

Critical Issues in Trucking: What They Mean to Dealers

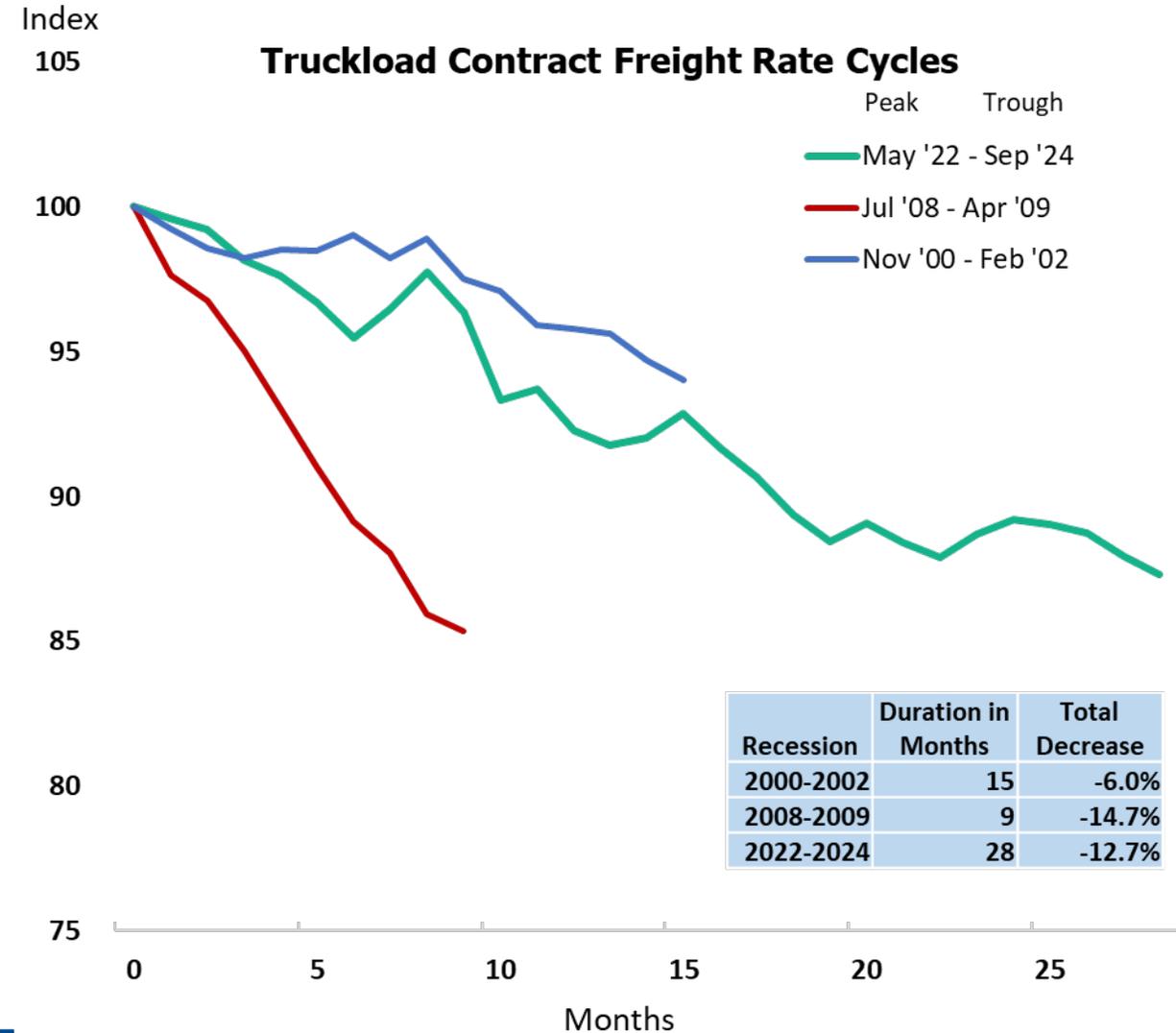
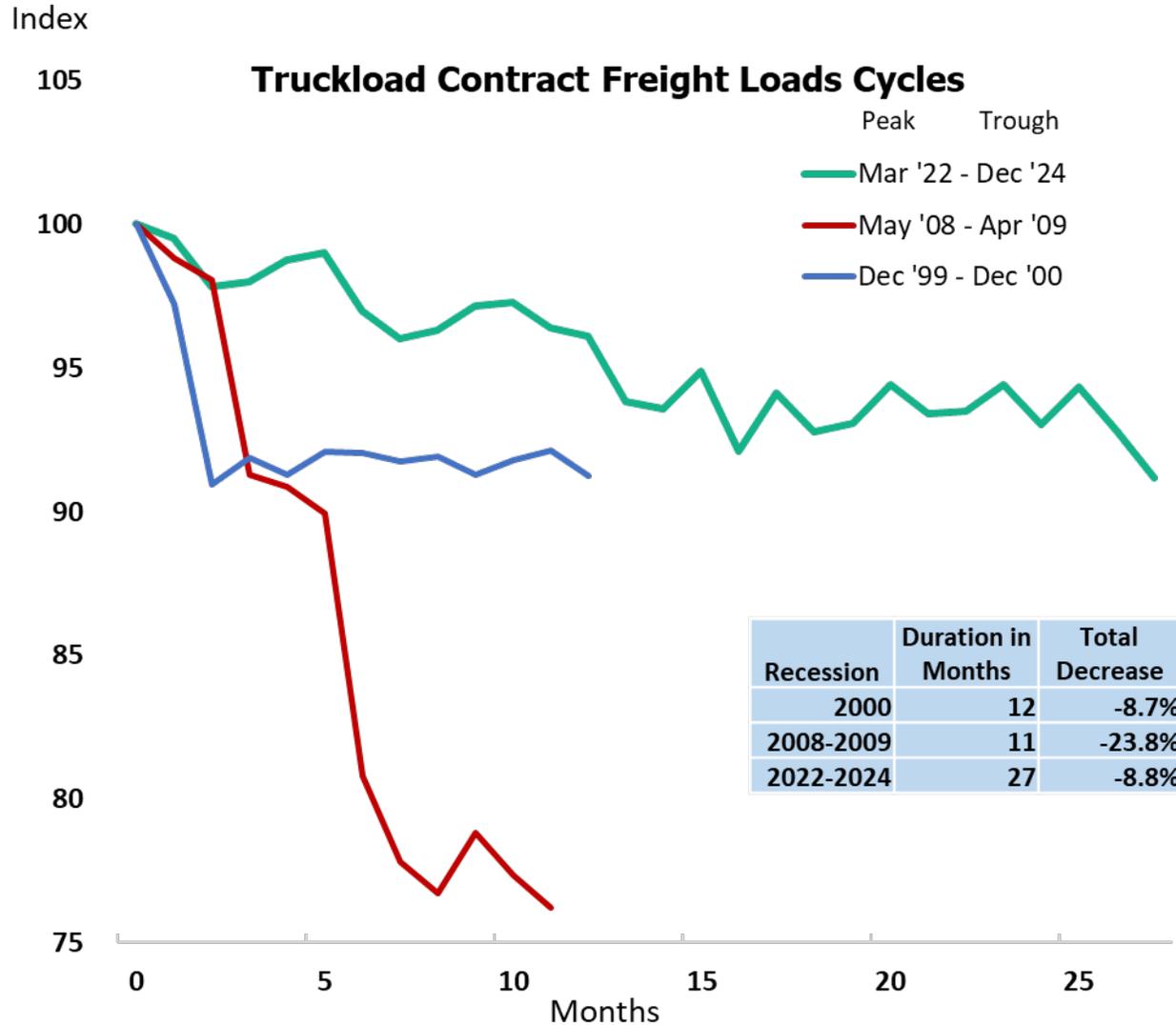
Dan Murray

Senior Vice President

American Transportation Research Institute (ATRI)

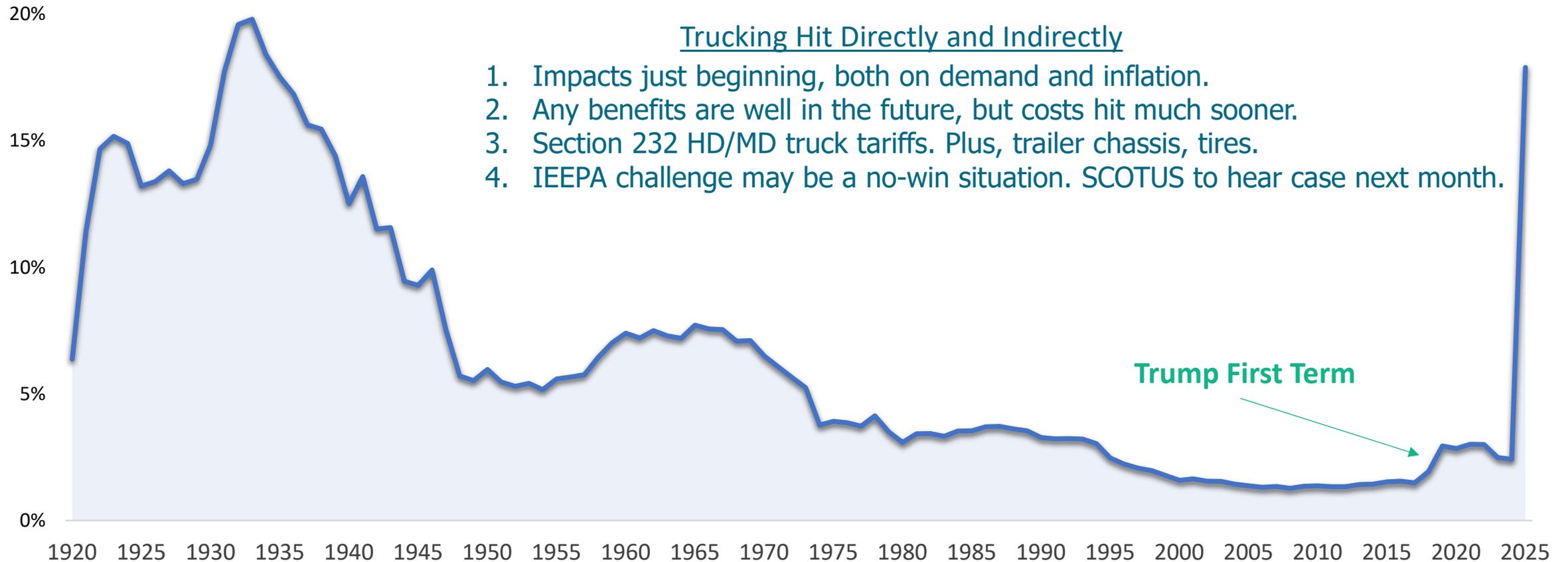


How Bad was this TL Freight Recession?



EFFECTIVE TARIFF RATE

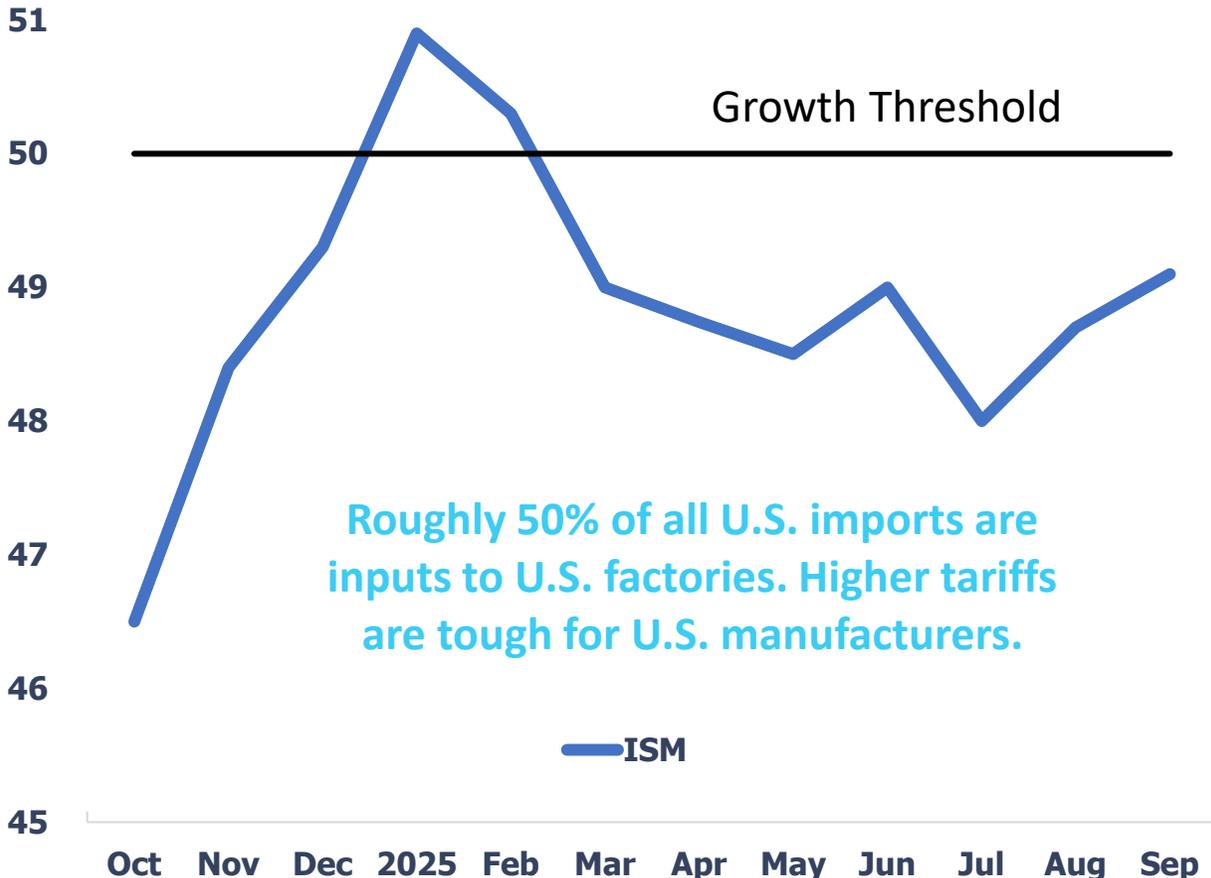
Annual Figures; 2025 is the Current Rate



Sources: Yale Budget Lab & ATA

EVIDENCE MANUFACTURING IS ALREADY BEING HURT BY TARIFFS

(ISM Manufacturing Index and Manufacturing Employment)



Roughly 50% of all U.S. imports are inputs to U.S. factories. Higher tariffs are tough for U.S. manufacturers.

