

2018 EDITION



TRUCKER PATH



# TRUCK PARKING REPORT

JULY 2018

**03 / SUMMARY**

**04 / PROBLEM**

**10 / PARKING CAPACITY  
OVERVIEW**

**12 / SOLUTIONS**

**20 / REFERENCES**



# SUMMARY

Ranked the #2 industry concern by truck drivers, the truck parking issue has safety, social and economic consequences. Failure to find a spot within the hours of service (HOS) limit puts many drivers at risk of parking in unauthorized areas, thus making the job more stressful. In a recent Trucker Path survey, 85% of drivers cited parking as the #1 cause of stress at work. 70% of truckers have had to violate HOS to find parking and 96% have admittedly parked in areas not designated for trucks. In addition, 48% of drivers spend an hour or more finding safe truck parking, which is essentially driving time that is not productive time. The annual loss per driver is at least \$5,000. The vast majority of truckers say it is harder to find parking after the ELD mandate and, according to Trucker Path app data, they look up parking availability 10-15% more often during evening hours than before the ELD mandate, signifying additional stress.

The issue of truck parking is widely recognized, and considerable effort has been applied to resolve it: truck stop chains have opened new locations, the DOT granted public funds to build real-time parking systems, and the Trucker Path's mobile apps helps drivers report parking updates in real-time. These efforts may actually be working, as Trucker Path parking data suggests that average truck parking availability improved in almost every U.S. state between 2016 and 2017. However, there are still areas in the Eastern United States, especially around urban centers, that have severe lack of capacity.

The problem could be further resolved by helping truckers find or secure a spot in advance. Despite the controversy, truck parking reservation systems are gaining popularity with 30% of drivers reportedly using them. Given that such systems still cover a small fraction of overall parking capacity, they could prove to be a promising solution in the future. Today, the largest impact could be achieved via spreading out the need for capacity throughout the day as the vast majority of drivers park at the same time. The United States Department of Transportation's (USDOT) Federal Motor Carrier Safety Administration (FMCSA) is already making positive changes by revising personal conveyance rules allowing truckers extra time after the HOS limit to find parking. If listed measures don't work, capacity could be expanded by utilizing weigh stations and shipper facilities as truck parking locations. Trucker Path's recent driver survey shows that truck drivers find shipper facilities almost as safe as truck stops.



# PROBLEM

The trucking industry is one of the most crucial parts of the U.S. economy. With 70% of freight moved by trucks in the US, the country heavily relies on its millions of truck drivers.

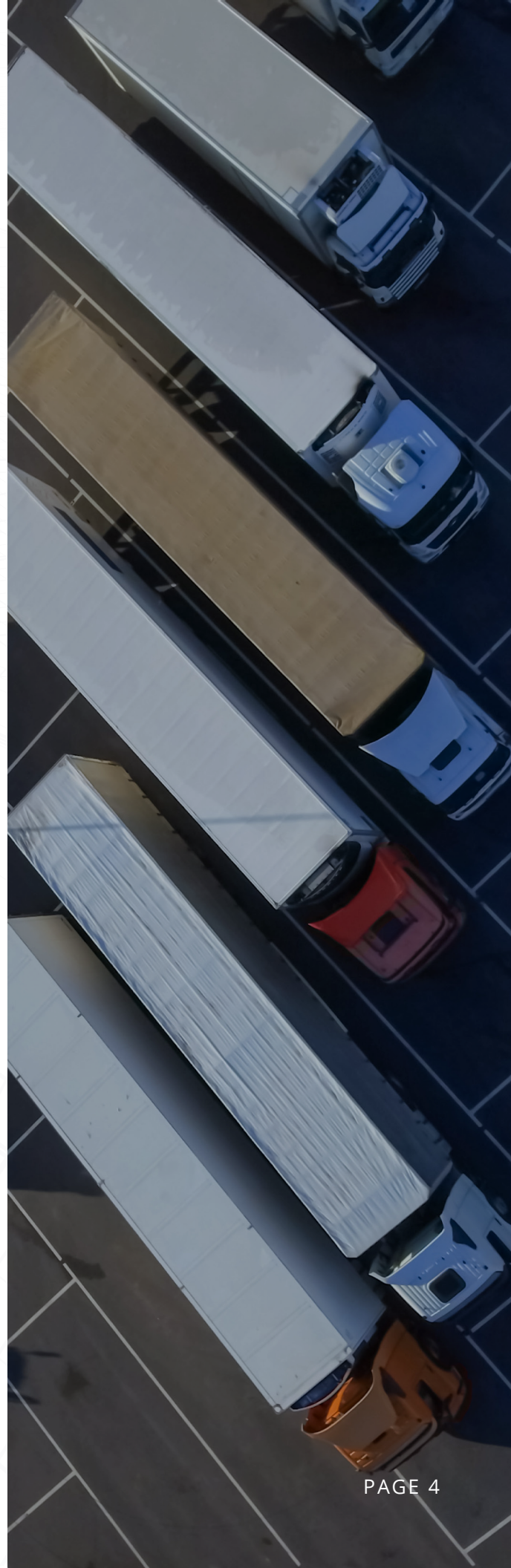
Shipping operations are complex and require different types of infrastructure such as truck-ready highways, bridges, and truck parking spaces. To ensure safety for truck drivers as well as the traveling public, FMCSA requires drivers to take mandatory rest breaks. During those breaks, drivers need to park, and finding available truck parking has always been difficult.

Failure to find truck parking is a significant problem. According to the American Transportation Research Institute (ATRI), parking is the 4th ranked concern in trucking as a whole and 2nd in the truck driver community<sup>1</sup>. 48% of US truckers require an hour or more to find an acceptable parking spot<sup>2</sup>. This lost driving time means burnt fuel and driver wages that do not translate into fleet revenues. In addition, inability to find parking within the allotted daily hours of service puts unnecessary stress on drivers and often forces them to park in unsafe areas.

Key take away:

# 70%

of freight is moved by trucks in the US.  
The country heavily relies on its millions  
of truck drivers.





# BACKGROUND

Lack of available truck parking has been an issue for years. However, major attention was brought to the issue in 2013 when Hope Rivenburg released the results of her study regarding truck parking spaces<sup>3</sup>. Rivenburg's husband, truck driver Jason Rivenburg, was fatally shot in 2009 while parked at an unlit, abandoned gas station.

