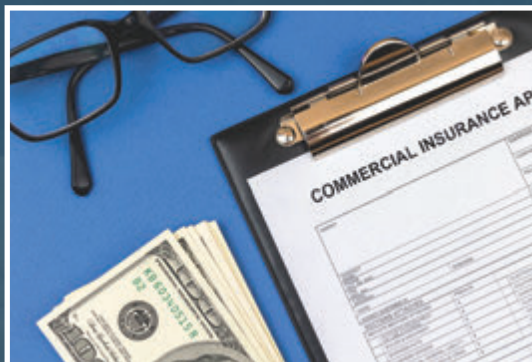


The Impact of Rising Insurance Costs on the Trucking Industry

February 2022



Prepared by the American Transportation Research Institute



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TABLE OF CONTENTS

INTRODUCTION.....	7
RESEARCH OBJECTIVE.....	8
BACKGROUND.....	8
METHODOLOGY.....	11
RESPONDENT DEMOGRAPHICS.....	11
Size of Operation.....	12
For-Hire Business Operation Type	12
Trip Types.....	12
Trip Region.....	13
FINDINGS.....	14
Premiums	14
Cost per Mile Comparisons	15
Excess Coverage Levels	18
Deductibles and Self-Insurance Retention (SIR)	21
Self-Insurance Retention	24
Insurance Captives.....	25
Out-of-Pocket Costs	26
Crashes	28
Safety Technology Implementation	31
Spending Cuts.....	33
Causes of Insurance Rate Increases.....	34
CONCLUSIONS.....	38
APPENDIX.....	40

FIGURES AND TABLES

Figure 1: Insurance Premium Costs per Mile 8

Figure 2: Truck and Passenger Vehicle Crash Rates, 1999 to 2019 9

Table 1: Respondent Fleet Size..... 12

Table 2: Respondent Primary For-Hire Operation Type..... 12

Table 3: Survey Respondent Trip Types 13

Table 4: Survey Respondent Trip Region 13

Figure 3: Average Auto Liability Premiums for Very Large and Large Fleets 14

Figure 4: Average Auto Liability Premiums for Medium and Small Fleets..... 15

Figure 5: Average Premium Costs per Mile by Size Normalized to 2020 Mileage . 16

Figure 6: Average Premium Costs per Mile by Sector Normalized to 2020 Mileage 17

Figure 7: Average Premium Costs per Mile by Region Normalized to 2020 Mileage 18

Figure 8: Excess Coverage Levels by IFTA Mileage by Sector 19

Figure 9: Excess Coverage Levels 20

Figure 10: Impact of Excess Coverage Level Changes on Premiums..... 21

Figure 11: Proportion of Deductible or SIR to Total Coverage by Sector 22

Figure 12: Average Auto Liability Deductible or SIR per Incident 23

Figure 13: Impact of Deductible or SIR Changes on Premiums..... 24

Table 5: Self-Insurance Retention Participation 25

Table 6: Insurance Captive Participation 25

Figure 14: Average Out-of-Pocket Incident Costs Below Deductible or SIR 26

Figure 15: Impact of Deductible or SIR Changes on Out-of-Pocket Costs 28

Figure 16: Impact of Three-Year Crash Rate Changes on Premiums 29

Figure 17: Impact of Deductible Changes on Crashes 30

Figure 18: Impact of Coverage Changes on Crashes 31

Figure 19: Safety Technology Equipment Added from 2018-2020..... 32

Table 7: Top Spending Cuts..... 33

ACRONYMS

ATRI	American Transportation Research Institute
CSA	Compliance, Safety, Accountability
FMCSA	Federal Motor Carrier Safety Administration
IFTA	International Fuel Trade Agreement
LTL	Less-Than-Truckload
MCMIS	Motor Carrier Management Information System
RAC	Research Advisory Committee
SIR	Self-Insurance Retention
TPA	Third-Party Administrator

INTRODUCTION

Commercial auto insurance is an essential yet complex cost center for trucking fleets. Rising rates in the commercial insurance market pose a challenge to motor carriers of all sizes and sectors, regardless of safety records. In response, the American Transportation Research Institute (ATRI) Research Advisory Committee (RAC) identified this study as a top research priority in 2020.¹

This research expands on ATRI's ongoing efforts to provide detailed analyses of financial and operating data based on proprietary data provided by motor carriers. Since 2008, ATRI has published its annual *An Analysis of the Operational Costs of Trucking*, which provides updated, comprehensive analysis of operational costs for motor carriers. In light of large annual increases in insurance premium costs documented in the Operational Costs report, ATRI's RAC recognized that a more in-depth analysis of underlying factors and consequences was needed to understand the full impact of insurance cost increases on safety and operations. This report also identifies a nexus between commercial insurance and ATRI's research on risk and litigation found in *The Impact of Small Verdicts and Settlements on the Trucking Industry* and *Understanding the Impacts of Nuclear Verdicts on the Trucking Industry*.²

This report analyzes commercial auto insurance trends as one dimension of the total cost of risk – a framework that provides a more comprehensive account of the evolving role of insurance in the trucking industry. By documenting and quantifying key insurance components as well as additional risk cost centers across the trucking industry, this research offers strategic insight into the causes and impacts of rising insurance costs. Equally important, this analysis can provide benchmarks for carriers and insurance professionals as well as practical evaluations of risk management strategies currently available to carriers.

¹ ATRI's Research Advisory Committee is comprised of industry stakeholders representing motor carriers, industry suppliers, state and federal government agencies, labor and driver groups, law enforcement, and academia. The RAC is charged with annually recommending a research agenda for the Institute.

² Claire Evans and Alex Leslie, *The Impact of Small Verdicts and Settlements on the Trucking Industry*, American Transportation Research Institute, Nov. 2021; Dan Murray, Nathan Williams, and Erin Speltz, *Understanding the Impacts of Nuclear Verdicts on the Trucking Industry*, American Transportation Research Institute, June 2020.

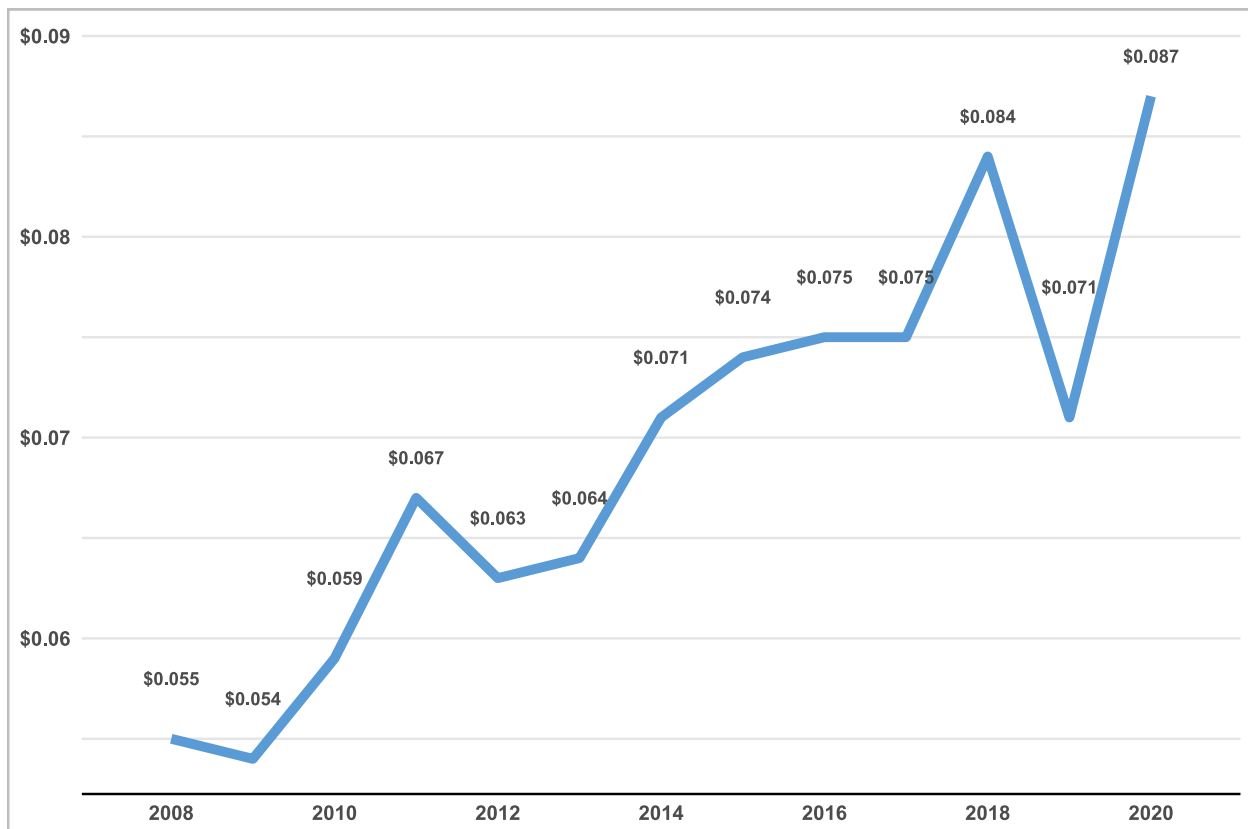
RESEARCH OBJECTIVE

This research is predicated on the need for accurate and timely insurance cost data analysis in the trucking industry. Although previous studies conducted by ATRI and others have moderately quantified and explained rising insurance costs, these studies do not capture the nuances of carrier responses to these costs. This study quantifies carrier responses to, and mitigating strategies for, rising insurance costs by aggregating three years of confidential carrier insurance cost data and carrier crash data. By establishing a standardized data collection methodology and analysis, this research creates a baseline for any future studies that seek to document the changing landscape of commercial auto insurance in trucking.

BACKGROUND

Volatile and increasing insurance premiums have created a very challenging operating environment for motor carriers. ATRI's annual *An Analysis of the Operational Costs of Trucking* report found that insurance premium costs per mile increased overall by 47 percent over the last ten years, from \$0.059 to \$0.087 (Figure 1).³

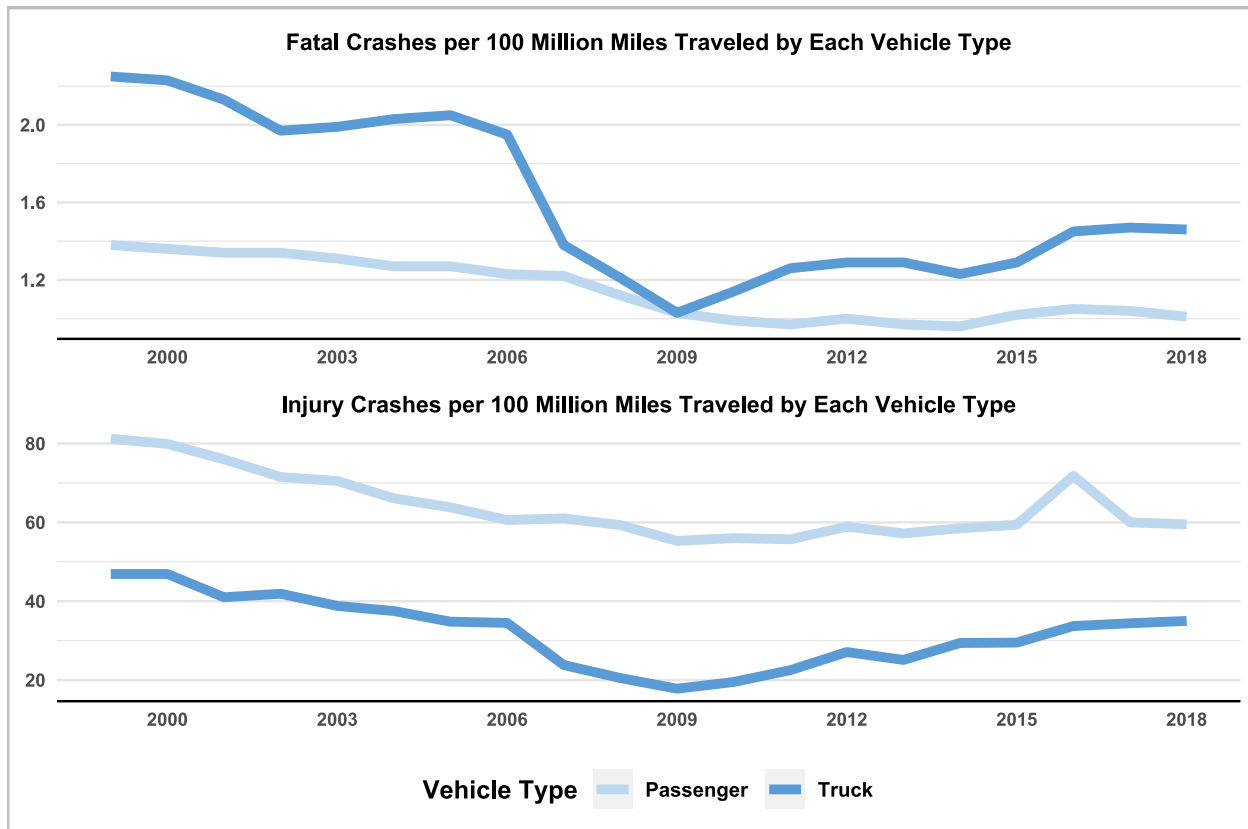
Figure 1: Insurance Premium Costs per Mile



³ Alex Leslie and Dan Murray, *An Analysis of the Operational Costs of Trucking: 2021 Update*, American Transportation Research Institute, Nov. 2021.

Industry-wide trends in truck-involved crash frequency and severity certainly play a role in insurance rate trends, as do the numerous other factors described in this research. While Figure 2 shows that frequency and severity were on the rise from 2009 to 2018 – the data time-period used in this analysis – the rate of insurance cost increases during this same period (Figure 1) far exceeds the nominal rate increase in crashes (given that annual premiums reflect crash history from the previous year and earlier).⁴

Figure 2: Truck and Passenger Vehicle Crash Rates, 1999 to 2019



As Figure 2 also shows, however, recent annual crash levels remain below those of the early 2000s and before. Furthermore, though there is a relatively strong correlation between crash frequency and premium costs per mile in these two datasets ($r = 0.69$, $p < 0.01$), the increase in crash frequency does not account for the entirety of premium increases in the period from 2009 to 2018.⁵ Industry safety is of paramount concern, but it is not the only factor that influences commercial auto insurance rates.

⁴ *Large Truck and Bus Crash Facts 2019*, Analysis Division, Federal Motor Carrier Safety Administration, Oct. 2021. This figure utilizes Tables 4, 5, 7, and 8.

⁵ This figure represents the simple correlation between each year's premium cost per mile and the preceding year's total crashes per 100 million miles traveled (fatal plus injury). More comprehensive correlations between crashes and insurance policies at the carrier level are evaluated in the subsequent sections.

Litigation also puts financial pressures on insurers which are then passed on to motor carriers. ATRI's report on *The Impact of Small Verdicts and Settlements in the Trucking Industry* found that this category of litigation resulted in an average payment of between \$406,386 and \$449,792.⁶ Furthermore, factors related to the litigation process – rather than crashes themselves – have a statistically significant impact on payment amounts. Cases venued in highly litigious states such as California, Michigan, New Jersey, and North Carolina, for example, “had average litigation payments over 50 percent larger than the national average.”⁷

Industry growth presents additional challenges. The industry-wide expansion of fleets and the driver workforce has increased exposure to risk and introduces additional uncertainty into risk projections for motor carriers and insurers alike.

