

ATRI Research Update...

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SVP

**American Transportation Research
Institute**

ATRI

Trucking industry's not-for-profit research organization

- **Safety**
- **Mobility**
- **Economic Analysis**
- **Technology**
- **Environment**

www.TruckingResearch.org

Board of Directors



Research Advisory Committee



2021 Top Industry Issues

1. **Driver Shortage (1)**
2. **Driver Retention (6)**
3. **Driver Compensation (2)**
4. **Lawsuit Abuse Reform (7)**
5. **Truck Parking (3)**
6. **Compliance, Safety, Accountability (4)**
7. **Detention / Delay at Customer Facilities (9)**
8. **Transportation Infrastructure / Congestion / Funding (#9 in 2019)**
9. **Insurance Cost / Availability (5)**
10. **Diesel Technician Shortage**

CRITICAL ISSUES IN THE TRUCKING INDUSTRY – 2021



Presented to the
American Trucking Associations

Prepared by
The American Transportation Research Institute
October 2021



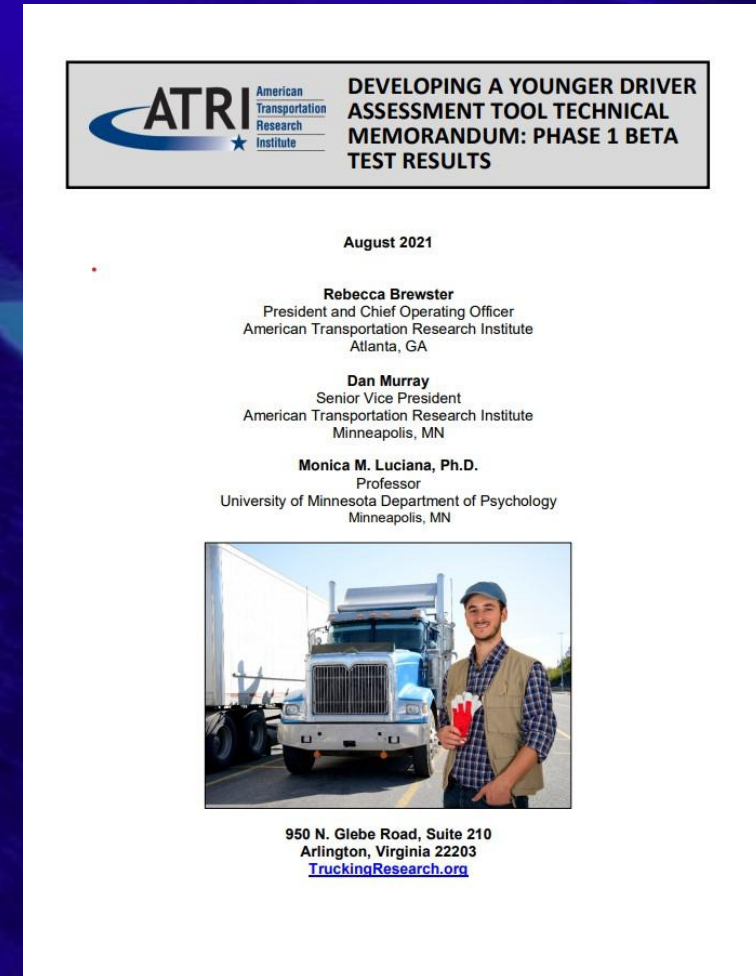
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2021 Top Industry Issues

Rank	Commercial Drivers		Motor Carriers
1	Driver Compensation (tie)	Truck Parking (tie)	Driver Shortage
2	Detention / Delay at Customer Facilities		Driver Retention
3	Fuel Prices		Lawsuit Abuse Reform
4	Driver Training Standards		CSA
5	Hours-of-Service Rules		Driver Compensation
6	ELD Mandate		Insurance Cost / Availability
7	Driver Distraction		Diesel Technician Shortage
8	Transportation Infrastructure / Congestion / Funding		Transportation Infrastructure / Congestion / Funding
9	Speed Limiters		Driver Distraction
10	CSA		Detention / Delay at Customer Facilities

Younger Driver Assessment Tool

- **ATRI-developed assessment tool to identify younger drivers with personality characteristics similar to mature, veteran drivers**
- **Beta test of tool included 94 drivers aged 20-60**



Younger Driver Assessment Tool

- **Measures tested included:**
 - ◆ **Personality traits**
 - ◆ **Reasoning**
 - ◆ **Impulsivity**
 - ◆ **Sensation-seeking**
 - ◆ **Sleep quality**
 - ◆ **Cognitive control**
- **Participating drivers' safety performance measured through MVR and PSP – crashes and safety violations**

Younger Driver Assessment Tool

- Among statistically significant findings, safest drivers scored highest on Extraversion and Conscientiousness and lowest on Depression and Sleep Latency
- Assessment did show sensitivity to age-related variations in performance
 - ◆ Similar findings for older drivers with less driving experience