Rivenburg's research showed that 39% of truck drivers required an hour or longer to find truck parking, and 83% felt unsafe while parked during periods of mandatory rest. The study led to the passage of Jason's Law, named for her late husband. This law resulted in USDOT releasing a memorandum clarifying the eligibility of truck parking projects for various federal funding programs. These programs aimed to assist states interested in advancing truck parking projects by allowing them to use federal funding resources. The USDOT also selected two projects to provide truck parking information to drivers as part of competitive, discretionary funding programs. These projects included one award to a coalition of eight states, which sought funding under the 2015 round of the Transportation Investment Generating Economic Recovery ("TIGER") program, and an award to the State of Florida, which was selected for a grant under the Nationally Significant Freight and Highway Projects program in 2016.

In addition, private and state-funded mobile developers have created apps that display truck parking information – for example, Trucker Path and Park My Truck.

Truck Stop chains such as Pilot Flying J and TA Petro added parking reservation systems and openly display the number of available parking spots for some of their locations on their websites or in mobile apps. For example, almost 400 out of 750+ Pilot Flying J locations offer a truck parking reservation option. TA Petro offers parking reservations for over 250 out of 550 locations<sup>4</sup>.

With regard to additional capacity, there is little available data on public rest areas. Fortunately, truck stop chains publicly disclose such information. For example, Pilot Flying J added 17 new locations in 2016<sup>5</sup>, eight in 2017, and has plans to add another 20 locations in 2018<sup>6</sup>. These numbers don't include renovations of existing truck stops that often include parking capacity expansion. According to TA Petro's 2017 annual report, the company added 4 locations in 2016 and 2017 combined. Over the past five years, Love's has opened 147 new locations and plans to open another 40 in 2018<sup>7</sup>. Clearly, truck stop chains realize the need for additional parking capacity and the economic benefits of providing it.

Despite these efforts, the problem may have worsened. When Trucker Path carried out our Truck Parking Survey in 2017, 40% of truck drivers reported that they needed an hour or more to find a spot. This year, the share is up to 48%. Furthermore, in ATRI's rating of top industry issues the truck parking issue has gone up from 8th place in 2012 to 4th in 2017<sup>8</sup>.

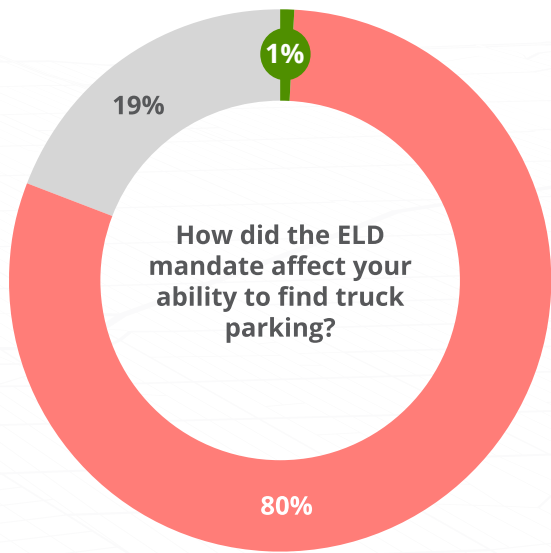


# ELD IMPACT

2018 brought enforcement of the electronic logging device (ELD) mandate. The FMCSA requires most commercial drivers to install ELDs, which automatically record drivers' hours-of-service and duty status information. Because of this automation, gone are the days of driving a few more miles to find a parking spot and simply changing the records. In the survey carried out by Trucker Path among 5,400 drivers (see Methodology), 80% of respondents said that the ELD makes it more difficult to find truck parking.

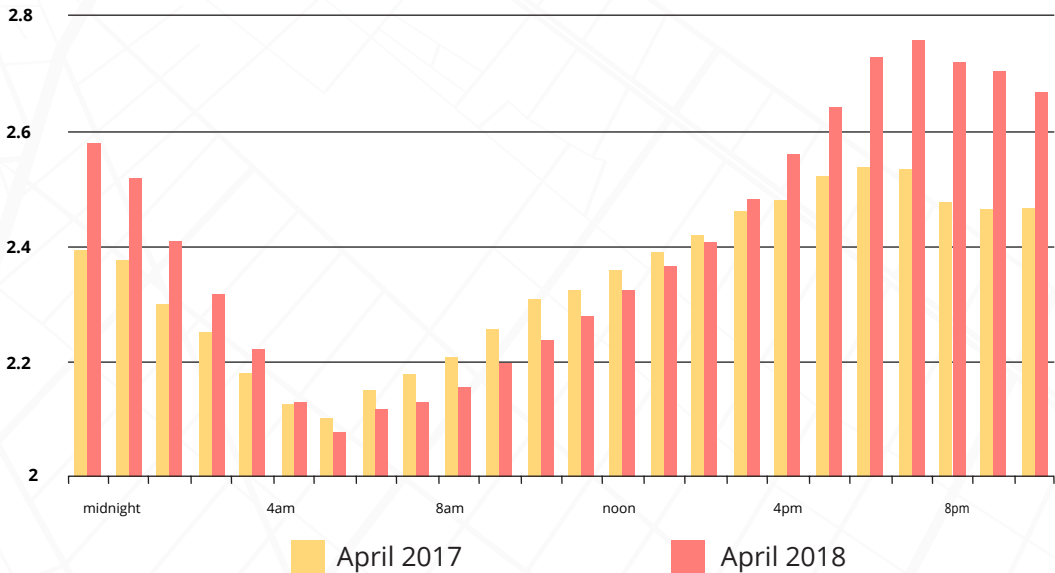
According to research carried out by ATRI, drivers already utilizing ELDs are nearly twice as likely to spend over 30 minutes looking for available parking than drivers without an ELD<sup>9</sup>. This is substantiated by the data from the Trucker Path app, which shows sizeable changes in drivers' operational planning under the new ELD mandate. The average number of times a trucker looks up parking information in the mobile app has significantly increased during evening hours if we compare April 2017 to April 2018. This shows drivers feel more pressure now than before and therefore check parking situations more often than they did prior to the ELD mandate.

