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# Fear and Loathing in Las Trailer Pools: FreightWaves Research into Drop Trailer Detention Rates


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WHITE PAPER

# Table of Contents

# List of Figures

# FreightWaves drop trailer detention rates research

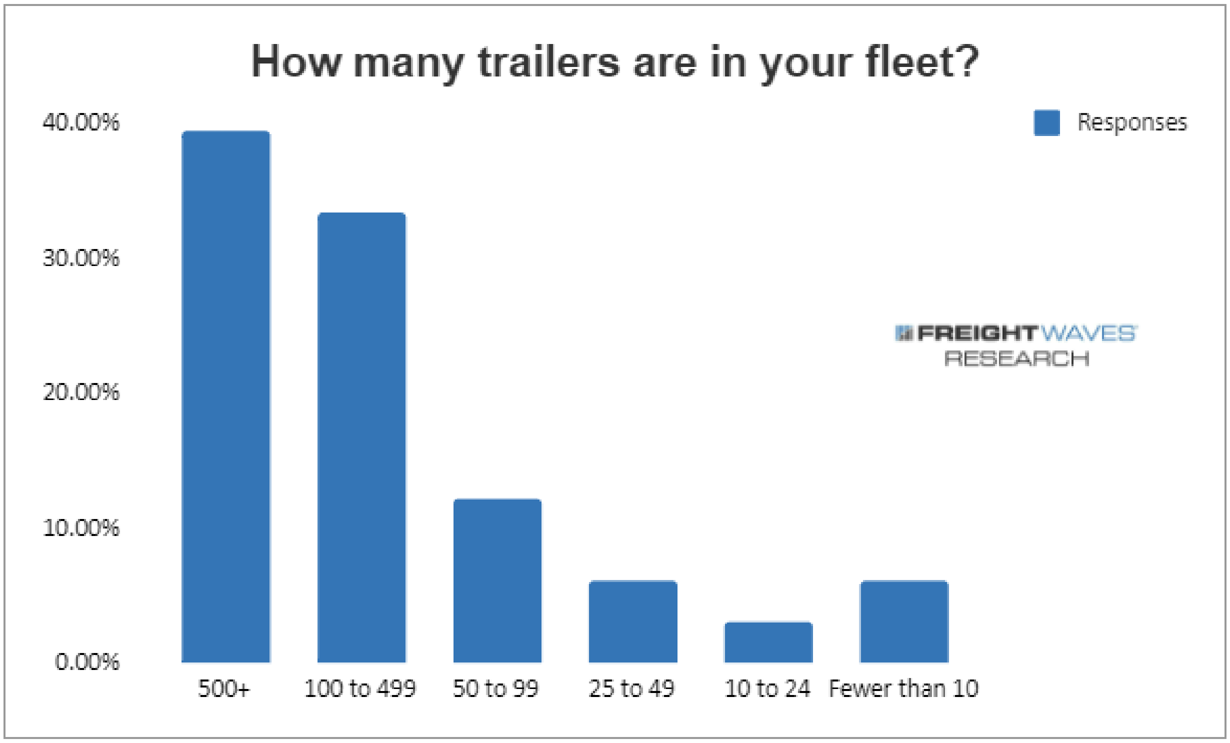
## Executive Summary

FreightWaves recently completed a survey of truckload carriers that utilize trailer pools. The goal was to determine the frequency, free time and costs associated with trailer detention. For large fleets, drop trailer pools are a capital intensive yet pragmatic solution to their customers' internal supply chain constraints. The primary constraints for the motor carrier are time related, and drop trailer pools represent an attractive solution for both the shipper and carrier, which can load or pick up the trailer as their schedule permits.

Challenges arise when the timely loading and unloading of trailers at the designated trailer pools do not occur. Whether it  be related to labor constraints or pandemic supply chain disruptions, a common challenge for carriers is getting their equipment utilized, and trailers being used for storage at a customer location are unprofitable and unable to haul additional loads. A way carriers attempt to overcome this problem is through the use of trailer detention charges. The goal is to encourage the shipper or consignee to utilize the equipment on hand, either by unloading the trailer to be used for a follow-on load, or by loading an empty trailer for a tendered load shipment.