Economic conditions within the insurance industry have contributed to rate increases as well. Incurred losses for insurers of commercial vehicles grew annually between 2015 and 2019, for an overall increase of 50 percent.⁸ Losses for insurers parallel a general rise in claims despite the fact that net premiums written have consistently risen at a higher rate.⁹ Underwriting losses persist, despite reaching a ten-year low during the coronavirus pandemic in 2020, due to high claim severity.¹⁰ Loss ratios were even higher in states with some of the highest numbers of truck registrations, such as Texas, which are comparatively more litigious.¹¹

In response, insurers are reallocating coverage capacity to other less risky sectors, with some companies leaving the market altogether and others reducing offered coverage limits.¹² Declines in capacity and competition in the commercial auto insurance market exert additional upward pressure on rates. Reductions in the coverage limits offered by insurers also force carriers to seek other sources of coverage or to operate with greater exposure to nuclear verdicts.

All these factors combined generate an industry-wide risk cost increase, which includes higher insurance premiums but is by no means limited to them. Already-high rates are exacerbated for any carrier experiencing an uptick in crashes or a particularly expensive

⁶ Claire Evans and Alex Leslie, *The Impact of Small Verdicts and Settlements on the Trucking Industry*, American Trucking Research Institute, Nov. 2021.

⁷ Ibid.

⁸ “Insurance Fact Book 2021.” Insurance Information Institute. 2021. Available online: https://www.iii.org/sites/default/files/docs/pdf/insurance_factbook_2021.pdf

⁹ Ibid.

¹⁰ “Commercial Auto Results Aided By Rising Rates, Reduction in Driving.” Fitch Ratings. May 12, 2021. Available online: <https://www.fitchratings.com/research/insurance/commercial-auto-results-aided-by-rising-rates-reduction-in-driving-12-05-2021>

¹¹ Borba, Philip S. and Jones, Derek. “Trends in Attorney Representation: Texas Commercial Automobile Insurance.” Milliman. March 19, 2021. Available online: <https://www.apci.org/media/news-releases/release/65831/>; “American Trucking Trends 2020.” American Trucking Association. 2020.

¹² Amaral, Rodrigo. “There’s the Hard Market – Then There’s the Trucking Industry.” Available online: <https://riskandinsurance.com/the-trucking-industry-insurance-crisis/>

lawsuit. Unsafe operating practices that once incurred only short-term costs now result in long-running repercussions that include persistent rate spikes and even bankruptcy.¹³

Motor carriers have responded with a variety of strategies for restructuring insurance policies, improving safety and redistributing operational costs. Insurance costs are not the only costs on the rise, however. The new technologies that help make trucks safer, the bonuses or higher wages that promote safe driver practices, and the administrative initiatives to develop more comprehensive safety training and legal protocols have all led to higher marginal costs.¹⁴

Industry experts as well as the findings in this report suggest that carriers should consider all safety-related matters and expenses – in addition to insurance – as part of a total cost of risk. This comprehensive approach enables carriers to organize costs more effectively for the long-term by emphasizing the impacts that all cost centers have on safety and the relationships between them.

METHODOLOGY

An online data collection form (see Appendix) was sent to motor carriers in ATRI's contact list and disseminated through industry trade press. To capture the cost of risk as holistically as possible, the data collection form solicited information for all components of commercial auto insurance in addition to incident costs, technology usage, operational metrics and cost-management strategies. Responses were reviewed carefully, and the aggregated data was cleaned and summarized to eliminate inconsistencies and missing entries. The data was subdivided primarily by fleet size and sector, and analyzed for trends in paid premiums, excess coverage levels, deductible levels, self-insurance retention and insurance captive participation, out-of-pocket costs, and safety technology implementation.

The Federal Motor Carrier Safety Administration's (FMCSA's) Motor Carrier Management Information System (MCMIS) carrier crash data was obtained for all motor carrier participants. Insurance cost data and crash data was then analyzed in aggregate to identify relationships between trends in costs and safety outcomes.

RESPONDENT DEMOGRAPHICS

Participating motor carriers represented 94,555 truck tractors, straight trucks and specialty trucks with an accumulated total of 7.5 billion IFTA miles in 2020.¹⁵ The data represented 82 carriers and contained general operational information in addition to insurance costs.

¹³ Michael Bradford, "Driver shortage, rate hikes hit trucking market," *Business Insurance*, Sept. 1, 2021, available online: <https://www.businessinsurance.com/article/20210901/NEWS06/912344088/Driver-shortage,-rate-hikes-hit-trucking-market>.

¹⁴ Alex Leslie and Dan Murray, *An Analysis of the Operational Costs of Trucking: 2021 Update*, American Transportation Research Institute, Nov. 2021.

¹⁵ Each motor carrier must record total vehicle miles traveled across U.S. states and Canadian provinces in accordance with the International Fuel Trade Agreement (IFTA). As such, it is an industry standard for mileage.

Size of Operation

Because freight truck insurance varies widely by fleet size and sector, data was summarized into four fleet size categories and analyzed as such. Table 1 provides the definitions of “small,” “medium,” “large” and “very large” fleet size breakdowns that are used throughout the report.

Table 1: Respondent Fleet Size

Fleet size	Number of Trucks	Proportion of Sample
Small	1 – 20	29.3 %
Medium	21 – 100	29.3 %
Large	101 – 1,000	20.7 %
Very Large	Greater than 1,000	20.7 %

For-Hire Business Operation Type

The majority of respondents reported truckload, hazmat or flatbed as their primary operation type (Table 2). Small fleets represented a large proportion of flatbed trucks, while very large fleets included a larger proportion of less-than-truckload (LTL) operations. Mid-sized fleets had the largest proportion of hazmat and truckload operation types.

Table 2: Respondent Primary For-Hire Operation Type

Sector	Sample Proportion
Truckload	23.2 %
Other	20.7 %
Hazmat	15.9 %
Flatbed	14.6 %
Refrigerated	11.0 %
Less-than-Truckload	7.3 %
Intermodal Drayage	7.3 %

Trip Types

Regional pick-ups and deliveries (100-500 miles) represented the largest proportion of trip lengths (40%). All other trip types, including national, inter-regional and local, were uniformly distributed and represented approximately 20 percent of all trip types. Table 3 gives the respondent share of miles traveled for each trip type.

Table 3: Survey Respondent Trip Types

Trip Type	Survey Respondent Share of Trips
Regional Pick-ups and Deliveries (100 – 500 miles)	40.7 %
National (over 1,000 miles)	21.2 %
Inter-regional pick-ups and Deliveries (500 – 1,000 miles)	19.4 %
Local Pick-ups and Deliveries (Less than 100 miles)	18.7 %

Trip Region

Respondents reported operating primarily in the Southeast and Midwest regions. Since most trip lengths were regional (Table 3), a majority of carriers are based in these regions as well. Table 4 gives the primary region of operation of respondent carriers.

Table 4: Survey Respondent Trip Region

Region	Survey Respondent Share of Trip Region
Southeast	33.5 %
Midwest	28.0 %
West	14.4 %
Southwest	13.5 %
Northeast	10.0 %
Canada	0.6 %

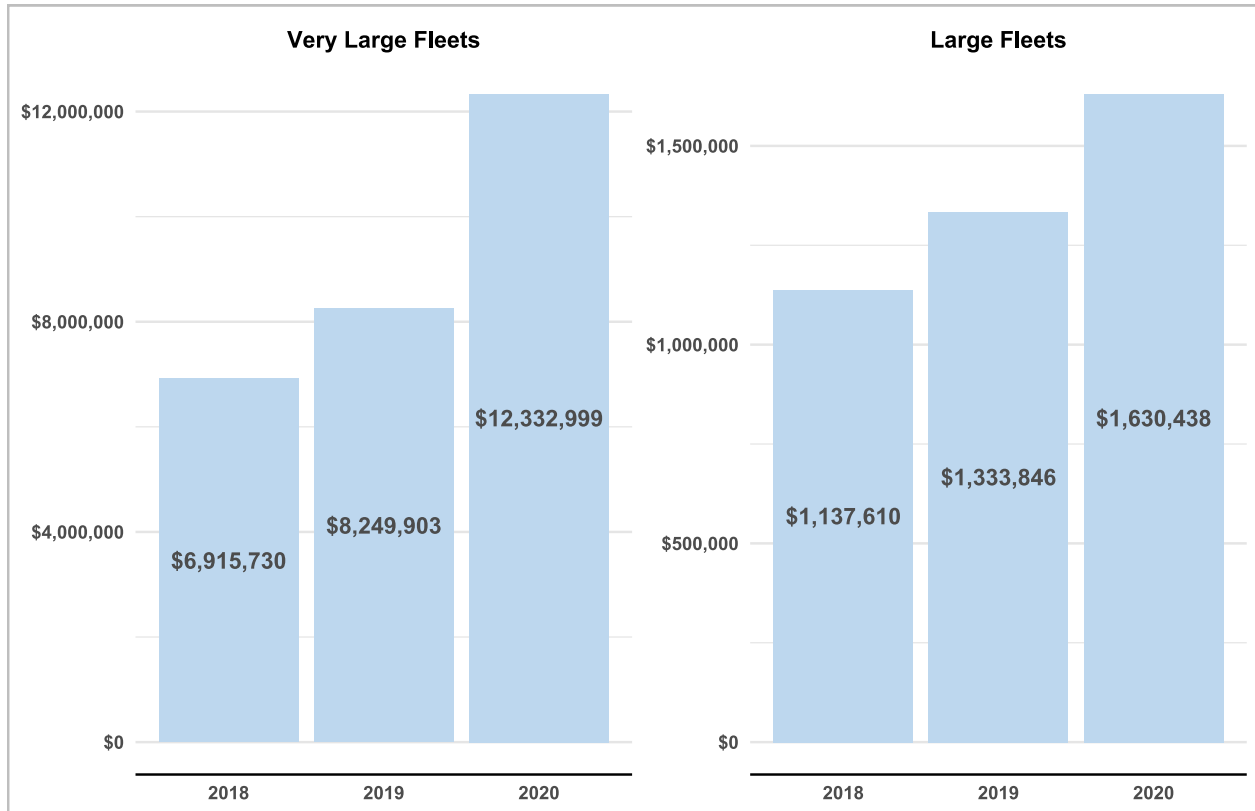
The trucking industry in general skews much more toward small truckload carriers than the cohort sample analyzed in this report. That said, the uniform distribution of this sample better facilitates comparison between sectors and fleet sizes.

FINDINGS

Premiums

ATRI respondents were asked to provide their company’s annual insurance premium costs for 2018, 2019 and 2020. The respondent data showed an increase in the average auto liability insurance premiums paid by carriers for all fleet sizes (Figures 3 and 4).

Figure 3: Average Auto Liability Premiums for Very Large and Large Fleets

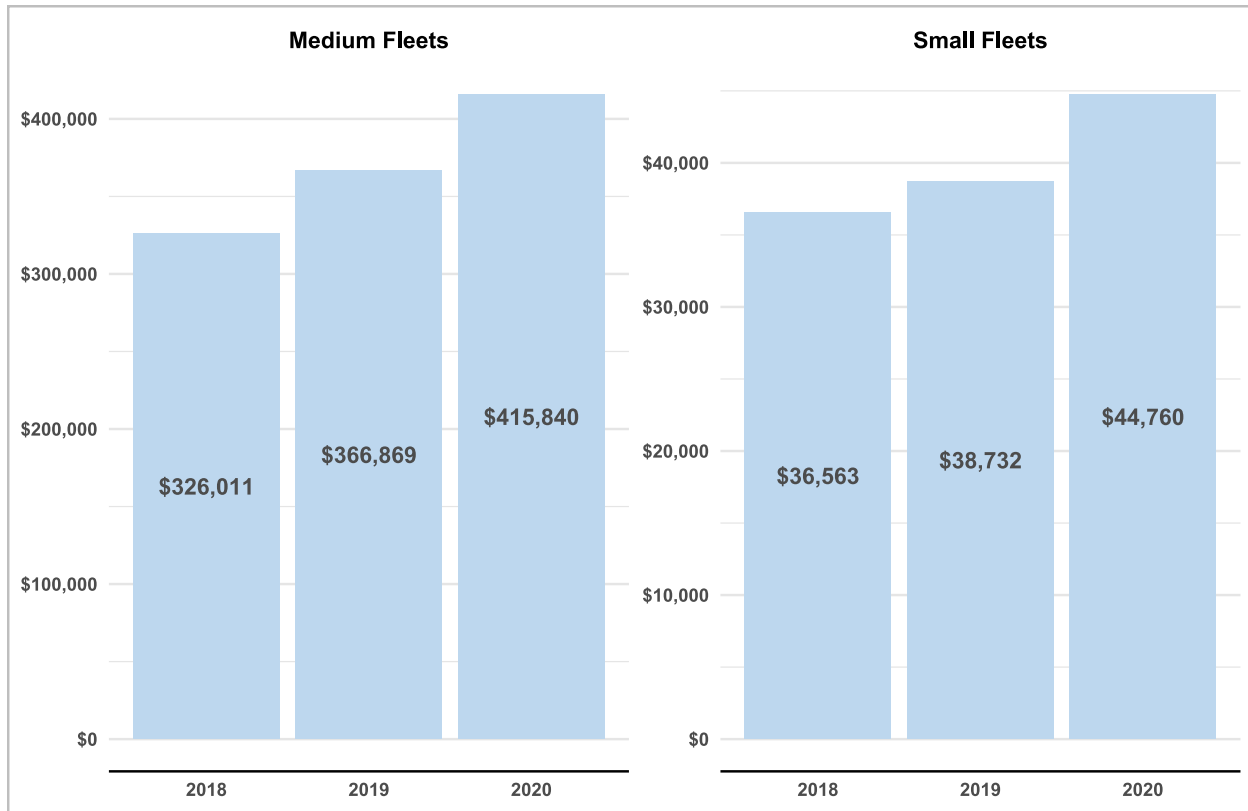


It is critical to note that there is a substantial difference in the types of insurance policies, and the corresponding costs, utilized by large carriers versus small carriers.

The dramatic increases experienced by large and very large carriers in Figure 3 primarily result from various excess coverage levels within these carriers’ insurance stacks. Pricing for these excess coverage levels/policies was extremely volatile and expensive over the past three years relative to basic or minimum coverage levels.

The large majority of small carriers maintained coverage levels at or slightly above the minimum \$750,000 federal requirement; at this level of insurance coverage, small carriers were less exposed to volatile and increasing pricing on excess coverage.

Figure 4: Average Auto Liability Premiums for Medium and Small Fleets



When the total cost of insurance is calculated using a per-mile metric (Figure 5), it becomes readily apparent that the real-world impact of insurance cost increases is more problematic for smaller fleets.

Ninety percent of carrier respondents reported an increase in premiums between 2018 and 2020, even though only 12.5 percent of these carriers reported an increase in excess coverage over the same period. In addition, 18.3 percent of carrier respondents, primarily representing large and very large fleets, recorded a spike in premiums of greater than 50 percent without increasing coverage.