The above is by no means an argument against the implementation of ELDs. Rather, the challenges with finding adequate truck parking should be considered one of the unintended consequences of ELD implementation. Now that drivers lack a degree of time flexibility they once enjoyed, they simply have fewer productive hours in the day to drive. The ELD mandate adds pressure and stress to drivers and affects fleet economics, all of which ultimately translate into higher rates for shippers.



- It is now harder to find truck parking
- I haven't noticed any changes
- It is now easier to find truck parking

**Average number of truck parking searches per user per hour**  
Source: Trucker Path App





# IMPLICATIONS

The lack of available truck parking has social, economic and safety implications. The social and safety consequences are heavy enough to consider this problem a top priority. The economic problems are primarily incurred by fleets and mainly stem from reduced productivity due to loss of driving time.

## SOCIAL IMPLICATIONS

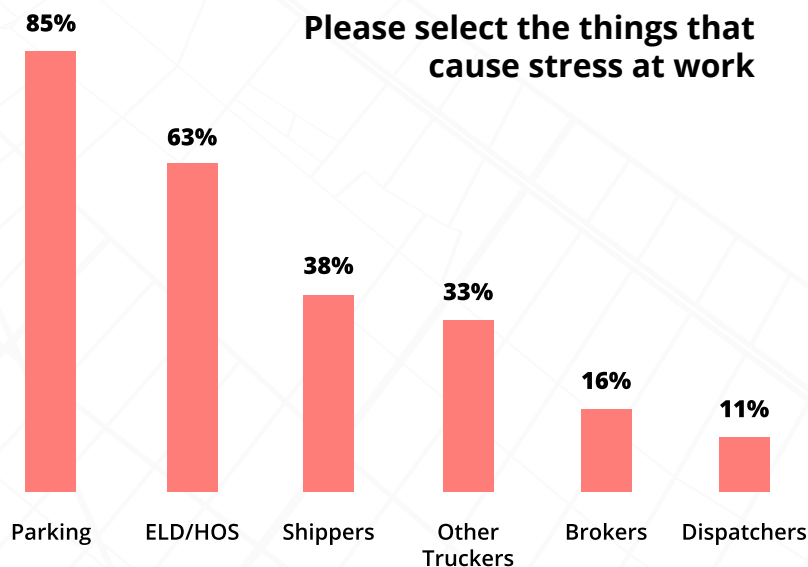
A truck driver's job is inherently stressful. Stressors include spending a lot of time away from home and family, dealing with tough schedules and suffering from chronic, debilitating illnesses associated with sitting in the cab most of the day -- just to name a few. Failing to find truck parking adds to the overall stress truck drivers endure on the job. It is fair to assume that something as critical as truck parking should be readily available. However, the reality is quite different. Stress is one of the primary reasons drivers quit the profession, which compounds ATRI's #1 and #3 top issues for trucking: the driver shortage and driver retention, respectively.

A 2018 survey conducted by Trucker Path revealed that 85% of respondents cited truck parking as the biggest cause for stress at work. The second biggest cause is HOS regulations and ELDs which require drivers to park, thus directly contributing to the amount of stress that stems from the lack of truck parking.

Given that there are roughly 2 million heavy haul truck drivers in the U.S.<sup>10</sup> (short haul drivers aren't affected as much by the lack of parking), eliminating the parking challenges would definitely have a visible positive impact on the industry. It could also help alleviate the driver shortage, as fewer drivers would leave the profession due to high stress levels.

The stress is caused by forcing drivers to choose between two less-than-optimal options: either violate the HOS regulations or park in unauthorized areas. According to the Trucker Path survey:

- 70% of truckers have violated HOS rules because they failed to find truck parking
- 96% of drivers have parked in unauthorized areas due to failure to find parking
- 84% feel unsafe when parked in unauthorized areas



Respondents were allowed to pick multiple answer choices.

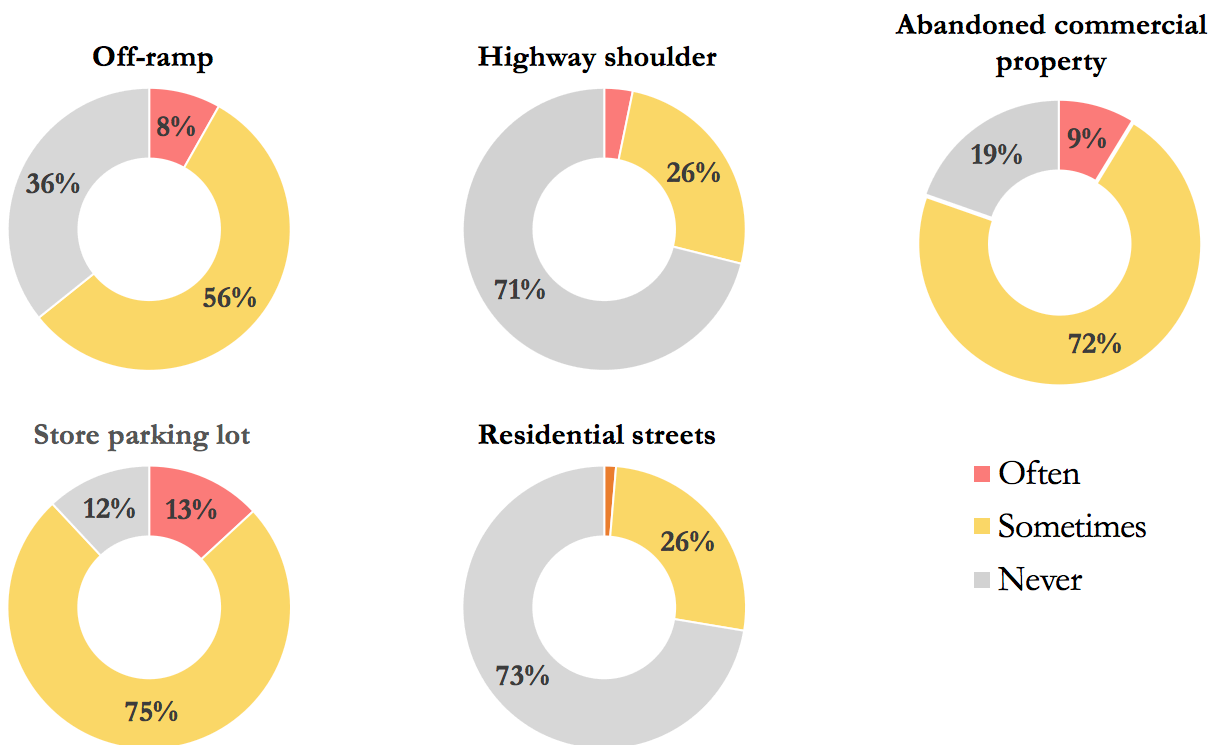
# IMPLICATIONS *(continued)*

## SAFETY IMPLICATIONS

The shortage and difficulty associated with finding legal parking creates unsafe scenarios for truck drivers and the motoring public. Truckers who have exhausted their allowable driving time without finding proper parking are often forced to park on highway on and off-ramps, along the shoulders of highways and even at abandoned commercial locations -- as was the case with Jason

