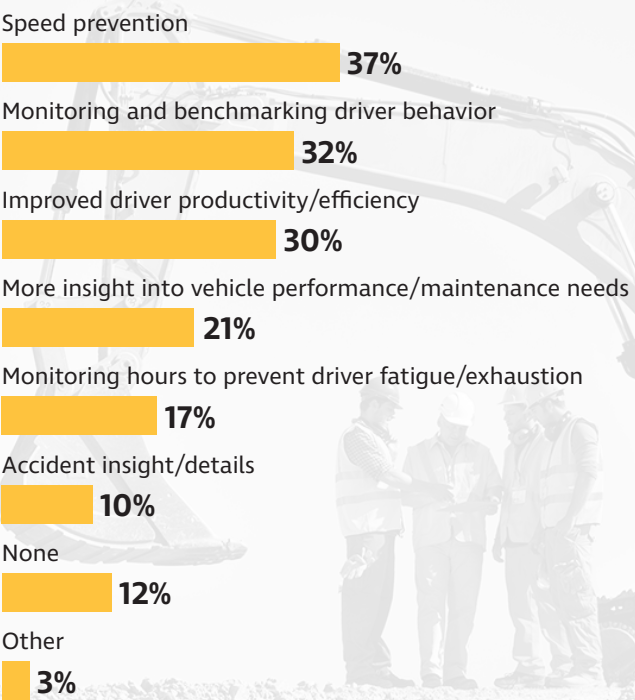
(Respondents provided scores based on a 5 point "Agreement" scale.)



While the average respondent only somewhat agrees they use telematics to improve job site performance, telematics power users are emerging. The number of respondents who strongly agree increased seven points from last year.

## TOP SAFETY BENEFITS REALIZED BY USING TELEMATICS

(Respondents could select up to two answers.)

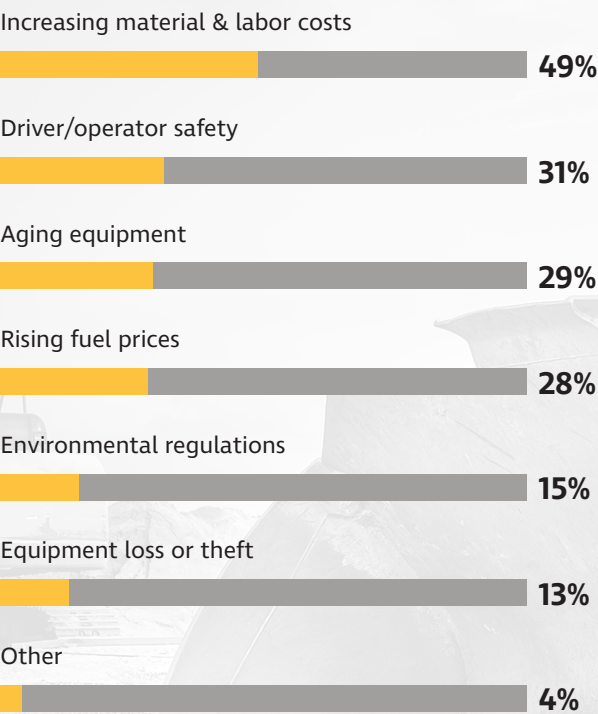


# Fleet growth expectations indicate positive outlook

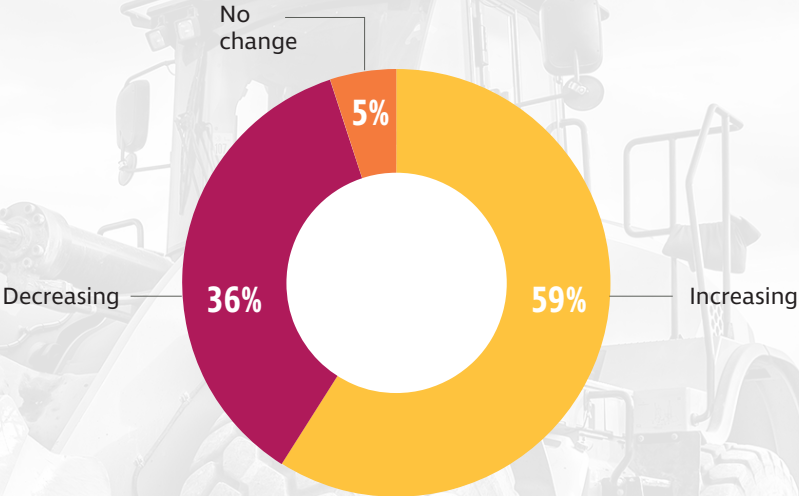
Despite increasing material and labor costs, more than half of organizations plan to increase their fleet size over the next year.

## TOP CONSTRUCTION COMPANY CONCERNS

(Respondents could select up to two answers.)



## CHANGES BEING MADE TO EQUIPMENT/FLEET SIZE OVER NEXT YEAR



Increasing material and labor costs remains the top construction concern for a second consecutive year.

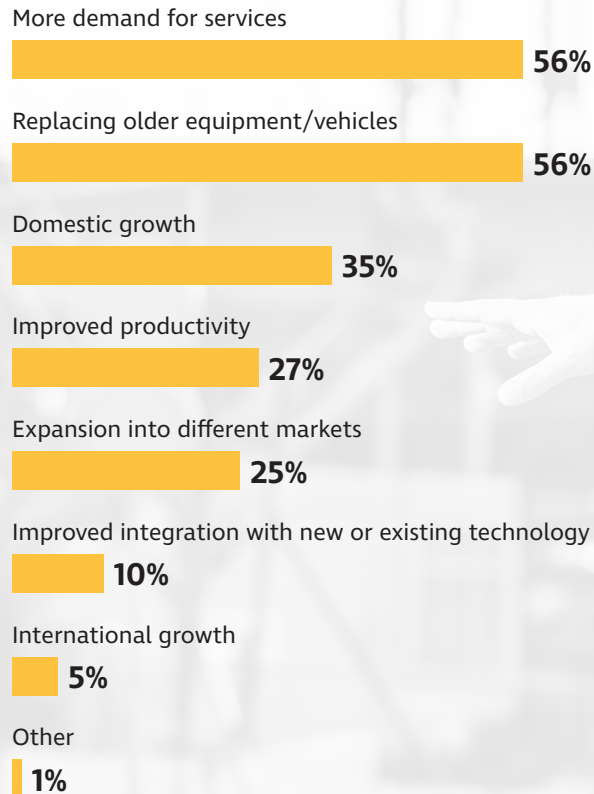


## Organizations meet demand and replace older assets while expanding fleet size

Respondents indicate extensive optimism in the market as more than half experience increased demand for services, while 35 percent cite domestic growth and 25 percent indicate expansion into different markets as reasons to increase their fleet size over the next year.