Cost per Mile Comparisons

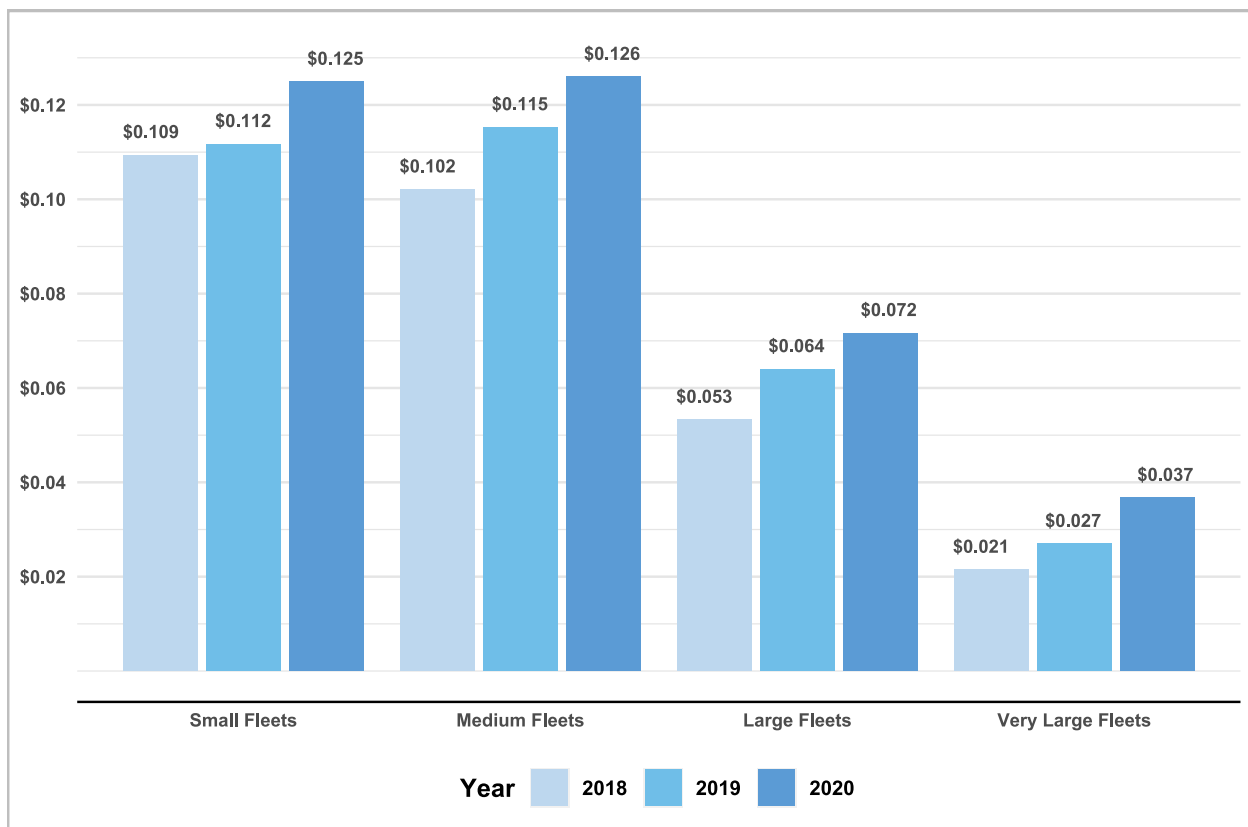
Cost per mile breakdowns show that premium costs increased across all fleet sizes, sectors and regions of operation, although not evenly.

The 2020 IFTA mileage and the annual total auto liability premium costs reported for each fleet were used to calculate an estimated average cost per mile by both fleet size and operation type. The use of 2020 IFTA mileage as a stand-in for 2018-2019 mileage results in higher estimated per-mile costs – and thus lower estimated percent increases – because IFTA mileage was lower in 2020 for slightly more than half of reporting

carriers.¹⁶ Standardizing costs in this manner demonstrates that, even by conservative estimates and correcting for the atypical Covid-related drop in IFTA mileage, rising premiums pose growing marginal costs difficulties for fleets of all sizes.

Small fleets continue to pay more than twice as much per mile in premiums as large fleets, which pay almost twice as much per mile as very large fleets (Figure 5). As ATRI's 2021 *An Analysis of the Operational Costs of Trucking* report shows, insurance premiums represent the largest proportional disparity between small and large fleets' marginal costs. The largest percent increase in premium costs per mile was seen in very large fleets. Even though very large fleets have the lowest premium cost per mile, this large percent increase poses significant challenges for operational planning.

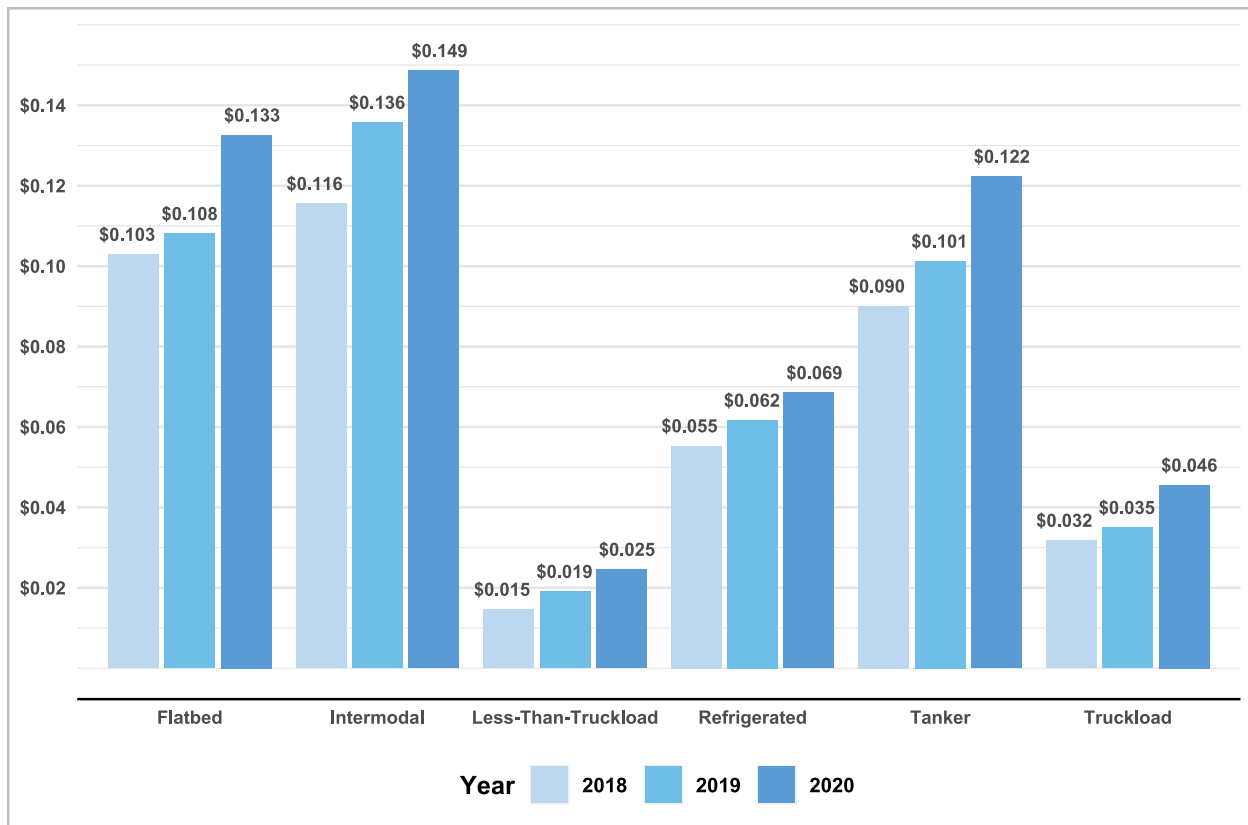
Figure 5: Average Premium Costs per Mile by Size Normalized to 2020 Mileage



Cost per mile increases were roughly consistent across operational types except for LTL operations, which saw a 66 percent increase from 2018 to 2020 (Figure 6).

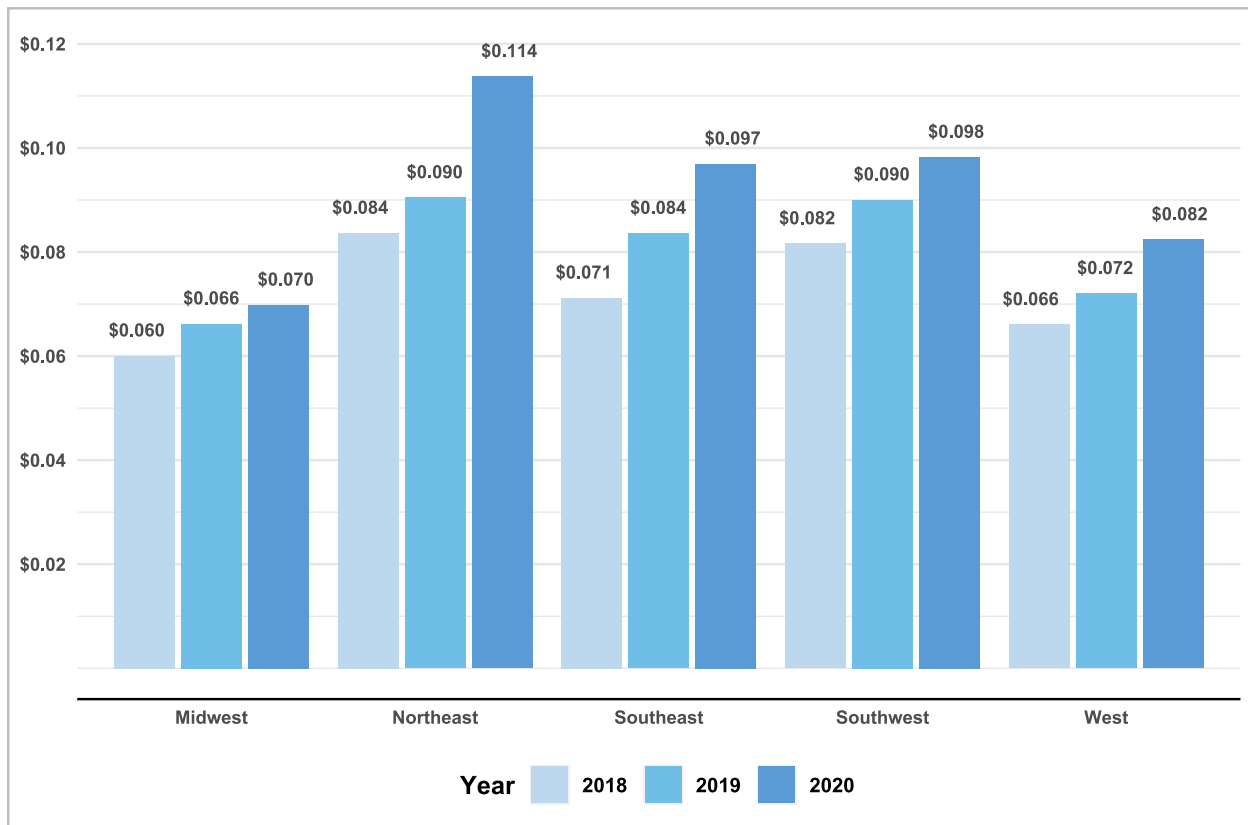
¹⁶ Alex Leslie and Dan Murray, *An Analysis of the Operational Costs of Trucking: 2021 Update*, American Transportation Research Institute, Nov. 2021.

Figure 6: Average Premium Costs per Mile by Sector Normalized to 2020 Mileage



Region of primary operation also influenced premium costs per mile, though less so than sector (Figure 7). Not surprisingly, carriers operating in the Northeast had the highest premium costs, while carriers operating in the Midwest had the lowest premium costs. The greatest increase in recent years occurred in the Southeast.

Figure 7: Average Premium Costs per Mile by Region Normalized to 2020 Mileage



Overall, fleet size had a much greater impact than sector or region on premiums and other risk costs analyzed in this report. In Figure 6, the LTL and truckload sectors have lower premium costs per mile because respondent fleets in these sectors tended to be larger. Small truckload carriers tended to have costs and policy components that were comparable to small carriers in other sectors: accordingly, the analysis in this report will prioritize fleet size breakdowns except where otherwise noted.

Excess Coverage Levels

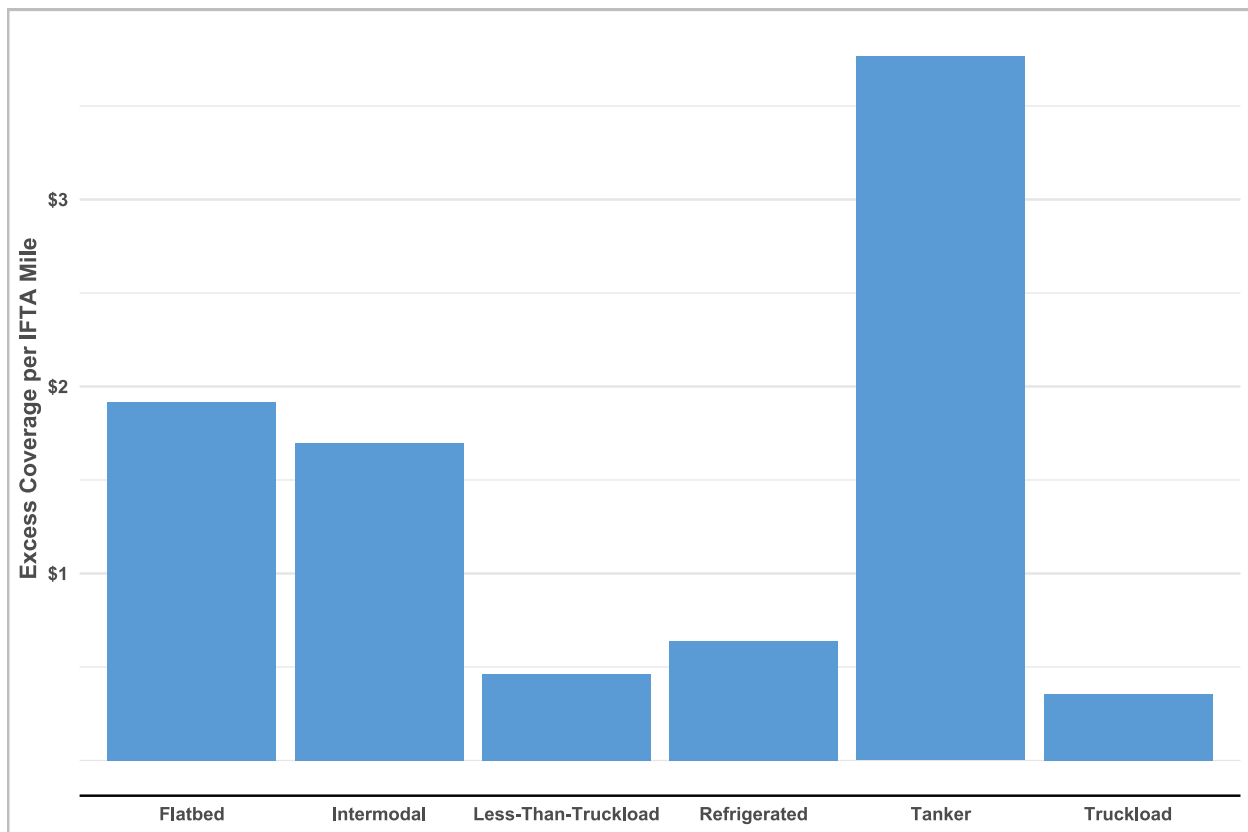
Respondents were asked to report their company’s annual total coverage levels as excess auto liability insurance over \$1 million. Though FMCSA only requires a \$750,000 minimum liability insurance coverage for non-hazardous freight, insurance industry experts indicated that most motor carriers treat \$1 million as a new de facto minimum coverage amount.¹⁷ The basis for defining \$1 million as base coverage is that most shippers and receivers now require at least \$1 million in coverage, with specific

¹⁷ “Financial Responsibility Requirements for Commercial Motor Vehicles,” Federal Motor Carrier Safety Administration, January 2013, available online: <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Financial-Responsibility-Study.pdf>.

sectors such as automotive, household goods movers and electronics requiring even higher coverage levels for carriers of all sizes.