Rivenburg that resulted in Jason's Law. When trucks park on shoulders or ramps, not only do they pose a safety risk for other motorists using the ramp, but maneuvering in-and-out of traffic after the rest period also poses significant safety risks. Accidents involving trucks parked on shoulders and ramps have involved injuries, and unauthorized parking has even resulted in fatalities.

### Trucker Path Survey: Do you park in these unauthorized areas?





# IMPLICATIONS *(continued)*

## ECONOMICS IMPLICATIONS

Fleets tend to operate on very thin margins and strive to utilize the available driving hours of their truckers as much as possible. Every lost hour is wasted fuel, lost wages, and missed revenue opportunity. However, our 2018 survey shows that 48% of drivers spend an hour or more per day looking for parking.

An hour of driving time spent looking for parking rather than getting to the destination incurs variable costs that do not contribute to any revenues. According to ATRI, driver wages, fuel, trailer lease, maintenance, and insurance accounted for about \$54 per hour in 2016.<sup>11</sup> With the average of ten trips per month, a driver wastes about \$500/mo on searching for available parking. Based on this, twelve months a year equals \$6,000 per driver. For a fleet of 1,000, that's \$6 million dollars of unproductive driver time each year.

ATRI estimates the lost income to be \$5,000 per trucker annually.<sup>12</sup> This estimate is more conservative than we have calculated, but it still leads to the same conclusion – each year the industry is losing billions of dollars due to the inefficiencies caused by the lack of truck parking. Take \$5,000 per trucker per year, with 48% of 1.9 million long haul truck drivers losing an hour of driving time, this number translates into almost \$5 billion per year, which is 0.5% of the total transportation costs. While 0.5% doesn't seem like a big number, at the macroeconomic scale it is significant.

HOS violations can be costly as well. HOS fines range from \$150 to \$16,000, and an accumulation of these can lead to a decrease in a drivers "safety history" leading to higher insurance rates, reduced attractiveness to carriers and shippers and even license suspension. Due to the lack of safe parking, drivers are often forced to park at unauthorized locations that are not monitored. In our recent survey, 19% of truck drivers said their personal belongings have been stolen from their truck while parked. Unsafe parking has also contributed to theft-related revenue losses for fleets. According to CargoNet in 2015, cargo theft loss was estimated to be over \$173 million.<sup>13</sup>

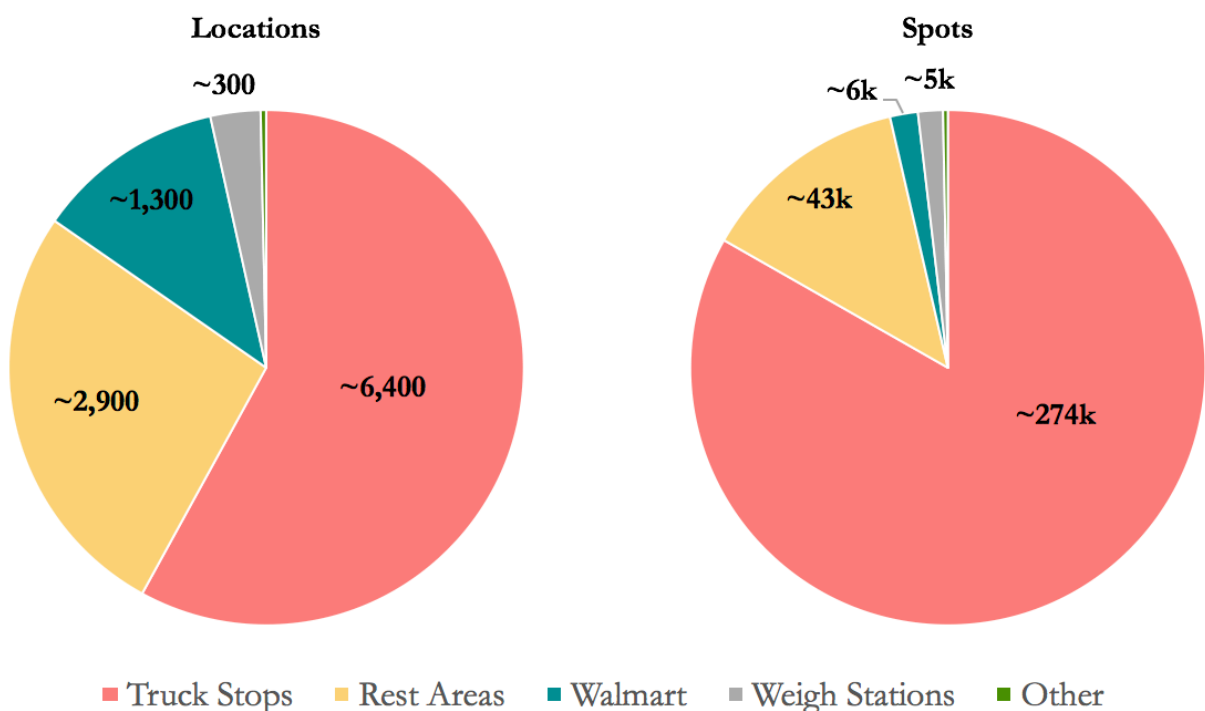


# PARKING CAPACITY OVERVIEW

Believed by many to be the most comprehensive databases of truck parking locations, the Trucker Path app lists around 11,000 locations with multiple overnight parking spots for semi trucks in the United States. Over 9,000 of these locations are dedicated truck parking locations (truck stops and rest areas), while the remaining are unconventional truck parking places like weigh stations, commercial shopping centers, truck scales, etc. The estimated truck parking capacity in the United States is around 330,000 individual spots, with the majority of spaces at truck stops (274k) and rest areas (43k).