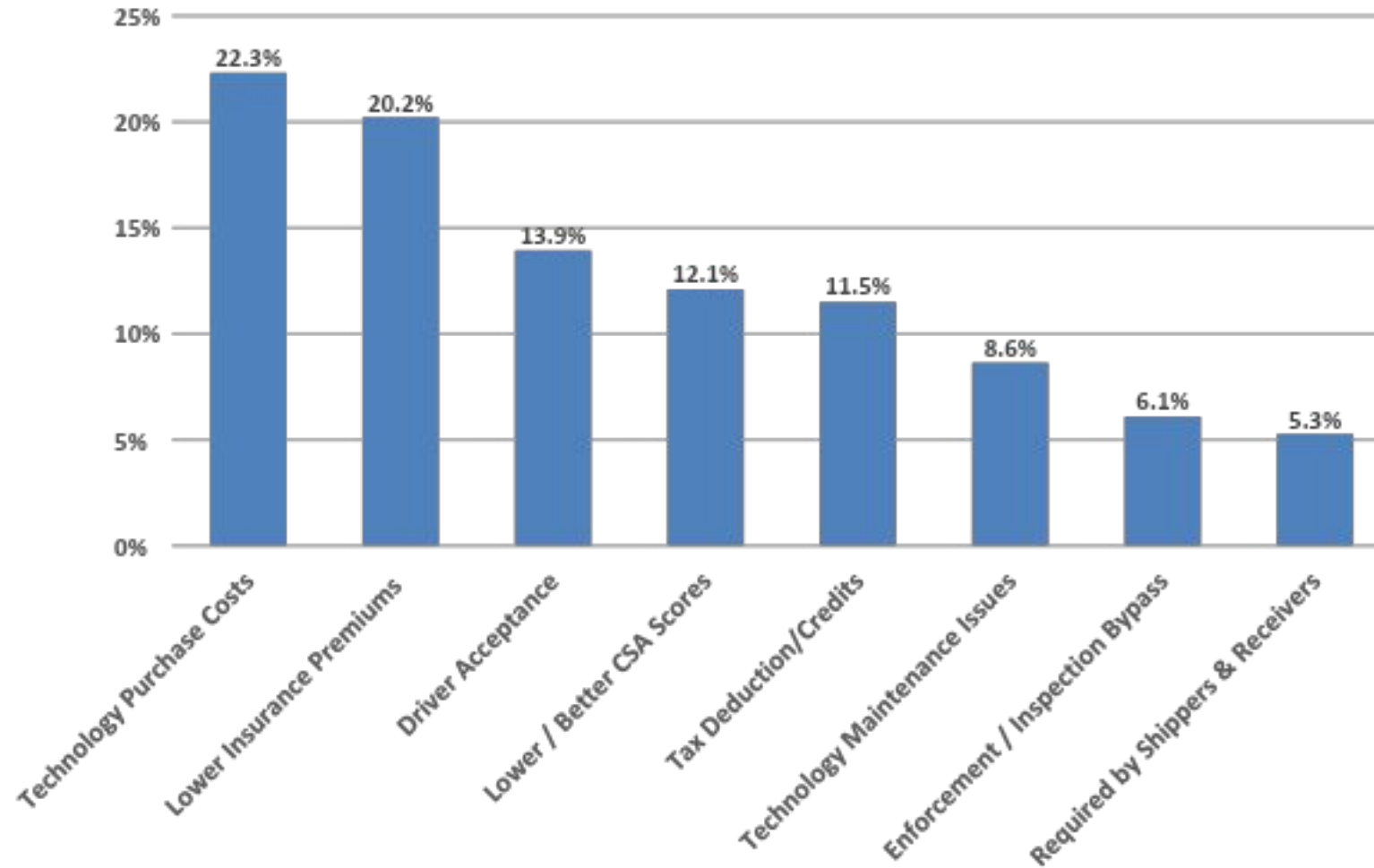
Younger Driver Assessment Tool

- **Next phase will expand sample to include more drivers under 25**
 - ◆ Working with CVTA, carriers with schools, apprenticeship programs
- **Shortened assessment will remove several tests**
 - ◆ BMI assessment – more likely to be predictive of health risks and threats to safety such as poor sleep in older and more seasoned drivers
 - ◆ UPPS-P – though highly sensitive to age, was not predictive of driver safety
 - ◆ Trail-Making Test – due to significant questions about validity in the context of automated administration
 - ◆ Attentional Network Test – the ANT is redundant in theory with the Multi-Source Interference Task and was not well received by the drivers