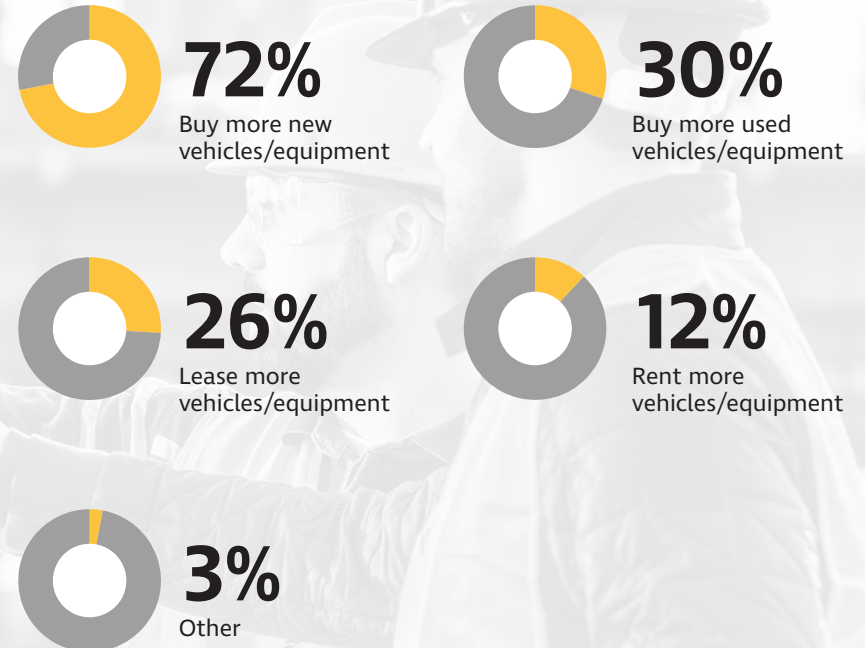
### WHY ORGANIZATIONS ARE INCREASING THE SIZE OF THEIR FLEET OVER THE NEXT YEAR

(Respondents could select all that apply.)



### HOW ORGANIZATIONS WILL INCREASE THE SIZE OF THEIR FLEET OVER THE NEXT YEAR

(Respondents could select all that apply.)

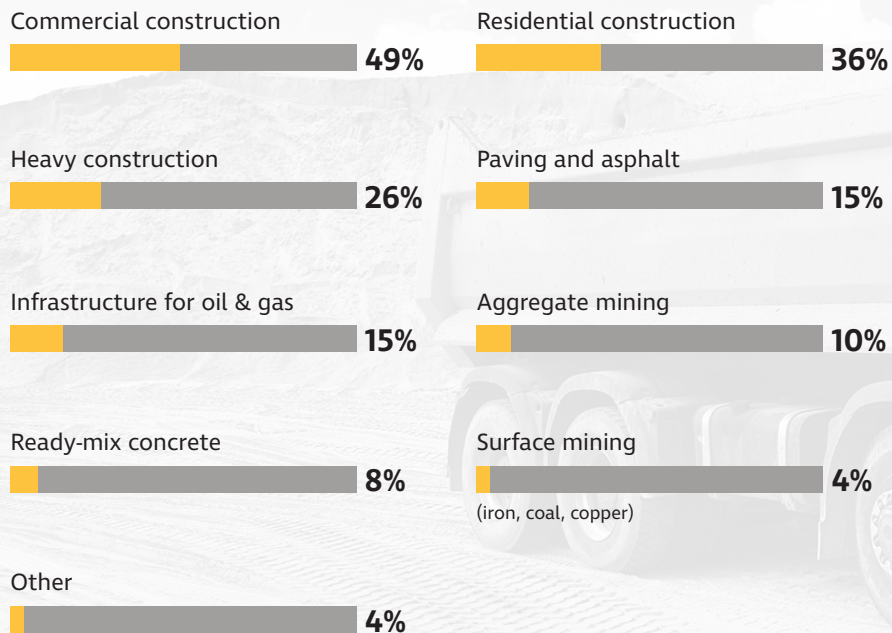


# Commercial construction tops the list for growth opportunities while organizations are challenged with traffic congestion

Residential construction fell 16 percent from 2017, dropping it as the number one segment for growth. And for a second year in a row, traffic congestion remains the most challenging infrastructure issue respondents are facing.

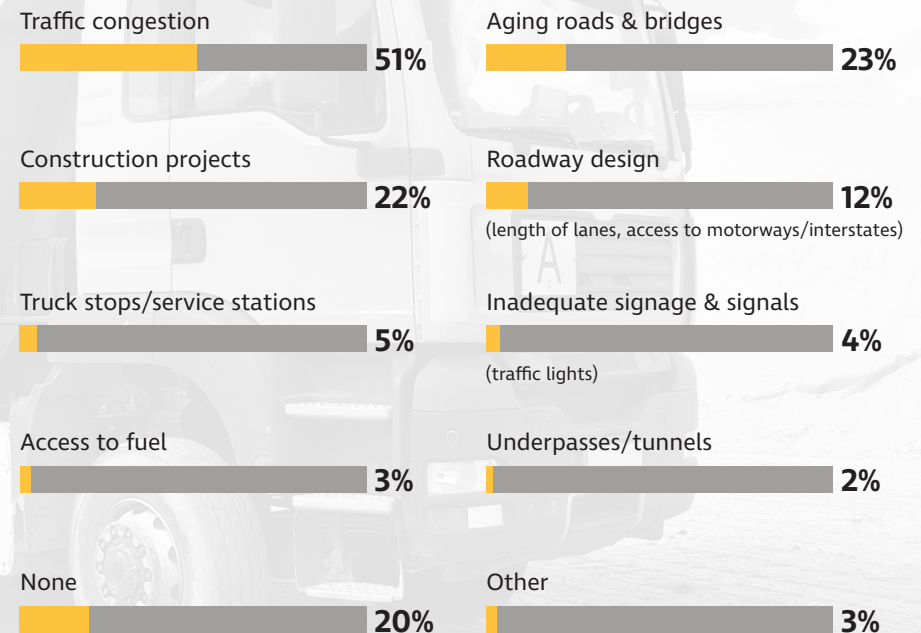
## CONSTRUCTION SEGMENTS WITH THE MOST GROWTH OPPORTUNITY

(Respondents could select up to two answers.)