Tankers had the highest coverage levels when averaged by IFTA mileage, a key measure of risk exposure. FMCSA requires that carriers of oil and certain types of hazardous waste meet a \$1 million coverage minimum, and that carriers of other hazardous materials meet a \$5 million coverage minimum.¹⁸ While this requirement is five times higher than that of general freight carriers, tankers had more than seven times the excess coverage levels of LTL and truckload carriers (Figure 8).

Figure 8: Excess Coverage Levels by IFTA Mileage by Sector



Flatbed and intermodal carriers also had considerably higher excess coverage levels on average, at roughly three times the excess coverage levels of LTL and truckload carriers.

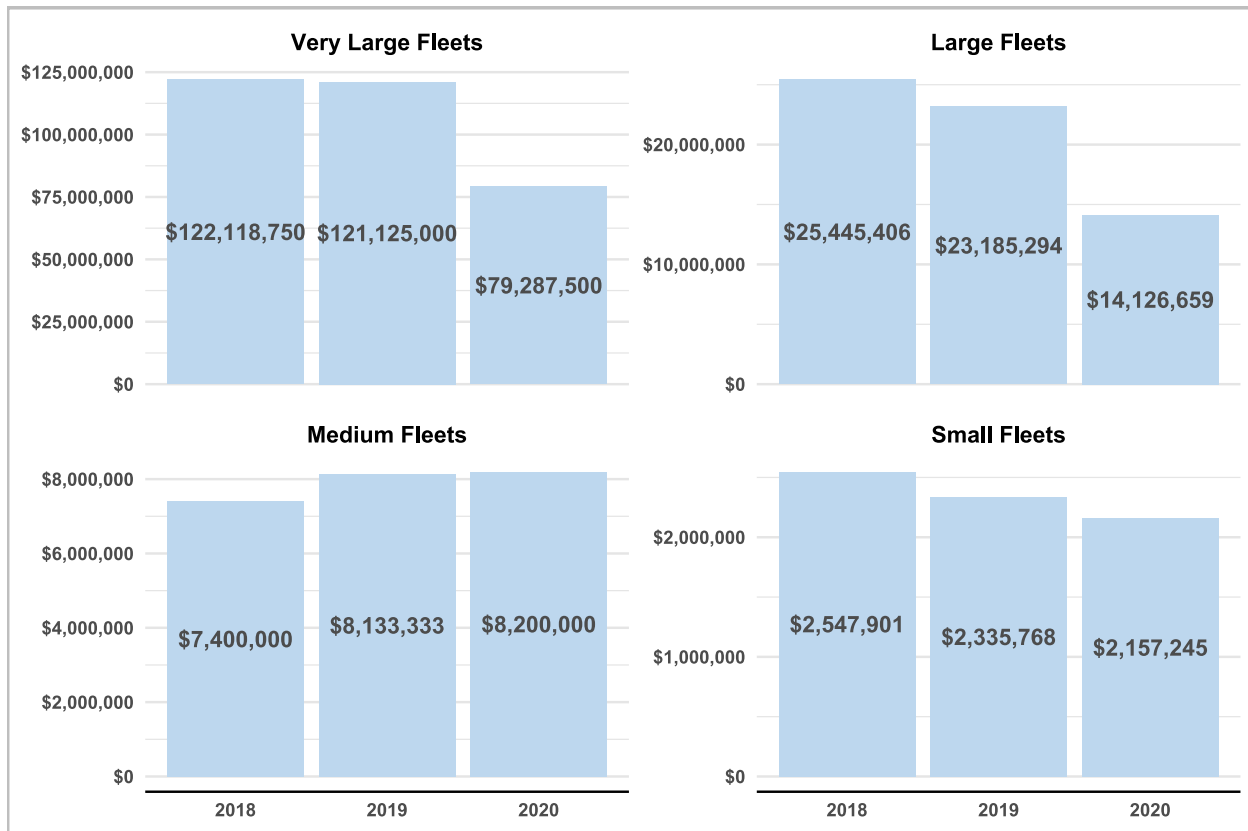
Of all sectors, truckload carriers operated with the lowest average excess coverage levels based on miles traveled.

As shown in Figure 9, excess coverage generally decreased between 2018 and 2020 – despite the simultaneous general increase in insurance premiums during the same period (Figures 3 and 4). In other words, carriers paid more for less coverage. The

¹⁸ Ibid.

average increases in premiums would have been even higher if more carriers had kept the same policy components.

Figure 9: Excess Coverage Levels



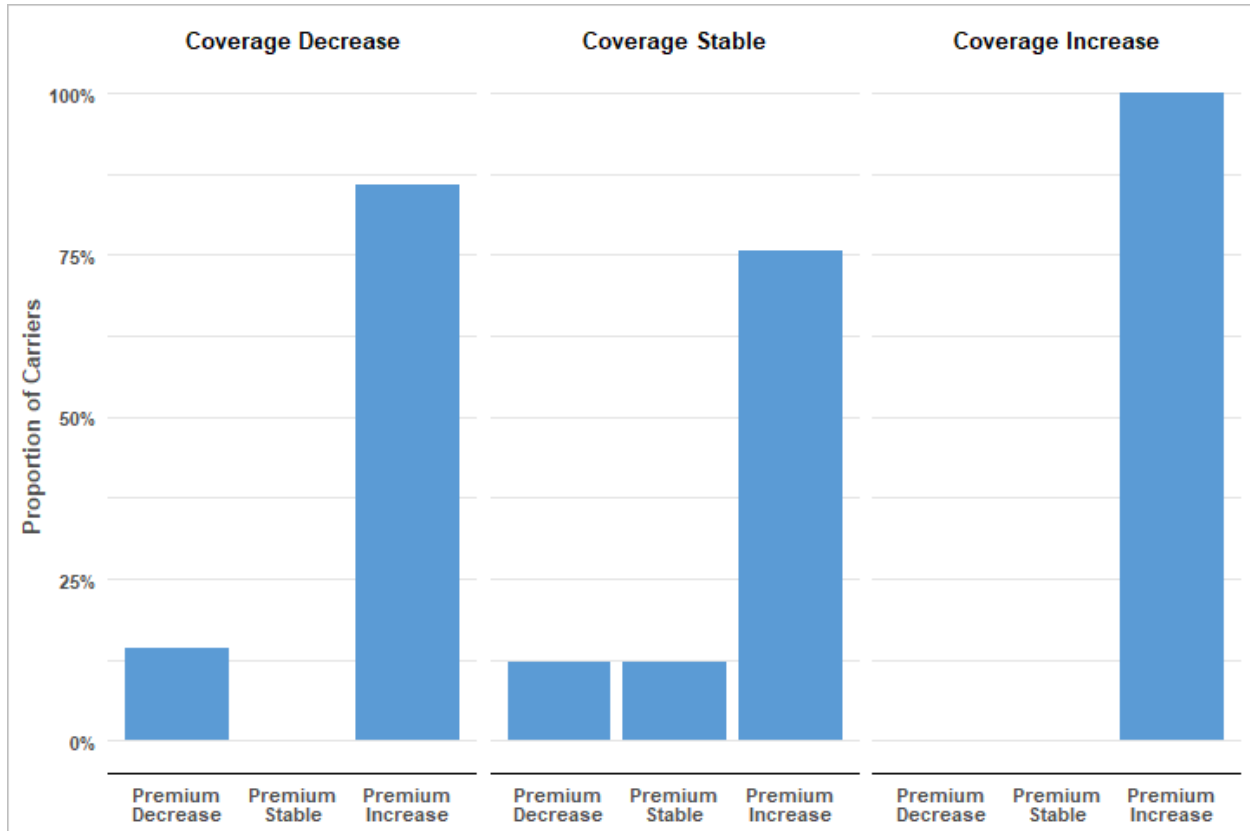
Carriers' most common response to increasing insurance rates was to decrease coverage levels in excess of \$1 million. The trend toward lower coverage levels was especially pronounced among very large fleets, a majority of whom (70.6 %) cut excess coverage by 25 percent or more between 2018 and 2020. Even though the average excess coverage for medium fleets increased moderately overall, the majority of these carriers retained the same coverage levels.

Feedback from insurance industry experts indicated that most companies reduce excess coverage primarily to lower costs. Several professionals also noted, though, that availability of excess coverage is declining due to high risk, social inflation, and other causes of low profitability discussed later in this report. Many carriers may also determine their need based on improvements in safety and reduction of incidents.

Carriers were analyzed on a year-over-year basis to identify the extent that changing total coverage levels impacted their premiums (Figure 10). Only 14.3 percent of carriers that decreased coverage from 2018 to 2019 or from 2019 to 2020 successfully secured lower premiums; the remaining 85.7 percent of carriers that decreased coverage still paid higher premiums. A slightly smaller proportion of carriers that retained the same

level of coverage, 12.2 percent, were able to secure lower premiums, presumably due to other carrier- or policy-specific changes. As expected, all carriers that increased coverage paid higher premiums. As such, it appears that decreases in total coverage levels are unlikely to lower premiums unless the decrease is substantial or occurs in conjunction with other unique carrier- or policy-specific changes.

Figure 10: Impact of Excess Coverage Level Changes on Premiums



While cutting back on excess coverage can reduce premium costs in the short run, it can also increase carriers’ exposure to nuclear verdict cases. There are additional potential downsides to be considered as well. Carriers that decrease total coverage might inadvertently disqualify themselves from future contracts with shippers that require a higher minimum coverage level. This may not be a concern amid current high levels of freight demand, but it could become a limiting factor when markets eventually soften.

Deductibles and Self-Insurance Retention (SIR)

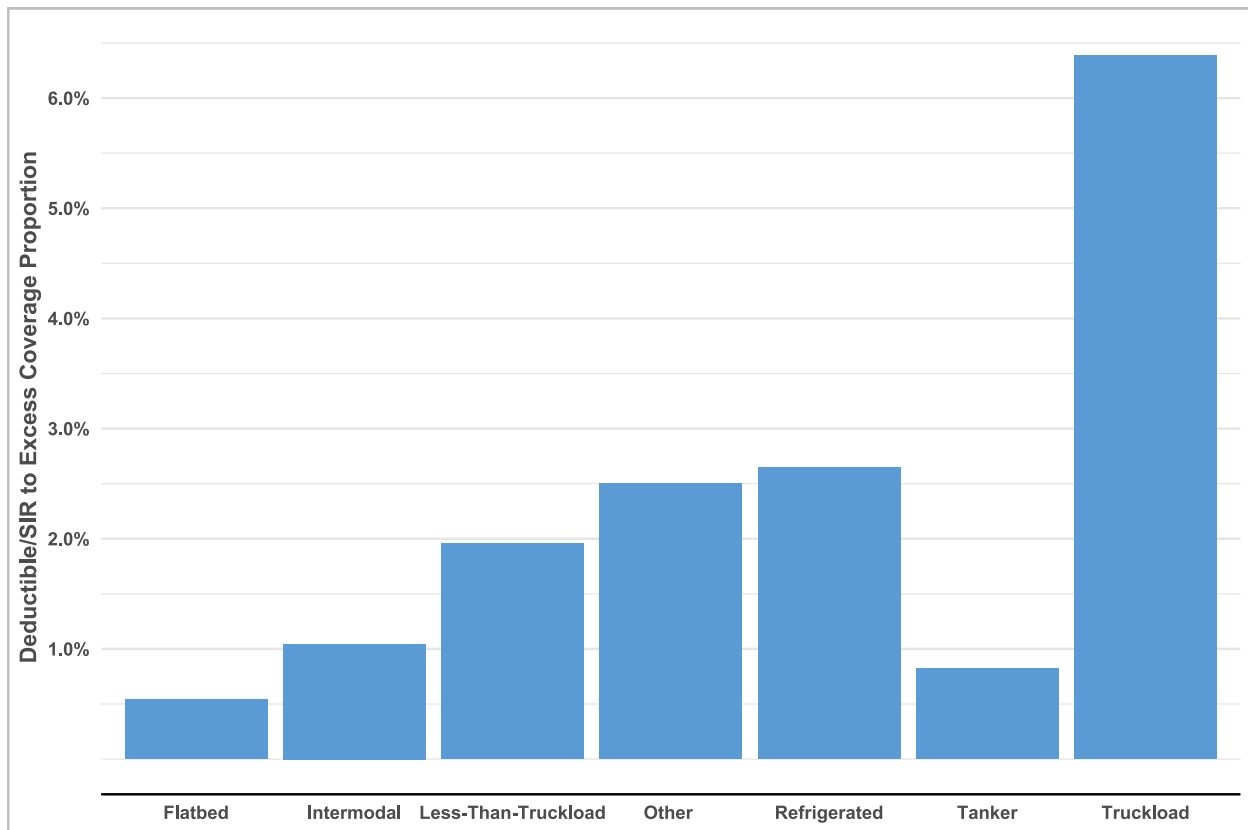
Deductible or SIR levels also vary considerably between sectors, as shown in Figure 11. Truckload carriers had the largest deductibles when measured as a proportion of their total coverage; their deductibles amounted to roughly 6 percent of their excess coverage. By having a higher deductible-to-coverage ratio, these carriers secured

lower premium costs, but in doing so they expose themselves to higher out-of-pocket costs. In the highly competitive truckload sector in particular, market pressures incentivize carriers to prioritize lower marginal costs.

Refrigerated and LTL carriers followed with deductibles averaging 2.5 percent and 2 percent of their total coverage, respectively.

Intermodal, tanker and flatbed carriers had the smallest deductibles relative to their total coverage in addition to having higher total coverage levels.

