

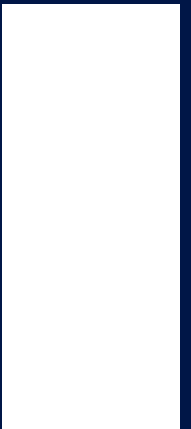
# FMCSA Analysis, Research & Technology IDIQ Webinar on Upcoming Procurement

*August 1, 2023*



U.S. Department  
of Transportation

Federal Motor  
Carrier Safety  
Administration



# Office of Acquisitions Management

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- **Welcome**
- **Agenda**
  - **Opening Remarks, Deila Johnson, Office of Acquisition Management**
  - **Overview and Division Descriptions**
    - **Bob Kreeb, Office of Analysis, Research, and Technology**
  - **Next Steps**
  - **Q&A**



# Office of Analysis, Research & Technology (ART): Mission and Focus Areas

## Mission:

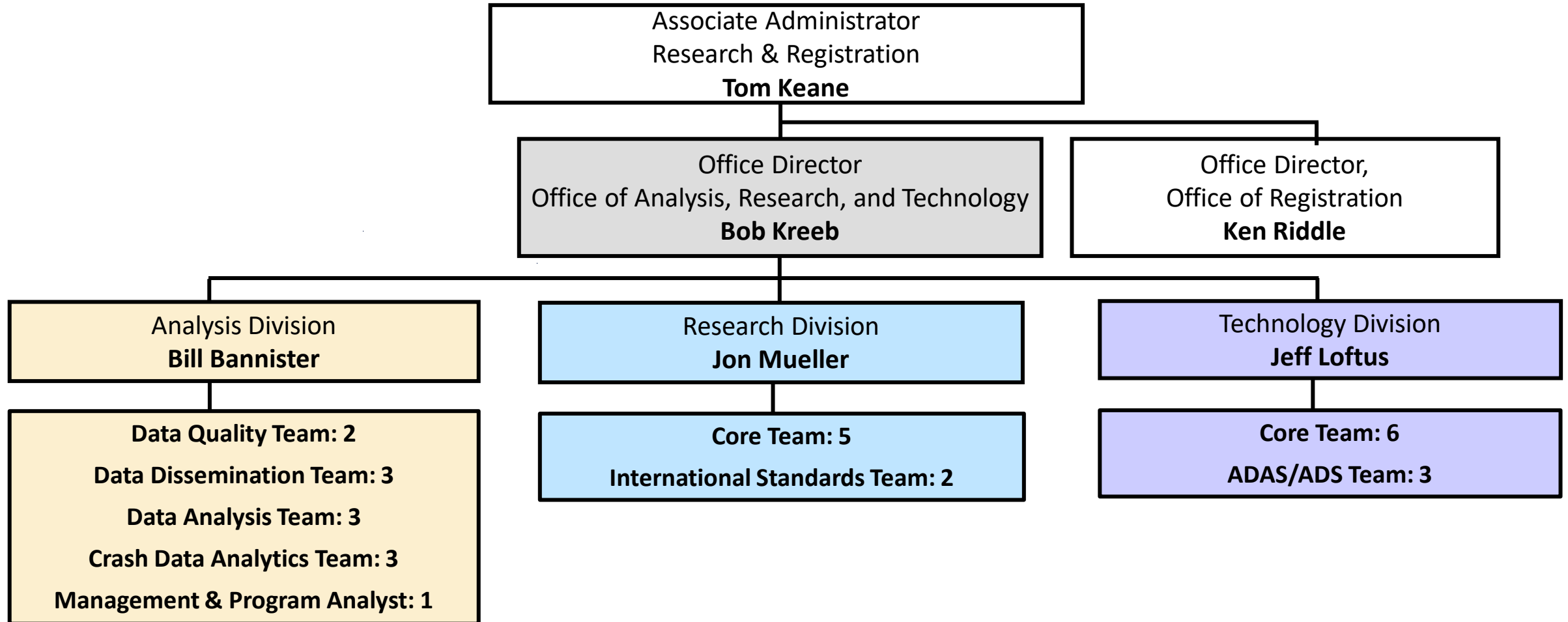
To save lives and reduce crashes and injuries by advancing large truck and bus safety through collaboration, education, research, technology, and compliance.

## Funding:

Annual funding is \$14 million. Also, an additional \$6 million for GOE, and occasionally congressionally-mandated studies.