## MOST CHALLENGING INFRASTRUCTURE ISSUES

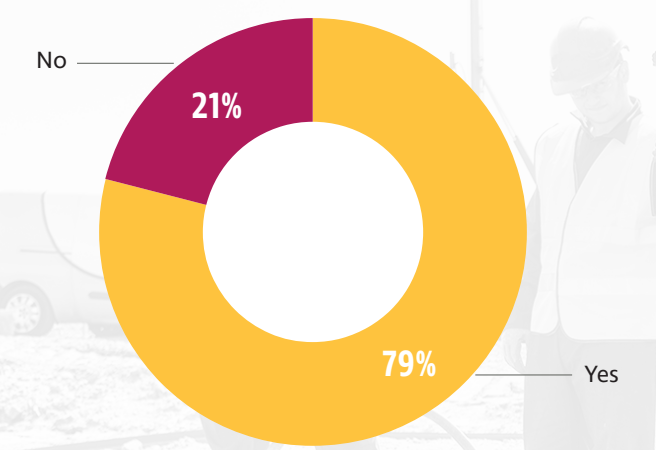
(Respondents could select up to two answers.)



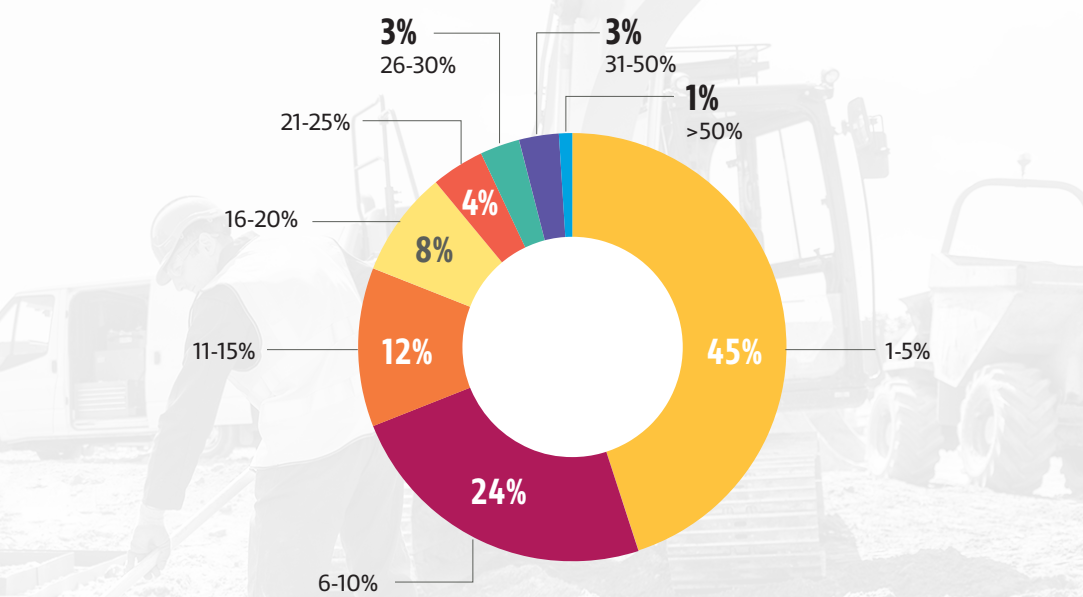
# Majority of organizations have a mixed fleet and experience unexpected equipment failure

Approximately two-thirds of construction organizations have a mixed fleet of vehicles and equipment. More than 50 percent of companies experience equipment failure on six percent or more of their assets, creating major costs and inconvenience for business.

THOSE THAT HAVE A MIXED FLEET



PERCENTAGE OF EQUIPMENT THAT EXPERIENCES UNEXPECTED FAILURE EACH YEAR



The impact of equipment downtime can also reflect delays in construction projects: "The figures, compiled by BIS, CITB, Constructing Excellence and Glenigan, show that the industry's ability to deliver on time fell from 45 percent in 2014 to 40 percent this year."<sup>3</sup>

3. <http://www.constructionmanagemagazine.com/news/client-satisfaction-dips-60-construction/>

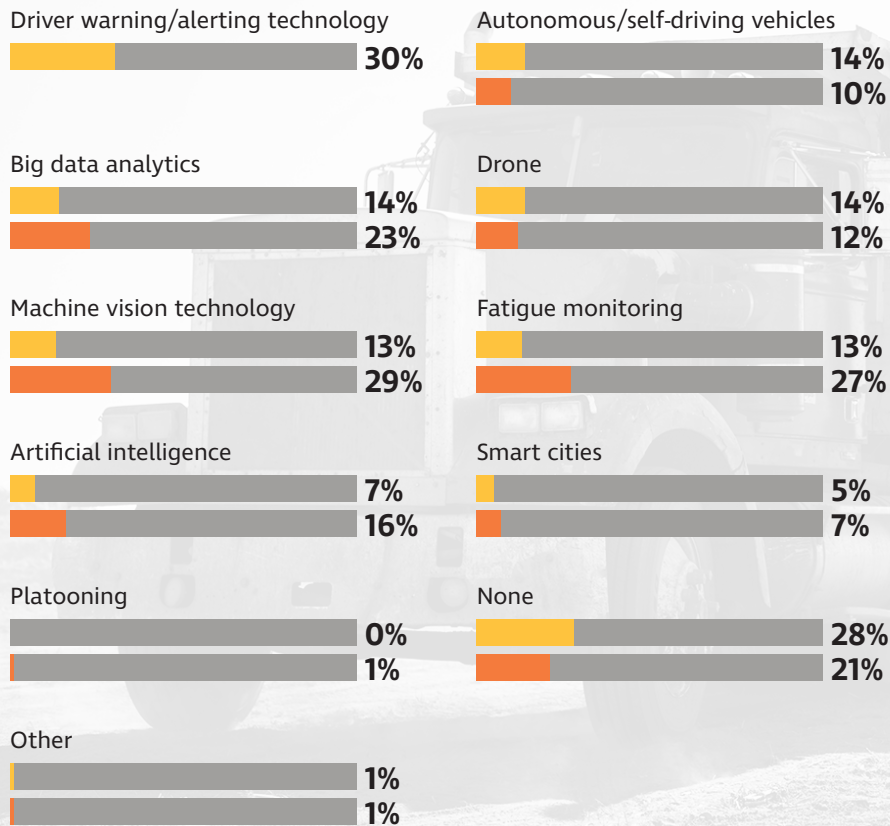
## Construction organizations seek near-term safety technology