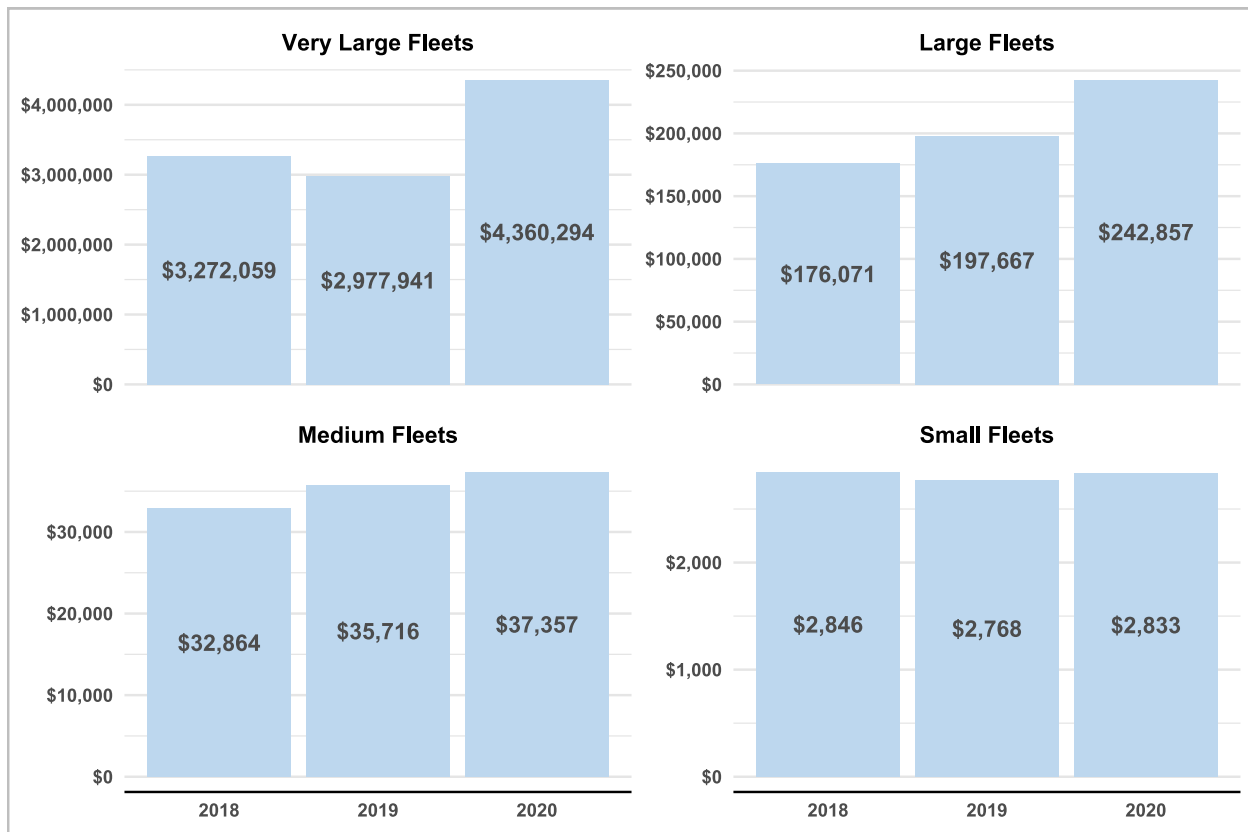
Figure 11: Proportion of Deductible or SIR to Total Coverage by Sector



The sample indicated an increase in average auto liability deductibles or self-insured retention from 2018 to 2020 for medium, large and very large fleets (Figure 12).

By covering a larger portion of losses per incident in the form of insurance deductibles or SIR, carriers can secure lower premiums. The trend of rising deductibles and SIR suggests that medium, large and very large carriers have likely calculated that their out-of-pocket costs will be lower than net insurance cost increases.

Figure 12: Average Auto Liability Deductible or SIR per Incident

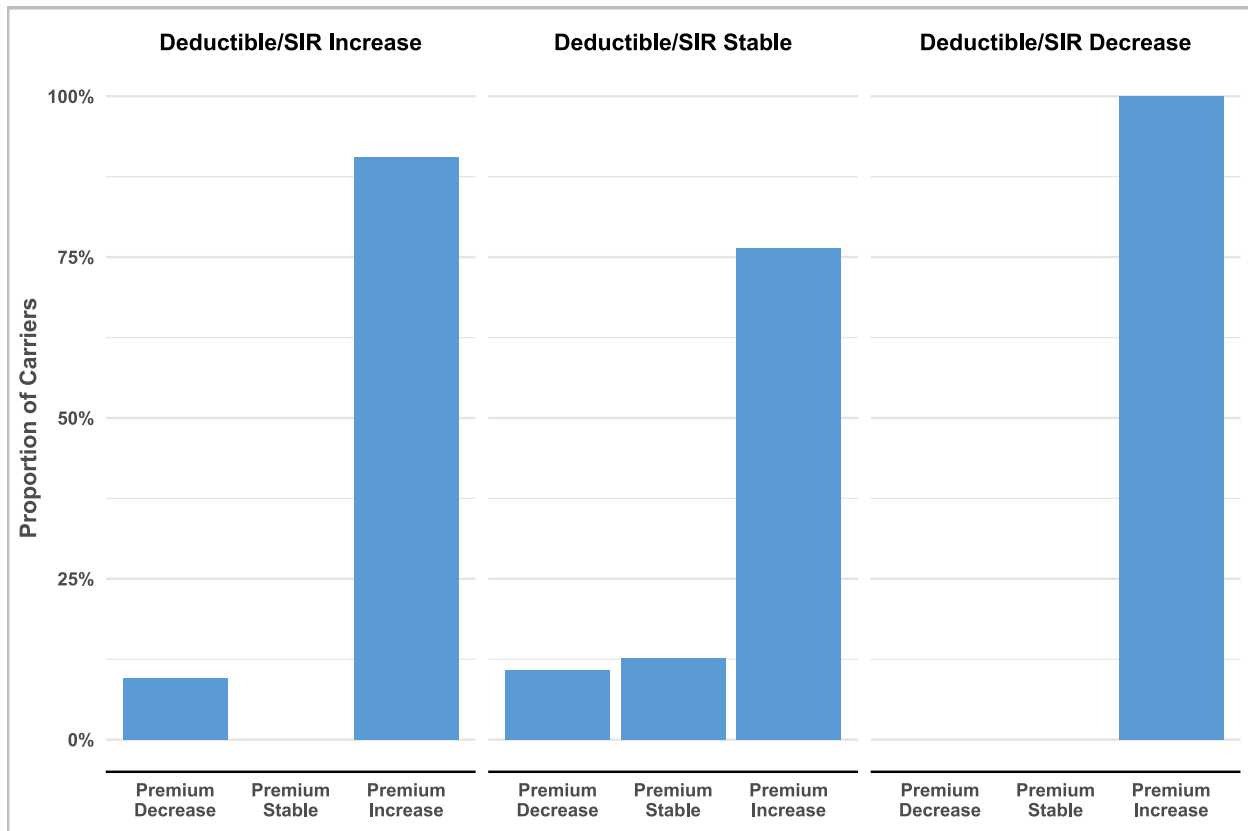


Small fleets were more likely to have deductible insurance policies, and most carriers in this category maintained the same deductible levels (Figure 12). Several factors explain this tendency, including small carriers with smaller profit margins may prefer to pay slightly higher premium costs over time rather than risk significantly higher out-of-pocket incident costs in the case of an incident, which could bankrupt a small fleet. With less available capital, smaller carriers also have fewer alternatives (such as SIR) to traditional deductible policies. Finally, many insurers do not offer higher deductible options to small carriers in order to reduce excess risk that the carrier may not be able to handle.

Carriers were analyzed on a year-over-year basis to identify whether changing deductible or SIR levels impacted their premiums (Figure 13). Only 9.5 percent of carriers that increased deductibles or SIR from 2018 to 2019 or from 2019 to 2020 successfully secured lower premiums; the remaining 90.5 percent of carriers that increased deductibles or SIR still paid higher premiums. A slightly greater proportion of carriers (10.8%) that retained the same deductible or SIR were able to secure lower premiums, presumably due to other carrier- or policy-specific changes. As expected, all carriers that decreased deductibles or SIR paid higher premiums. As such, it appears that increases in deductibles or SIR are unlikely to lower premiums meaningfully, unless

the increase is substantial or occurs in conjunction with other unique carrier- or policy-specific changes.

Figure 13: Impact of Deductible or SIR Changes on Premiums



Insurance industry experts advised that carriers should carefully assess their total cost of risk when considering whether to raise deductible or SIR amounts. Carriers need to be able to have confidence in the reliability of their loss projections and risk management. This requires strong data, a valid, reliable sample (covering many years and trucks) and higher expenditure in other cost centers that reduce total cost of risk, such as retention of skilled drivers and administrative staff.

Self-Insurance Retention

SIR offer several advantages over traditional deductible policies, though they also come with additional costs. While SIR require significantly greater out-of-pocket liabilities, they allow carriers to have more input in the claims resolution process, rely more on their own performance, and shield carriers in part from economic fluctuations specific to the insurance industry. Conversely, deductible policies are more susceptible to rising premiums, but they allow carriers to spread out financial obligations by relying on insurers for most claims management and administrative functions.

Respondents were asked to report their company’s total annual SIR levels from 2018, 2019 and 2020. The proportion of carriers with SIR and the proportion of carriers with SIR that increased or decreased its amount are shown in Table 5.

Table 5: Self-Insurance Retention Participation

Fleet Size	Proportion with SIR	Increased SIR from 2018 – 2020	Decreased SIR from 2018 – 2020
Very Large	64.7 %	5.9 %	5.9 %
Large	43.8 %	18.8 %	6.3 %
Medium	13.0 %	8.7 %	4.3 %
Small	7.7 %	0 %	3.8 %

SIR participation was most common among very large fleets; in fact, the majority of the large fleets with an SIR had more than 500 trucks. Though SIR participation was less common among large and medium fleets, SIR investment by carriers in these categories increased between 2018 and 2020. This suggests a trend among carriers toward SIR investment as an alternative to rising insurance costs.

That said, SIR still generally fulfills a secondary role to traditional insurance in the trucking industry. Only four carriers (two very large, one large and one medium) devoted more funds toward SIR than insurance premiums. Some carriers choose to use SIR for liability coverage while using deductibles for physical damage and cargo coverage.

SIR is not suited to all carriers. Carriers that possess the resources to invest in safety technology and strong claims management are best positioned to utilize the advantages of SIR. Insurers may also require a Third-Party Administrator (TPA) for carriers with SIR. These optimal or required conditions add to the total cost of SIR investment.

Insurance Captives

Respondents were asked to report participation in insurance captives, which represent another alternative to traditional deductible policies. Table 6 shows the proportion of participating carriers in each fleet size.

Table 6: Insurance Captive Participation

Fleet Size	Proportion with Insurance Captive
Medium	29.2 %
Very Large	12.5 %
Large	8.3 %
Small	0 %

Insurance captives have many of the same benefits as SIR, albeit to a lesser degree; they enable carriers to mitigate the impact of insurance industry economics and exert more control over the claims process. Insurance captives also have many of the same barriers to participation, such as requiring significantly greater capital outlays to establish loss funds. In addition, insurance captives limit participants' acceptable risks in order to optimize performance and reduce reinsurance costs, which can restrict operational decisions in areas like hiring and equipment purchases.

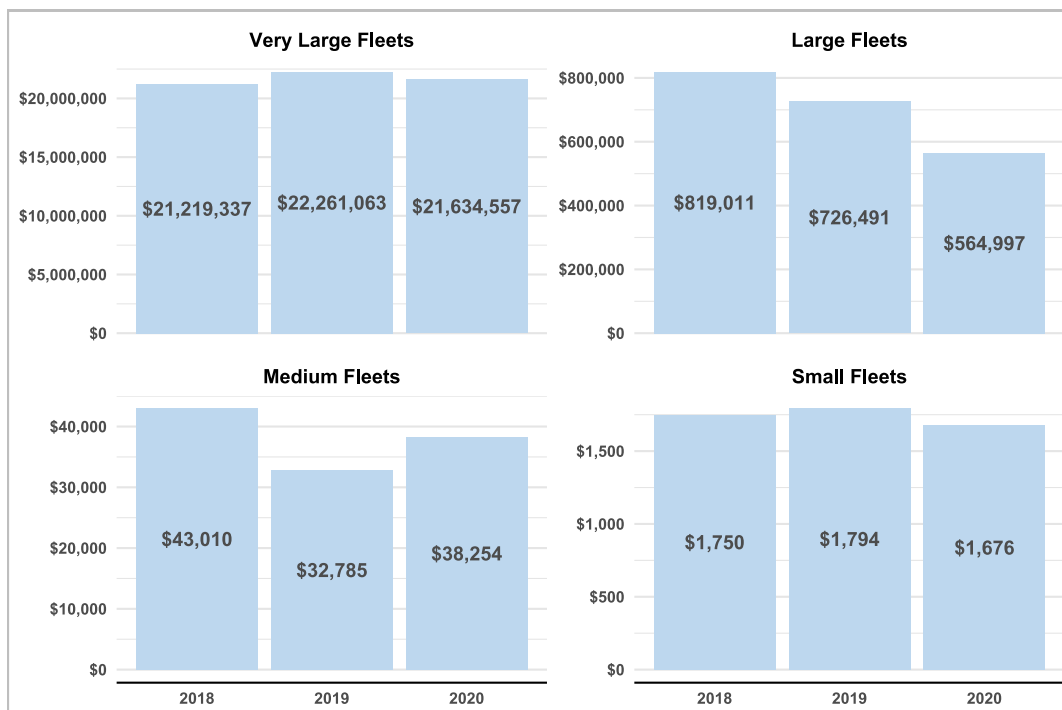
The majority of carriers of each fleet size did not participate in an insurance captive. Insurance captive membership was especially uncommon among fleets that were too small to have the necessary financial flexibility or large enough to pursue other options such as SIR participation. By contrast, almost one third of medium-sized carriers participated in an insurance captive, suggesting that carriers of this size are best positioned to benefit from captives.

To maximize the benefits of insurance captives, carriers should evaluate their capacity for risk on emerging industry issues – such as hiring drivers under the age of 21 as a response to the driver shortage – and participate in captives with other like-minded carriers. As premiums continue to increase, it is possible that insurance captives may pursue a greater variety of strategies for determining acceptable risks.

Out-of-Pocket Costs

Carriers also reported their annual total out-of-pocket incident costs not covered by insurance, as summarized in Figure 14.

Figure 14: Average Out-of-Pocket Incident Costs Below Deductible or SIR



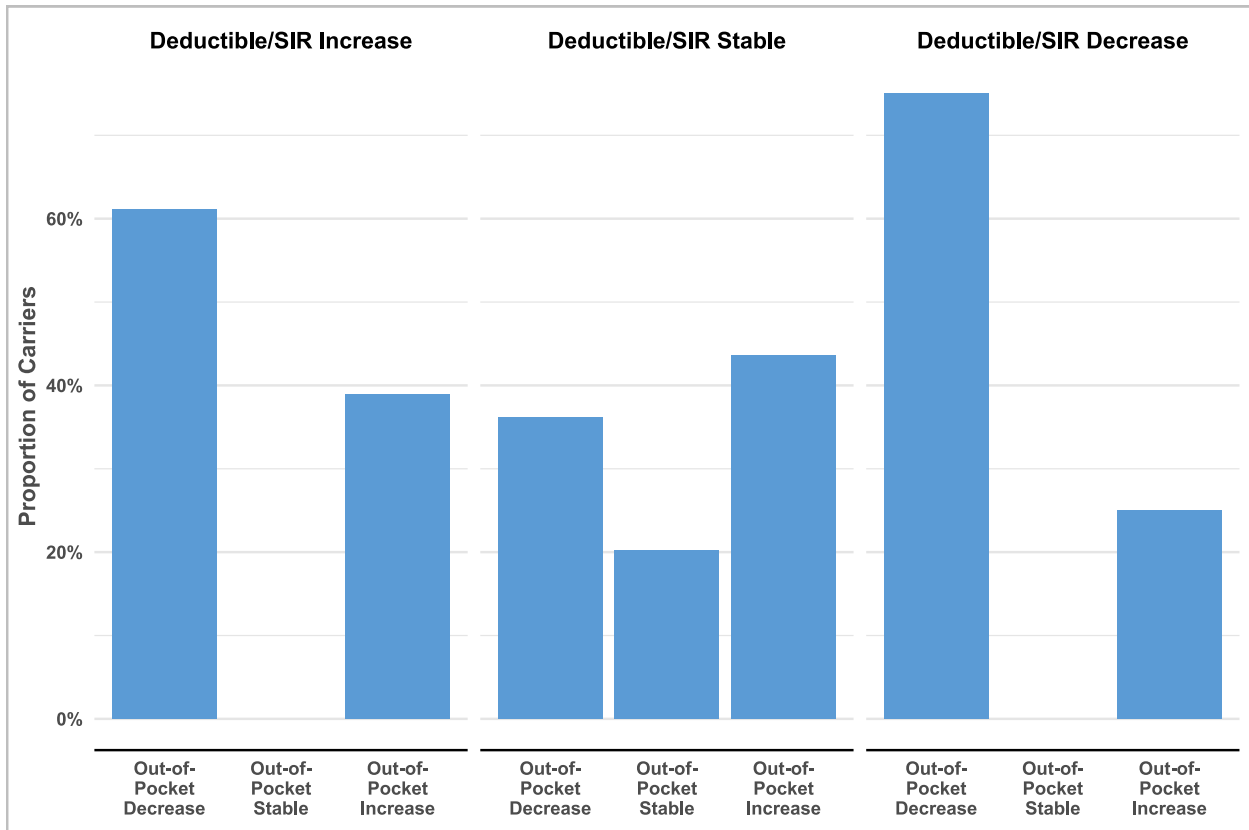
Even while premiums increased and carriers raised their deductibles or SIR, carriers' out-of-pocket incident costs (at or below their deductible or SIR) remained stable or even decreased. Medium fleets' variable out-of-pocket costs and small fleets' low out-of-pocket costs result from the fact that these fleet sizes have low crash totals.