— ISM



42,000 jobs cut over the last 4 months

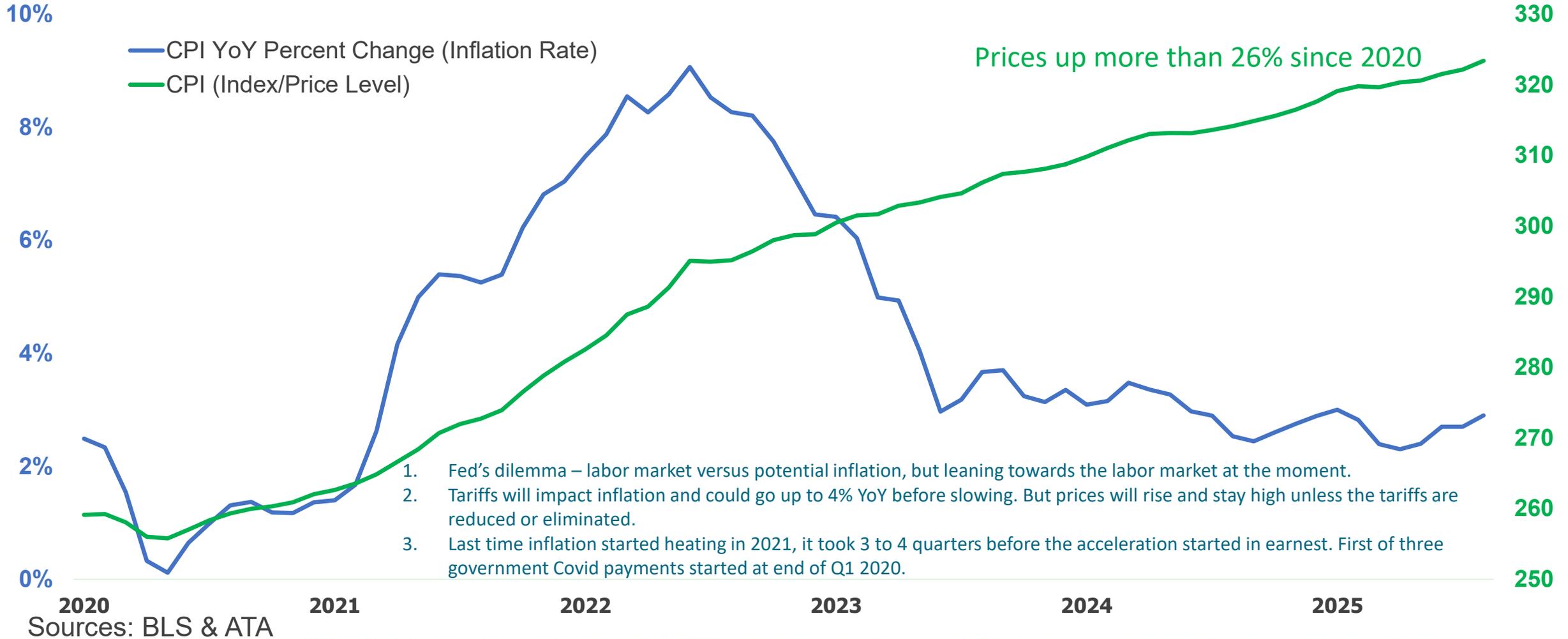
— Factory Employment (thousands)

Sources: Institute for Supply Management, DOL, ATA



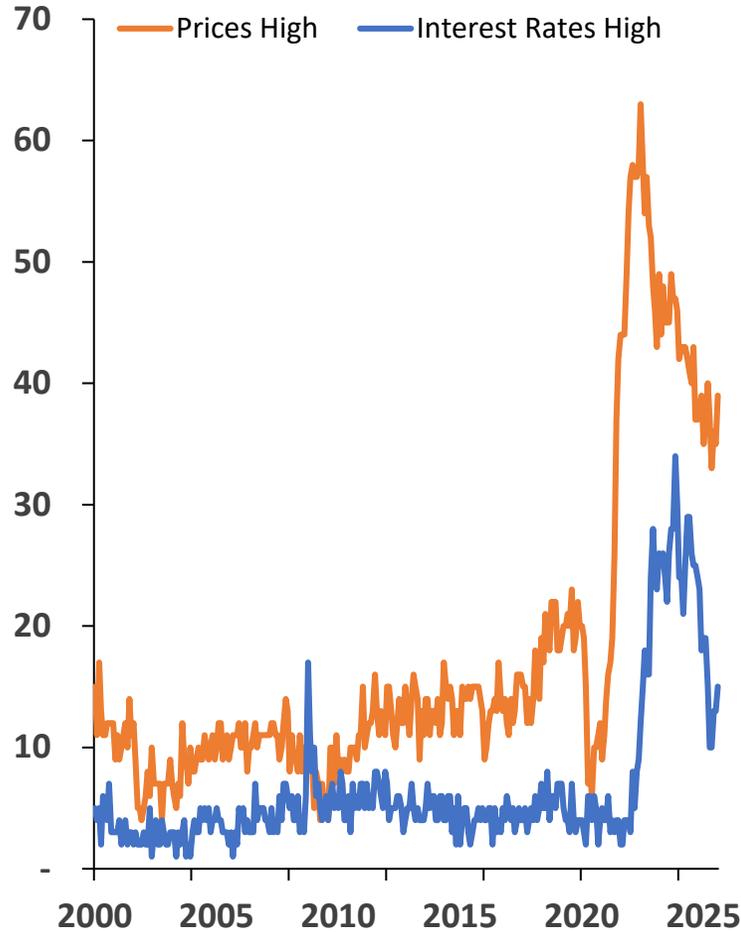
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CPI – PRICE VS INFLATION

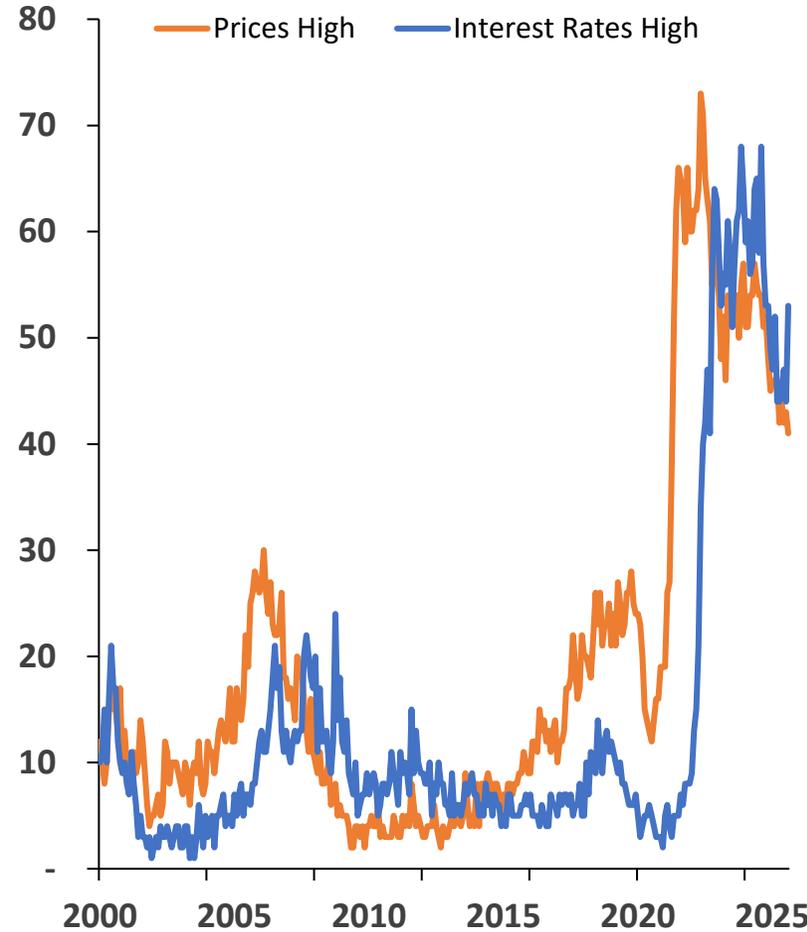


CONSUMERS: WHY IT'S A BAD TIME TO BUY

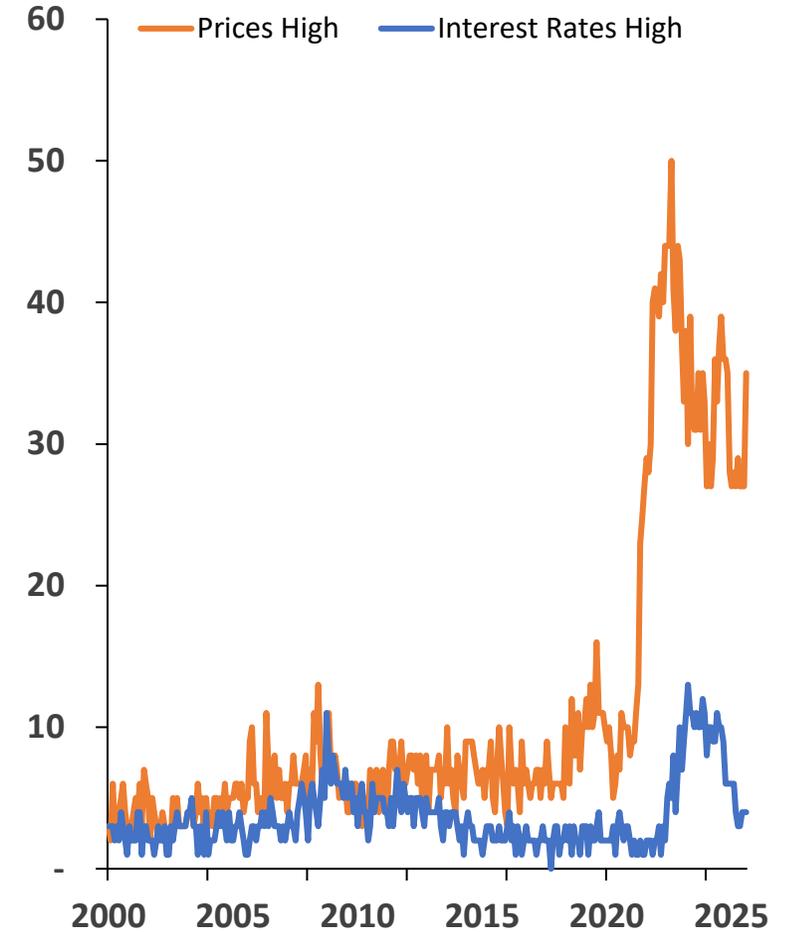
New Vehicles



New Homes

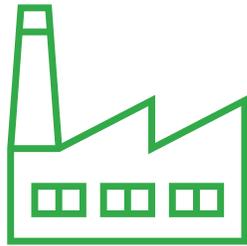


New Large Household Goods

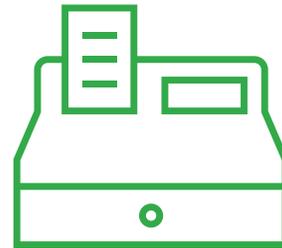


Source: University of Michigan Survey Research Center

THREE BIG SOURCES OF TRUCK FREIGHT



Factory & Industrial

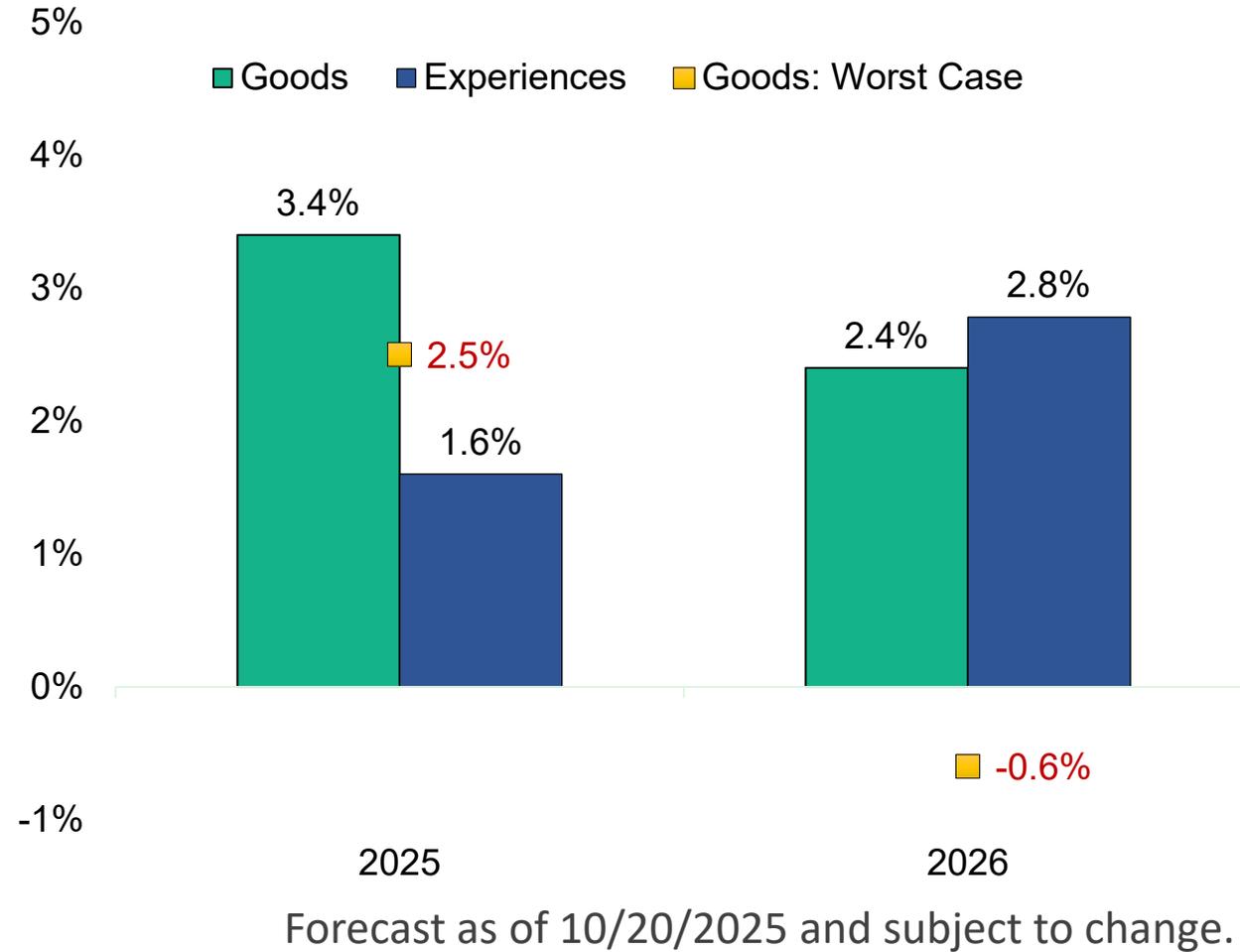
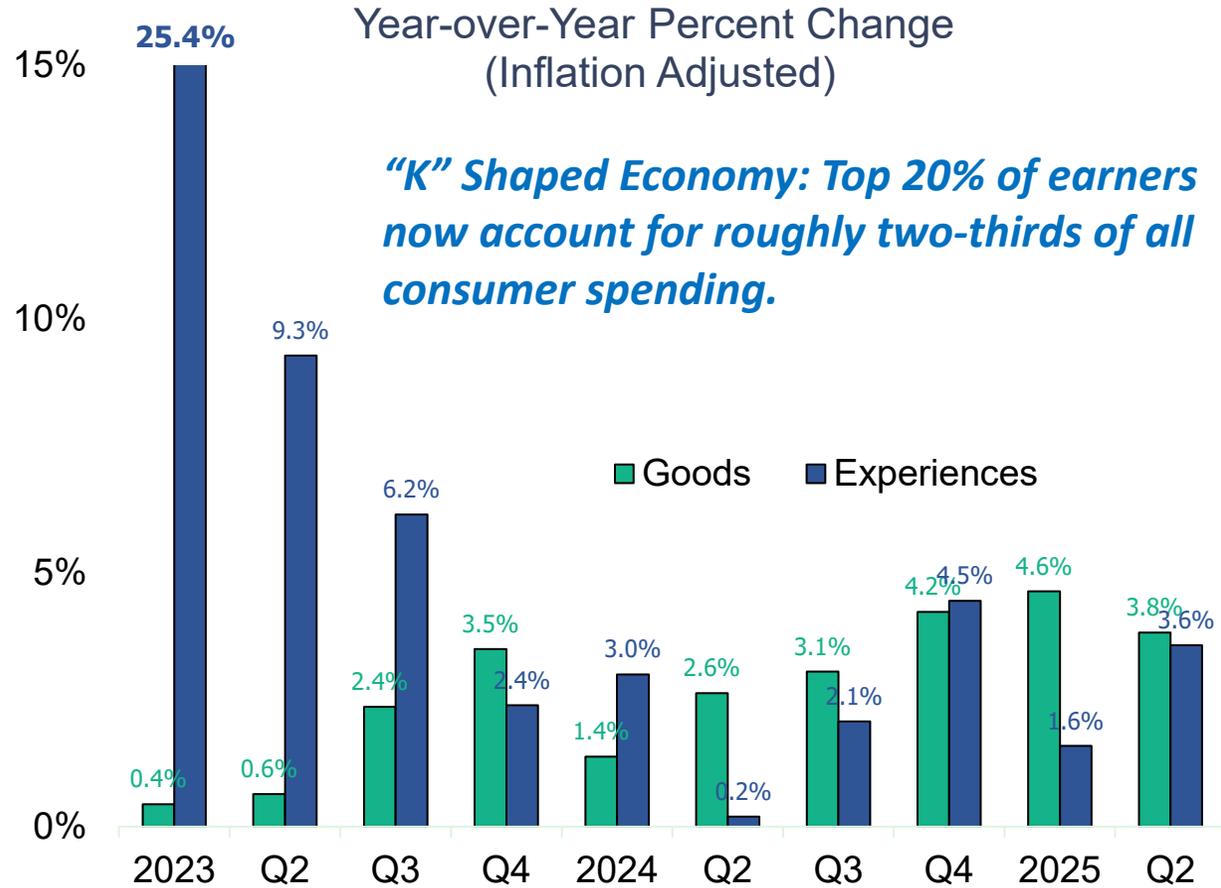