With driver warning and alerting technology in the lead and less than half of all respondents not considering implementing emerging technologies in 2018, organizations are focused on practical improvements. Machine vision and artificial intelligence both experienced decreases, suggesting respondents are pursuing safety technology that can impact the business in an immediate manner, instead of long-term “futuristic” technology.

### EMERGING TECHNOLOGIES EXPECTED TO HAVE THE GREATEST IMPACT ON BUSINESS OPERATIONS IN THE FUTURE

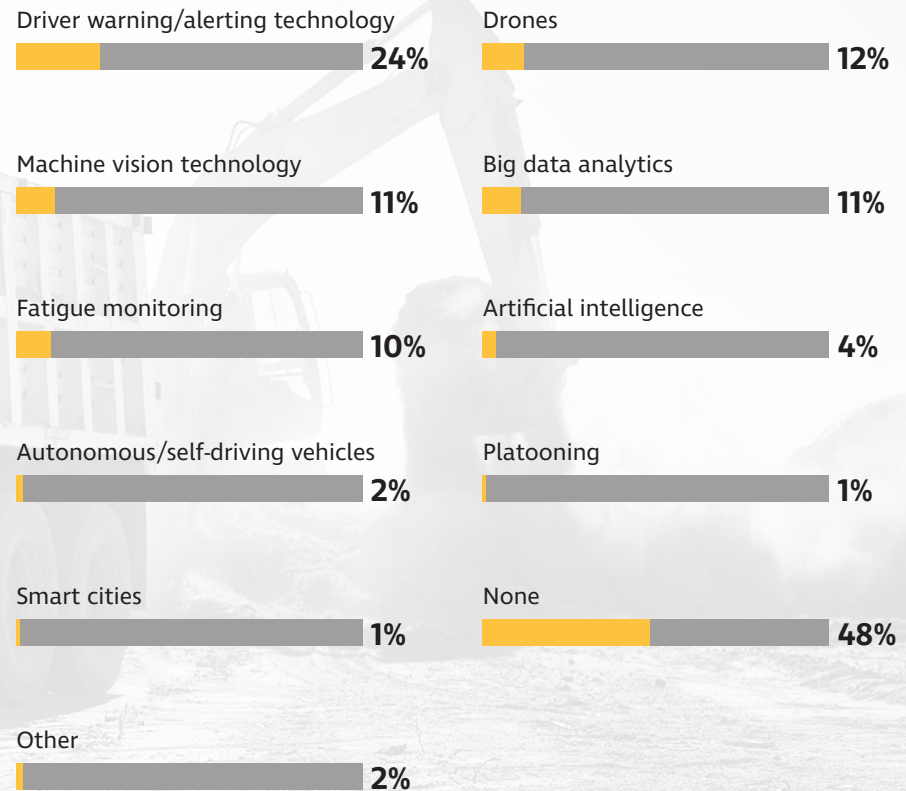
2018  
2017

(Respondents could select up to two answers. Driver warning/alerting technology was a new answer choice in 2018.)



### EMERGING TECHNOLOGIES THAT ARE BEING CONSIDERED FOR 2018 IMPLEMENTATION

(Respondents could select up to two answers. Driver warning/alerting technology was also a new answer choice in 2018.)