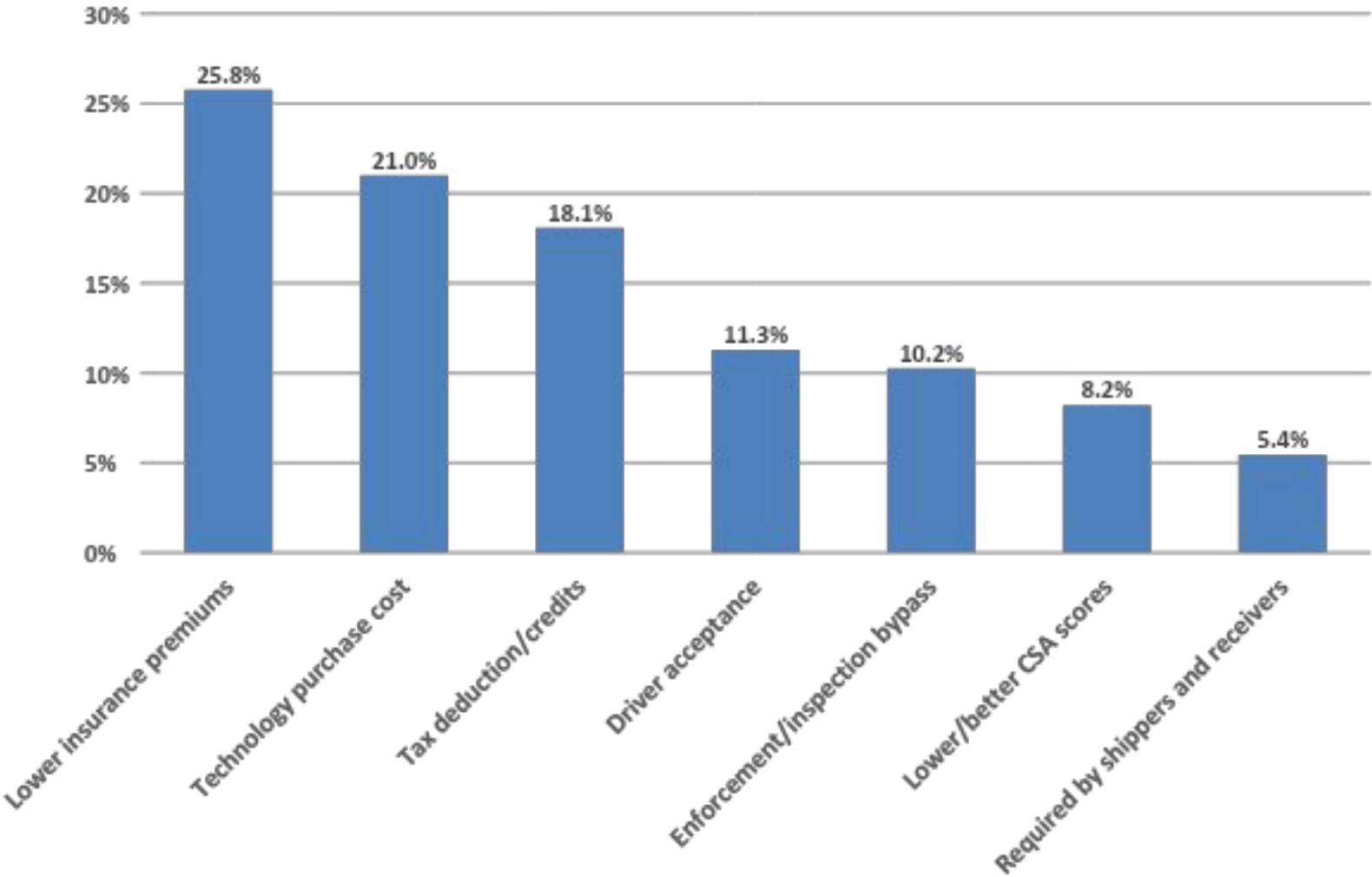


 U.S. Department of Transportation
Federal Motor Carrier Safety Administration

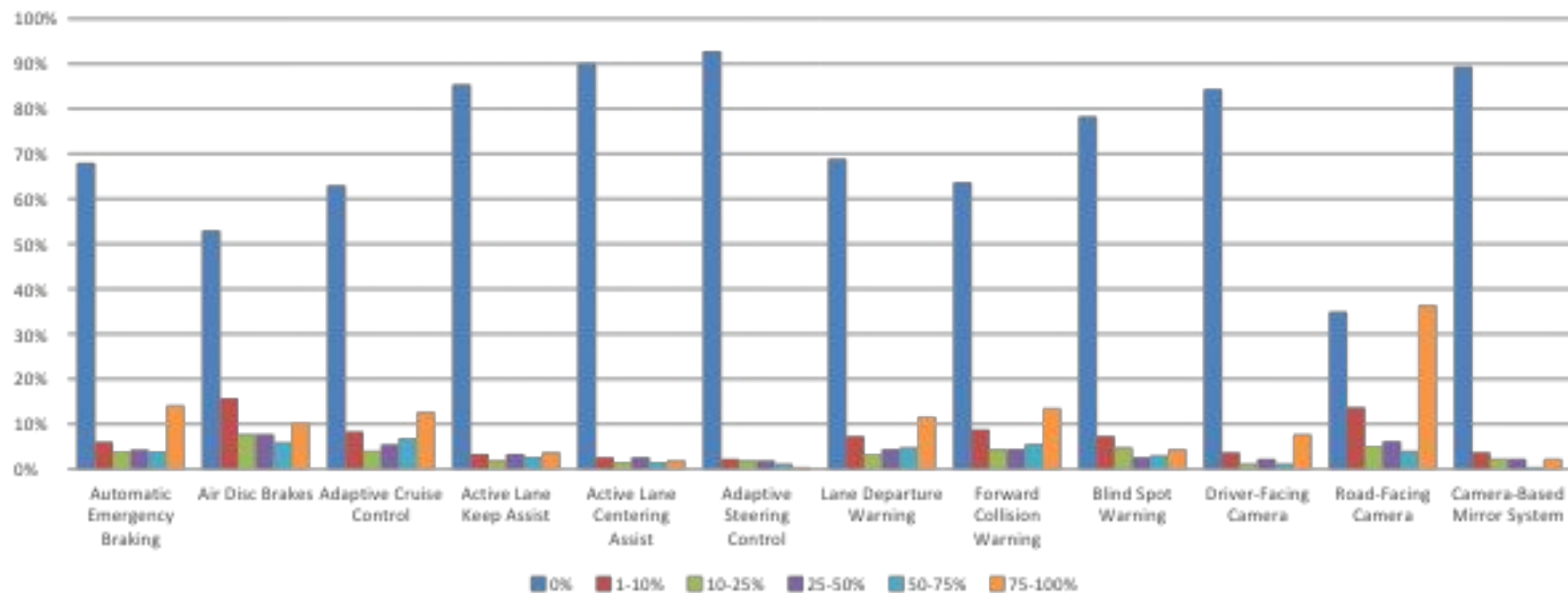