**Household
Consumption/Retail**



**Construction:
Home & Non-
residential**

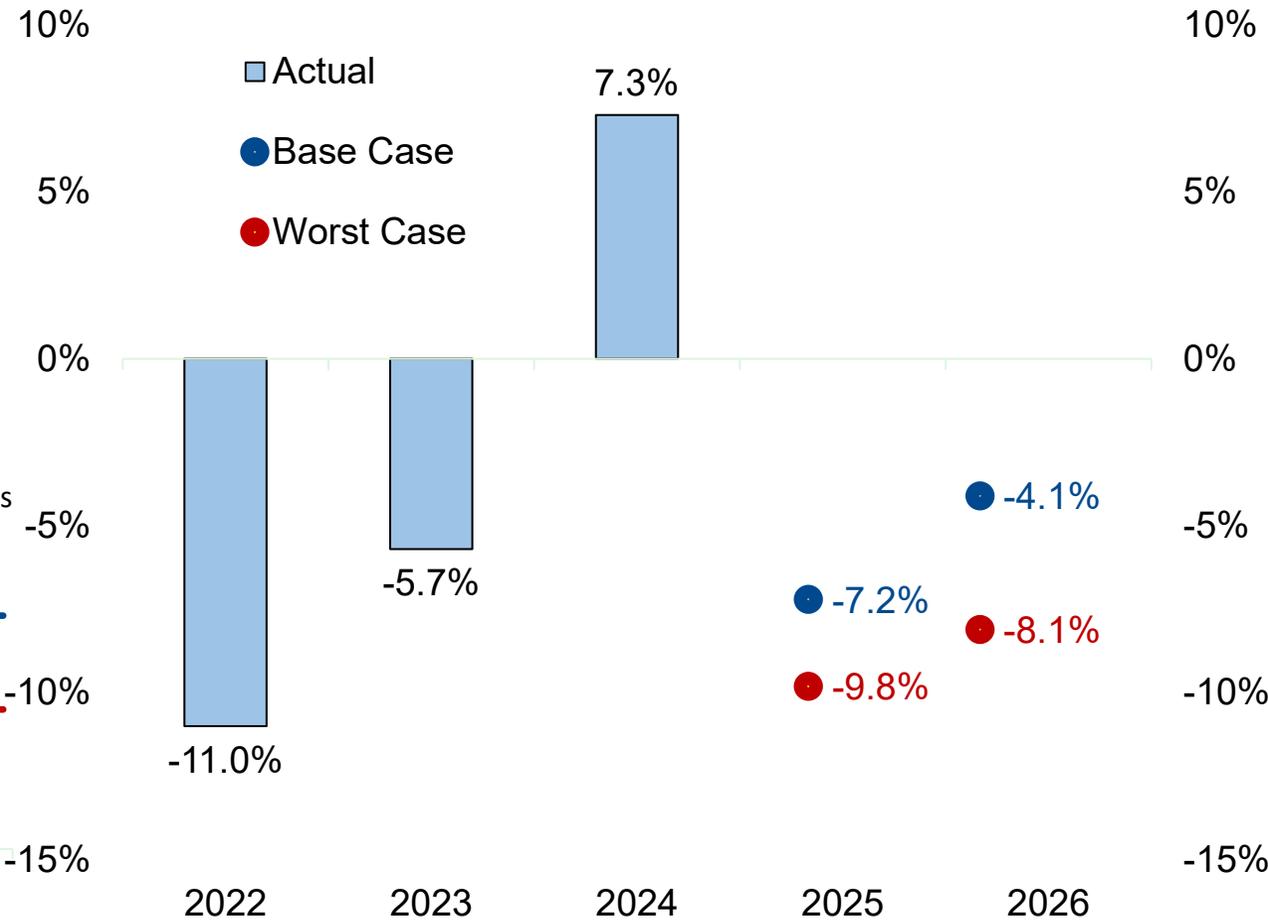
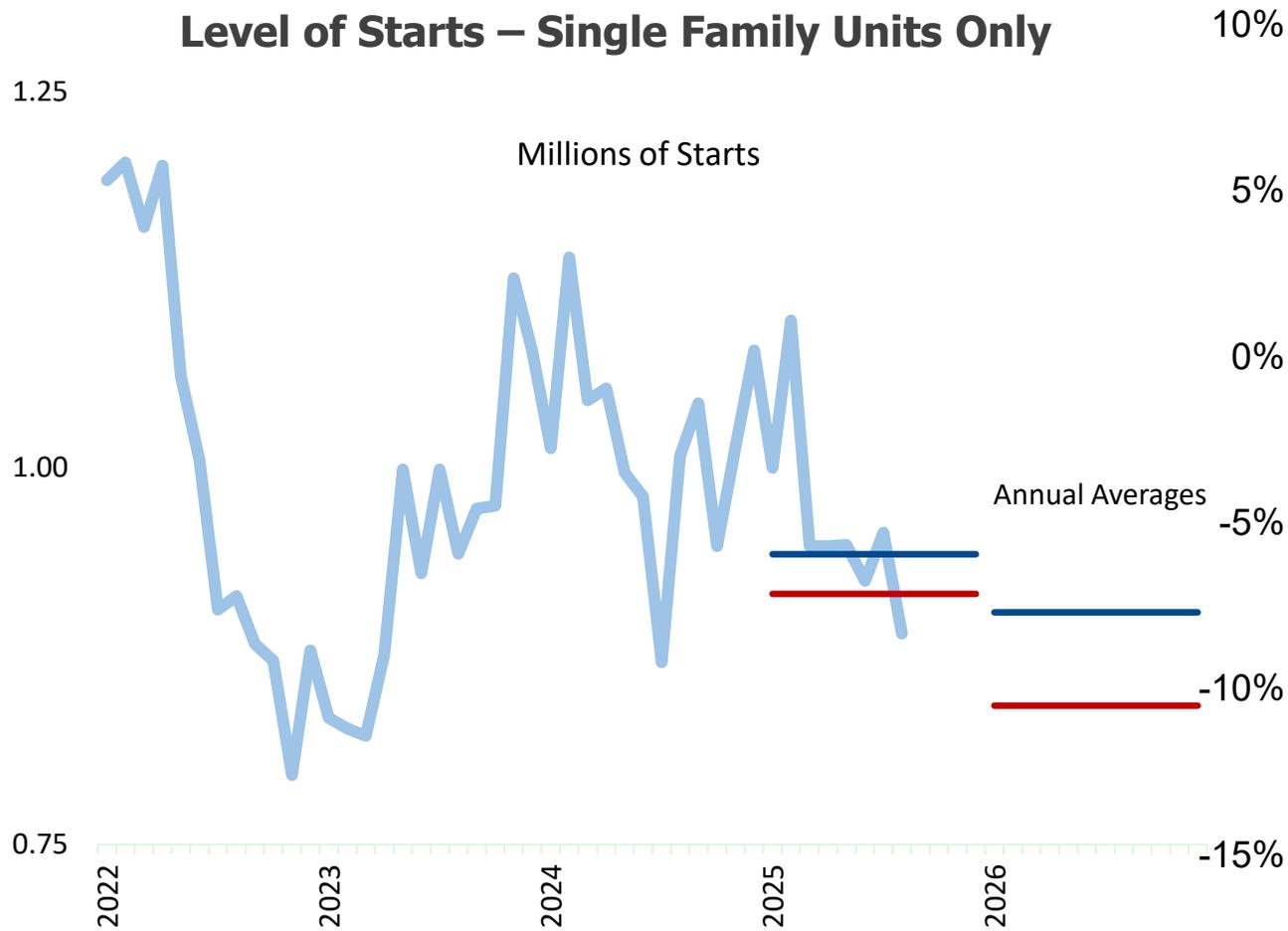
CONSUMER SPENDING – GOODS VS EXPERIENCES



Sources: BEA, ATA, S&P Markit

HOME CONSTRUCTION MARKET

Level of Starts – Single Family Units Only



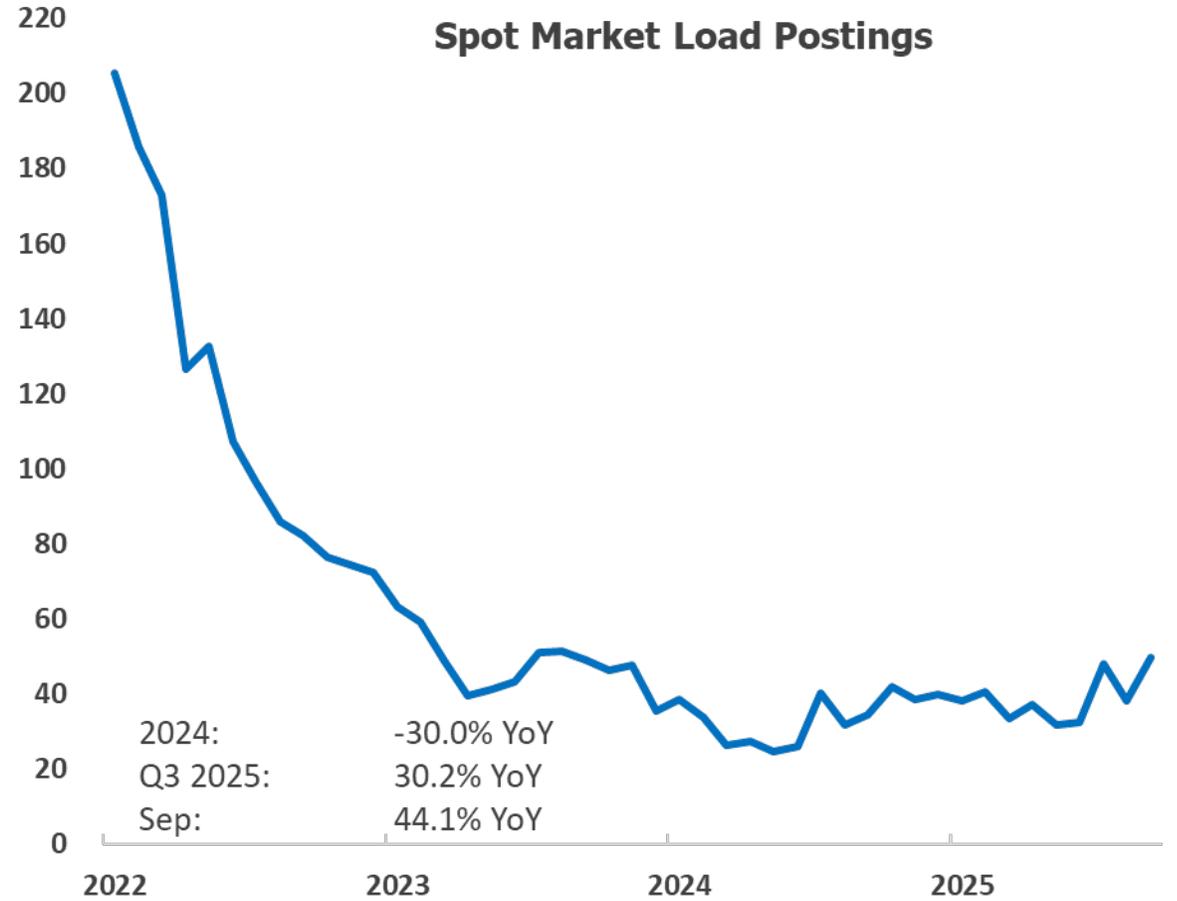
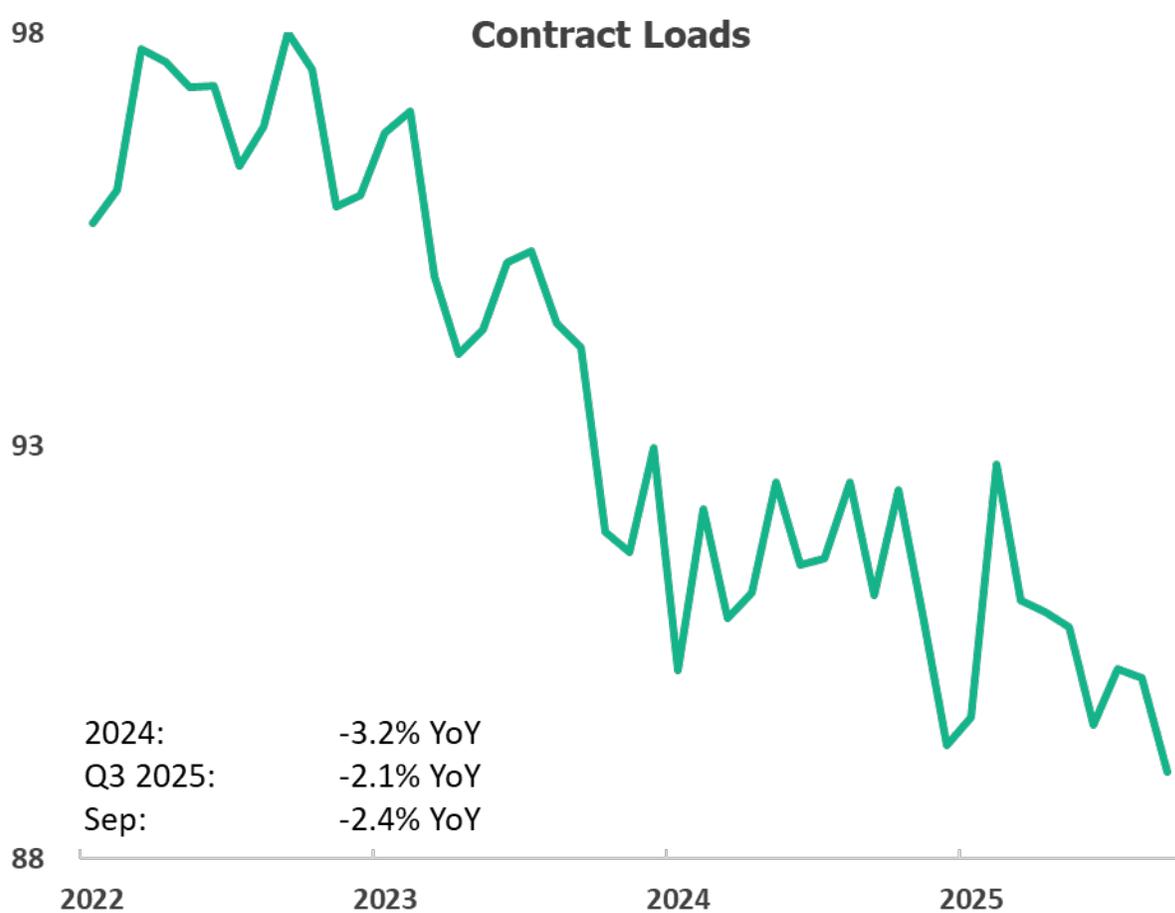
Sources: Census Bureau, S&P & ATA

Forecast as of 10/20/2025 and subject to change.

TRUCKING DEMAND

TRUCKLOAD LOADS

(Index; January 2020 = 100; Seasonally Adjusted)



Includes all types of truckload freight.