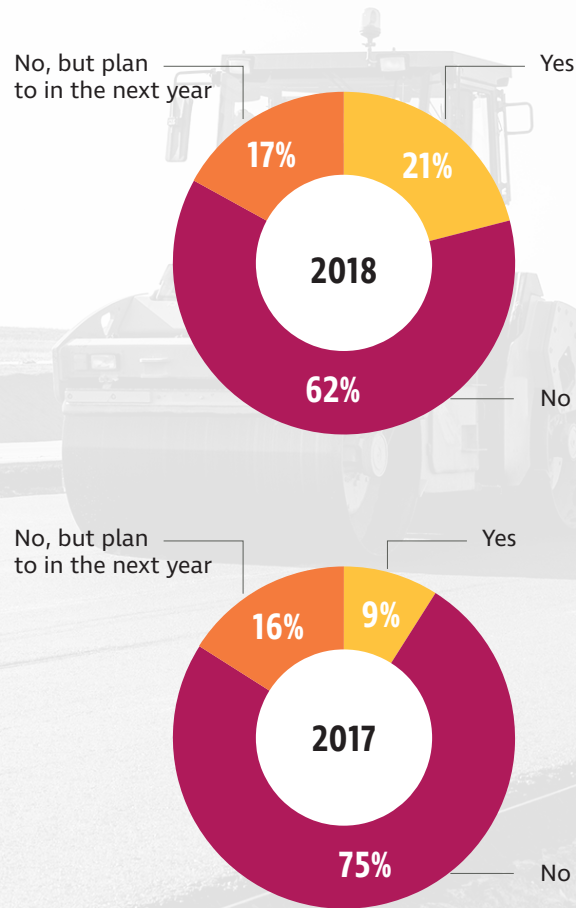




# Application of big data increases as theft of equipment tops security concerns

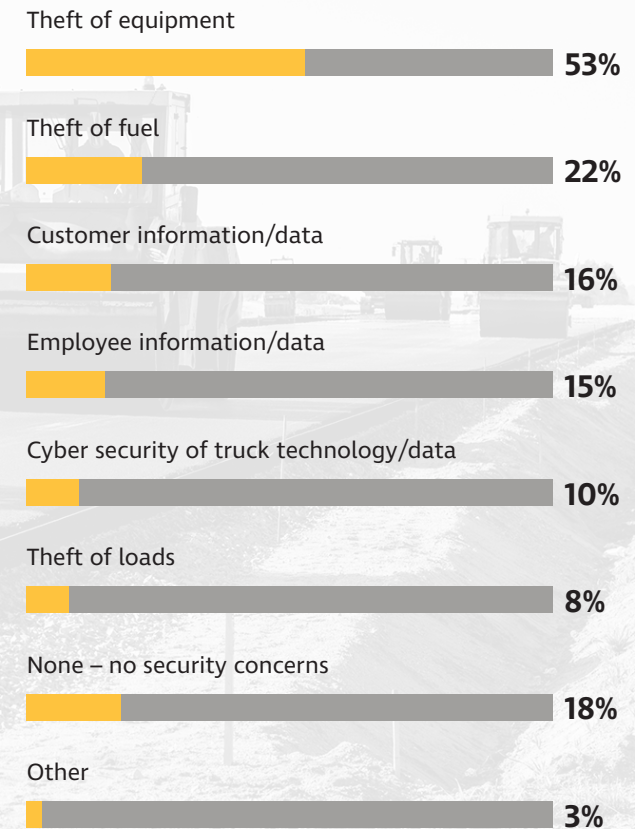
As organizations are concerned with a variety of security issues regarding theft, data and technology, the application of big data analytics into business operations increased by 12 percent and those planning on applying it in the next year increased by one percent.

## APPLYING BIG DATA ANALYTICS TO BUSINESS OPERATIONS



## TOP SECURITY CONCERNS

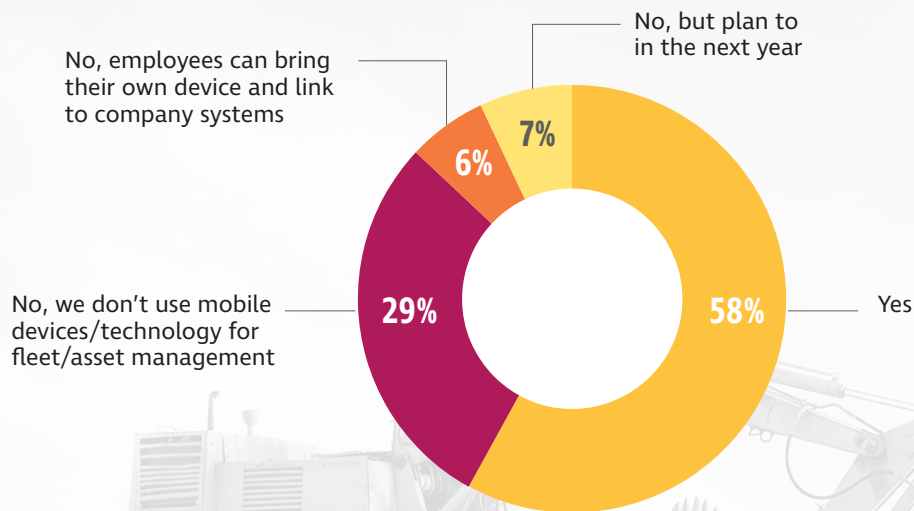
(Respondents could select up to two answers.)



# Construction organizations embrace mobile technology

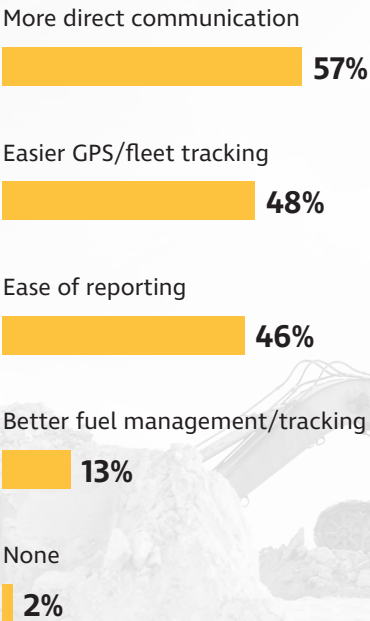
Sixty-five percent of respondents are currently offering mobile technology to their drivers/equipment operators for fleet/asset management or plan to in the next year. With this technology, organizations derive a variety of benefits, with better fuel management rising eight percent from last year.

## OFFER MOBILE TECHNOLOGY TO DRIVERS/EQUIPMENT OPERATORS FOR FLEET/ASSET MANAGEMENT



## MOST IMPORTANT EFFICIENCIES/BENEFITS OF MOBILE TECHNOLOGY

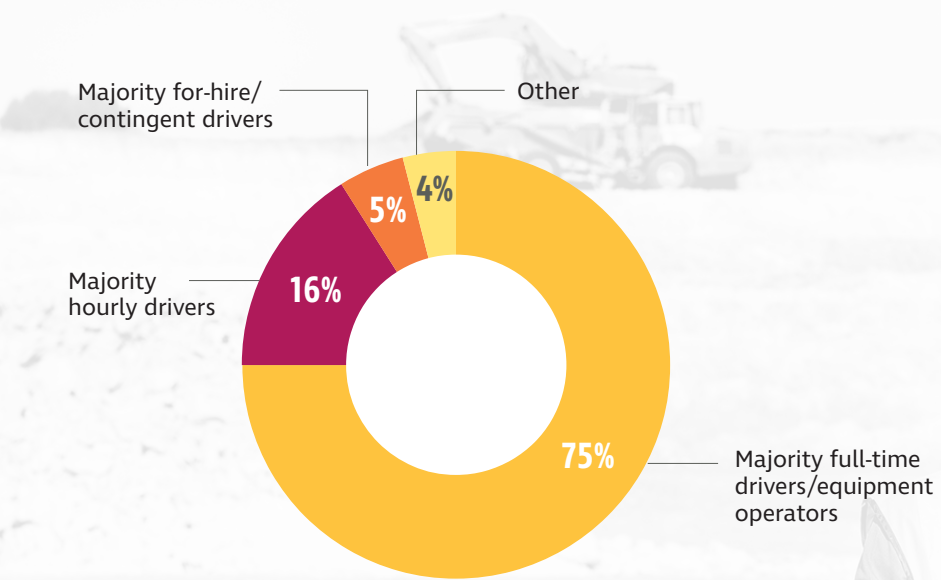
(Respondents could select up to two answers.)