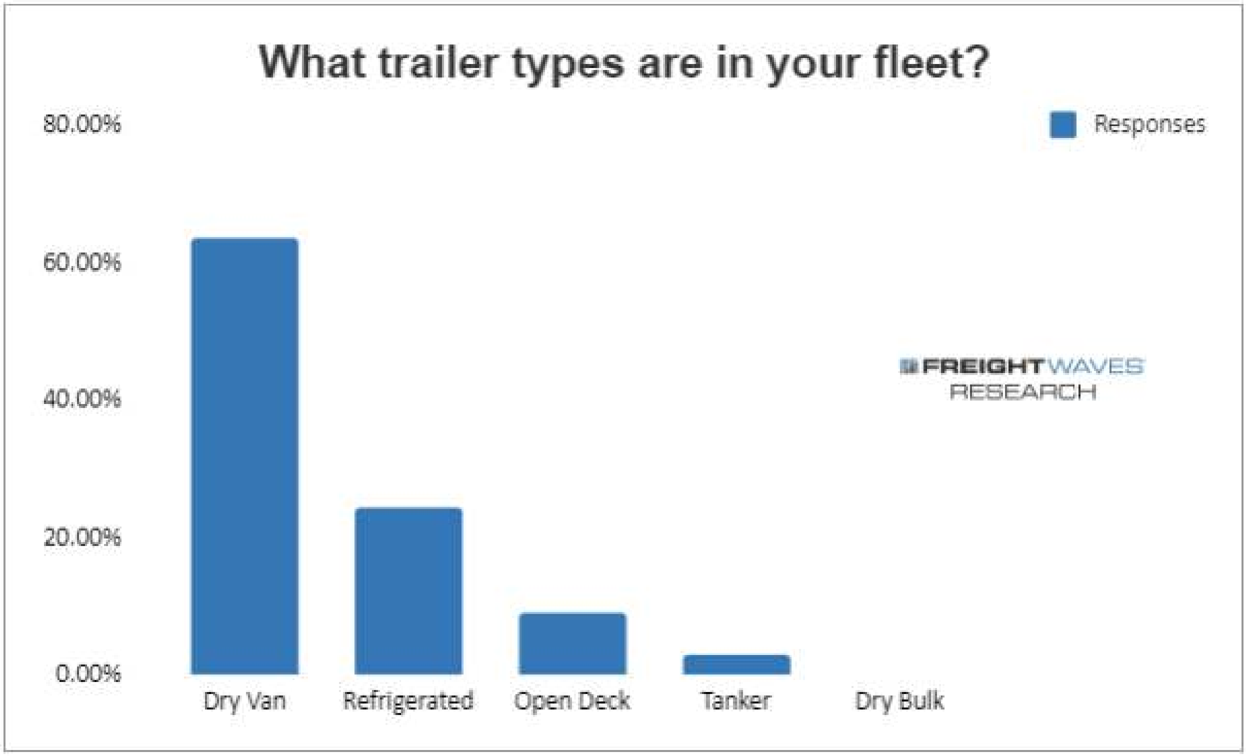
The survey hopes to provide carriers, brokers and shippers a better understanding of the characteristics of trailer detention charges. Possible use cases include carriers attempting to benchmark trailer detention rates, brokers attempting to price drop trailer lanes, or shippers hoping to understand the variation in trailer rates and behavior based on carrier characteristics.