Sources: ATA's Trucking Activity Report & DAT.com

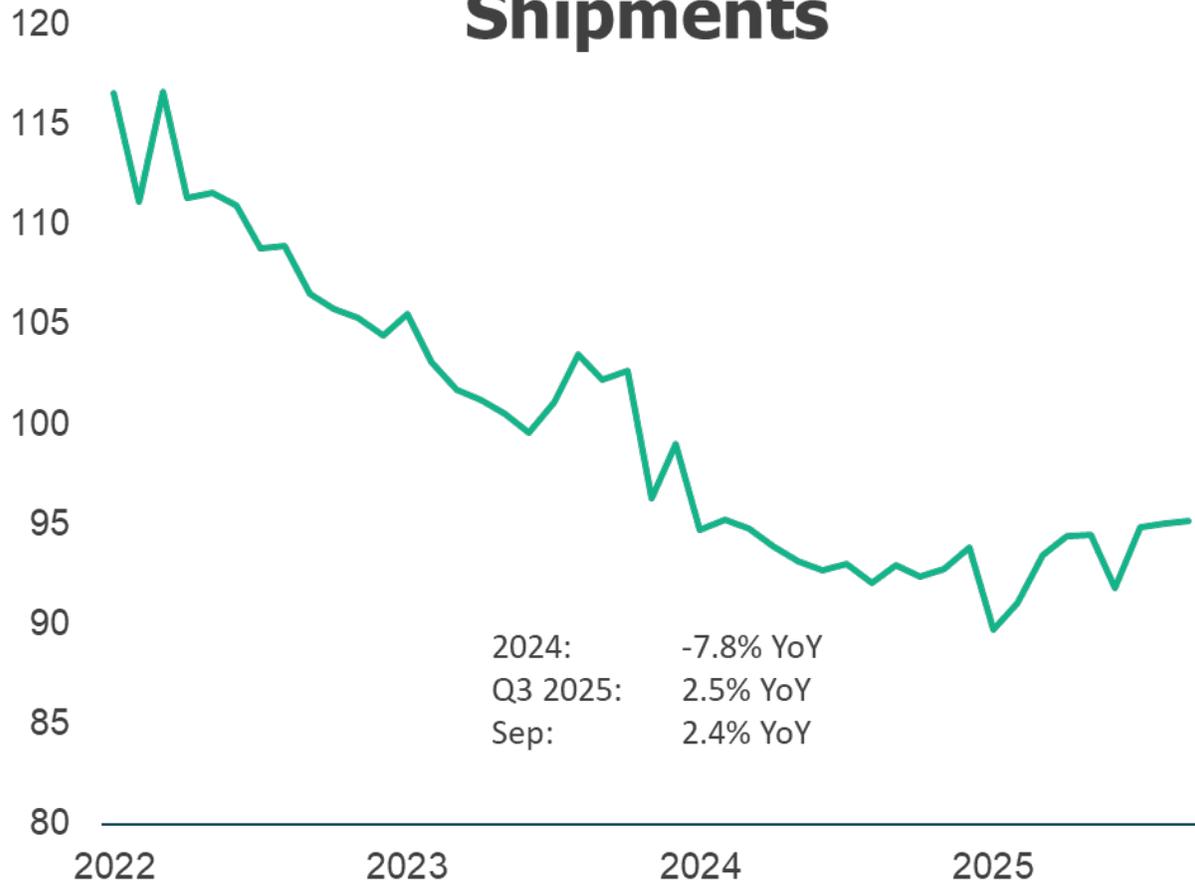


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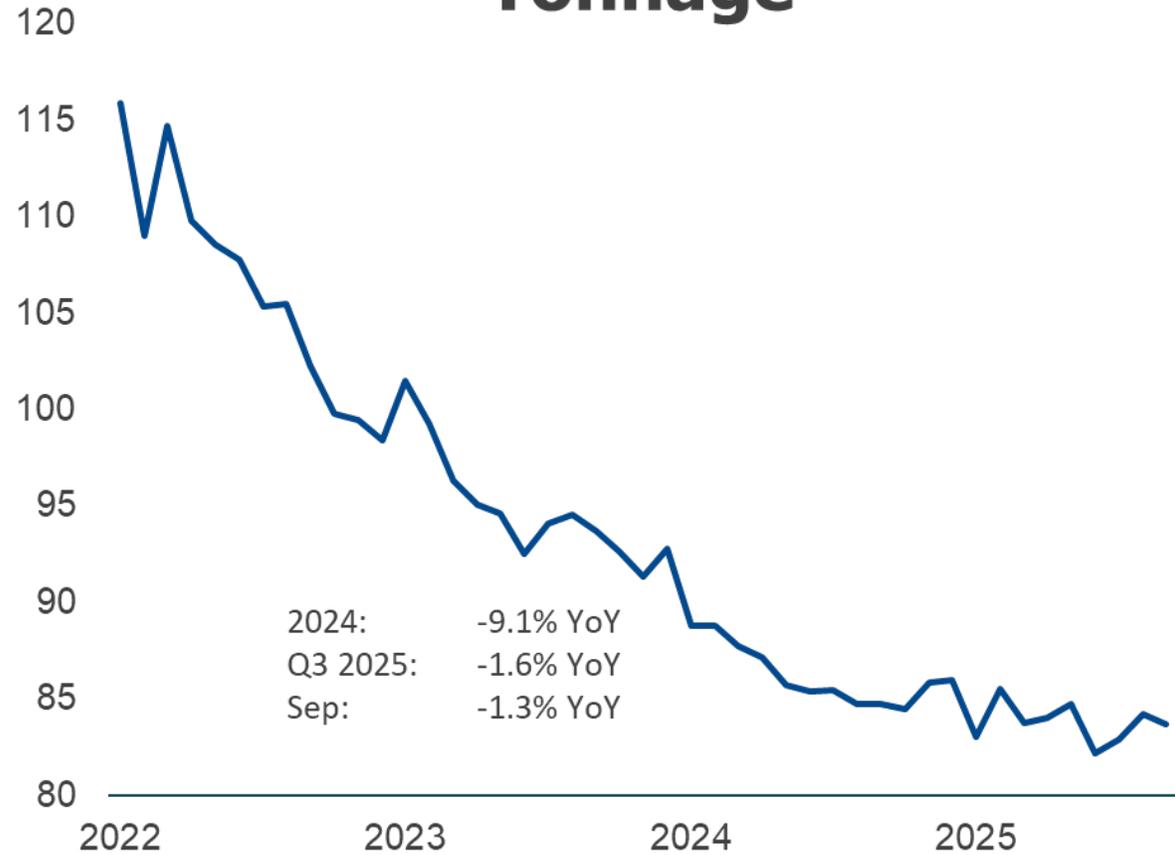
LTL SHIPMENTS AND TONNAGE

(Index, January 2020 = 100; Seasonally Adjusted)

Shipments



Tonnage



Source: ATA's Trucking Activity Report



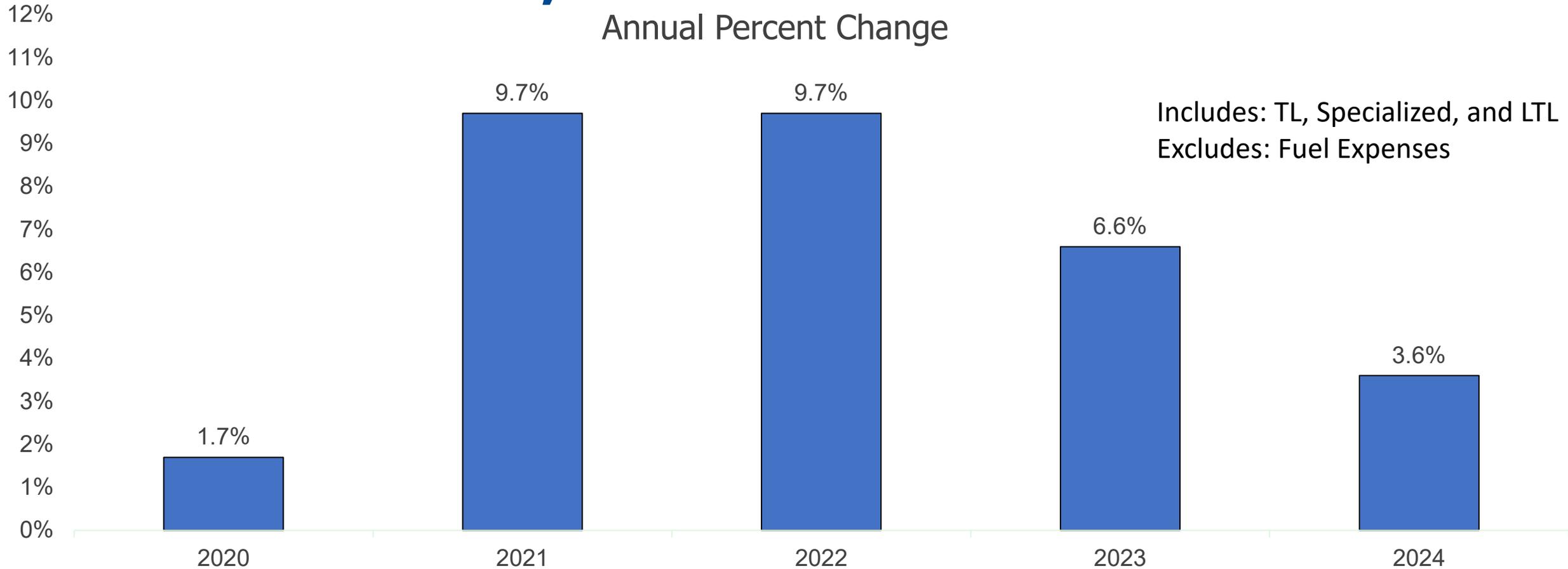
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TRUCKING SUPPLY TRENDS –

COST PRESSURES

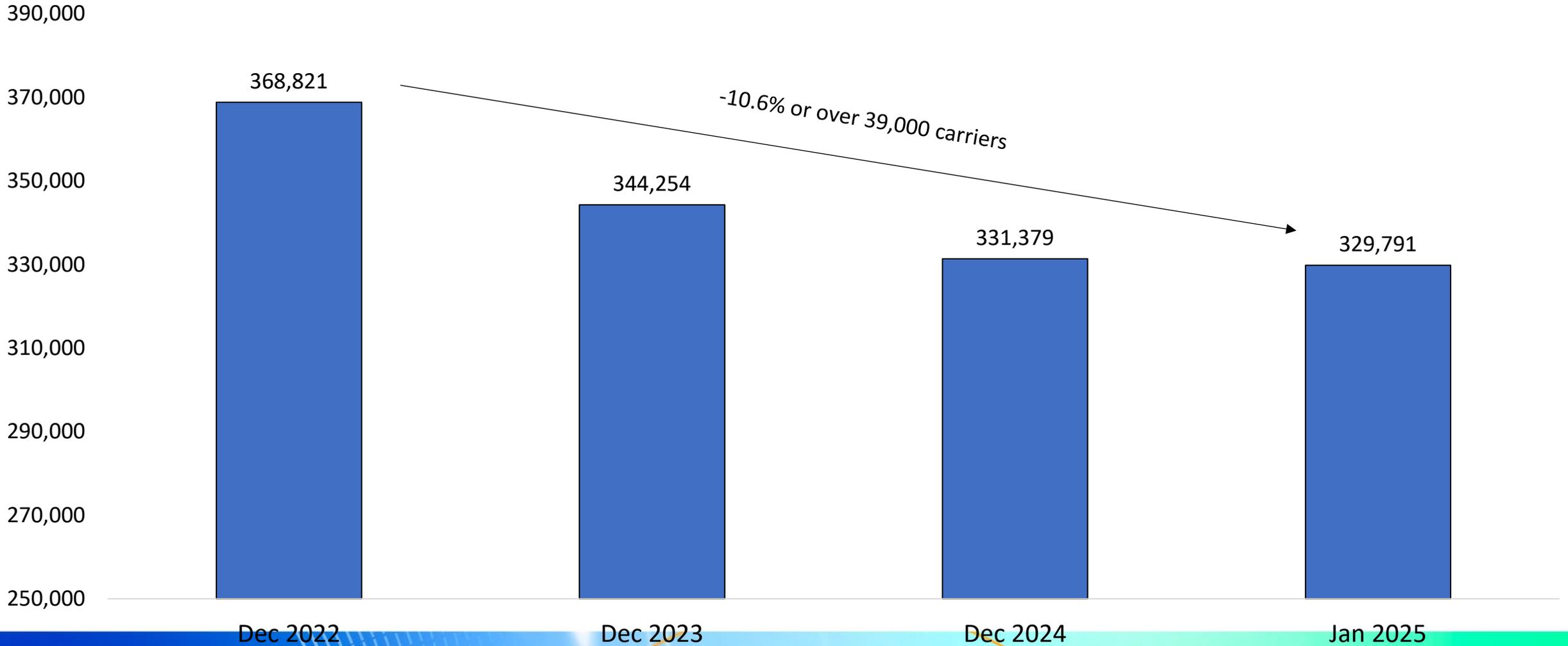
OPERATIONAL COST OF TRUCKING FOR TL, LTL, & SPECIALIZED

Annual Percent Change



Source: ATRI

Property Carriers with Interstate Operating Authority are Exiting the Market



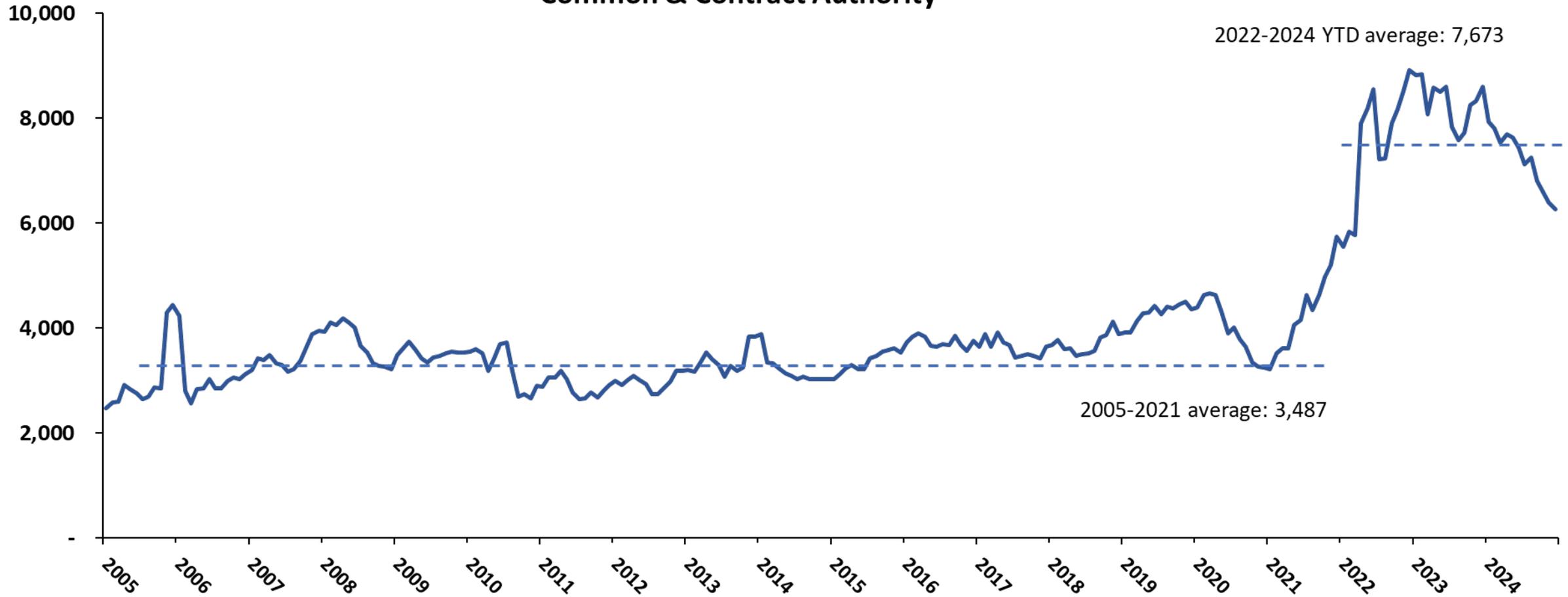
AMERICAN
TRUCKING
ASSOCIATION

Source: FMCSA Licensing & Insurance Snapshot

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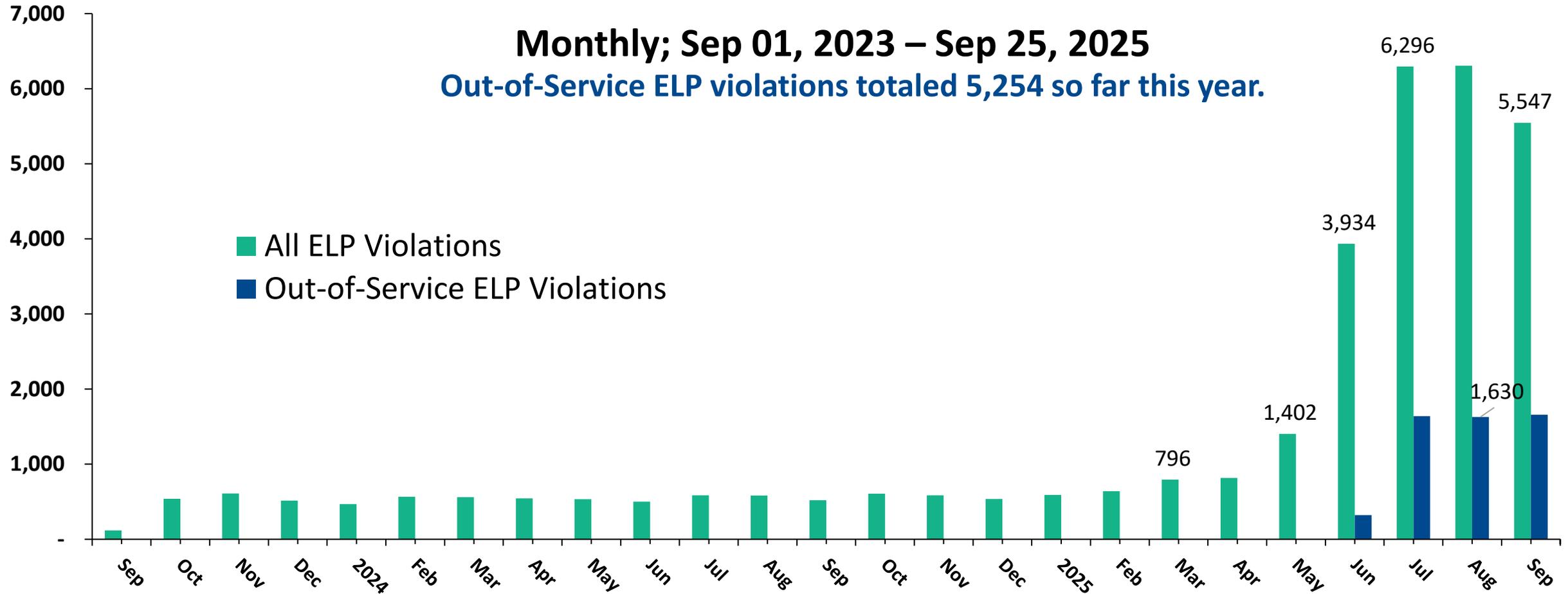
Operation Authority Revocations

3-Month Moving Average
Common & Contract Authority



ENGLISH LANGUAGE PROFICIENCY VIOLATIONS

Monthly; Sep 01, 2023 – Sep 25, 2025
Out-of-Service ELP violations totaled 5,254 so far this year.