Carriers: Top Ranked Issues Impacting Adoption Benefits



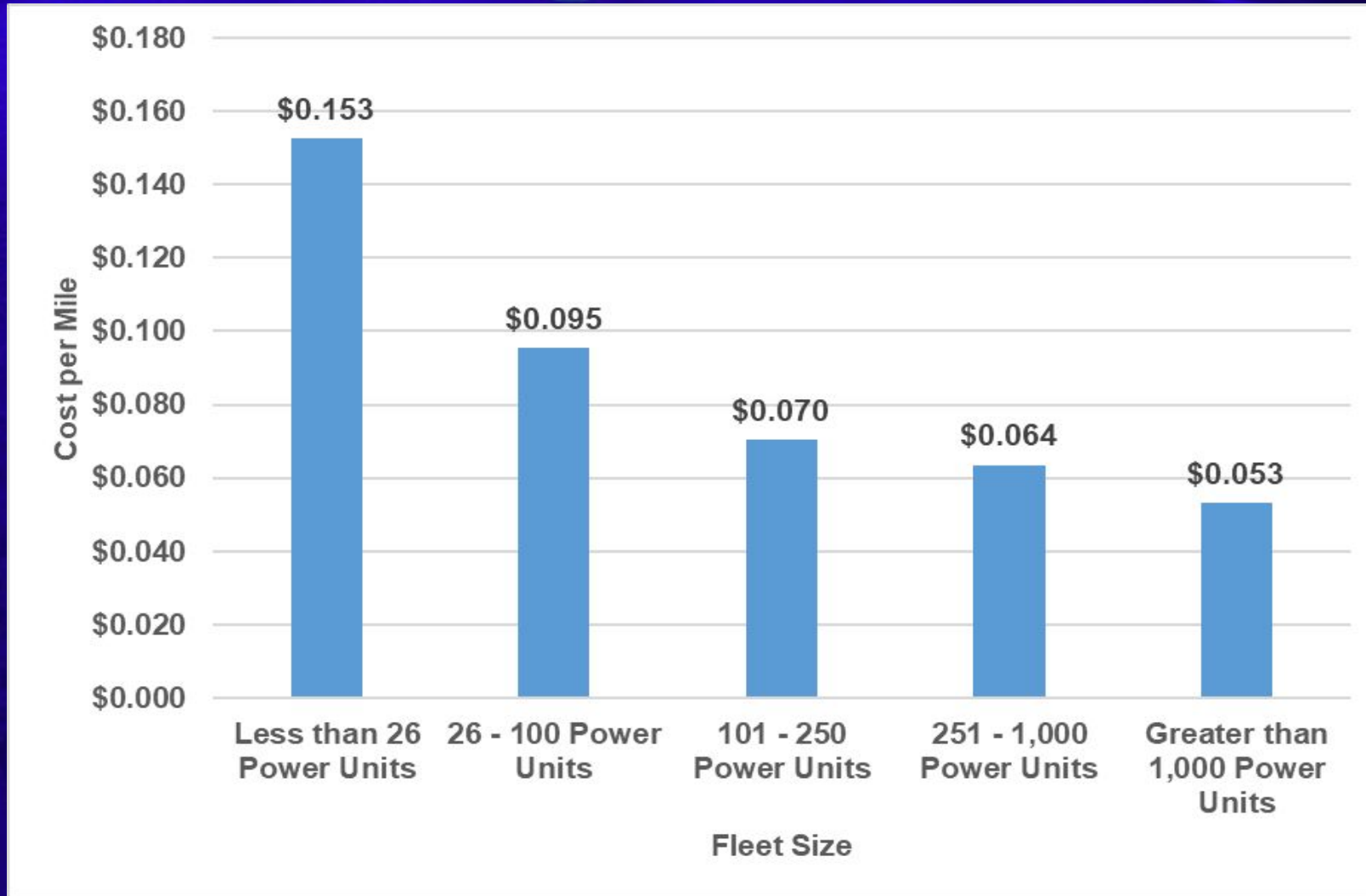
Truck Drivers: Top Ranked Issues Impacting Adoption Benefits