# FMCSA's Office of Analysis, Research, and Technology



# ART Program Mandate

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- The R&T Program conducts research, development, and technology transfer activities with respect to:
  - The causes of crashes, injuries, and fatalities involving commercial motor vehicles (CMVs).
  - Means of reducing the number and severity of crashes, injuries, and fatalities involving CMVs.
  - Improving CMV safety and efficiency through technological innovation.
  - Improving technology used by enforcement officers when conducting roadside inspections and investigations to increase efficiency and information transfers.
  - Increasing the safety and security of hazardous materials transportation.

# Sample Projects

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- Naturalistic Driving Data Baseline for Automated Driving System-Equipped CMVs
- Human Factors in ADS-equipped CMVs (Level 2 and 3)
- Advanced Driver Assistance Systems (ADAS) Crash Safety Analysis via Onboard Monitoring Systems Interim Report
- Accelerating the Adoption of ADAS by Commercial Fleets– “Tech-Celerate Now” Program
- Naturalistic Driving Data to Assess Distraction and Drowsiness in Drivers of CMVs
- Effect of the Length of Medical Certification on Safety
- Driver Detention Time Study
- Assessing Equity of CMV Inspection and Enforcement Actions
- Crash Risk by Driver Schedules

# Stakeholder input drives FMCSA's Research Portfolio

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- **Needs from other FMCSA Offices: Policy, Safety, Enforcement, Field Offices**
- Other USDOT Agencies : NHTSA, FHWA, FTA
- Other Government Agencies: DOE, DHS, EPA
- Safety Organizations: Commercial Vehicle Safety Alliance, Advocates for Highway and Auto Safety, NTSB
- Motor Carrier input: ATA; Truckload Carriers Assoc.; Technology Maintenance Council; Owner Operator Independent Drivers Assoc. (OOIDA)
- Truck and Trailer OEMs; Tier 1 suppliers
- Academia
- General Public

# Research Areas

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1. CMV Test Track and On-Road Testing Expertise
2. CMV Driving Simulator Facilities and Expertise and Associated Driving-Related Human Research
3. Broad-Based Laboratory Testing Capabilities (components, safety sub-systems)
4. Cybersecurity
5. CMV Safety Data Research and Analysis (Includes Data Management and Systems, Software and AI, CMV Safety Data Research and Analysis, Data Integration and Geospatial Analysis)
6. Basic and Applied CMV Industry Research (Information Gathering, Analysis, and Presentation)
7. Survey Methodology
8. Conference and CMV Demonstration Logistics Support