Geographically, truck parking capacity is unevenly distributed with the majority of spots and locations along the highways and major corridors. The eastern part of the United States has a larger share of spaces, and the biggest concentrations of spaces are around urban areas, for example Chicago or Dallas. See the following heatmap for reference.

**Distribution of parking capacity in the U.S.**  
as of May 1, 2018





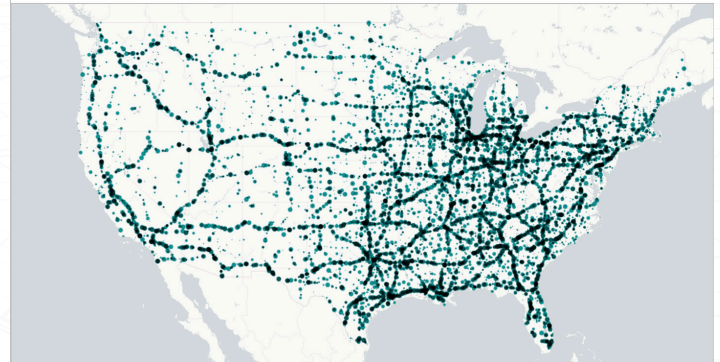
# PARKING CAPACITY OVERVIEW

(continued)

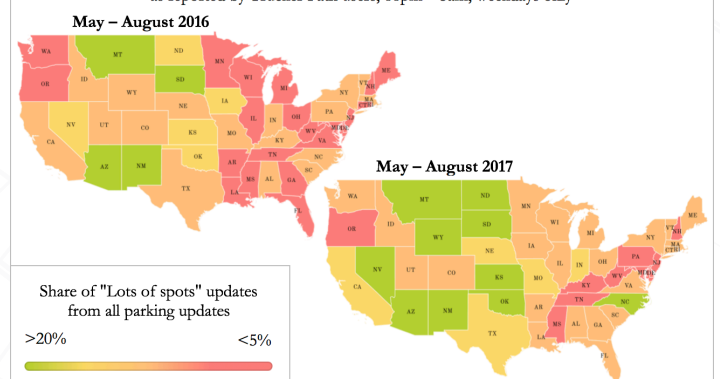
Used by 750,000 unique truckers monthly, the Trucker Path app requests truck drivers to report parking availability in real time and, in that way, helps drivers find available parking. Parking availability can be reported with three statuses: the stop is “full”, there are “some spots” or there are “many spots” available. According to our user survey, 97% of drivers find the updates reported by other drivers in the Trucker Path app reliable for finding a spot. The truck parking feature was introduced three years ago by Trucker Path, and since then we have gathered tens of millions of data points. Such crowdsourced data collected over time helps us understand average parking availability at most truck stops at any given time.

When compared between the summers of 2016 and 2017, the data from the Trucker Path app shows that, on average, the truck parking availability across the United States slightly increased. Hundreds of thousands of truckers using the app reported more available spots at night in most US states in 2017 than in 2016. The only three states where the parking situation got worse were Delaware, Massachusetts and Oregon. However, the negative changes were less than two percentage points in terms of overall available parking at night and therefore could be considered a statistical error. Such a conclusion is surprising, because many drivers believe that the situation has become worse; however, these same drivers on average report a higher availability in the Trucker Path app at night. The average capacity per state does not really mean that every individual driver can find a spot because they wouldn't drive across the state to a location that has free spaces. Nevertheless, the conclusion that the share of available parking at night has slightly increased may indicate that the issue is more about the perception and ability to find spots than the actual lack of capacity.

Heatmap of truck parking capacity in the U.S.  
Bigger dots – more spots, darker shade – more concentration



Truck parking availability at night by U.S. state  
as reported by Trucker Path users, 11pm – 5am, weekdays only





# SOLUTIONS

Drivers and experts mention the lack of capacity and information availability as the primary reasons for the truck parking issue. Even when there is an available spot nearby, some drivers struggle to find parking because they are unaware. But oftentimes, all the nearby rest areas and truck stops are full, so the options a driver is left with are unfavorable. The solutions come down to two groups: first – better utilize the existing parking capacity, and second – expand parking capacity.

## UTILIZING EXISTING CAPACITY

### Driver Behavior

There are many ways for drivers to ensure they efficiently plan their route to park their truck by the time they hit the HOS limit. It turns out most drivers already do their best to find truck parking; however, we identified that some drivers could do better. 61% of surveyed drivers already plan for truck parking during the trip. That leaves 39% who check truck parking info only before hitting the HOS limit.

Another way to be successful in finding a spot is to start looking an hour before the HOS limit. Given the ELD mandate, there is no flexibility in surpassing the limit, which means drivers may have to sacrifice driving time. Notwithstanding the above, most would agree that it is better to have no violations and be less efficient than to use all driving hours and park in an unauthorized area. 89% of drivers surveyed reported starting to look an hour or more before hitting the HOS limit -- indicating there is likely very little drivers themselves can do to improve the situation.





# SOLUTIONS

*(continued)*

## UTILIZING EXISTING CAPACITY

### Information Systems

Another significant factor preventing drivers from finding parking fast is the lack of information. This factor can be broken down into two parts: having the technology in place to track available parking and, in turn, disseminating that information. At Trucker Path we have seen progress in giving drivers the tools to access information, primarily via mobile apps. In addition, some states have added dynamic displays along highways for the same purpose. However, the quality of that information needs improvement.

Today, most drivers primarily rely on crowdsourced data from other drivers disseminated via mobile apps. Our survey shows that 78% of drivers who have Trucker Path use it to find parking. Of those who use the truck parking search feature, 97% find the information helpful in finding a spot. Despite the effort, having more accurate, constantly available updates would make the truckers' lives easier.

Truck stop chains such as Pilot Flying J and TA Petro have put in place information systems that list the exact number of available spots at some of their locations. However, these are available only at a fraction of all locations. The information is displayed in truck stops' proprietary mobile apps, which makes sense for the chains but is not convenient for drivers because they have no single view of all available spots nearby. The next step in improving the situation is sharing parking information with independent app developers.