Percent of Tractor-Trailers with Technology Installed



Insurance Cost per Mile by Fleet Size

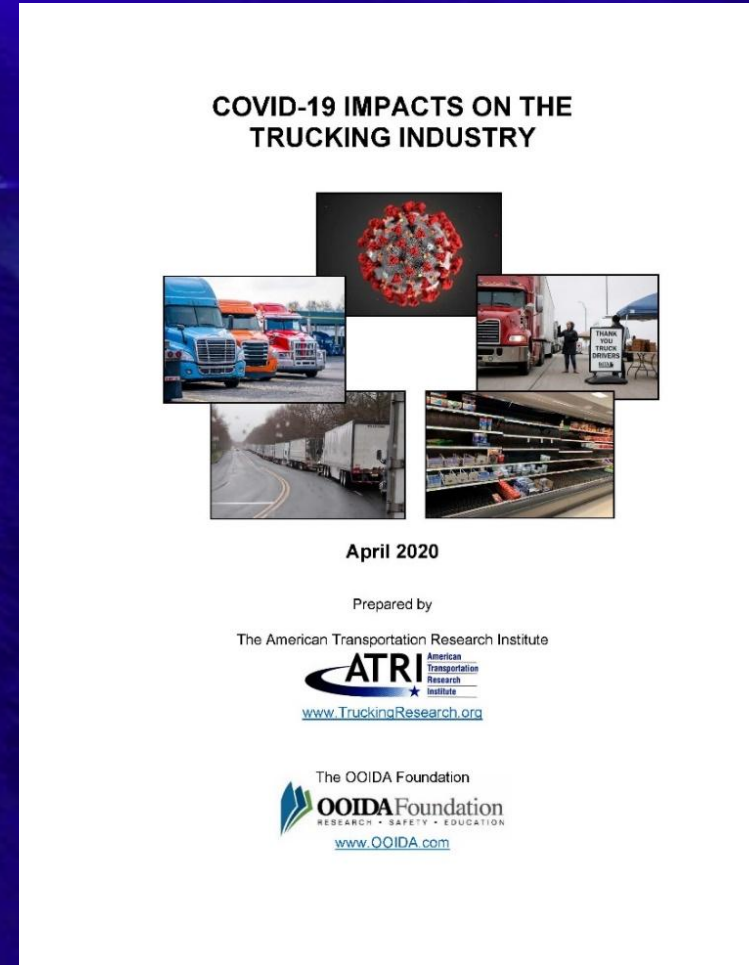


Impact of Rising Insurance Costs

- **Top RAC priority in 2020**
- **Expansion of existing Ops Costs analysis focused on 3 years of motor carrier insurance data and trends**
- **Includes auto liability, cargo, excess coverage, captive participation**
- **Q1 2022 release**

COVID-19 Impacts

- **Multiple GPS Analyses**
- **Joint survey with OOIDA Foundation**
- **5,000+ respondents over 2 weeks**
 - ◆ **77% drivers**
 - ◆ **68.6% fleets fewer than 50 trucks**
 - ◆ **65.5.% TL**