# Paper-based processes continue to drive organizations' hiring needs

Three quarters of organizations say that the majority of their drivers and operators are working on a full-time basis. Companies are challenged with hiring and retaining talent as the market grows at 4.2 percent<sup>4</sup>, nearly 40 percent of organizations are forecasting their hiring needs by manually pulling records and/or using paper-based processes in 2018.

CURRENT MAKE-UP OF DRIVER/EQUIPMENT OPERATOR WORKFORCE



HOW ORGANIZATIONS ARE CURRENTLY FORECASTING HIRING NEEDS

(Respondents could select all that apply)

Manually pulling records/paper-based processes



Tools for big data analysis



Guessing



Not currently doing this



Other



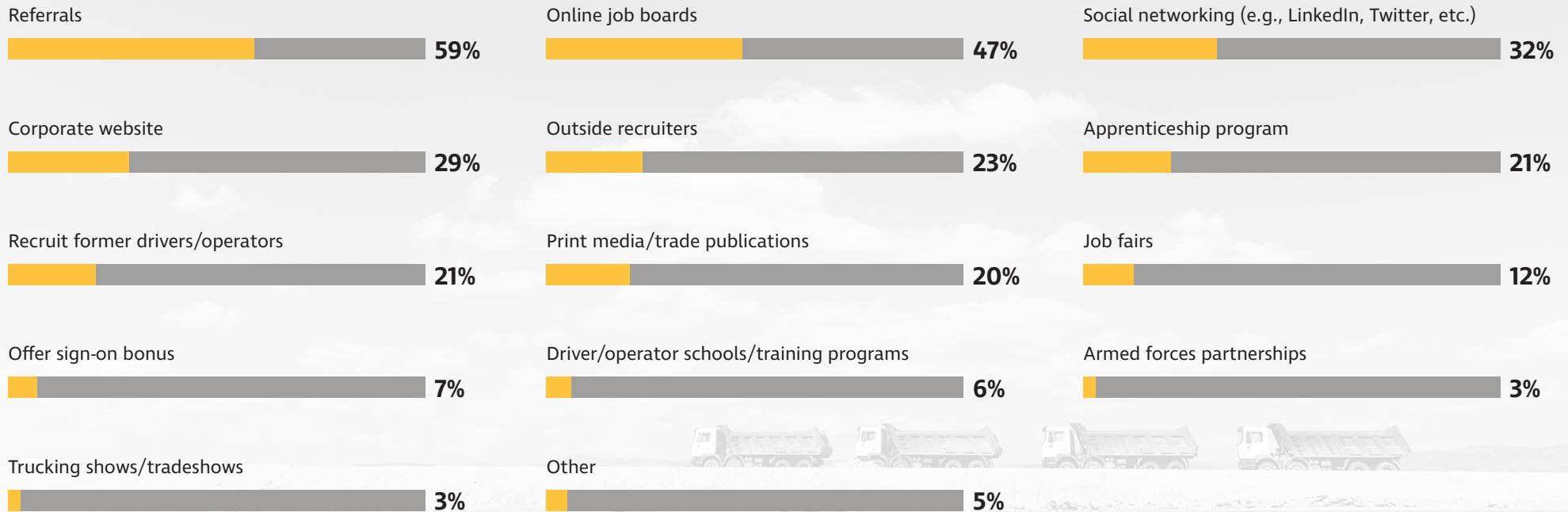
4. <https://www.researchandmarkets.com/research/sb5fmj/growth?w=5>

# Organizations use a wide range of sources to recruit, attract or find new employees

When organizations need to grow their workforce, respondents mainly use referrals, online job boards and social networking sites.

## HOW ORGANIZATIONS RECRUIT, ATTRACT OR FIND NEW EMPLOYEES

(Respondents could select all that apply.)





# Organizations address driver shortage by increasing pay, offering improved benefits and flexible work arrangements

Forty-two percent of construction organizations are experiencing a driver and/or operator shortage. Of this percentage, half of the respondents are increasing pay to address the issue. In order to retain current drivers, virtually all organizations are taking financially-oriented action, with the one exception being upgrading equipment.

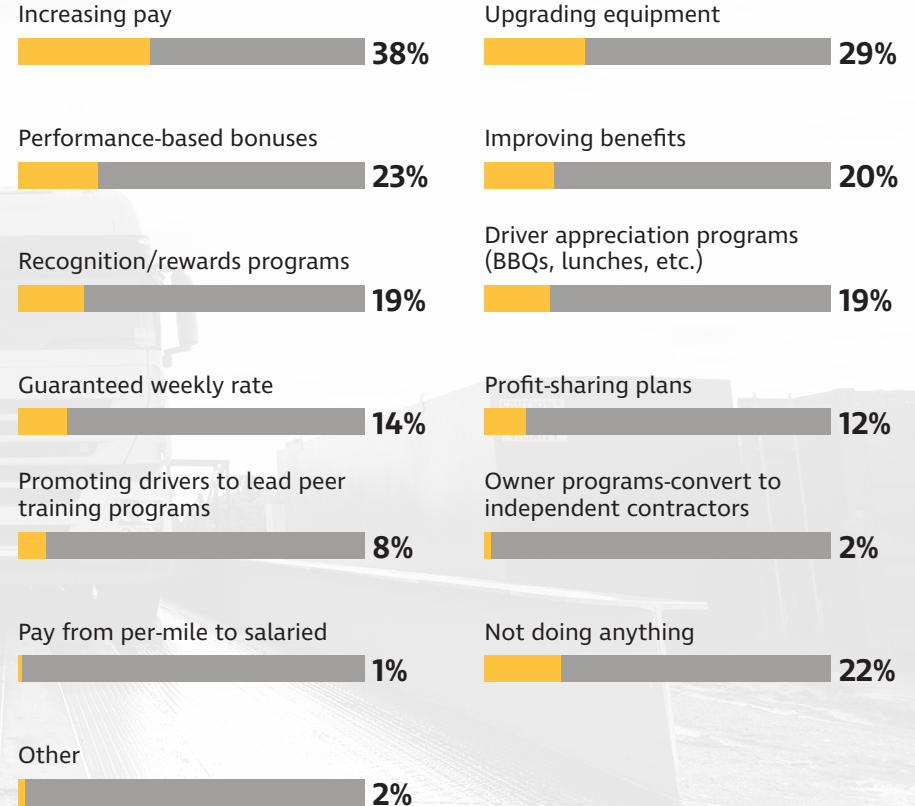
## HOW ORGANIZATIONS ARE ADDRESSING DRIVER/OPERATOR SHORTAGES

(Respondents could select all that apply.)