# SOLUTIONS *(continued)*

## UTILIZING EXISTING CAPACITY

### Parking Reservations

If a driver consistently fails to find truck parking before the HOS limit, another way to solve this problem is to reserve truck parking in advance. Parking reservations are a good strategy to ensure that a particular truck can park at night, but this only has to do with the allocation of spots and doesn't solve the capacity problem. At the same time, it helps drivers avoid redundant stress at work.

Currently, only a few major truck stop chains offer parking reservation options. For example, Pilot Flying J's Prime Parking allows drivers to reserve a spot at 400 out of 750 of its locations for up to 12 hours for \$12-20. TA Petro offers a similar service for 250 out of 550 locations and allows drivers to book a spot up to 30 days in advance.

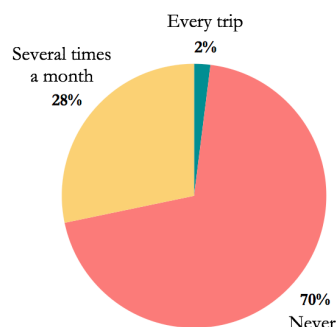
However, paid parking reservations are somewhat controversial. Our survey shows that 53% of the respondents have a negative view on parking reservations. At the same time, 33% of the surveyed have a neutral view, while 14% have a positive opinion. Even though truck parking reservations are not available everywhere, they are used by 30% of truck drivers. The biggest hurdle to further adoption is the price. While 15% of fleet drivers said that their fleet pays for reservations, most drivers are not ready to pay out of pocket.

With drivers unwilling to pay, truck stops aren't incentivized to put in extra effort that will not be compensated. A solution to this could be truck stops allowing the use of parking reservation payments as store credit. However, it is up to the market to decide the pricing.

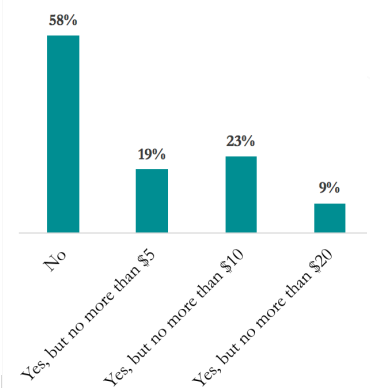
At the same time, few if any smaller truck stops have a truck parking reservation option. According to Roady's CEO Matt Patterson, truck stops recognize the value in such a system but face operational and implementation challenges. There is no readily available solution that could be easily adopted by truck stop owners. When a truck stop chain like Pilot Flying J makes the decision to introduce parking reservations, there is a dedicated group of people taking care of the R&D, and its location managers implement the systems on site. However, independent truck stops lack such a level of resources and therefore lag behind in introducing a similar system.

In conclusion, information systems have progressed within the past several years. If independent truck stops participate, that would create a positive impact. Parking reservations appear to be the economic incentive to develop information systems for tracking parking availability, although drivers aren't excited.

**How often do you reserve parking?**  
Only one answer choice was allowed



**Would you pay out of pocket for parking?**  
Only one answer choice was allowed





# SOLUTIONS *(continued)*

## UTILIZING EXISTING CAPACITY

### HOS Flexibility

According to our survey, 65% of drivers look for parking between 6pm and midnight. This is further supported by the usage of Trucker Path's Truck Parking Search feature (see below). Many drivers parking at the same time creates a peak demand for spaces and, given that the supply (capacity) is fixed, there are not available spots for all the truckers.

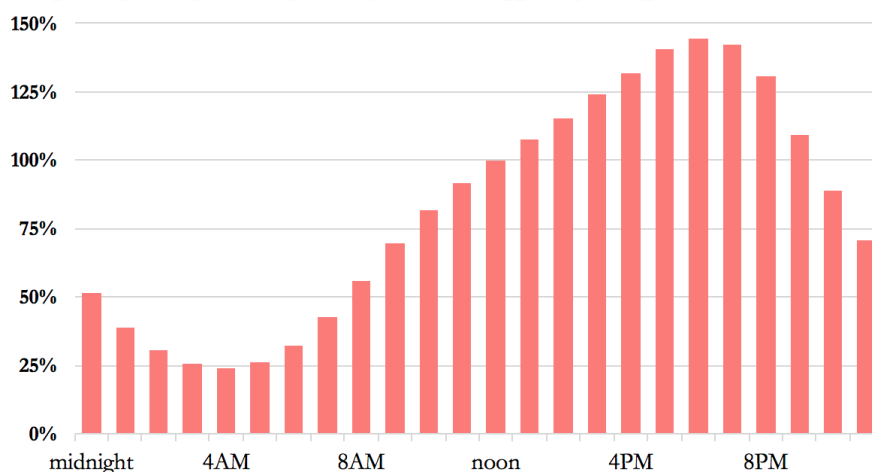
If so many drivers didn't have to park at the same time, finding a parking spot could be done more easily. That said, shipper operations and HOS requirements are constraining factors for drivers that cannot be ignored. Industry data shows 75% of drivers are detained at a pickup or delivery site for two or more hours every week, and 35% are delayed more than six hours every week.<sup>14</sup> Drivers getting detained at the shipper lose time and eventually rush to either find truck parking or drop off the shipment. Not only does that create stress, it also poses safety concerns.

With the adoption of ELDs, it is now easier to track detention time. Therefore, one can see when a driver was detained. Some have proposed an "extended detention exception" to lengthen the 14 hour on-duty limit by two hours if a driver has been delayed more than two hours. Such a measure would not only ease some driver stress, but also widen the driving window and even out the demand for parking during the day. Now that tracking wait time at the shipper is easier, detention fees could incentivize some facilities to either be more efficient and load more quickly or allow for flexibility in pick-up and drop-off times. That adjustment could also positively impact the demand curve for truck parking.

On May 31, 2018 FMCSA published new rules that allow drivers to use their "personal conveyance" time to find safe truck parking if a shipper or receiver has exhausted driving hours, even when the vehicle is "laden". This is definitely a positive thing for truck drivers, as they will have more time to find a parking spot instead of resorting to unauthorized parking.