Average Length of Haul Changes

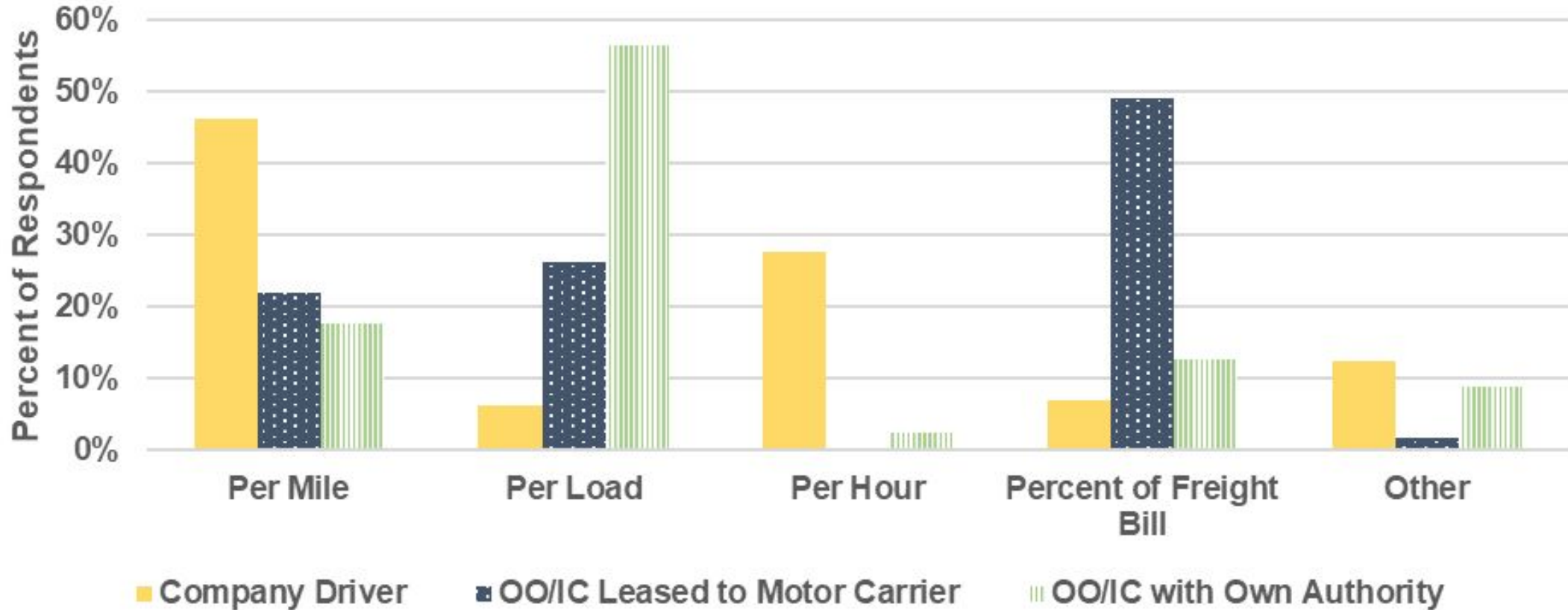
	Before Pandemic	During Pandemic
Local (less than 100 miles per trip)	7.8%	18.2%
Regional (100-499 miles per trip)	31.0%	33.8%
Inter-regional (500-999 miles per trip)	28.6%	25.2%
Long-Haul (1,000+ miles per trip)	32.7%	22.7%

OO/IC in the Supply Chain

- Driver data collection September-October 2021
- **Over 2,000 drivers, 66.2% OO/IC**
 - ◆ **49.2% OO/IC Leased to a Motor Carrier**
 - ◆ 17.0% OO/IC with own Operating Authority
 - ◆ **33.8% Company Drivers**
- **Presented** with 8 motivators for choosing to be OO/IC or Company Driver
- **Levels of satisfaction with each since motivator becoming OO/IC or Company Driver**

Driver Compensation

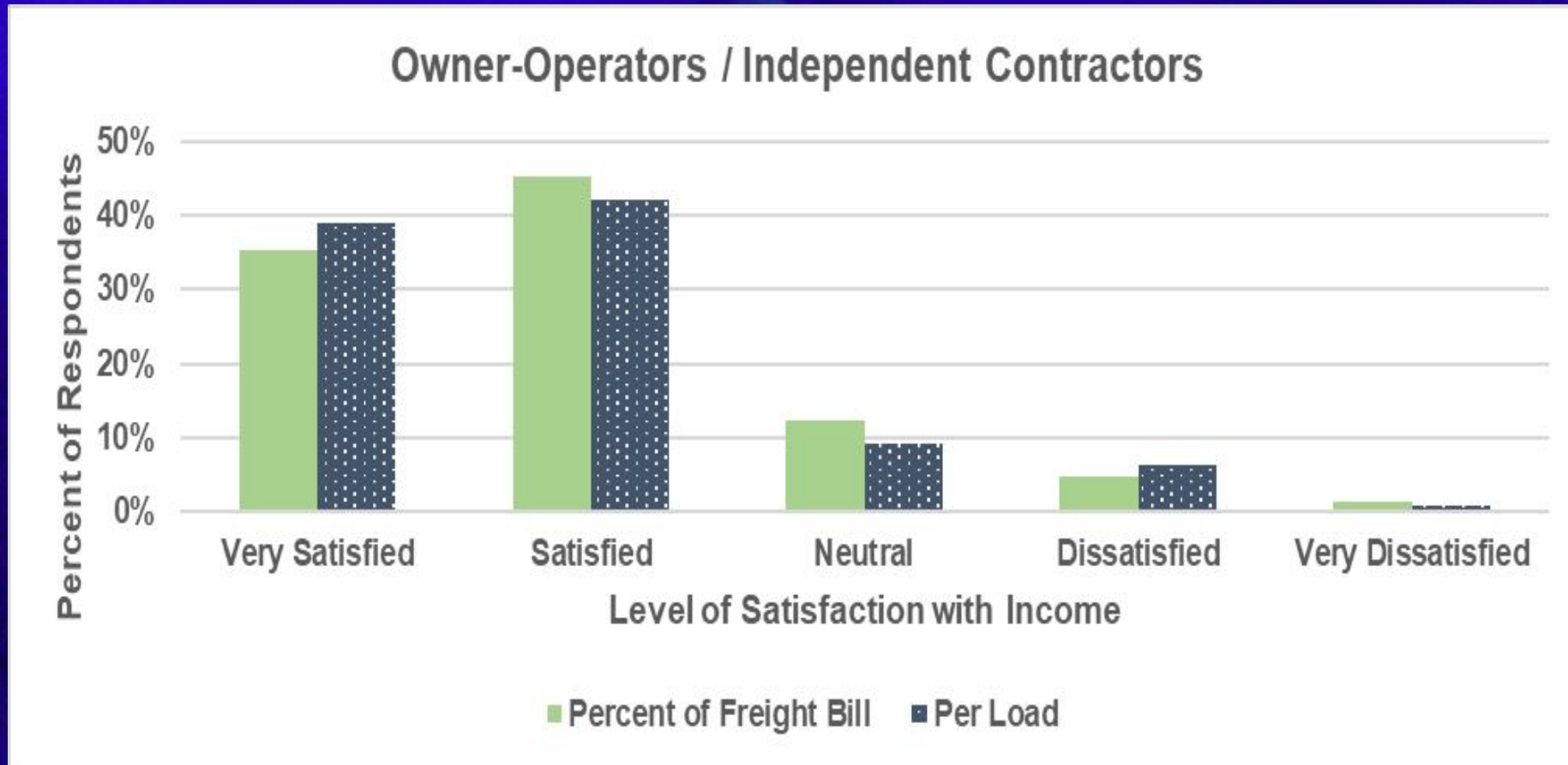
How Are You Paid?