Sources: FMCSA & ATA

Top Industry Issues 2025

1. Economy (1)
2. Lawsuit Abuse Reform (3)
3. Insurance Cost/Availability (4)
4. Truck Parking (2)
5. Driver Compensation (5)
6. CSA (7)
7. English Language Proficiency for Drivers
8. Diesel Emissions Regulations
9. Driver Training Standards
10. Artificial Intelligence in Trucking

CRITICAL ISSUES IN THE TRUCKING INDUSTRY – 2025



Prepared by
The American Transportation Research Institute
October 2025



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2025 Top Industry Issues

Rank	Truck Drivers	Motor Carriers
1	Driver Compensation	Economy
2	Truck Parking	Lawsuit Abuse Reform
3	English Language Proficiency for Drivers	Insurance Cost/Availability
4	Broker Issues	CSA
5	Detention/Delay at Customer Facilities	Driver Shortage
6	Artificial Intelligence in Trucking	Driver Retention
7	Driver Training Standards	Driver Distraction
8	Autonomous Trucks	Diesel Emissions Regulations
9	Electronic Logging Device Mandate	Truck Parking
10	Diesel Emissions Regulations	Broker Issues

Ops Costs 2025 Update

- **Analyzes real-world motor carrier costs, operations, and revenue data**
 - ◆ Data covers 2008-2024
 - ◆ Calculates costs by mile and by hour
 - ◆ Sector and regional analysis
 - ◆ Fleet size analysis
- **Many line-item costs decreased or were below inflation, but truck/trailer payments, driver benefits, and insurance continued to rise**
- **Operations impacts reflect cost cutting and decrease in viable freight**
- **With no improvement in freight rates, profit margins severely squeezed across industry**

An Analysis of the Operational Costs of Trucking: 2025 Update

July 2025



Prepared by the American Transportation Research Institute

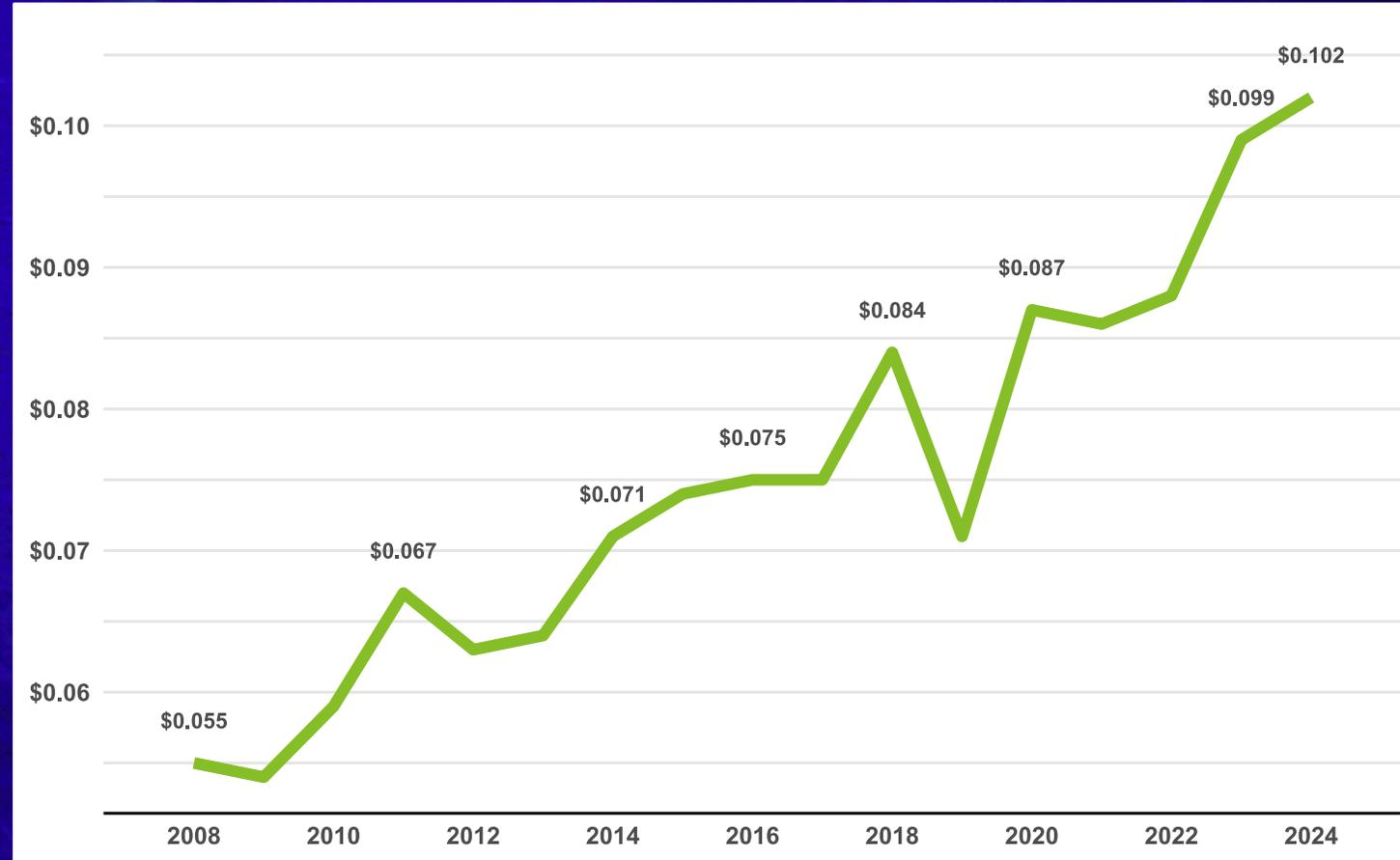


Average Carrier Costs per Mile

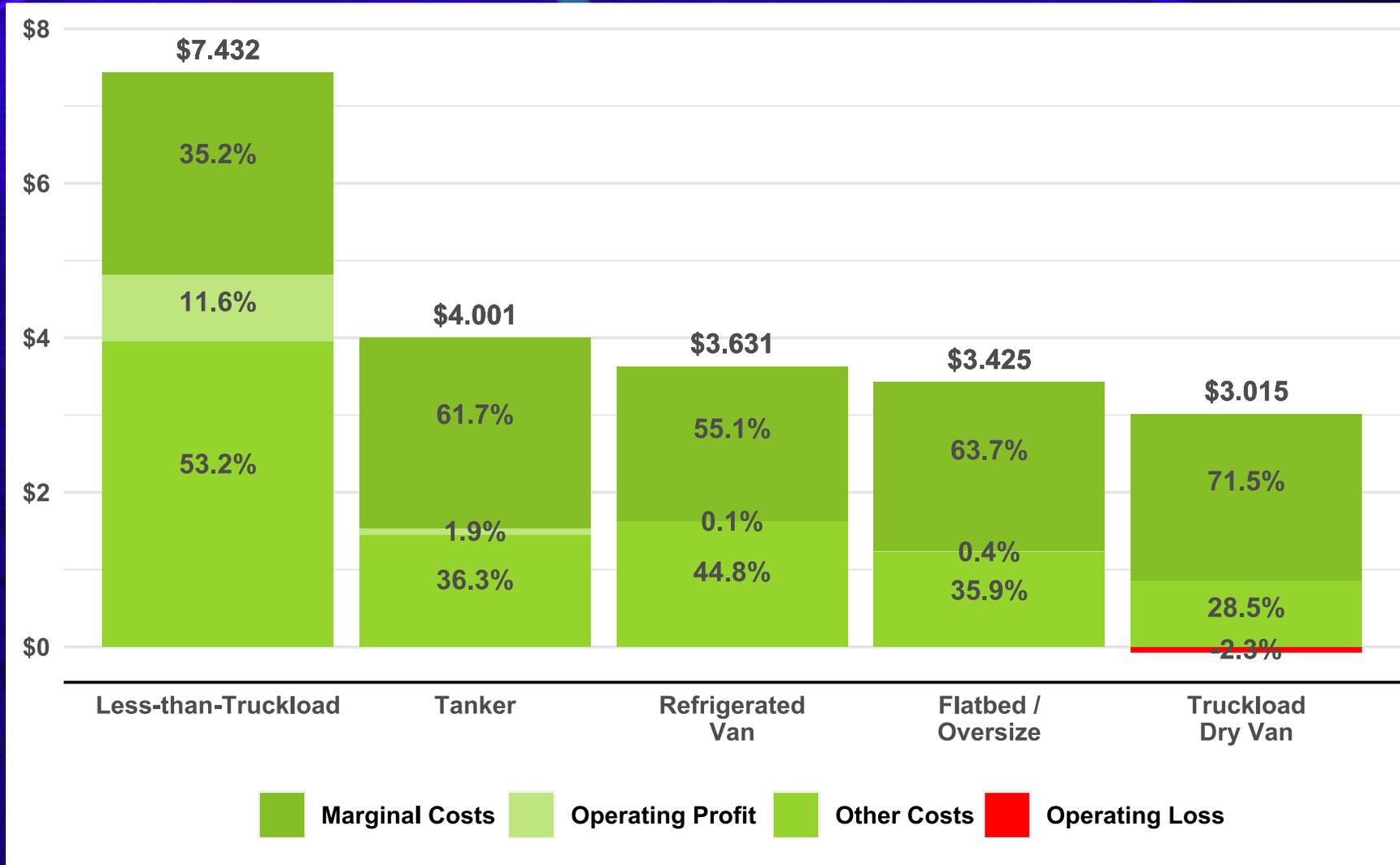
Motor Carrier Costs	2020	2021	2022	2023	2024
Vehicle-based					
Fuel Costs	\$0.308	\$0.417	\$0.641	\$0.553	\$0.481
Truck/Trailer Lease or Purchase Payments	\$0.271	\$0.279	\$0.331	\$0.360	\$0.390
Repair & Maintenance	\$0.148	\$0.175	\$0.196	\$0.202	\$0.198
Truck Insurance Premiums	\$0.087	\$0.086	\$0.088	\$0.099	\$0.102
Permits and Licenses	\$0.016	\$0.016	\$0.015	\$0.009	\$0.009
Tires	\$0.043	\$0.041	\$0.045	\$0.046	\$0.047
Tolls	\$0.037	\$0.032	\$0.028	\$0.034	\$0.038
Driver-based					
Driver Wages	\$0.566	\$0.627	\$0.724	\$0.779	\$0.798
Driver Benefits	\$0.171	\$0.182	\$0.183	\$0.188	\$0.197
TOTAL	\$1.646	\$1.855	\$2.251	\$2.270	\$2.260

Insurance Costs Resume Rise

- Increase of 3.0% in 2024, building on 12.5% increase in 2023
- Lower crash rates during the pandemic led to a stabilization in premium costs in 2021 and 2022, but in 2023 costs returned to historical trajectory
- Includes auto liability and cargo coverages
- Increase of 36% in the past 8 years



Revenue, Profit, and Costs per Mile 2024



Repealing the FET on New Truck Equipment

Analyzes the impact of repealing the federal excise tax (FET) of 12% on new trucking equipment

- **Environmental impacts: Decrease in CO2 emissions**
- **Safety impacts: Decrease in crashes and crash costs**
- **Tax Implications**
 - ◆ **Truck FET is not an efficient user fee: Lacks comprehensiveness, is volatile and is complex**
 - ◆ **Could be replaced with an 11.2 cent diesel tax increase**



April 2025

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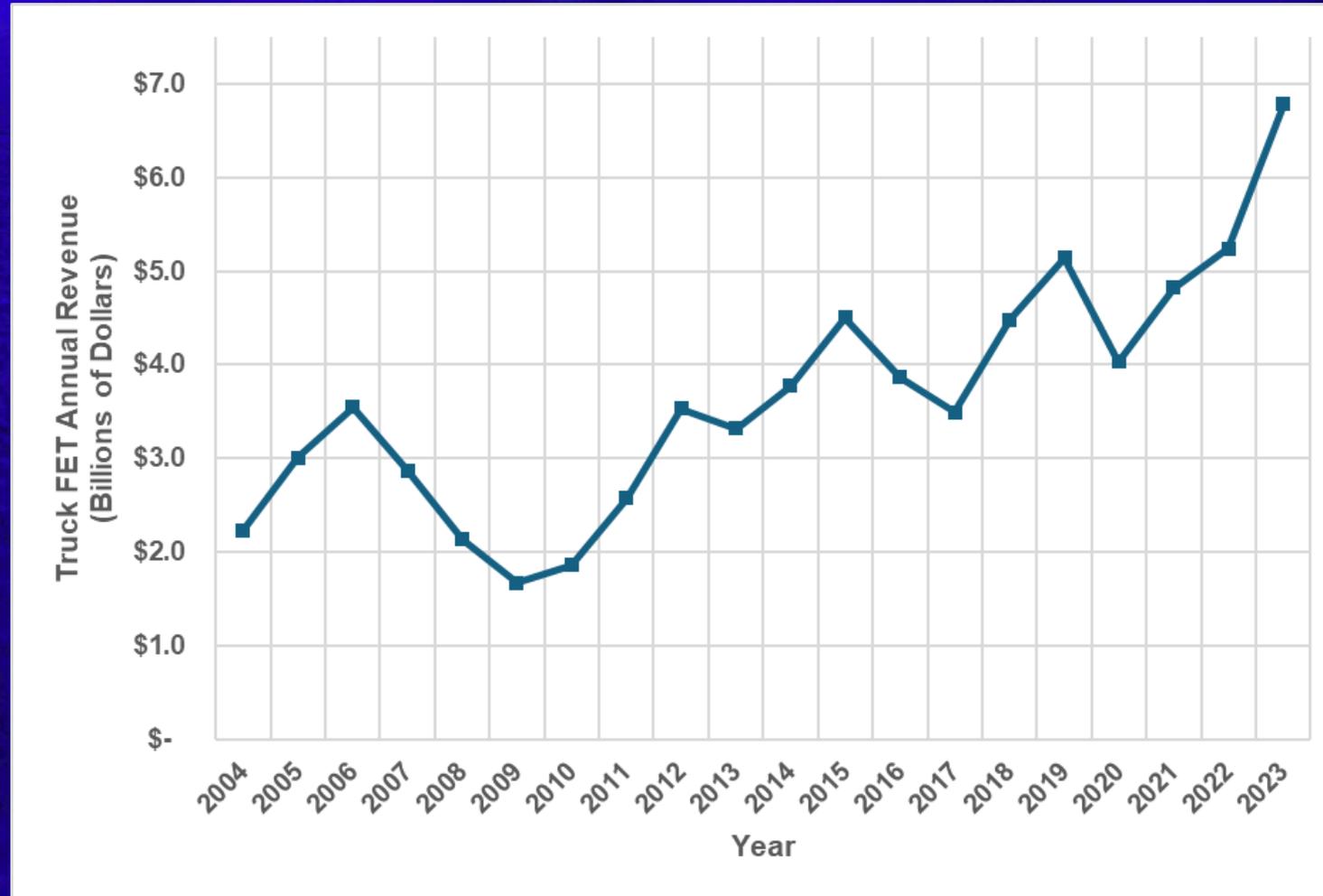
TruckingResearch.org