These figures suggest that, regardless of any change in claim severity, the number of annual safety incidents did not significantly increase. FMCSA figures corroborate this fact. The annual number of truck-involved crashes declined from 2018 to 2019 and from 2019 to 2020, and current FMCSA figures place 2021 crash totals below those of 2019.¹⁹ In other words, premiums increased overall even as carriers trended safer overall.

Carriers that increased deductibles or SIR levels as a strategy for lowering premiums successfully lowered out-of-pocket costs more often than other carriers, as Figure 15 shows. Of all carriers that increased their deductible or SIR from 2018 to 2019 or from 2019 to 2020, 61.1 percent saw lower out-of-pocket incident costs – despite their greater exposure.

¹⁹ "Crash Statistics Summary Report," Federal Motor Carrier Safety Administration. Accessed online: <https://ai.fmcsa.dot.gov/CrashStatistics/rptSummary.aspx>

Figure 15: Impact of Deductible or SIR Changes on Out-of-Pocket Costs



Carriers that increased deductibles or SIR appear to have successfully curbed out-of-pocket incident costs by either decreasing the number or severity of incidents – thus saving costs on both premiums and crashes. For these carriers, greater exposure was an effective incentive to lowering risk.

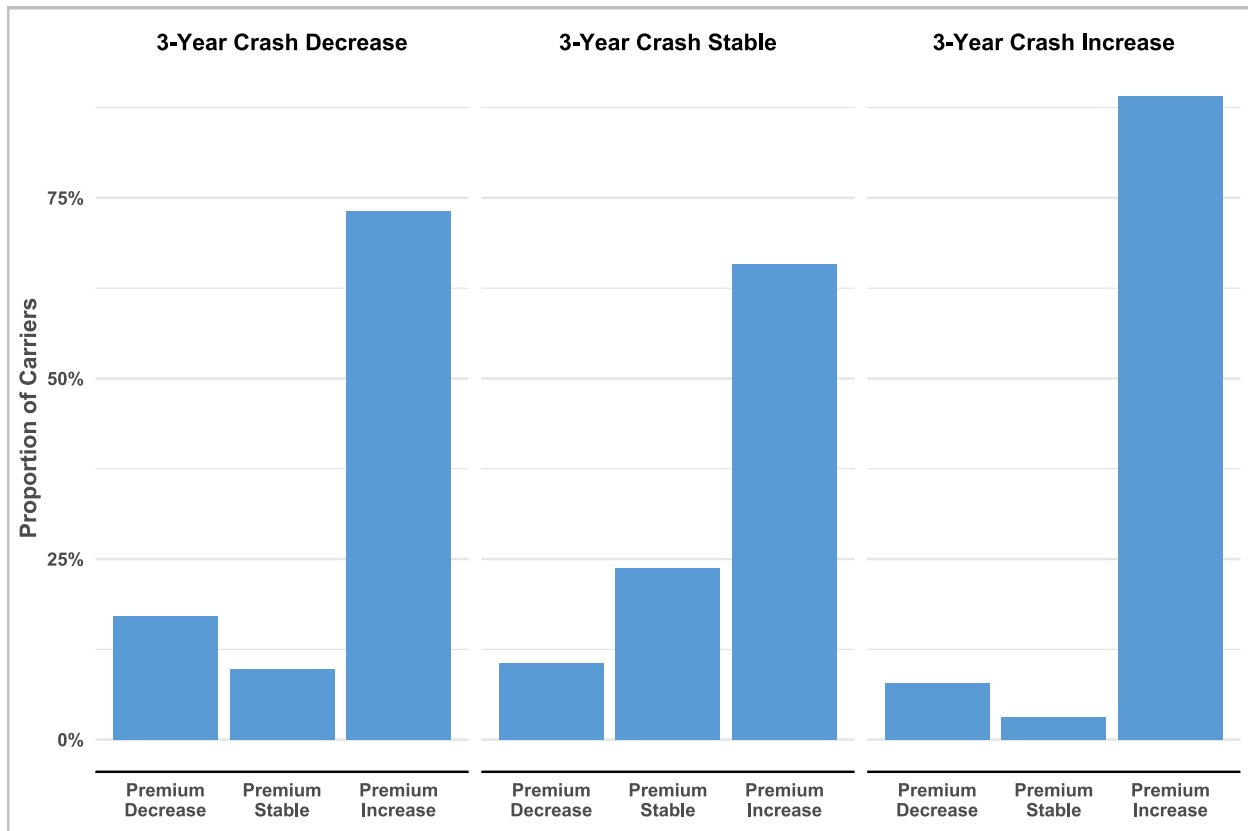
Crashes

Insurance survey data was compared with crash data from MCMIS in order to identify any relationships between carrier insurance cost strategies and crash risk. Changes in carrier crash data were examined in relation to changes in premium rates, total coverage levels, deductibles or SIR, and out-of-pocket costs to identify potential relationships.

Improvements in safety performance did not lead to lower premiums, as Figure 16 shows. Because insurers often use three to five years of crash history when determining rates, each carrier’s premiums were compared with their preceding three years of crash history. Only 17.1 percent of carriers that managed to decrease their three-year crash totals between either 2015-2017 and 2016-2018 or 2016-2018 and 2017-2019 were able to secure lower premiums in the subsequent policy year, while 74 percent of these carriers saw higher premiums in the subsequent policy year. This

tendency suggests that premium increases are largely due to factors outside of a carrier's experience rating.

Figure 16: Impact of Three-Year Crash Rate Changes on Premiums



The previous section of this report already documented that many carriers that cut costs by increasing deductibles and SIR levels successfully lowered out-of-pocket costs as well. MCMIS crash data corroborates this observation. Carriers that scaled back policy levels also successfully reduced crashes.

Figure 17 shows that a large majority of the carriers that increased deductibles or SIR – 75 percent – managed to decrease crash totals in the following year. In fact, carriers that increased deductibles were more than twice as likely to reduce crashes as carriers that decreased deductibles.

Figure 17: Impact of Deductible Changes on Crashes

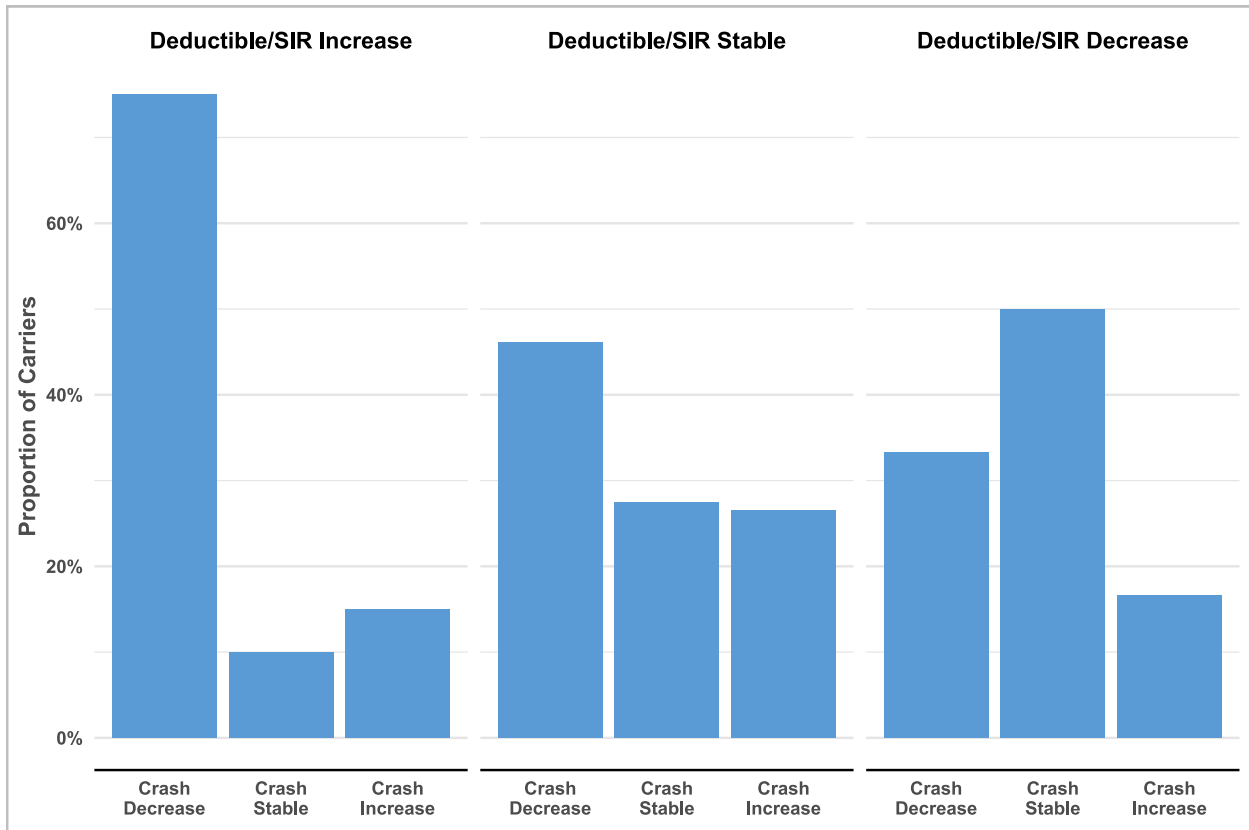
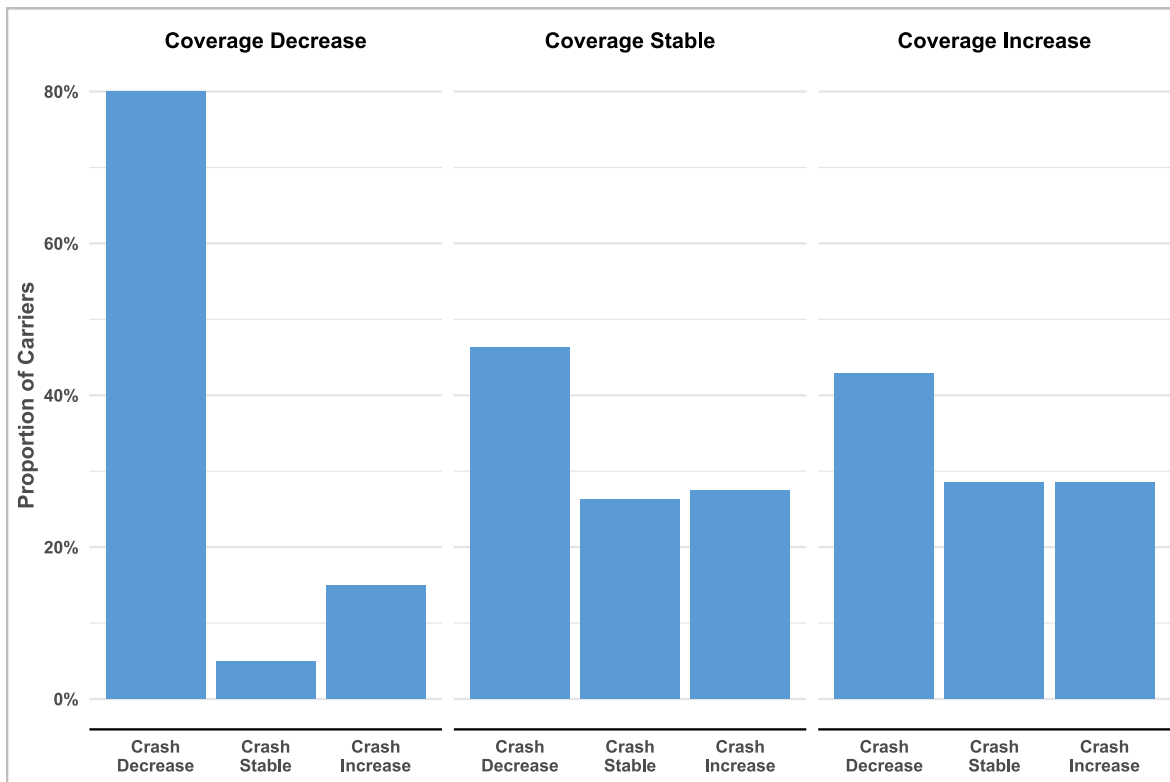


Figure 18 shows a similar and even more pronounced trend in coverage levels. A large majority of carriers that decreased their excess coverage – 80 percent – managed to decrease crashes in the following year. Carriers that decreased excess coverage were almost twice as likely to reduce crashes as carriers that increased coverage.

Figure 18: Impact of Coverage Changes on Crashes



Figures 17 and 18 suggest that lowering coverage and raising deductibles incentivize carriers to reduce crashes. Of course, it is by no means a certainty that carriers improve their safety performance after scaling back their insurance policies. Historical research documents that safety culture that permeates motor carrier fleets starts with a “top down” approach; these same senior executives would also be the final arbiters on decisions to cut insurance coverage levels and increase financial exposure.²⁰ To ensure that the coverage/safety relationship materializes, fleet executives must develop a holistic approach to the total cost of risk, one that permeates training, investments, equipment, operational planning, and safety management practices.

This approach, if persistently and successfully applied, can benefit all parties involved by reducing insurer losses, reducing carrier expenses and improving roadway safety.