## WHAT ORGANIZATIONS ARE DOING TO RETAIN CURRENT DRIVERS/OPERATORS

(Respondents could select all that apply.)

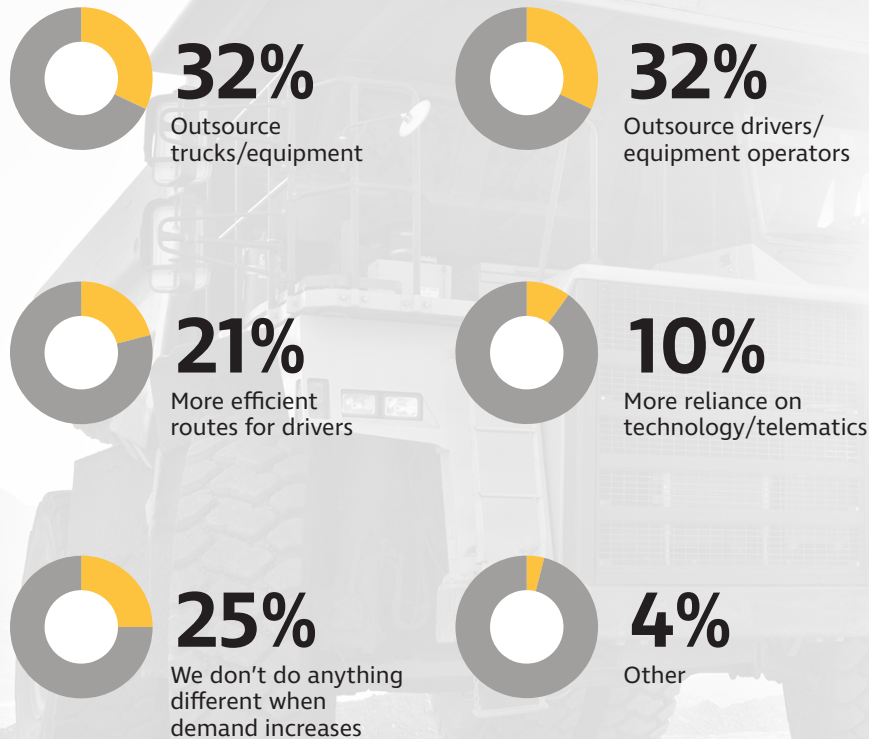


## Fluctuations of increased demand reflect roles organizations expect to add in the next year

The top two ways respondents manage fluctuations of increased demand are outsourcing trucks/equipment operations and outsourcing drivers/equipment operators. To meet demand, more than half expect to grow the number of drivers and operators in their fleet in the next year.

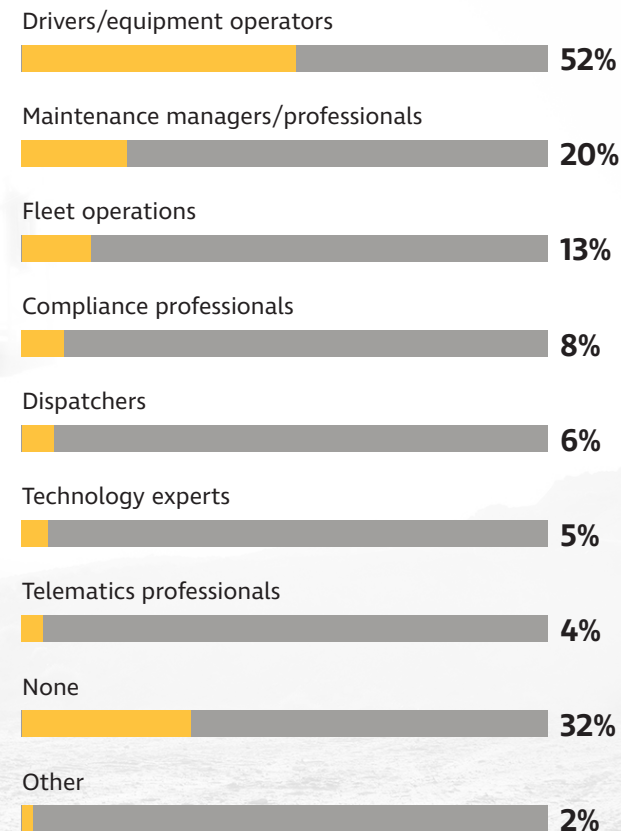
### HOW ORGANIZATIONS MANAGE FLUCTUATIONS OF INCREASED DEMAND

(Respondents could select all that apply.)



### WHAT ROLES ORGANIZATIONS EXPECT TO INCREASE IN THE NEXT YEAR

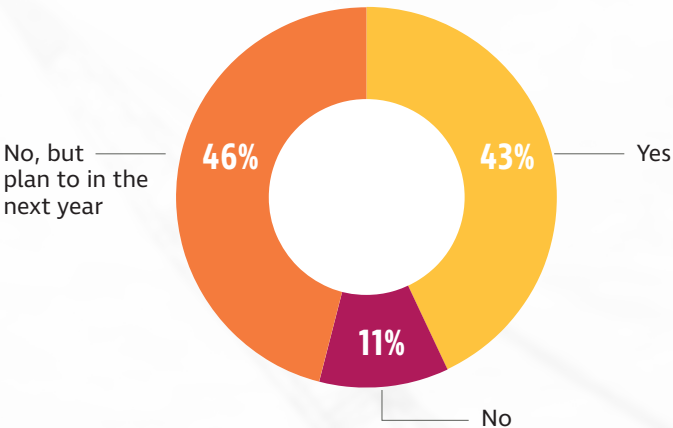
(Respondents could select all that apply.)



# Rewards pay off for drivers and organizations

More than half of respondents that offer rewards to drivers and equipment operators for better performance experience fewer safety violations and/or accidents as a result. Organizations currently evaluating and benchmarking driver performance or planning to in the next year increased eight percent from 2017.