**Figure 1: Fleet Trailer Count Summary**



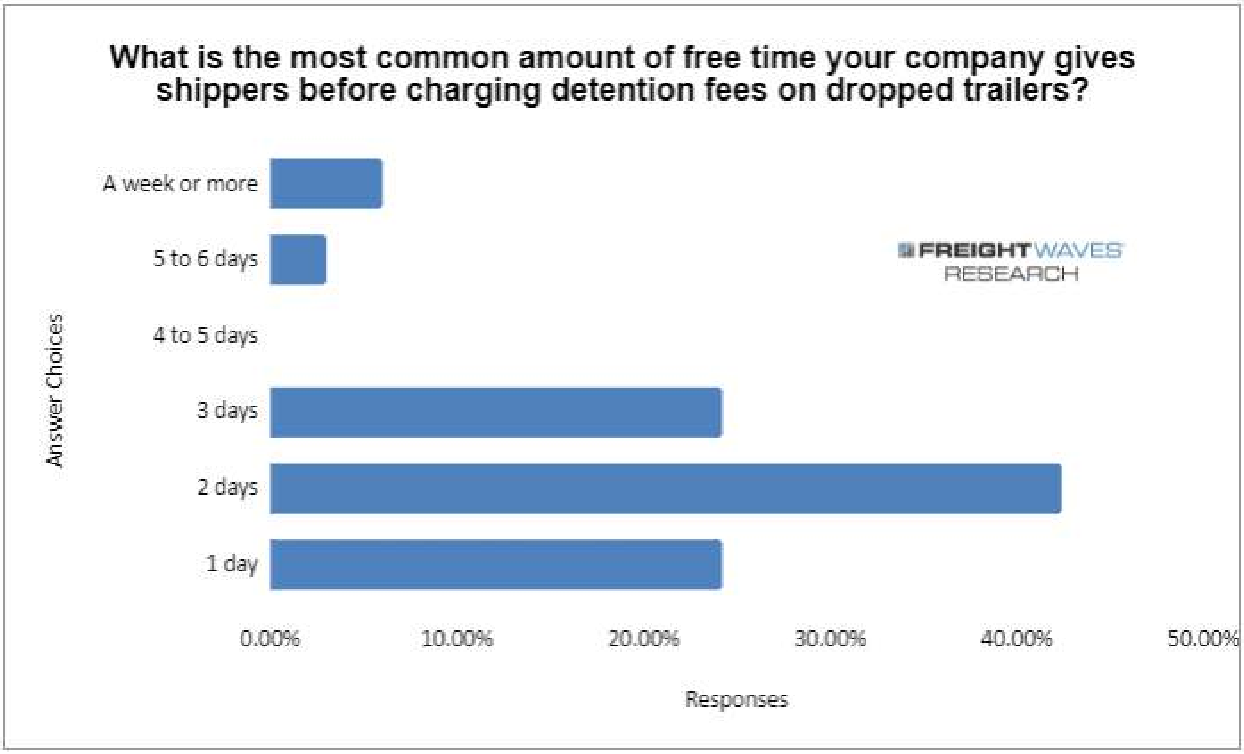

- Among the trucking companies surveyed, a majority of the respondents, around 75% had at least 100 trailers.
- What is notable is that almost half of those surveyed, around 40%, indicated they had 500 or more trailers in their fleet.
- This large amount of equipment is common for larger carriers, as many with consistent contracted lanes will utilize trailer pools and operate around a 3-to-1 trailer-to-load ratio.
- Fleets with fewer than 10 trailers often utilize live loading or unloading appointments, as many do not have the working capital to invest in costly trailer pools at their size.
- Smaller fleets without access to large amounts of trailers or equipment may utilize power-only brokerages or equipment-sharing programs with customers or rental companies.

**Figure 2: Fleet Trailer Count by Trailer Type**




- The majority of respondents — about 65% — indicated they utilized dry van trailers, compared to refrigerated equipment at 25% and open deck at around 15%.
- This data matches general truckload industry trends, with the majority of freight being shipped by full-truckload being dry van, while specialized equipment such as open deck and reefer experience lower volumes but potentially greater rates.
- It is notable that many large, diversified fleets may have a combination of those three equipment types, and can switch trailer type based on the economy or freight volumes, at the expense of paying the additional upkeep for the extra trailers.
- Often open deck carriers may carry a few extra dry van trailers to utilize during the winter months when construction activities are limited by weather conditions or macroeconomic trends.

**Figure 3: Detention Free Time before charges begin**




- A majority of fleets surveyed — 85% of respondents — reported between one and three days free time before the company begins charging detention fees on dropped trailers.
- The median number was around two days, at around 45% of surveyed carriers.
- This reflects some of the difficulties that large carriers have when holding underutilizing trailer customers accountable, as often the escalation begins in operations and moves up through sales before finally connecting to an appropriate contact within the shipper to address some of these issues.

## Figure 4: Average daily detention charges on dropped trailers

**What is your average daily detention charge to customers after the free time expires on your dropped trailer?**

| | Mean | Median | Mode | Range |
|---|---|---|---|---|
| All respondents | $61.70 | $64.00 | $50.00 | $0-$100 |

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- When trailer detention is charged, all respondents noted a mean of $61.70, a median of $64 and a mode of $50 on a range between $0 to $100.
- The mode of $50 appears to represent a standardized agreed upon trailer detention rate occurring among most carriers.
- For most large carriers, there will be very little variation in trailer detention rates due to commoditization and competition from other carriers.