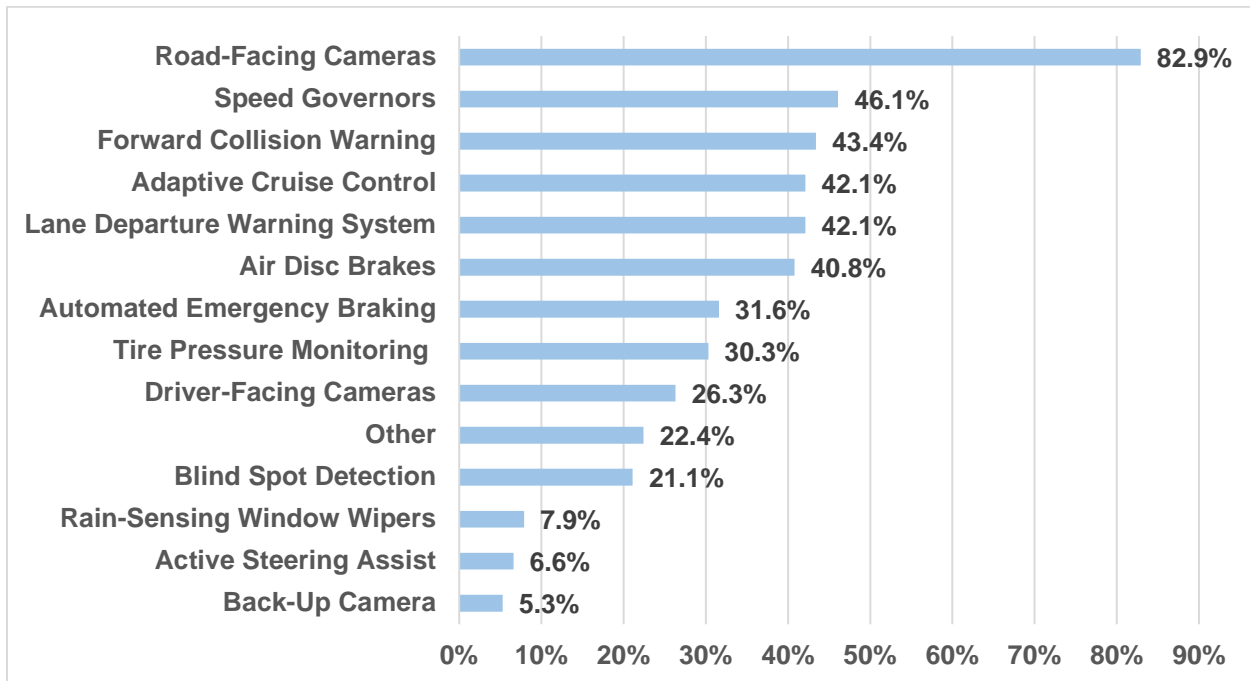
Safety Technology Implementation

Respondents were asked to report which leading safety technologies they added to their fleets over the three-year period (Figure 19). Ninety-two percent of all respondents adopted new safety technology in the last three years while 7.3 percent did not. Strikingly, 56 percent of carriers implemented three or more new safety technologies, indicating strong commitment among respondents to seeking new strategies for

²⁰ Jeffrey Short, Linda Boyle, Sandra Shackelford, Bob Inderbitzen, and Gene Bergoffen, *The Role of Safety Culture in Preventing Commercial Motor Vehicle Crashes*, Transportation Research Board, 2007.

improving safety on the road. Road-facing cameras were reported with the highest frequency.

Figure 19: Safety Technology Equipment Added from 2018-2020



Within the ATRI data, no significant correlations ($r > |0.5|$) were found between newly-adopted safety technologies and insurance premiums. This effect likely arises from one or more factors, including:

- lack of awareness by insurers of safety technology adoption by carrier insureds;
- already low crash rates among “safety culture” carriers who invest in safety technologies; and
- time delays between safety technology investments and crash reduction outcomes.

Safety technologies and their respective percentages of adoption were broadly consistent across very large, large, and medium fleet sizes. Small carriers adopted fewer technologies individually and fewer technology suites or groups. Still, the majority (58.3%) of small carriers adopted road-facing cameras within the last three years. If this divergence between large and small fleet adoption trends continues, small carriers could find themselves at a disadvantage in safety performance and cost of risk.

Road-facing cameras have become a strategic tool for insurers, carriers and drivers as they provide irrefutable safety documentation, thus lowering claims and defense costs. Camera evidence allows insurers to immediately determine the empirical facts of an

incident in order to determine the most efficacious response to legal action, whether settling or challenging in court, and to minimize costly back-and-forth engagements.

All other safety technologies only indirectly influence insurance premiums. Theoretically, safety technologies lead to more favorable insurance rates by reducing crashes, but they do not directly improve rates in themselves. This finding was corroborated by insurance industry experts, and it has been observed in the personal auto insurance sector as well.²¹ One reason that safety technologies do not have a direct impact on premiums is that they make trucks considerably more costly for insurers to repair or replace. Safety technologies can improve premium costs indirectly in the long run by reducing crashes, but this delay presents a challenge to carriers: carriers must pay relatively high up-front installation prices and then wait to accumulate three to five years of driving history (actuarial data) before they can experience any potential savings on premiums.

Insurance industry experts noted that the safety technologies with the greatest potential benefit are those best suited to reducing preventable crashes, which are comparatively minor in severity and cost yet frequent. These include forward collision warning, adaptive cruise control, and lane departure warning systems – all among the most-adopted safety technologies of the last three years. Safety technology can also help prevent truck-involved crashes in which passenger vehicles were at fault, which make up the majority of all truck-involved crashes.²²

Insurance industry experts also expressed the conviction that a carrier’s pursuit of safety technology in general was more important than implementing any particular technology in itself. This is because investment in safety technology in general demonstrates that a carrier recognizes and proactively prioritizes the importance of reducing crashes.

Spending Cuts

Respondents identified and reported cost centers in which they reduced spending in response to higher premiums. The most common cost-cutting strategy was to reduce wages and bonuses. Table 7 lists the top four cost centers (in descending order) that were reduced to offset rising insurance rates.

Table 7: Top Spending Cuts

Cost Center	Proportion of Respondents
Salary/Wages/Bonuses	34.1 %
Insurance	24.4 %
Equipment Purchase/Maintenance	22.0 %

²¹ “Why Tech That Makes Your Car Safer Won’t Lower Your Insurance Rates,” The Zebra, Jan. 11, 2022, available online: <https://www.thezebra.com/resources/research/new-car-tech-wont-lower-insurance-rates/>.

²² For an overview of recent studies by the National Highway Traffic Administration, FMCSA, and others, see “Relative Contribution/Fault in Car-Truck Crashes,” American Trucking Associations, Feb. 2013.

Employee Hiring/Firing	13.4 %
------------------------	--------

Aside from insurance, spending cuts in each of these cost centers can increase a carrier’s total cost of risk – meaning that short-term savings may generate long-term consequences such as increased crashes, worsening driver shortages, or lower productivity.

For example, lower wages may limit carriers’ ability to attract and retain experienced or otherwise high-quality drivers. Drivers ultimately remain the most important factor for ensuring safe operations. Cutting safety bonuses may also de-emphasize safety within the company culture relative to other operating concerns.

Older or poorly maintained equipment, from tires to brakes to safety technologies, can increase the probability of crashes and negatively impact carriers’ CSA scores.²³

Laying off employees or hiring fewer employees can put strains on a carrier’s existing staff. It might also impact the personnel tasked with managing safety programs or incident resolution. Carriers that reduced their staffing in these areas risk encountering more crashes and paying more in litigation.

Furthermore, as explained in the following section, insurers consider driver experience/retention, equipment condition, and safety prioritization when calculating rates. Spending cuts in these cost centers will likely be offset in part – even in the short-term – by increases in premiums.

Causes of Insurance Rate Increases

The analysis in the preceding sections shows that carriers have not been able to lower their premiums consistently or reliably by increasing deductibles, decreasing total coverage, implementing safety technology, lowering out-of-pocket costs or even reducing crashes. Some carriers did see reductions or stabilization in premiums, but these resulted from unique conditions involving additional factors.

There are three key areas of influence on premiums beyond crash history and policy components: economic impacts on the insurance industry, social inflation, and carrier-specific factors.

Economic Conditions

External economic conditions contribute to rising insurance rates. At the broadest level, these externalities include general inflation and rising healthcare costs – which typically increase at a greater rate than consumer prices in general.²⁴ Medical advances help save lives, but these treatments directly contribute to higher medical costs. Similarly,

²³ The FMCSA’s Compliance, Safety, Accountability (CSA) program measures inspection and crash data to evaluate carrier safety: see <https://csa.fmcsa.dot.gov/About>.

²⁴ “Price & use indices,” Peterson-KFF Health System Tracker, accessed Dec. 8, 2021, available online: <https://www.healthsystemtracker.org/indicator/spending/price-index/>. Based on BLS price and GDPD data.

technological advances in motor vehicles contribute to increasing costs associated with repairing them; electronics now make up 40 percent of the cost of a new vehicle.²⁵ These higher costs impact premiums via claims.

As noted previously, insurers have struggled for the past decade to achieve profitability in the commercial auto sector.²⁶ Market cycles in the insurance industry arise from a complex combination of factors that include growth in the insurance industry, asset valuation, credit availability, underwriting losses, the strength of the economy, public spending (on infrastructure, for example) and weather, among many others.²⁷ Insurers have attempted to correct the trend of poor profitability in the commercial auto sector by raising rates, and others have pulled out of the commercial auto sector. The result has been a decline in capacity and competition, both of which have an adverse effect on rates for trucking fleets.

Crash severity has also been on the rise in recent years, a factor which increases the cost of claims as well as the likelihood of litigation. Average vehicle speeds were higher during the COVID-19 pandemic in particular due to lower traffic levels, and they have been linked to higher crash severity.²⁸

Social Inflation

Social inflation is a term used in the insurance industry to describe general increases in claims costs beyond economic inflation.²⁹ Social inflation is the process of continuous change in public opinion relating to allocation of negligence, how much compensation is appropriate, or which parties ought to absorb costs of risk under particular circumstances. These nebulous social attitudes directly impact insurance payouts through changes in laws, medical practice, the propensity to claim or litigate and more. As noted in ATRI's litigation research, jury awards do not necessarily follow logical conclusions or precedents; jury decisions are influenced by emotions, state and local laws or procedures, and plaintiff bar tactics. Hence, insurers react to social inflation by raising rates in the relevant sectors.

Not all social inflation is misplaced, but it can lead to disproportionately higher costs in some industries when public opinion is either misled or simply uninformed.

²⁵ Eric Tingwall, "Electronics Account for 40 Percent of the Cost of a New Car," *Car and Driver*, May 2, 2020, available online: <https://www.caranddriver.com/features/a32034437/computer-chips-in-cars/>.

²⁶ "Commercial Auto Results Aided By Rising Rates, Reduction in Driving." Fitch Ratings. May 12, 2021. Available online: <https://www.fitchratings.com/research/insurance/commercial-auto-results-aided-by-rising-rates-reduction-in-driving-12-05-2021>.

²⁷ Doron Nissim, "Analysis and Valuation of Insurance Companies," Center for Excellence in Accounting & Security Analysis, Columbia University, 2010, available online: <http://www.columbia.edu/~dn75/Analysis%20and%20Valuation%20of%20Insurance%20Companies%20-%20Final.pdf>.

²⁸ Alex Wells, "Commercial Auto insurers face an environment of continuing challenges," Zurich American Insurance Company, Aug. 11, 2021, available online: <https://www.zurichna.com/knowledge/articles/2021/08/commercial-auto-insurers-face-an-environment-of-continuing-challenges>.

²⁹ Darren Pain, *Social Inflation: Navigating the evolving claims environment*, The Geneva Association, Dec. 2020, available online: https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/social_inflation_web_171220.pdf.

Developments in litigation financing, courtroom strategies and plaintiff business models all contribute to social inflation.³⁰ The Casualty Actuarial Institute and Insurance Information Institute recently found that social inflation in excess of economic inflation has caused higher loss development factors in the commercial auto insurance sector over the past ten years.³¹

ATRI investigated some key legal conditions driving these trends in both its 2020 report *Understanding the Impact of Nuclear Verdicts on the Trucking Industry* and its 2021 report *The Impact of Small Verdicts and Settlements on the Trucking Industry*. Plaintiff attorneys push motor carriers to settle cases out of court for 37.7 percent larger payments than juries award in court.³² Even taking into account additional court-related costs, carriers pay more in settlement cases than the award amounts that juries deem appropriate for similar crashes.

Though it is difficult to directly corroborate the relationship, reforms in tort law and improvements in education on the trucking industry and roadway safety strategies are two important ways to mitigate the negative portion of social inflation. Recently enacted laws curtailing phantom damages in Montana, staged accidents in Louisiana, “reptile theory” in Texas, arbitration awards in Missouri, and the seat belt gag rule in West Virginia all have the potential to make crash litigation more transparent and equitable.³³

The financial responsibility for safety currently falls mostly on carriers and insurers rather than shippers. Though shippers can of course pay more to work with safer carriers, in practice they often favor low rates, and there is no standardized method for defining carriers’ safety commitments and incorporating their resulting safety investment expenses into shipping contracts. Safety is in the best interest of all parties in the supply chain. Model contracts that provide for marginal pricing flexibility or safety investment surcharges could help expand safety investments, and make the total cost of risk more transparent for shippers and carriers alike.

Carrier-Specific Factors

Insurance industry experts generally acknowledge that three to five years of safety data are taken into consideration when calculating policy rates. Carriers posing a higher risk of underwriting loss often require the maximum number of years of available loss history. Even so, experts noted that more recent improvements or backslides on safety

³⁰ Jerry Theodorou, “The Scourge of Social Inflation,” R Street, Dec. 2021, available online: <https://www.rstreet.org/wp-content/uploads/2021/12/RSTREET247.pdf>.

³¹ Jim Lynch and David Moore, *Social Inflation and Loss Development*, Casualty Actuarial Society and Insurance Information Institute, 2022, available online: https://www.iii.org/sites/default/files/docs/pdf/social_inflation_loss_development_wp_02082022.pdf.

³² Claire Evans and Alex Leslie, *The Impact of Small Verdicts and Settlements on the Trucking Industry*, American Trucking Research Institute, Nov. 2021.

³³ Tort reform legislation in 2021 includes Montana’s SB 251 (<https://leg.mt.gov/bills/2021/billpdf/SB0251.pdf>), Louisiana’s HB 15 (<https://www.legis.la.gov/legis/BillInfo.aspx?i=239779>), Texas’s HB 19 (<https://capitol.texas.gov/BillLookup/History.aspx?LegSess=87R&Bill=HB19>), Missouri HB 345 (<https://legiscan.com/MO/bill/HB345/2021>), West Virginia’s SB 439 (https://www.wvlegislature.gov/Bill_Status/bills_history.cfm?INPUT=439&year=2021&sessiontype=RS).

performance by “safe” carriers impact rates as well. Additional carrier factors impacting premium rates include operational sectors, cargo values, states or regions of operation, company growth, and commitment to safety culture including safety technologies.

Carriers demonstrating *consistent* year-over-year improvements in safety technology adoption, safe driver hiring and training practices, and crash history can potentially lower their premium costs despite the current adverse environment.

Insurance industry experts consulted in this research often disagreed about which carrier-specific factors contribute most to premium size, reflecting the fact that different insurers prioritize different factors when evaluating carriers. One major point of divergence is whether fleet size or safety record plays a larger role in determining rates. Where insurance experts emphasized fleet size, they also emphasized fleet sector or operation type; otherwise, fleet sector or operation type was considered less important.

A carrier’s primary state or region of operation was in the top three factors for almost every consulted expert. This point of agreement testifies to the significance of state-by-state differences in social inflation and tort law, as ATRI documented in *Understanding the Impact of Nuclear Verdicts on the Trucking Industry* and *The Impact of Small Verdicts and Settlements on the Trucking Industry*. Furthermore, congestion levels and truck bottlenecks also increase crash exposure and may affect premiums.

Safety technologies were one of the lowest-rated factors for most insurance industry expert reviewers. As discussed above, however, some insurers treat safety technology adoption as one of many indicators of a carrier’s more holistic commitment to improving safety. For example, road-facing cameras are valuable in litigation, but industry experts argue that they are even more valuable when used proactively as part of ongoing, dynamic driver coaching programs.