## ORGANIZATIONS CURRENTLY EVALUATING AND BENCHMARKING DRIVER PERFORMANCE

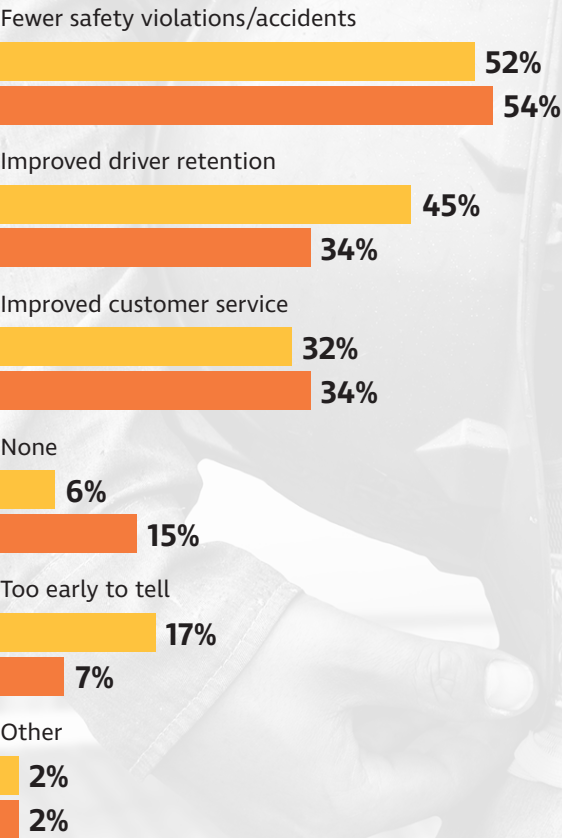


## ORGANIZATIONS REWARDING DRIVERS FOR BETTER PERFORMANCE



## RESULTS SEEN BY OFFERING REWARDS TO DRIVERS FOR BETTER PERFORMANCE

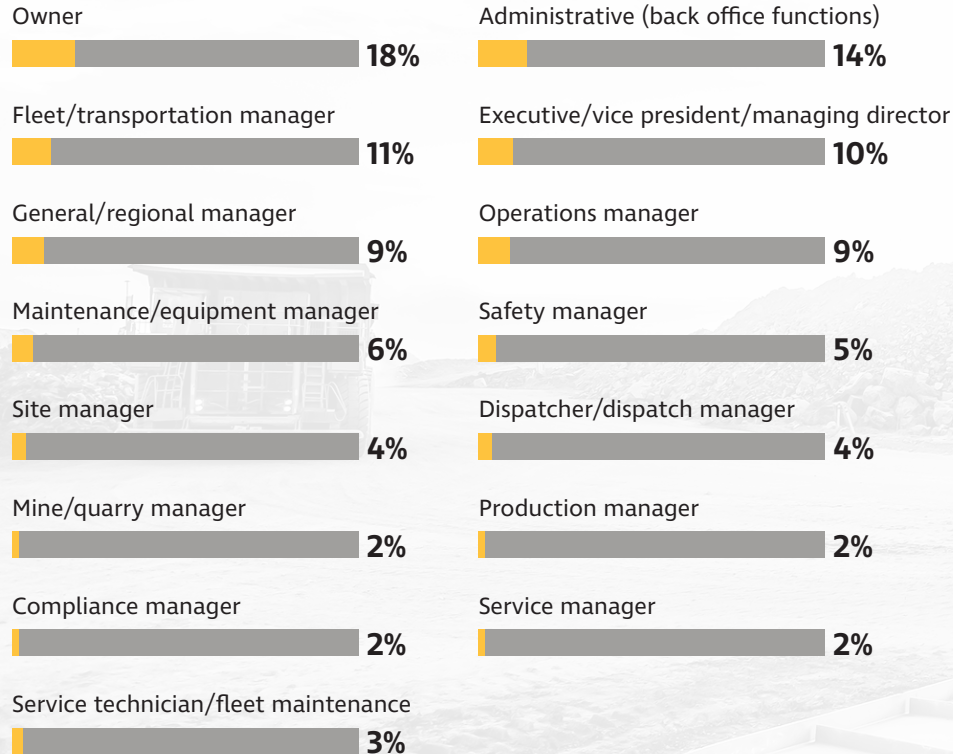
(Respondents could select all that apply.)



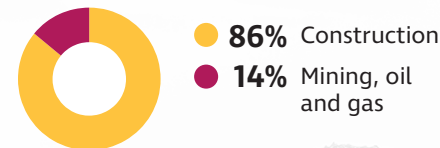
## Survey overview and methodology

The 2018 Teletrac Navman Benchmark Survey is based on responses from more than 2,400 fleet operations and fleet management professionals from around the world. Of the total survey respondents, 646 indicated that their primary industry was construction, mining or oil and gas. The results described in the 2018 Telematics Benchmark Report: Global Construction Edition were compiled from those respondents. The report provides an understanding of fleet management trends and best practices in business, telematics, construction, economic growth, technology and talent. Some 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.

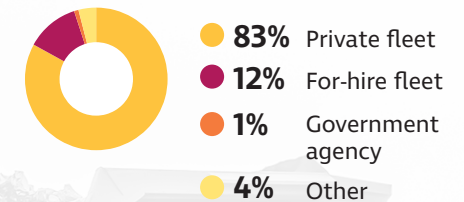
### RESPONDENT ROLE



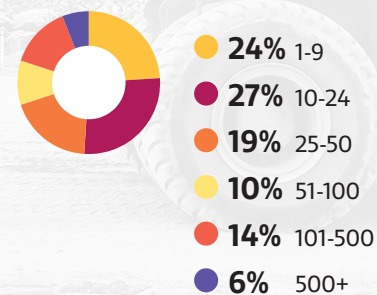
### INDUSTRIES



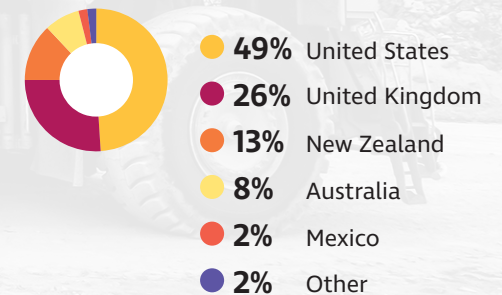
### TYPE OF FLEET OPERATIONS



### FLEET SIZE



### GEOGRAPHICAL DISTRIBUTION





# 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. **For more information, visit [TeletracNavman.co.uk](https://www.teletracnavman.co.uk).**

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