Truck FET Background

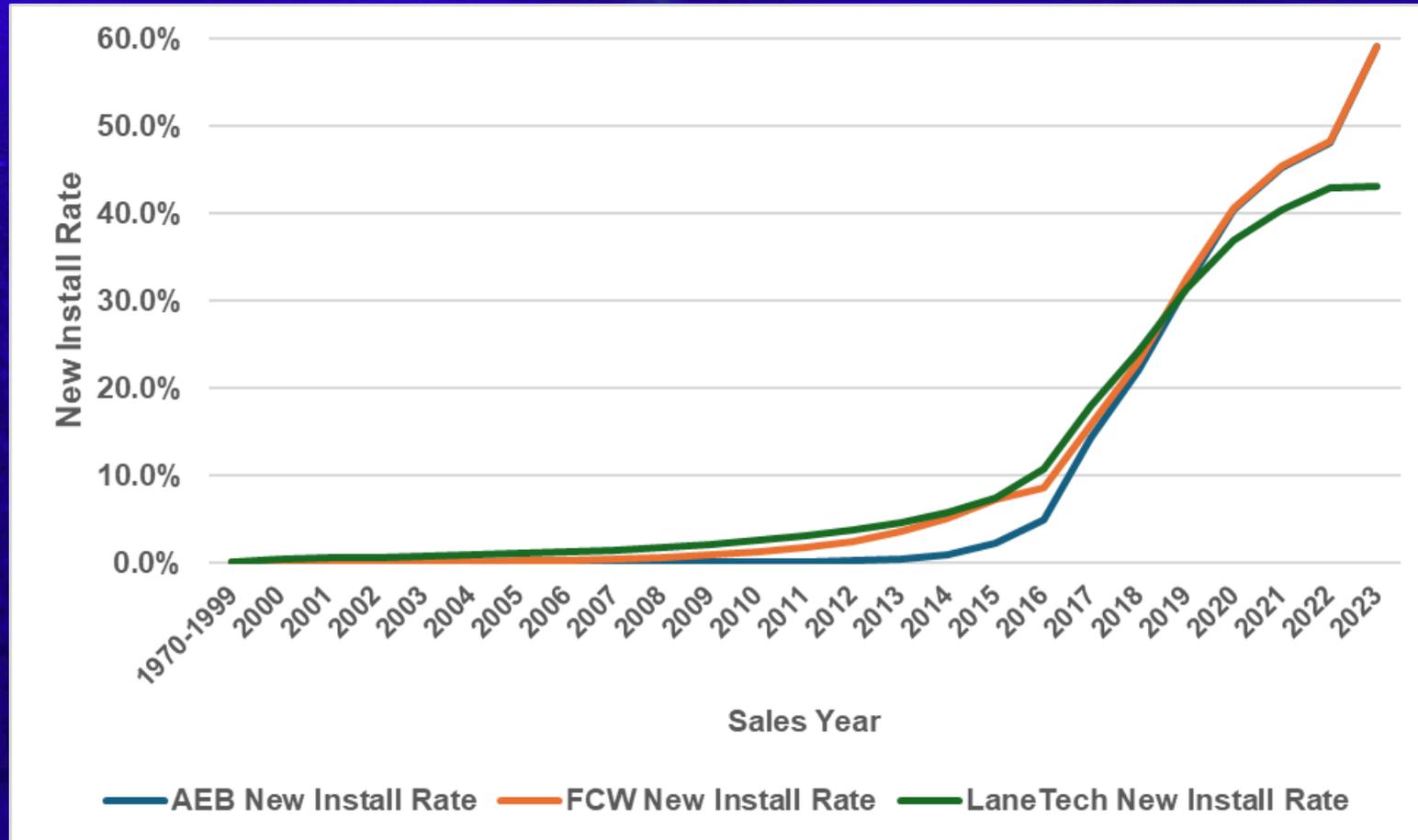
- **1917 legislation to fund World War One**
- **Imposed at 3 percent in 1917**
 - ◆ Climbed to 8 percent in 1950s
 - ◆ 12 percent in the 1980s
- **Significant burden**
 - ◆ \$20,000 – \$25,000 for a new diesel truck
 - ◆ \$50,000 for a zero emission truck
 - ◆ \$5,000 - \$10,000 for a trailer
- **Decreases demand for new vehicles**
- **Represents 0.15 percent of federal revenue**
 - ◆ 14.1 percent of Highway Trust Fund (HTF)



20-Year Trend of Truck FET Annual Revenue



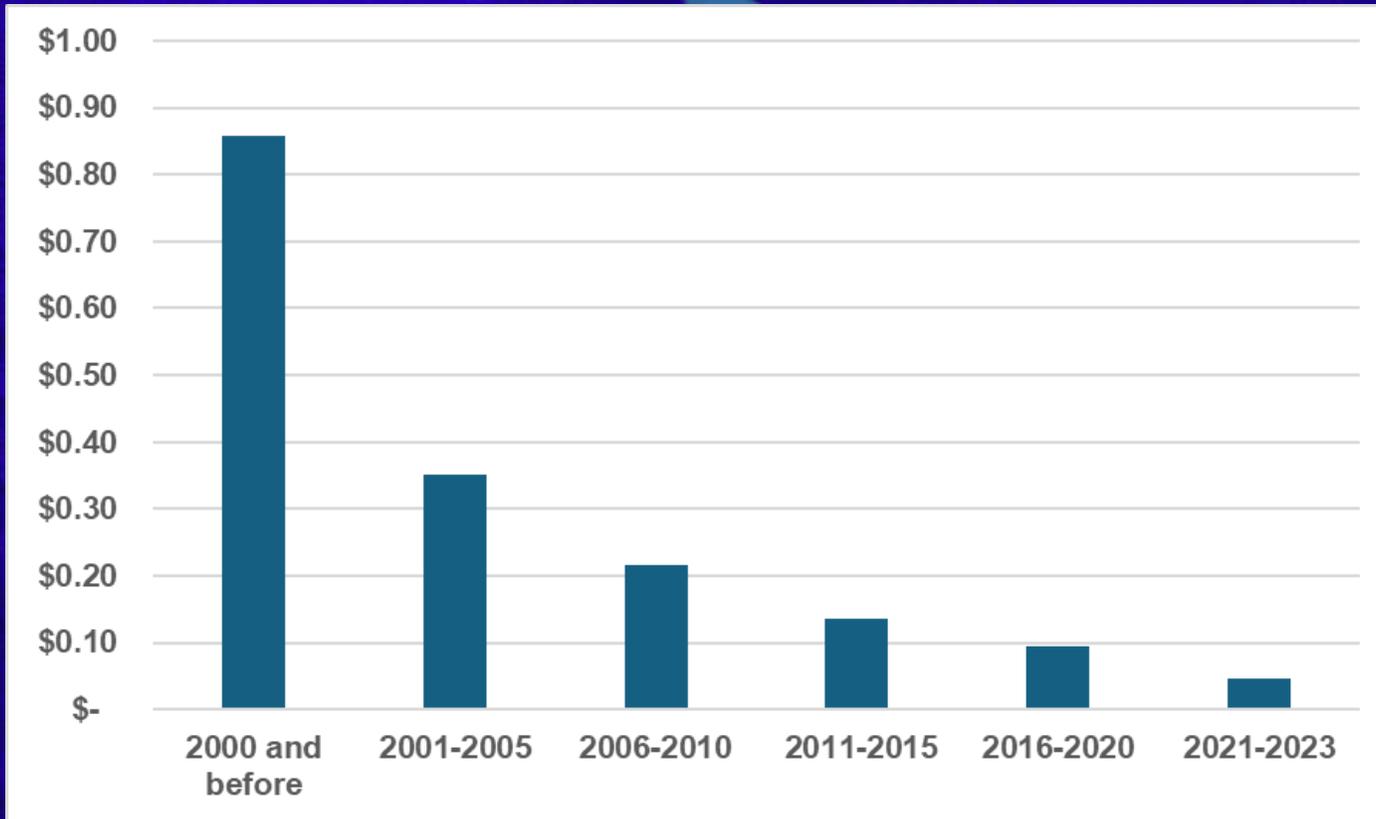
Safety Analysis



Cumulative Safety Benefits of Truck FET Repeal Across 10 Years

Annual Benefit	PDO Crashes	Injury Crashes	Fatal Crashes	Total Savings
Year 1	558	163	8	\$245,222,239
Year 2	1,116	326	16	\$490,444,478
Year 3	1,674	489	24	\$735,666,717
Year 4	2,232	652	32	\$980,888,956
Year 5	2,790	815	40	\$1,226,111,195
Year 6	3,348	978	48	\$1,471,333,434
Year 7	3,906	1,141	56	\$1,716,555,673
Year 8	4,464	1,304	64	\$1,961,777,912
Year 9	5,022	1,467	72	\$2,207,000,151
Year 10	5,580	1,630	80	\$2,452,222,390
Total	30,690	8,965	440	\$13,487,223,145

Operations: Parts and Labor Costs per Mile by Vehicle Age



Potential Sources of Revenue

Fuel Tax Scenario	Per Gallon Tax Increase & (Final Total Per Gallon Tax)	
	Gasoline	Diesel
Do Not Replace with Fuel Tax	\$0.000 (\$0.184)	\$0.000 (\$0.244)
Replace with Diesel Increase Only	\$0.000 (\$0.184)	\$0.112 (\$0.356)
Replace w/ Gas & Diesel Increase (% of Revenue) ⁶⁰	\$0.023 (\$0.207)	\$0.031 (\$0.275)

Decrease in CO₂ from Truck FET Repeal Across Ten Years

Annual Benefit	Decrease in Metric Tons of CO ₂
Year 1	1,199,745
Year 2	2,399,491
Year 3	3,599,236
Year 4	4,798,981
Year 5	5,998,727
Year 6	7,198,472
Year 7	8,398,218
Year 8	9,597,963
Year 9	10,797,708
Year 10	11,997,454
Total Across 10 years	65,985,995

Evolving Truck Driver Demographics: Issues and Opportunities

- Analyzes two decades of demographic trends in the U.S. truck driver workforce
 - ◆ Highlights key shifts in age, gender, employment classification, race, and education levels
- Identifies two underrepresented populations with potential to increase truck driver workforce
 - ◆ Former foster youth
 - ◆ Justice-involved individuals

Evolving Truck Driver Demographics: Issues and Opportunities

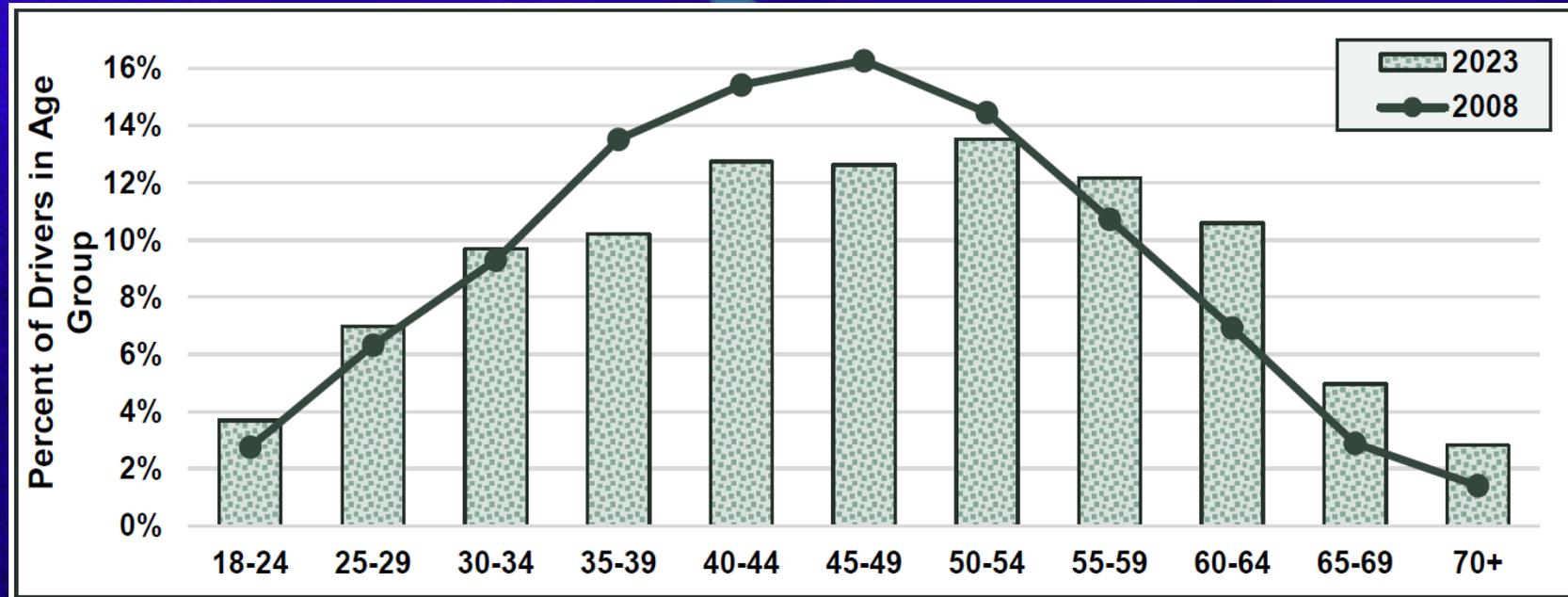
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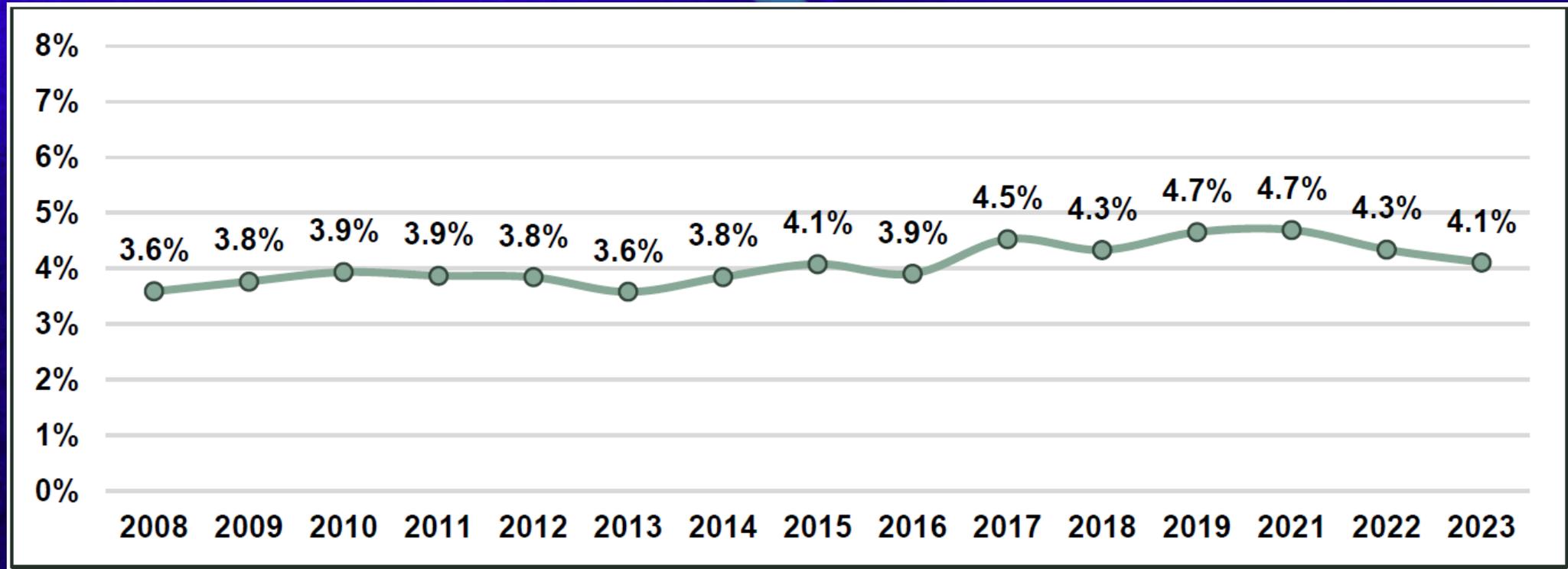


Issue: Aging Workforce



- In 2023, the average age of truck drivers was 47, compared to 42 for the overall U.S. labor force
- This marks an increase from 45 years old in 2008, highlighting aging truck driver workforce