## Figure 5: Average increase in daily detention rates based on trailer utilization

**If you notice that a customer is continuously underutilizing trailers, by what percentage on average do you increase your daily detention charge for your trailers?**

| | Mean | Median | Mode | Range |
|---|---|---|---|---|
| All respondents | 16.36% | 2% | 0% | 0-100% |

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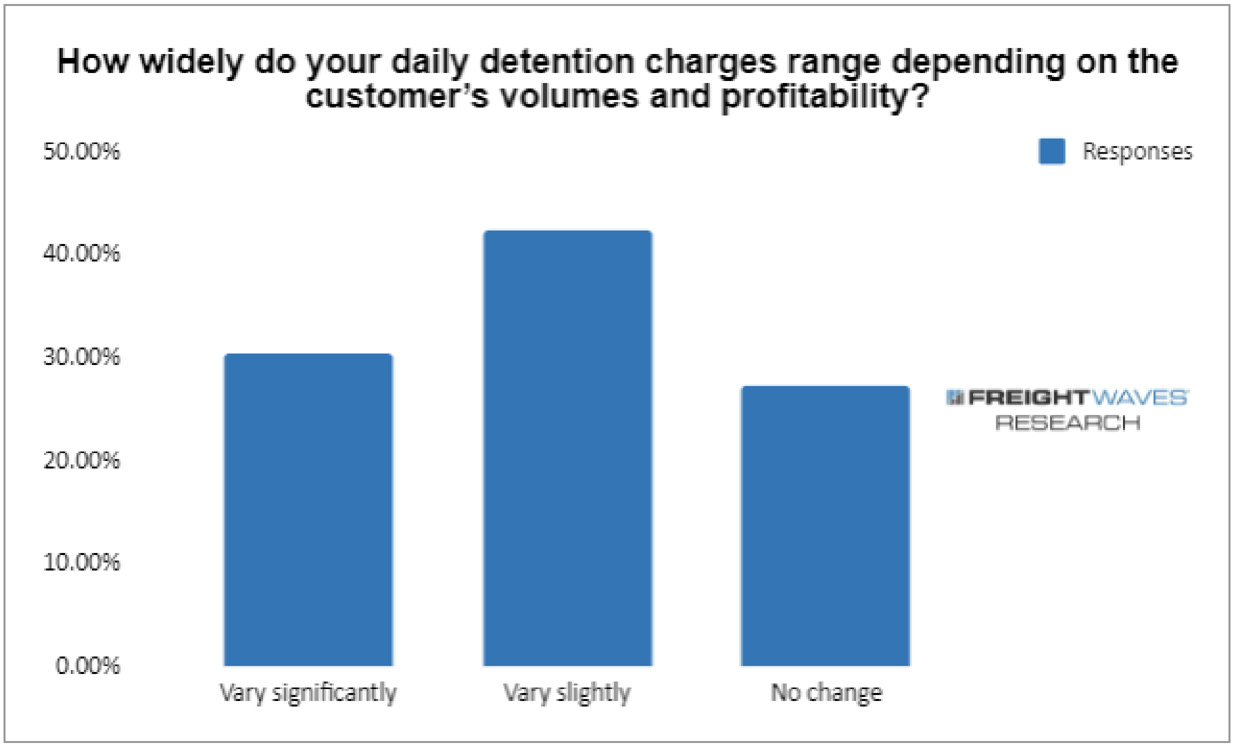
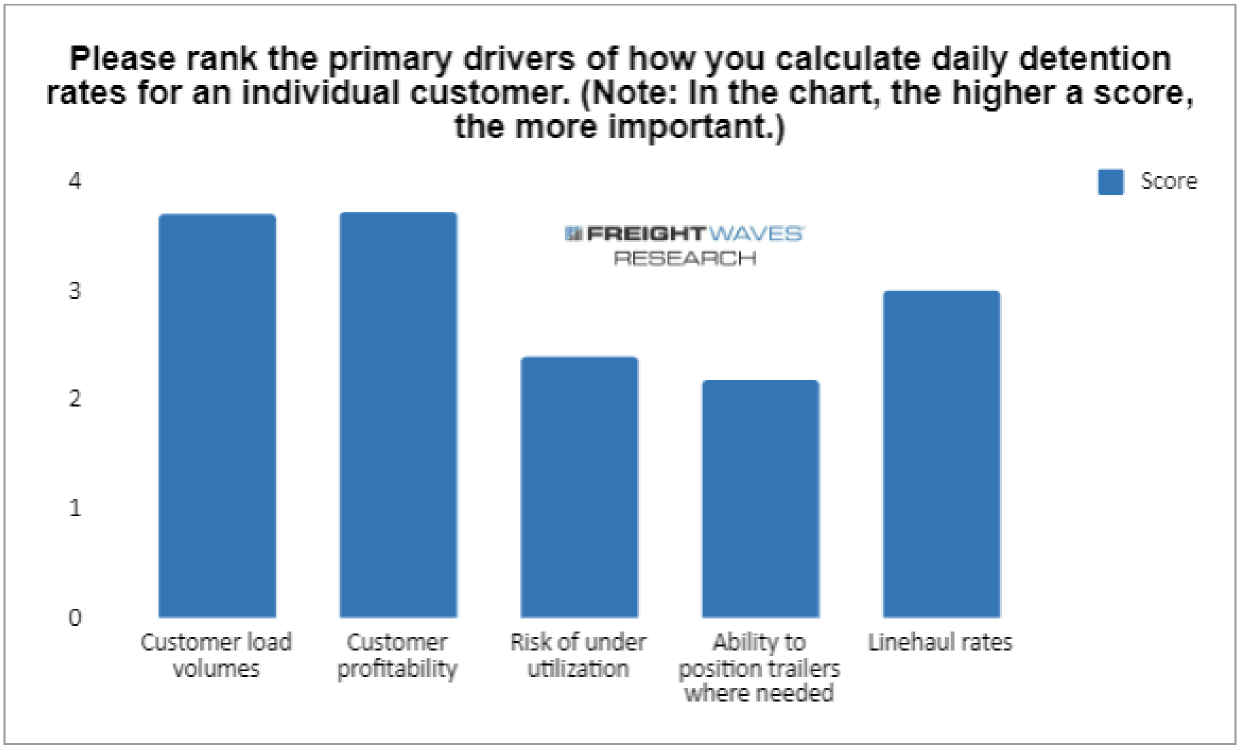
- Notably, when a customer is continuously underutilizing trailers, the upcharge for the daily detention charge increased by an average of 16.36%.
- A possible reason why the average daily detention charge is so low could be the agreed upon accessorial rates during the RFP process for underutilized equipment.