Insurance industry experts noted that another indicator of a holistic commitment to safety is the active involvement of executive leadership in their fleet’s safety culture, as safety culture requires executive approvals for hiring, technology investments and other business model changes. In summary, carriers that prioritize safety as intrinsic to all departments in the company have the greatest control over insurance costs.

CONCLUSIONS

The findings in this report provide a high-level assessment of the current state of commercial auto liability insurance in the trucking industry, insights into how the rising cost of insurance is impacting carriers, and carrier strategies for mitigating cost increases.

This insurance analysis is based on detailed data from more than 80 carriers, representing nearly 95,000 commercial trucks.

A considerable percentage of total insurance cost increases do not relate *directly* to most carriers' crash experience. While underwriting losses do continue, much of the cost increase experienced by motor carriers is associated with economic externalities, limited high-severity crashes, expanding litigation and loss of coverage capacity in the commercial auto insurance market.

Total insurance coverage cost increases exist among all fleet sizes but have disparate impacts. Small fleets paid more than three times as much as very large fleets in 2020 on a per-mile basis: \$0.125 per mile for small fleets versus \$0.037 per mile for very large fleets.

Total insurance coverage levels are dropping considerably. From 2018 to 2020, very large fleets dropped coverage levels by nearly 55 percent; large fleets dropped coverage levels by 44 percent. Only medium fleets experienced slight increases in coverage. Small fleets decreased coverage by less than 1 percent.

Reducing excess coverage and increasing deductibles and SIR levels are not having a meaningful impact on insurance premiums. Even though carriers are seeking to cut insurance costs by decreasing their excess coverage, raising deductibles and rapidly adopting new safety technologies to prevent crashes, they are still paying higher premiums. In fact, 90 percent of participating carriers reported premium increases between 2018 and 2020, even though only 12.5 percent increased insurance coverage during this same time period. In addition, 18.3 percent of carriers that did not increase coverage experienced premium spikes of more than 50 percent.

While deductible levels are increasing in total and on a per-incident basis, out-of-pocket expenses were stable or decreased. Similar to the effect of lowering coverage levels, the carriers in the ATRI sample improved their safety vis-à-vis out-of-pocket incident expenditures and MCMIS crash numbers. As noted in the research, this likely requires a top-down emphasis on safety culture starting with the senior executives who authorize changes in coverage, deductibles and/or SIR levels.

Reductions in coverage levels increase litigation exposure but lead to improved safety for most fleets. Fleets that raised SIR and deductible levels and/or reduced excess coverage experienced reductions in MCMIS crash numbers: 80 percent of carriers that reduced insurance coverage decreased their MCMIS crash rates the following year. This counter-intuitive finding appears to result from a heightened

awareness of increased liability and exposure that leads to increased safety investments.

Insurance captives and SIR represent opportunities for carriers to lessen exposure to high premiums, but their efficacy depends considerably on a carrier's fleet size, available capital, and risk profile: they are not across-the-board solutions.

Many carriers have responded to rising costs by attempting to reduce spending in other critical cost centers. The leading cost center targeted for reduced spending was wages. Cuts in wages, equipment, and training, however, are likely to cause further increases in premiums as well as total cost of risk.

The best measure of insurance cost impacts is a comprehensive Total Cost of Risk calculation. The most important exercise a carrier of any size can conduct is a detailed assessment of its own unique total cost of risk. Carriers should evaluate all costs associated with risk, including coverage, deductible and/or SIR levels, financial and litigation liability exposure, safety technology investments, driver hiring and training, and out-of-pocket expenses. Measuring these direct and indirect costs will allow carriers to manage risk and safety more effectively.

Looking ahead. Trends in trucking insurance are expected to remain consistent in the coming years. Many insurance industry experts consulted for this report expect rate increases to continue, but at a slightly more moderated pace in 2022. Commercial auto insurers experienced significant improvements in profitability during 2020, which may mitigate some of the economic factors behind premium increases.³⁴ Concurrently, however, the commercial auto insurance sector experienced limited growth in 2020 as measured by net written premiums.³⁵ As such, the myriad direct and indirect factors that place upward pressure on insurance costs could continue for quite some time, particularly if and when traffic levels, truck-involved crashes and thus insurance claims return to pre-COVID-19 levels.

FMCSA records show that 2021 likely had fewer crashes than 2018 and 2019, though 2021 had more crashes than 2020.³⁶ If this general trend persists, circumstances will likely continue to be mildly favorable to carriers that demonstrate successful safety cultures.

³⁴ "Commercial Auto Results Aided by Rising Rates, Reduction in Driving," Fitch Ratings, May 12, 2021, available online: <https://www.fitchratings.com/research/insurance/commercial-auto-results-aided-by-rising-rates-reduction-in-driving-12-05-2021>.

³⁵ Ibid.

³⁶ FMCSA Crash Summary Report, Oct. 29, 2021, available online: <https://ai.fmcsa.dot.gov/CrashStatistics/rptSummary.aspx>.

APPENDIX

IMPACT OF RISING COSTS OF INSURANCE DATA COLLECTION FORM



Understanding the Impact of Rising Insurance Costs

The American Transportation Research Institute (ATRI) is seeking motor carrier input on the total insurance cost of risk (i.e. insurance premium costs + SIR/deductibles paid) over time.

ATRI's Research Advisory Committee (RAC) identified this research as a top industry priority, separate from ATRI's annual Operational Costs of Trucking data, to better understand changes insurance financial risk, and how drivers and fleets are managing insurance cost increases. The survey below was developed with input from both motor carriers and insurance providers.

All survey responses will be kept completely confidential. Personal, organizational, and/or financial information will never be released for public use under any circumstance, and will only be used internally for research analyses. The final report will only be presented in an aggregated, non-identifying format. If requested, ATRI will sign a Non-Disclosure Agreement.

All survey respondents will receive an advance copy of the final report.

CONTACT INFORMATION

- 1) Please enter your contact information below. Occasionally ATRI will follow up with respondents to clarify answers. **All respondents will receive an advance copy of the report.**

Company	Contact Name
Phone	Email Address

DEMOGRAPHIC DATA

- 2) **How many drivers do you use?** *(include employee, Owner-Operator and Independent Contractors)*

- 3) **How many trucks are in your fleet?**

Truck-Tractors	
Straight Trucks	
Other	

- 4) **What was your fleet's IFTA mileage in 2020?** *(include Owner-Operator miles reported for IFTA purposes)*

5) What is your primary for-hire business operation type? (check only one)

Truckload Dry Van	<input type="checkbox"/>
Less-than-Truckload	<input type="checkbox"/>
Refrigerated Van	<input type="checkbox"/>
HazMat Tanker	<input type="checkbox"/>
Flatbed	<input type="checkbox"/>
Specialized – Oversize/Overweight	<input type="checkbox"/>
Express / Parcel Service	<input type="checkbox"/>
Intermodal Drayage	<input type="checkbox"/>
Automotive Transportation	<input type="checkbox"/>
Household Goods Mover	<input type="checkbox"/>
Other (please specify): _____	<input type="checkbox"/>

6) What are the three primary types of commodities that your company hauls? While your fleet may haul multiple commodities, select only the top 3 most frequently hauled commodities.

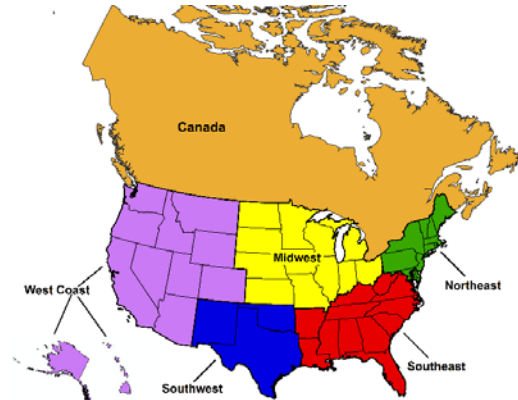
<input type="checkbox"/> Agricultural Products	<input type="checkbox"/> Livestock
<input type="checkbox"/> Automotive Parts	<input type="checkbox"/> Manufactured Goods
<input type="checkbox"/> Construction/Building Materials	<input type="checkbox"/> Mine Ores
<input type="checkbox"/> Finished Vehicles	<input type="checkbox"/> Modular/Mobile Homes
<input type="checkbox"/> Forest Products	<input type="checkbox"/> Paper Products
<input type="checkbox"/> Garbage or Sanitation	<input type="checkbox"/> Petroleum Products
<input type="checkbox"/> General Freight	<input type="checkbox"/> Refrigerated Food
<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Retail Store/General Merchandise
<input type="checkbox"/> Heavy Machinery/Equipment	<input type="checkbox"/> U.S. Mail/Parcel Service
<input type="checkbox"/> Household Goods	<input type="checkbox"/> Other (please specify): _____
<input type="checkbox"/> Industrial Gases	<input type="checkbox"/> Don't Know
<input type="checkbox"/> Intermodal Containers	

7) Based on your fleet's IFTA miles, what percentage of your drivers' trips were in the following categories in 2020? (total must sum to 100%)

Local pickups and deliveries (less than 100 miles)	
Regional pickups and deliveries (100 – 500 miles)	
Inter-regional pickups and deliveries (500 – 1,000 miles)	
National (greater than 1,000 miles)	
Total	100%

8) Please estimate the percentage of miles traveled by your fleet (include IC/Owner-Operator miles) in the following regions during 2020. (total must sum to 100%)

Region	% of Total Miles
Midwest	
Northeast	
Southeast	
Southwest	
West	
Canada	
Total	100%



9) Please list your average Auto Liability deductible *per-crash/incident* (or self-insured retention) for each year.

Policies effective in:	Per-Incident Deductible
2018	
2019	
2020	

10) If applicable, please list your total annual Self Insurance Retention (S.I.R.) amount for each year.

Policies effective in:	S.I.R.
2018	
2019	
2020	

11) Please list the total coverage levels / amount of excess Auto-Liability insurance (\$1 million or over) you paid for each year. Please add multiple tower policies together as needed. Do not include separate physical damage; cargo; unladen/bobtail costs.

Policies effective in:	Auto-Liability Excess Coverage Amount
2018	
2019	
2020	

12) Are you a member of an insurance captive?

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
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13) If Yes, what is your "attachment point" (your own maximum claim liability within group)?

\$ _____

14) Please provide your total auto liability insurance premium costs for each year.

Policies effective in:	Total Premium Costs
2018	
2019	
2020	

15) How much did you spend in total out-of-pocket, in incident costs below your deductible or S.I.R. in each year?

Policies effective in:	Out-of-Pocket Spend
2018	
2019	
2020	

16) Based on escalating insurance costs, please indicate what cost centers or spending priorities have been cut to offset insurance cost increases.

- a) _____
- b) _____
- c) _____

17) What safety technologies has your fleet adopted in the last three years? (Check all that apply)

<input type="checkbox"/> Automated Emergency Braking <input type="checkbox"/> Air Disc Brakes <input type="checkbox"/> Lane Departure Warning System <input type="checkbox"/> Forward Collision Warning <input type="checkbox"/> Blind Spot Detection <input type="checkbox"/> Road Facing Cameras <input type="checkbox"/> Driver-Facing Cameras	<input type="checkbox"/> Adaptive Cruise Control <input type="checkbox"/> Active Steering Assist <input type="checkbox"/> Speed Governors <input type="checkbox"/> Rain-sensing Window Wipers <input type="checkbox"/> Back-up Cameras / Sensors <input type="checkbox"/> Tire Pressure Monitoring <input type="checkbox"/> Other (please specify): _____
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Thank you! We greatly appreciate your participation.

Please return completed data collection form to Nathan Williams:

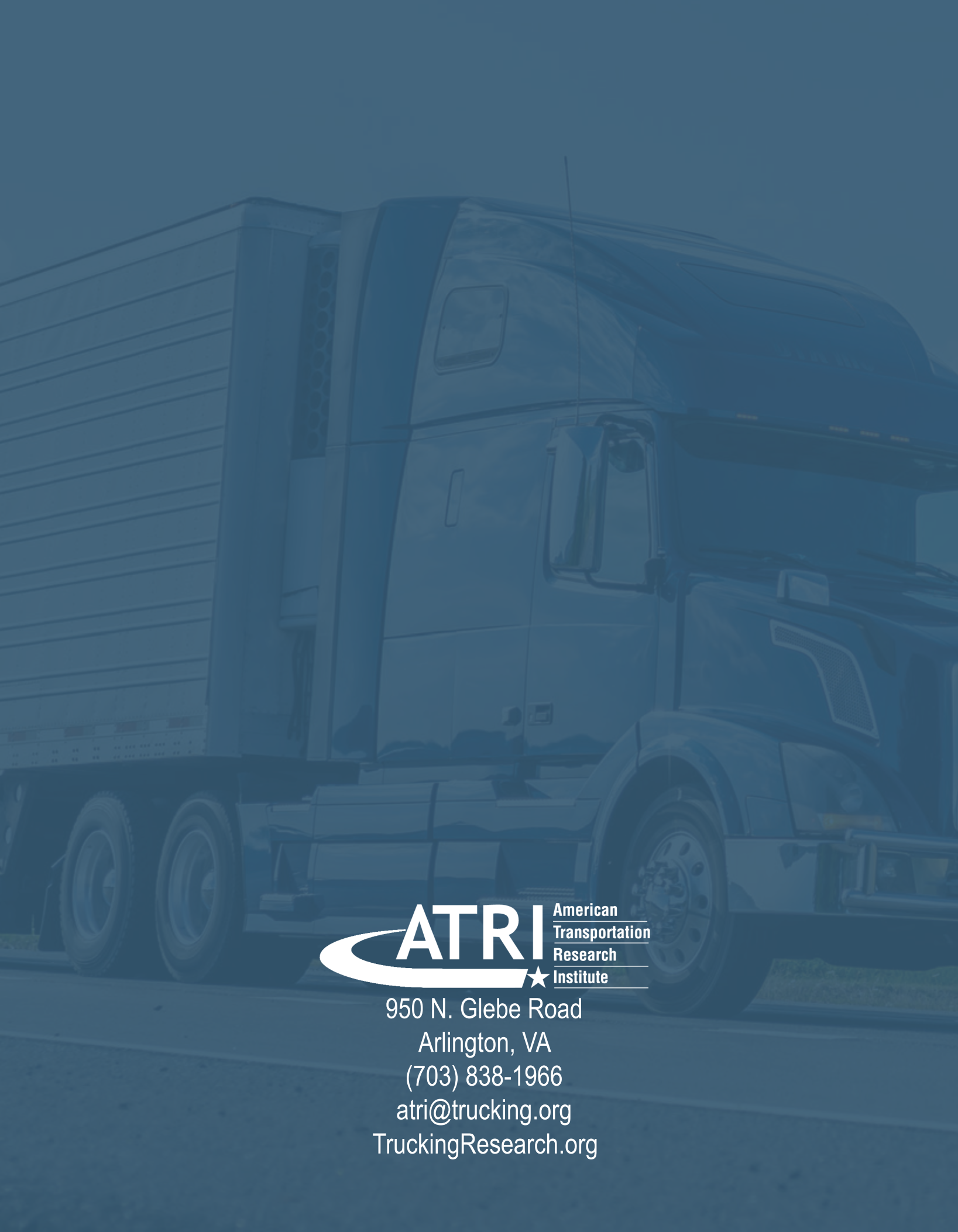
Email: nwilliams@trucking.org

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