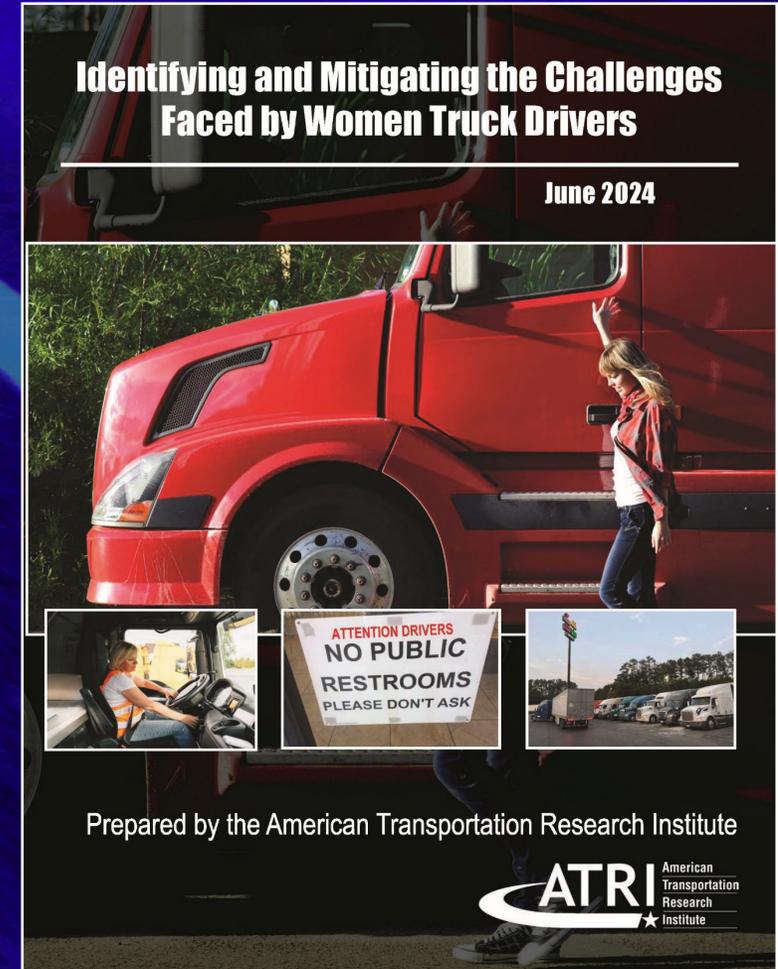
Stagnant Progress in Recruiting Women Truck Drivers



Percent of Women Truck Drivers, 2008 - 2023

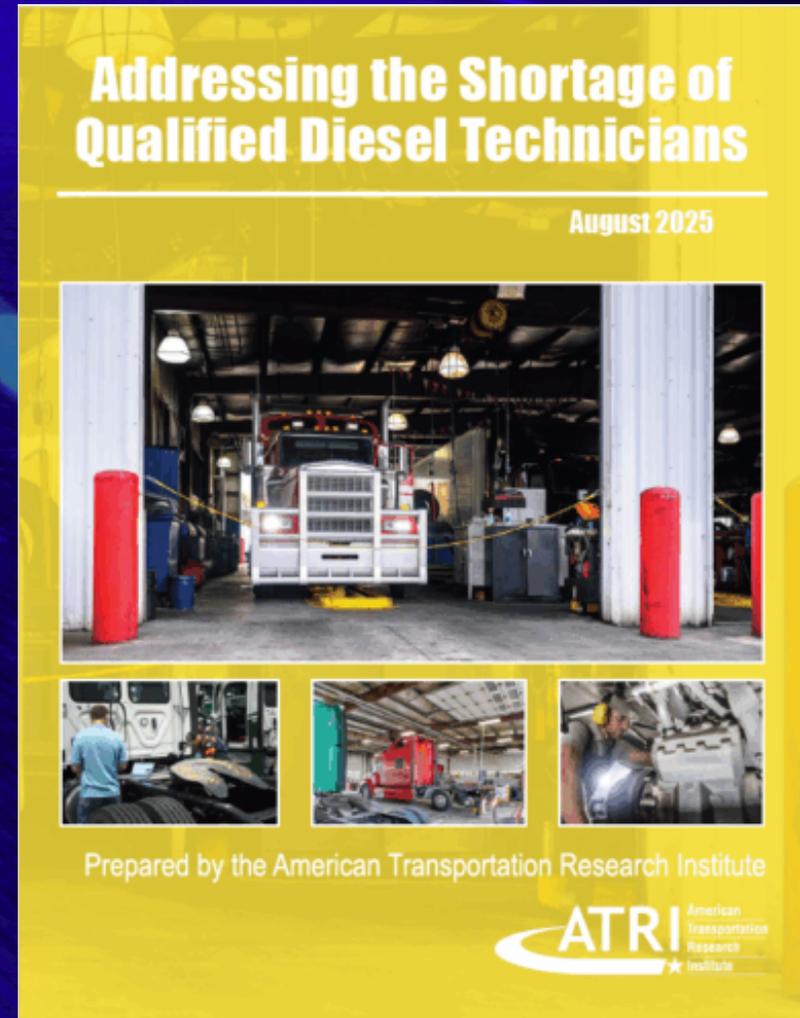
Identifying and Mitigating the Challenges Faced by Women Truck Drivers

- Includes input from thousands of truck drivers, motor carriers, truck driver training schools
- Surveys, interviews, driver focus group
- Identified six key challenges faced by women truck drivers
- Industry action plan with discrete steps for fleets, schools, drivers to advance success in recruiting / retaining women drivers



Addressing the Shortage of Qualified Diesel Techs

- **Three integrated surveys of target stakeholders:**
 - ◆ Techs
 - ◆ Shops
 - ◆ Training programs
- **Identifies missed opportunities for recruiting techs, which skills need better training, and why techs leave trucking for other industries**



What is the Shortage?

- **65.5% of shops were understaffed in 2025**
- **19.3% average vacancy rate (open positions)**
- **16.5% average turnover rate**
- **Weak correlation between tech pay and vacancy rate**
- **The upshot: a persistent struggle to get enough qualified techs capable of filling trucking positions which cannot be explained by turnover or pay alone**

Training Shortfalls

- **61.8% of first-time techs have no training prior to hiring**
- **On-the-job training costs 357 hours and \$8,211 in trainee wages**
- **Techs with prior training: more than 30% were still unqualified in each of 20 core skill areas (and more than 40% in 10)**

Costs and Consequences of Truck Driver Detention

- Tracks driver experiences across 3 surveys over the last decade
- Quantifies lost productivity, income, revenue, and more from federal and motor carrier data
- Analysis of ATRI's large truck GPS database shows impact of detention on truck speeds

Costs and Consequences of Truck Driver Detention: A Comprehensive Analysis

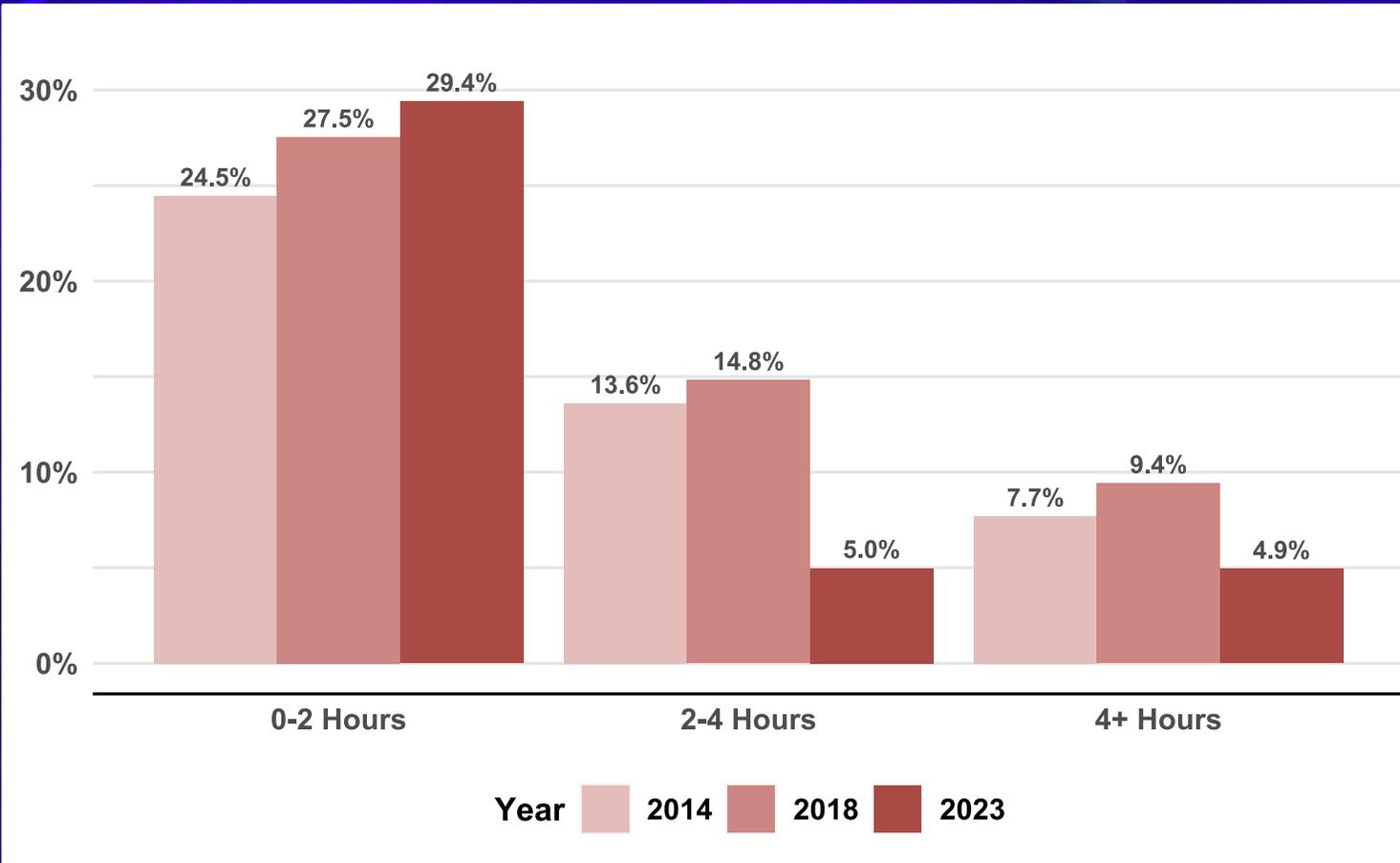
September 2024



Prepared by the American Transportation Research Institute



Driver Detention: 10-Year Trend



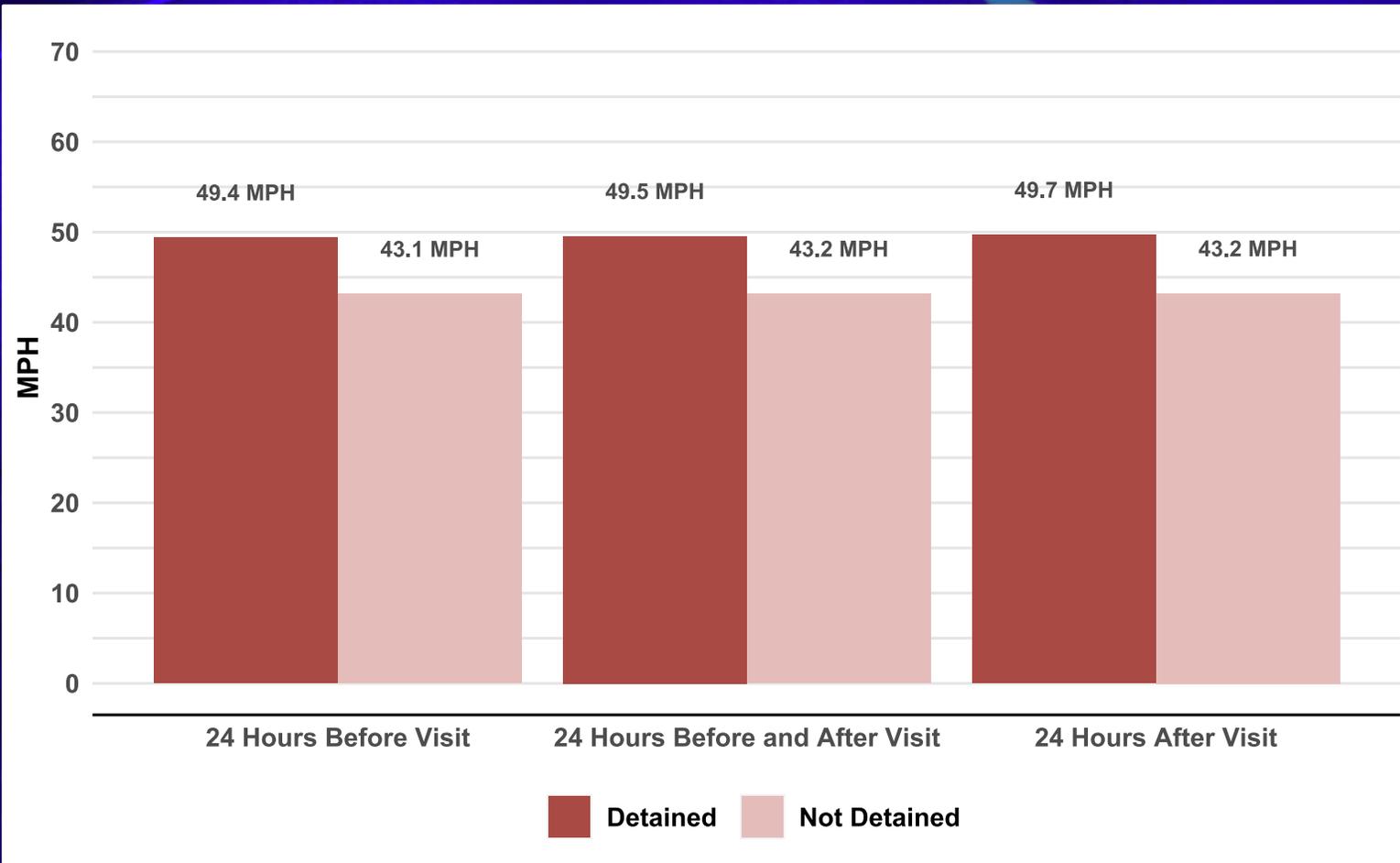
Detention in 2023

- Nearly 40% of all stops
- Women drivers detained more – 49.1% of stops vs 37.2% for men drivers
- 42.5% of spot market freight vs 33.8% of contract freight

For-Hire Trucking Industry Total Costs of Detention

- **135.9 million lost productive hours**
- **72.6 million wasted gallons of diesel**
- **5.4 billion lost miles**
- **\$3.6 billion unreimbursed direct expenses**
- **\$11.5 billion lost revenue**

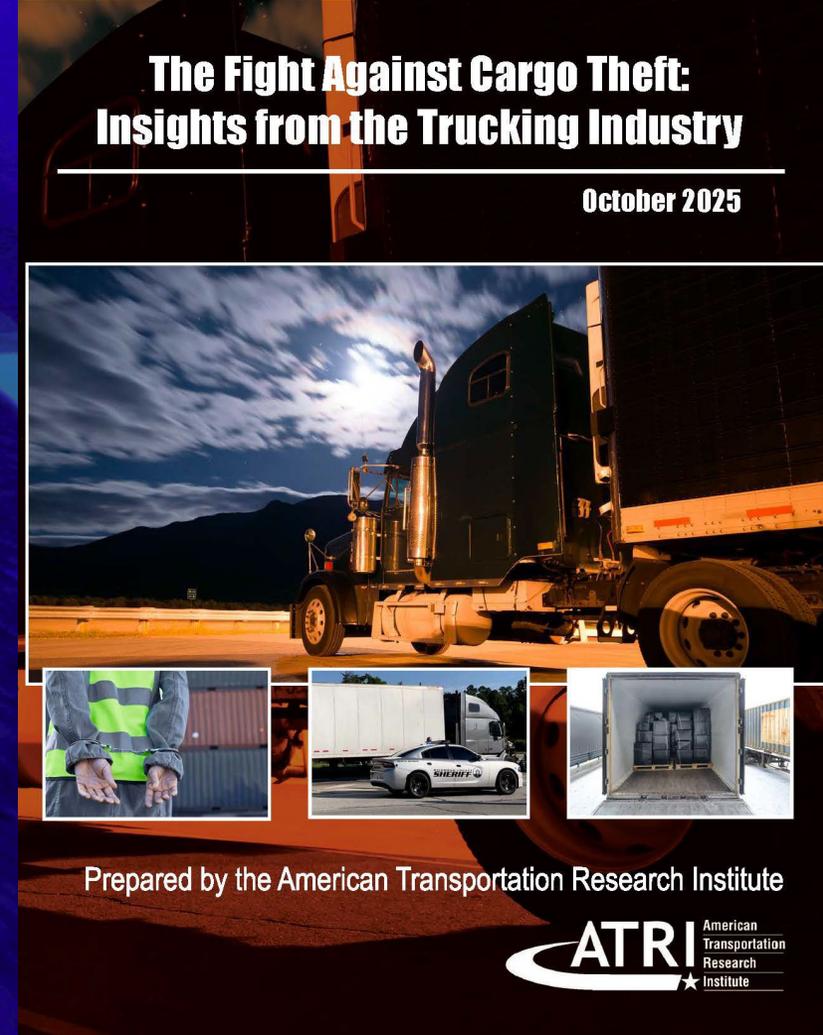
Detained Trucks Drive Faster



- Detained trucks faster 24 hours after *and* before detention
- 14.6% faster in full 48-hour period
- Similar findings for each sector