### How Many Unique Users are Using the Parking Search Feature in Trucker Path per Hour?

Weekdays, April-May 2018



Usage at 12pm = 100%



# SOLUTIONS *(continued)*

## UTILIZING EXISTING CAPACITY

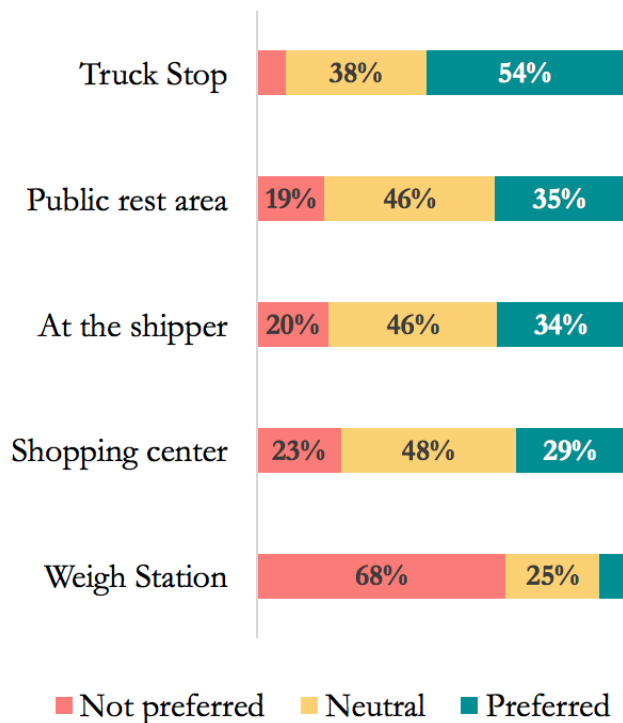
### Expanding Capacity

The solutions mentioned thus far could improve the truck parking situation in many regions. However, there may still be areas that require additional parking. Building new capacity is expensive and difficult. As previously stated, the need for parking capacity is dynamic, so many different factors need to be considered before building additional parking capacity. Essentially, capacity expansion could be achieved in

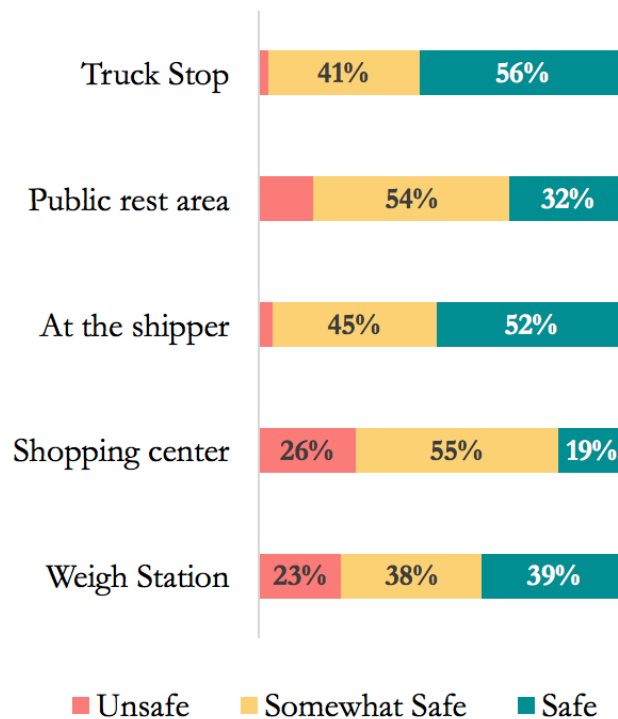
two ways: converting/utilizing existing capacity that is currently not used for truck parking and capital investment in new parking spaces.

When choosing the best approach, it is important to understand what drivers prefer and where they feel safe. Not surprisingly, the most preferred truck parking locations are truck stops, followed by public rest areas.

#### Locations by preference on where to park



#### Do you feel safe to park at these locations?



# SOLUTIONS

*(continued)*

## UTILIZING EXISTING CAPACITY

### Weigh Stations

As we can see from our data, at least 5,000 parking spaces are available at 400 weigh stations. Given that there are over 1,600 weigh stations in the US, there is likely additional capacity with those weigh stations that could be further explored. At the same time, additional considerations must be made before allowing overnight parking at weigh stations, because they are not a preferred parking location for 68% of surveyed truck drivers and are considered to be unsafe by 23% of survey respondents.

### Shipper Facilities

According to our survey, 85% of drivers said that shippers sometimes allow parking on their premises. Given that drivers feel almost as safe at the shipper as at a truck stop, making shipper parking a norm could significantly help solve the problem. This, of course, would require carriers and shippers to start a conversation and try to find a win-win solution where both parties benefit when a trucker can utilize shipper facilities for overnight parking.

### Shopping Centers

Shopping centers can be an alternative source for overnight truck parking spaces. The Walmarts that allow overnight parking are listed in Trucker Path and represent almost 6,000 spaces nationwide. A win-win solution could likely be discussed between commercial stores and FMCSA to increase the available capacity. On the other hand, 26% of drivers consider shopping centers to be unsafe, so additional considerations must be made.