**Figure 6: Daily detention rate variation based on customer volume and profitability**




- Around 30% of carriers surveyed indicated detention charges do not vary based on customer volumes and profitability.
- The median of total respondents, around 44% reported that daily detention charges vary slightly based on customer characteristics.
- Putting this in context, around 74% of carriers will adjust daily detention charges based on customer volume and profitability, with only around 26% reporting no change.

### Figure 7: Primary drivers impacting daily detention rates




- Customer volumes and the overall impact that the lane has on the carrier's internal load network explain the variation in detention rates.
- Customer load volumes and customer profitability both rated at 3.75 out of 4, and linehaul rates at around 3 out of 4.
- These three factors underscore the responses from the earlier question regarding the rate of change, as certain customers within a carrier's overall mix will have outsized impact on the potential to receive trailer detention over others.

## Conclusion

This survey indicated that only large carriers appear to be impacted by trailer detention and lack of utilization at scale, as 75% had at least 100 trailers and around 40% reported 500 or more trailers in their fleet.

Additionally, more respondents had dry van equipment than other types, and customers could expect between one and three days before a majority of carriers will charge detention.

Knowing that 65% of respondents reported two to three days as free could provide greater insight into planning and communicating trailer utilization problems to underperforming customers.

Finally, the average daily detention rate of $61.70 and median of $64 indicates that most carriers remain locked in on unified pricing or that most carriers utilize a similar standard accessorial rate.

## FreightWaves

FreightWaves SONAR gives subscribers access to aggregated freight data to analyze domestic and global freight market activity. FreightWaves' current and historical data is generated from thousands of exclusive sources representing more than $200 billion of contract and spot freight transactions. Using SONAR's Market Dashboard, users leverage thousands of data points across major North American transportation lanes to observe supply chain movement and trends. Supply chain, logistics and global operations organizations use SONAR to identify transportation-related efficiencies and opportunities.

FreightWaves is also the largest publisher of freight news and data in the world. FreightWaves.com publishes 40-plus news articles per day, providing commentary and analysis for freight transportation, while FreightWavesTV is the first and only streaming TV network for the transport and logistics industry.



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