The Fight Against Cargo Theft

- Annual cost of cargo stolen from motor carriers is up to \$6.6 billion
 - ◆ \$18 million+ per day
- Value of cargo stolen
 - ◆ \$521,135 annually for motor carriers; \$29,108 per theft incident
 - ◆ \$1,838,160 annually for LSPs; \$95,351 per theft incident
- Food, electronics, automotive and beverages most commonly stolen
- CA, IL, TX, GA, FL and TN are national cargo theft hotspots



The Fight Against Cargo Theft: Next Steps

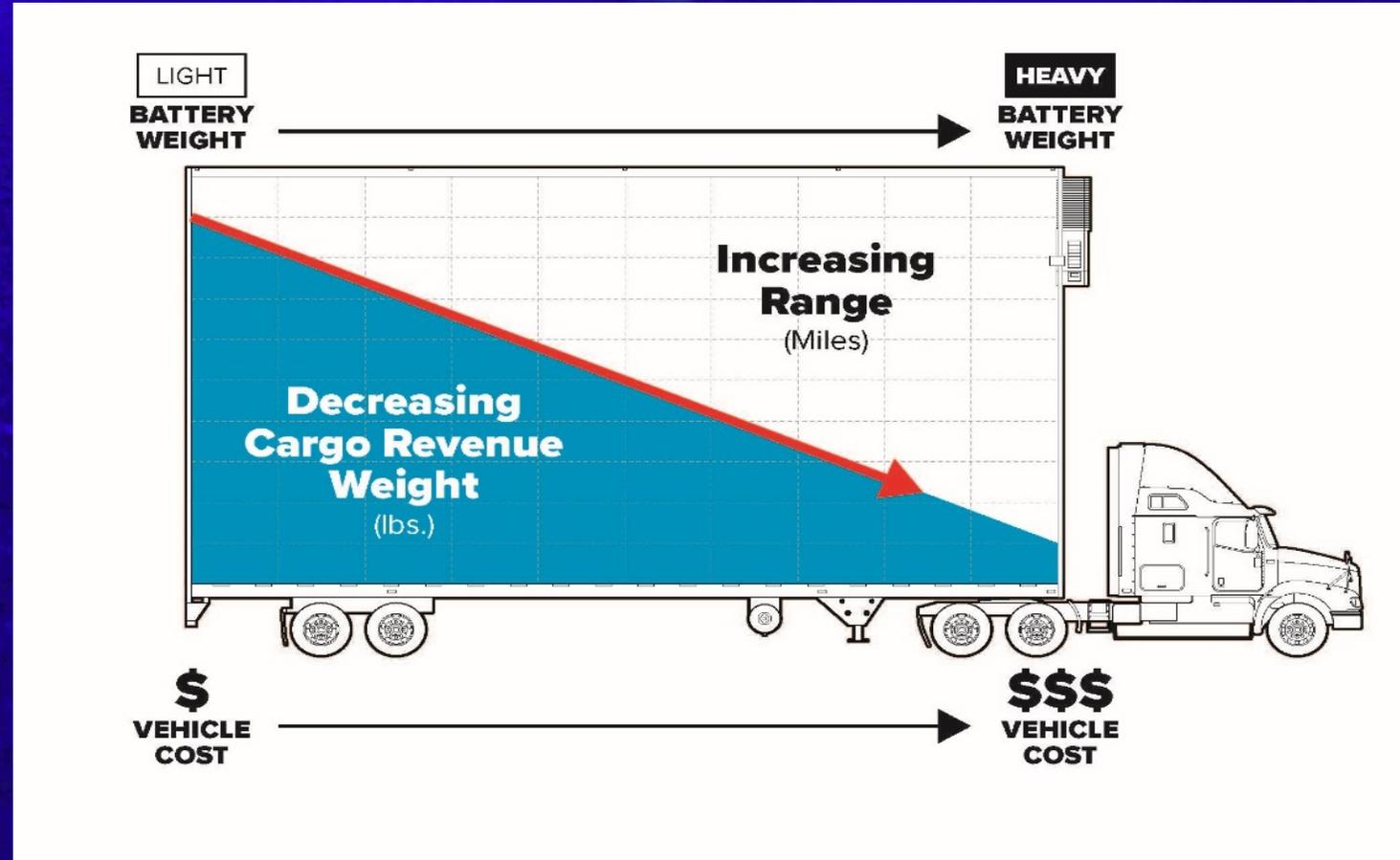
- **Foster “Security Culture” Across the Supply Chain**
 - ◆ Leadership-driven support of security/security investment
 - ◆ Driver/staff training; involve all employees in cargo theft awareness
 - ◆ Clear expectations and accountability
 - ◆ Provide support for driver/employee vigilance, such as tools for reporting suspicious activity or checking the veracity of information
- **Enact Model State Legislation**
 - ◆ Designate cargo theft as a distinct crime
 - ◆ Graduated sentencing for cargo theft
 - ◆ State task force/advisory board
- **Federal-Level Centralized Reporting Agency**
 - ◆ Data collection, management and analysis
 - ◆ Cross-jurisdictional cargo theft information sharing
 - ◆ Dissemination of intelligence to supply chain stakeholders

Questions?

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BEV Truck Conundrum



Realities

- **Vehicle costs – new Class 8 BEV truck could cost over \$425,000**
- **Battery Life: 4-7 Years**
- **Roh Roh if you operate in the North!**
- **Material sourced from outside U.S.**
 - ◆ **Lithium, graphite, cobalt, manganese and nickel**

CALIFORNIA FLEX ALERT

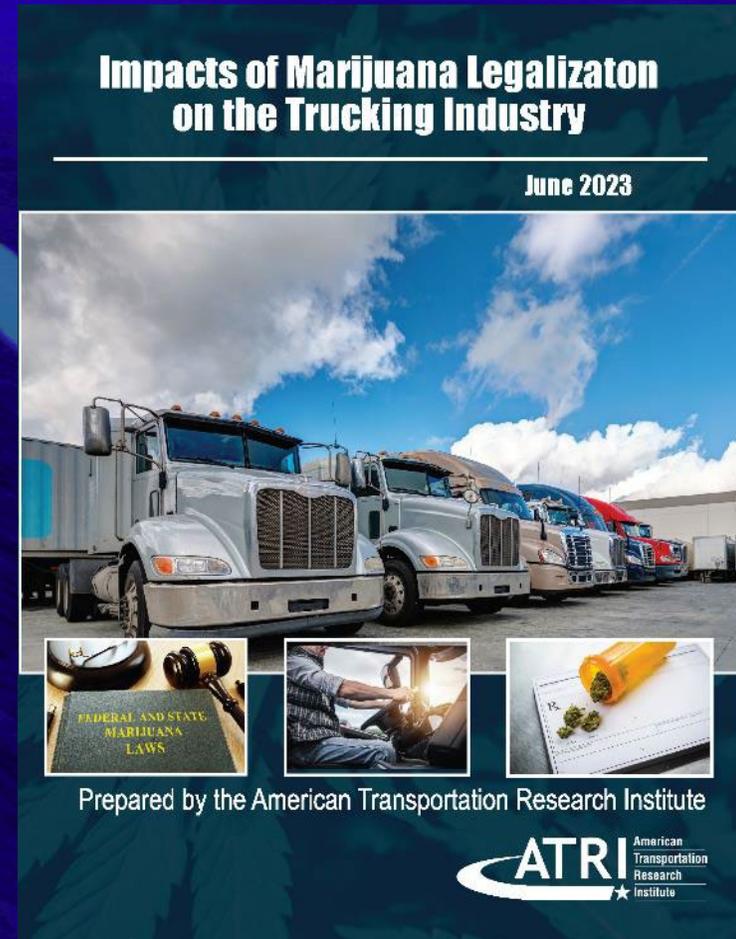
- SET THERMOSTATS TO 78 DEGREES OR HIGHER
- AVOID USE OF MAJOR APPLIANCES
- TURN OFF UNNECESSARY LIGHTS
- AVOID CHARGING ELECTRIC VEHICLES

FOX 13

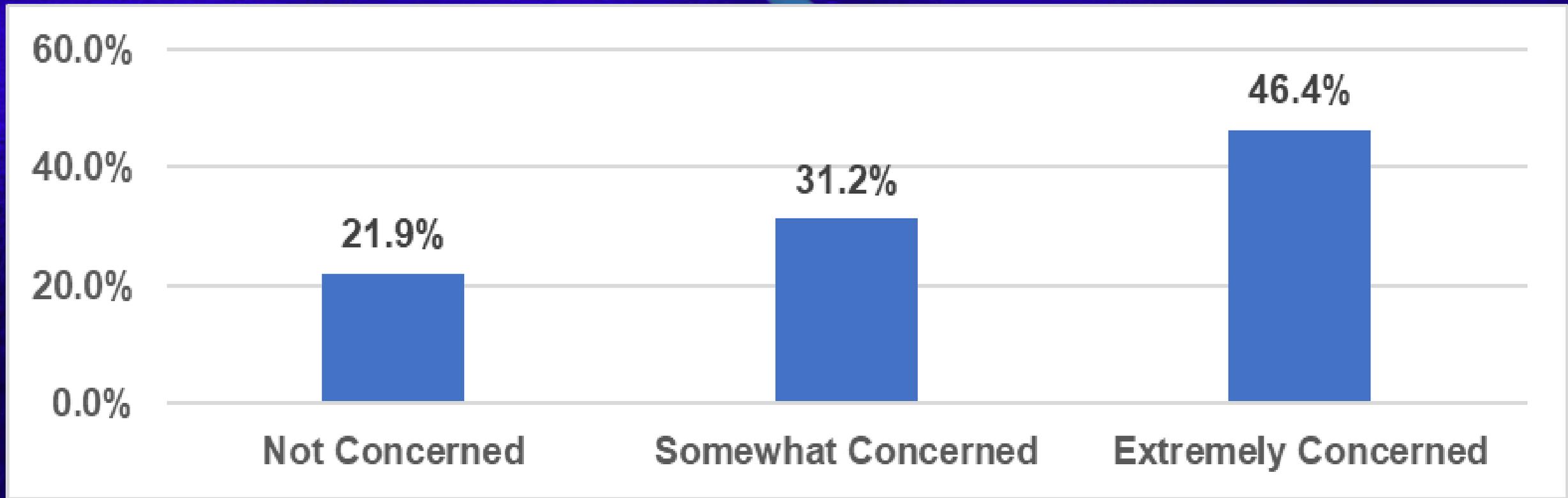
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Impacts of Marijuana Legalization on Trucking

- Top RAC priority for 2022
- Focus on workforce implications from increased legalization
- Includes motor carrier survey (200+ responses) and driver survey (3,300+ responses)



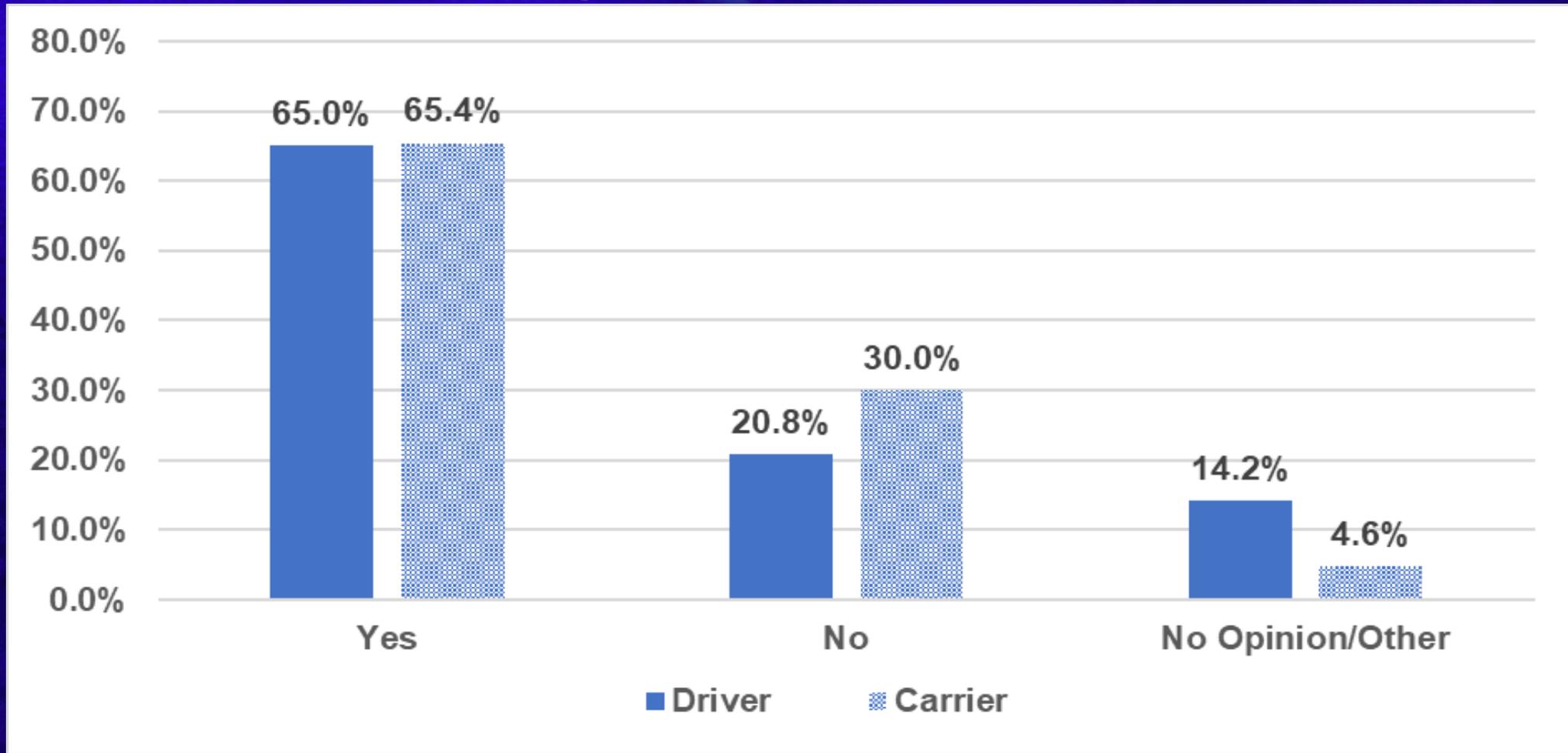
Concern that Insurance Rates will Increase for Carriers in a Legal State



Driver Survey

- **19.1% of drivers were not sure if a CDL holder can use marijuana off-duty in a state where it is legal**
 - ◆ 6.6% incorrectly said drivers can use marijuana off-duty in states where it is legal
- **Driver opinions on impairment time after using recreational marijuana:**
 - ◆ Most common response was after 10 hours or more (28.6%)
- **Majority of drivers (55.4%) do not believe highway safety has been impacted by legalized marijuana**

Should Marijuana Impairment Test Replace Marijuana Use Test?



2025 Top Research Priorities

- **Rising Insurance Costs and Self-Insurance Motivations**
- **Efficacy of Entry-Level Driver Training on Safety Outcomes**
- **Safety Impacts of In-Cab Monitoring**
- **Capitalizing on Telematics Data**
- **Understanding the Prevalence and Impact of Cabotage Violations**

Questions?

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www.TruckingResearch.org