# SOLUTIONS *(continued)*

## UTILIZING EXISTING CAPACITY

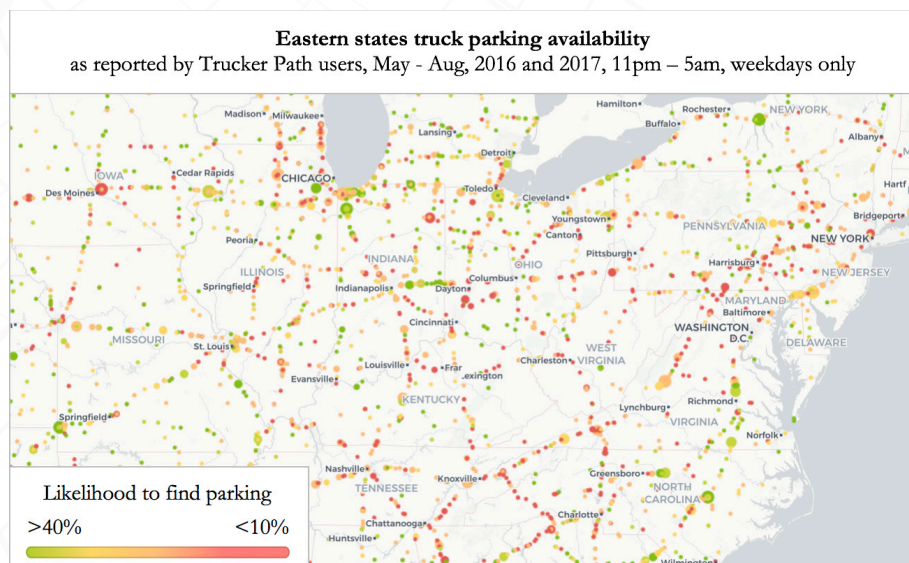
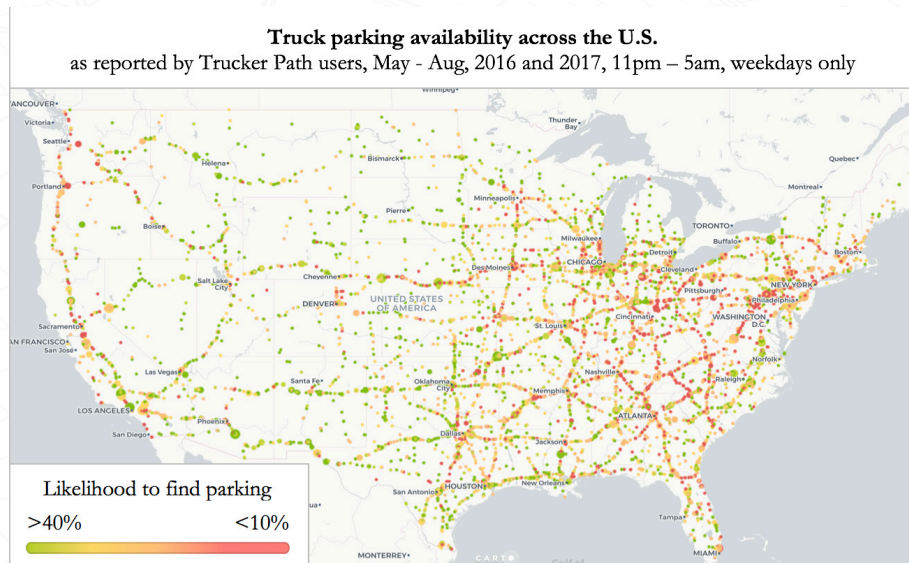
### Building New Capacity

Truck stops and rest areas are conventional parking locations, so they're naturally the preferred options for truck parking. In case existing capacity is not sufficient even if all the above measures have been taken, new spaces must be built.

As we have discussed, the eastern United States needs truck parking the most. When deciding where to build new capacity, it makes sense to look at the existing situation in the form of a heatmap (see below). The information on the map is consistent with survey

results. According to drivers, it is harder to find truck parking in the eastern part of the US. In addition, 51% of respondents said that urban and rural areas are equally bad for finding parking, and 45% said that urban areas are worse.

Expanding truck parking capacity is one of the most obvious solutions to the problem. At the same time, it can be capital intensive and therefore needs to be strictly prioritized, taking into account return on investment and geographical demand.





# METHODOLOGY

## TRUCK PARKING CAPACITY HEATMAP

Trucker Path is America's most popular app for truckers with nearly 750,000 truck drivers as active users. The mobile app is used to find truck stops, check diesel prices, find available truck parking, and more. Trucker Path allows truck drivers to report parking availability at a location in three statuses: "Lot is full," "Some spots," "Lots of spots." Trucker Path users contribute more than 1,000,000 parking status updates a month, with most of the updates happening during evening hours. To analyze the lack of capacity, we combined the data from two periods: May 1, 2016 – August 31, 2016 and May 1, 2017 – August 31, 2017. We only looked at summer months, as this is when the demand for truck parking is the highest. In addition, weekends were excluded from the analysis, as this is when the parking situation is less problematic. We considered only night hours (i.e., 11pm to 5am) – when most trucks are parked. A lot of smaller locations were excluded due to the lack of statistically significant amounts of data at those locations. Having limited the scope, we calculated the likelihood as a weighted average of different updates. "Lots of spots" was appointed 100% probability, "Some spots" 25%, "Lot is full" 0%. A 15% value would mean that there is 15% likelihood that a truck stop has a free a spot at night during weekdays.

## SURVEY

Between May 8 -15 of 2018, over 5,500 truck drivers participated in a survey about the truck parking issue in the US. The questionnaire consisted of 26 questions and was distributed via the Trucker Path apps. When presenting the conclusions of this survey, we limited the response sample only to those drivers who do not return home every night, and for the sake of diligence, certain questions were limited to a specific audience. For example, owner-operators' responses were excluded from fleet-related questions.

## ABBREVIATIONS & ACRONYMS

DOT – Department of Transportation  
FMCSA – Federal Motor Carrier Safety Administration  
HOS – hours of service  
ELD – electronic logging device  
ATRI – American Transportation Research Institute  
TIGER – Transportation Investment Generating  
Economic Recovery



- <sup>1</sup> ATRI - Critical Issues in the Trucking Industry 2017
- <sup>2</sup> Trucker Path Truck Parking Survey 2018, see Notes for details
- <sup>3</sup> Land Line Magazine: "Hope Rivenburg releases her truck parking survey results" / Dec 9, 2013
- <sup>4</sup> TA Petro and Pilot Flying J websites / as of May 2018
- <sup>5</sup> Overdrive Magazine: "Pilot Flying J added 58 locations in 2016" / January 10, 2017
- <sup>6</sup> KeepTruckin Blog: "Pilot Flying J is planning to add more stores in 2018" / February 15, 2018
- <sup>7</sup> Overdrive Magazine: "Love's to open 40 new locations in 2018" / January 09, 2018
- <sup>8</sup> American Transportation Research Institute: "Critical Issues in the Trucking Industry 2017" / October 2017
- <sup>9</sup> American Trucker – "Parking and your bottom line" / Jan 13, 2017
- <sup>10</sup> Bureau of Labor Statistics – Heavy and Tractor-trailer Truck Drivers
- <sup>11</sup> ATRI - An Analysis of the Operational Costs of Trucking: 2017 Update
- <sup>12</sup> CCJ: "Drivers' parking journals show they lose \$5,000 annually to time spent finding parking" / Dec 14, 2016
- <sup>13</sup> CCJ: "CargoNet: Over 800 cargo thefts recorded in 2016, losses total \$173M" / Feb 1, 2017
- <sup>14</sup> KeepTruckin Blog: "KeepTruckin Launches Petition to Change the 14-Hour Rule" / Nov 15, 2017