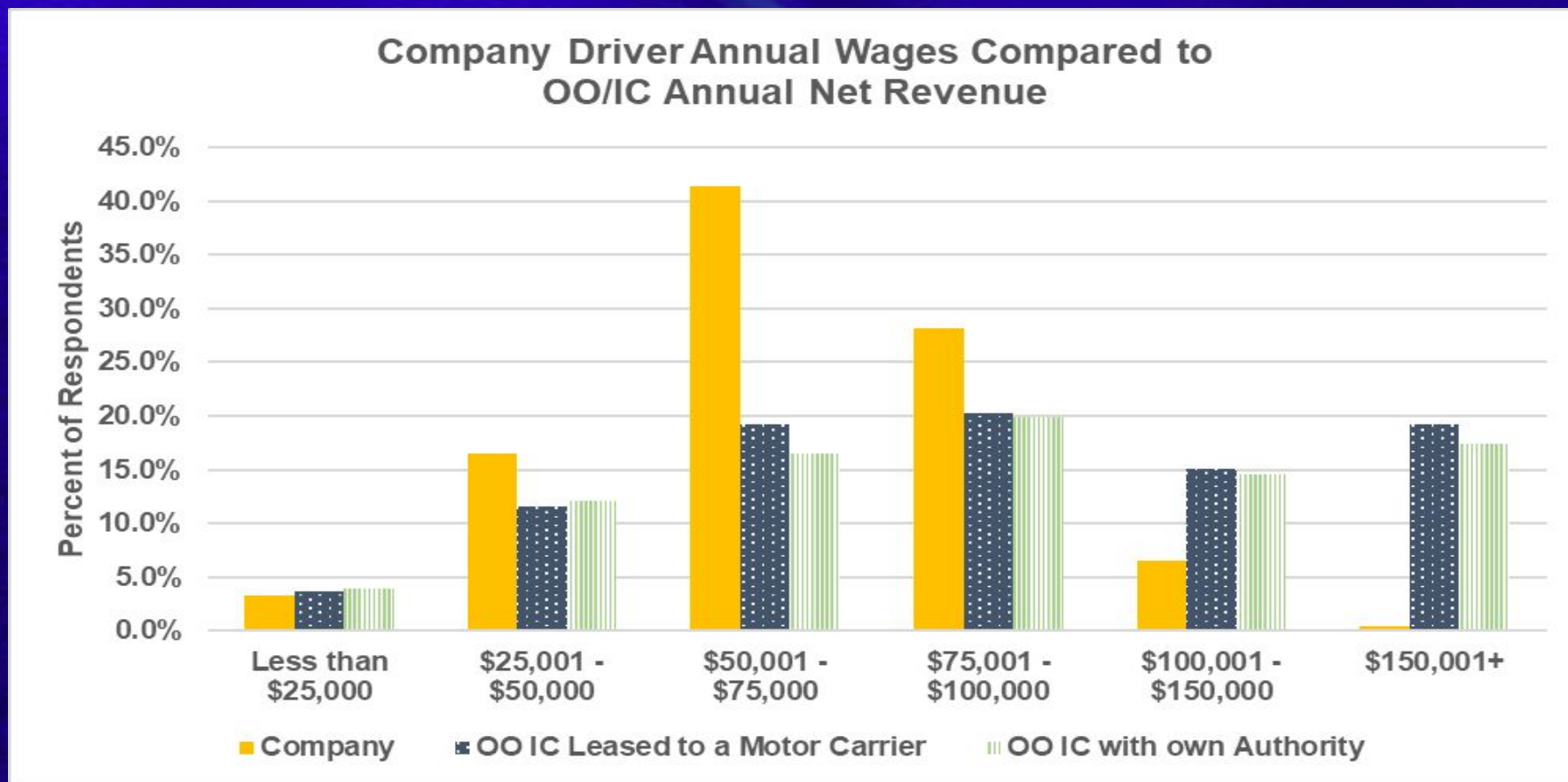
Level of Satisfaction with Income



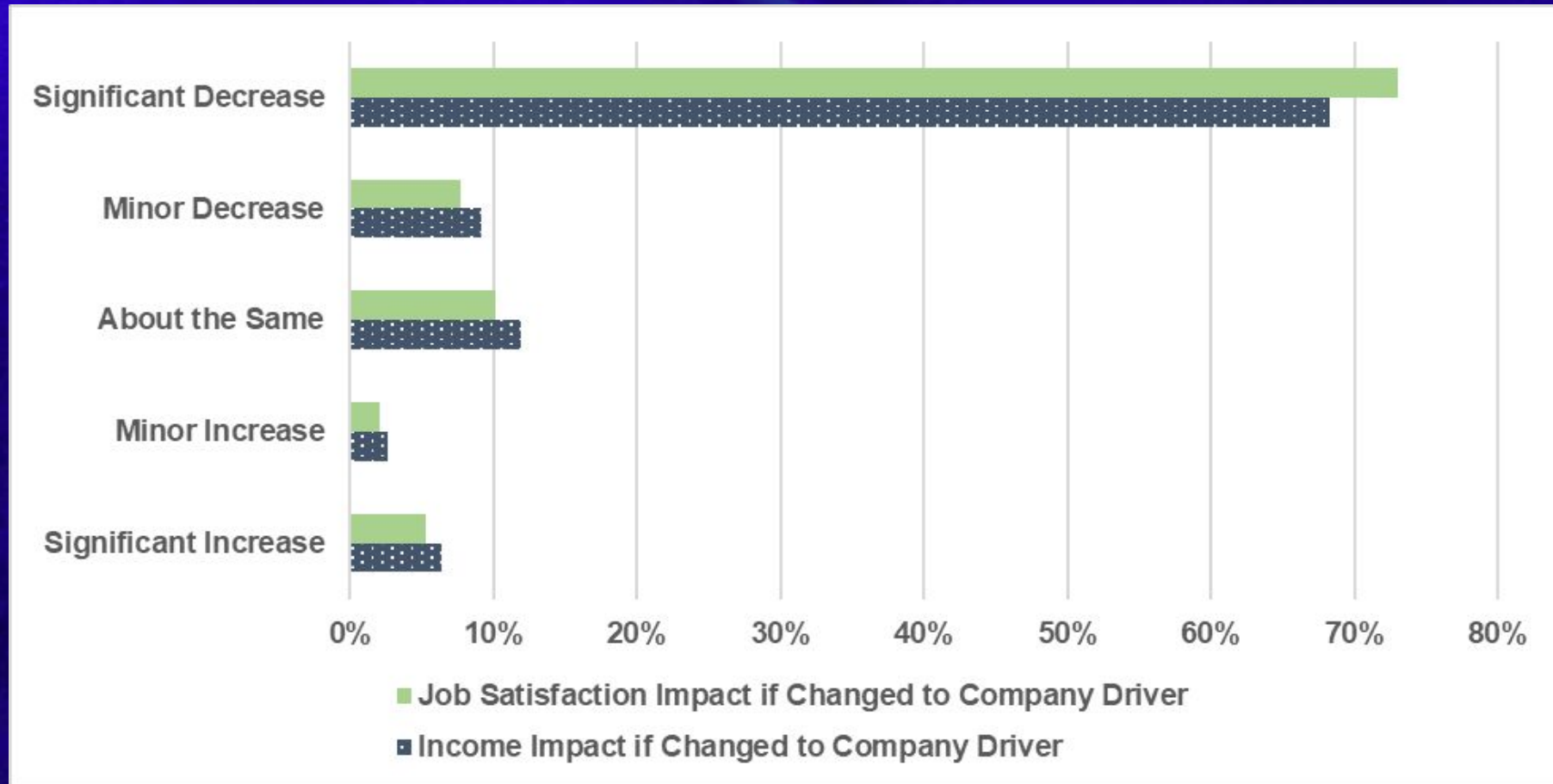
Level of Satisfaction with Income



Annual Income Comparison



OO/IC Expectations if Reclassified to Company Driver



2021 Top Research Priorities

- **Understanding How to Best Integrate 18-20 Year Olds into the Trucking Industry – underway**
- **Charging Infrastructure Considerations for Electric Trucks – underway**
- **Marijuana and Other Drugs: Impacts of Decriminalization on the Trucking Industry**
- **Understanding the Environmental Impacts of Zero Emission Vehicles – underway**
- **Quantifying the Impacts of Driver-Facing Cameras on Fleets and Drivers – underway**

Questions?

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