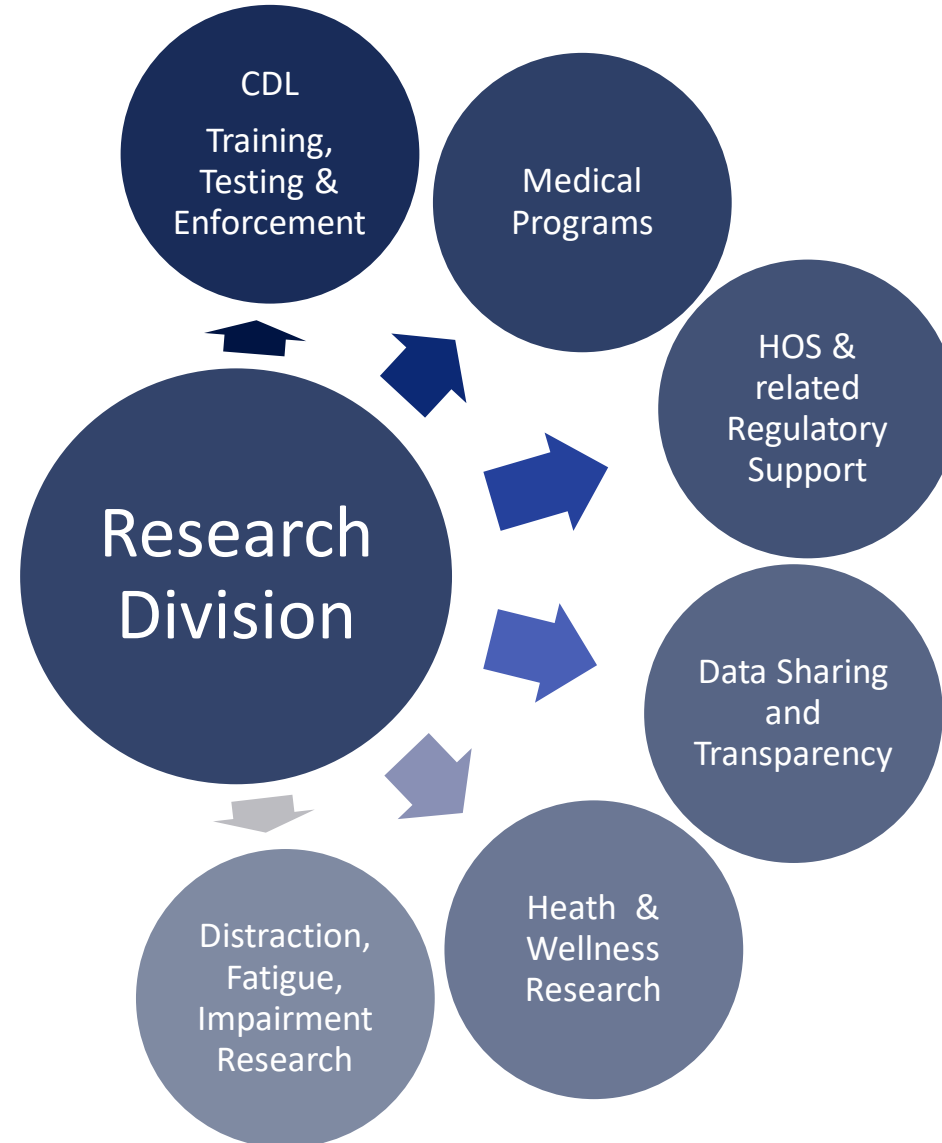


# Research Division Focus Areas

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The Research Division conducts research to:

- Produce Safer Drivers
- Produce Safer Carriers



# Impact of Driver Detention Time On Safety and Operations

- **OBJECTIVE:**

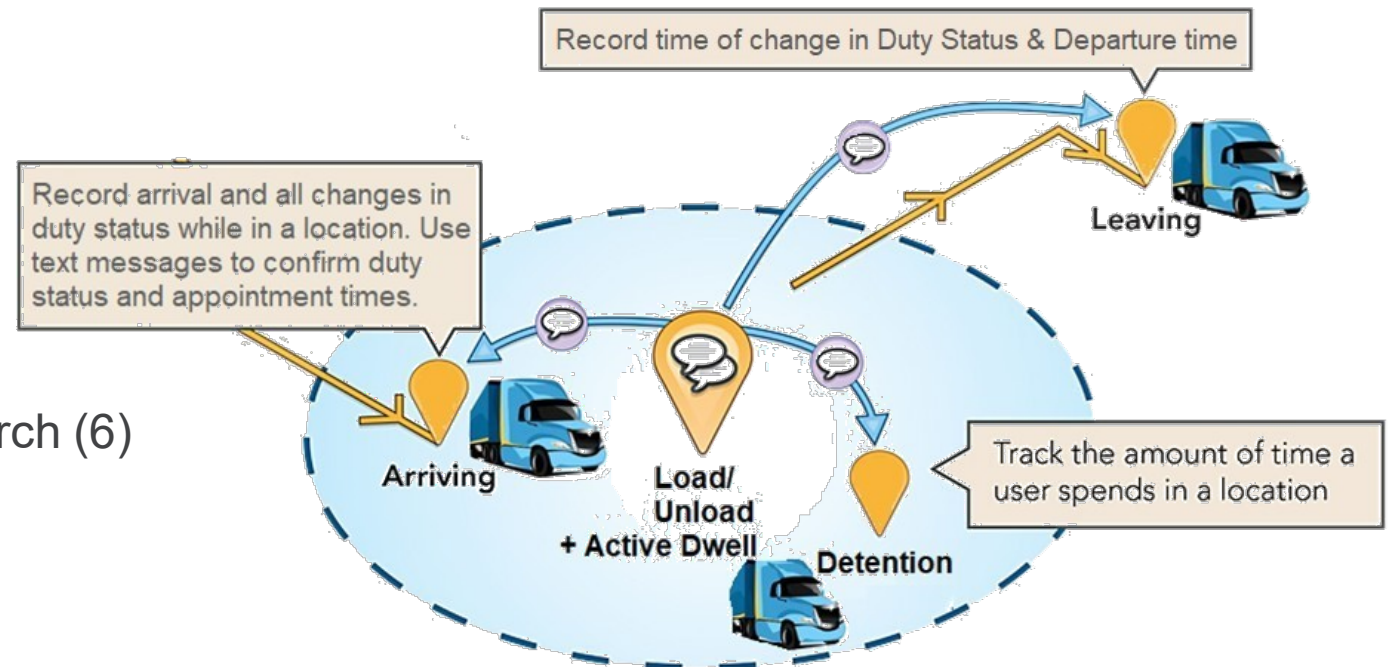
- “Collaborate with industry stakeholders to develop and implement a plan to collect and analyze reliable, accurate, and representative data on the frequency and severity of driver detention times.” OIG Recommendation (Jan ‘18 Report) ST-2018-019

- **PERIOD OF PERFORMANCE:**

- July 2022 – July 2025

- **POTENTIAL RESEARCH AREAS**

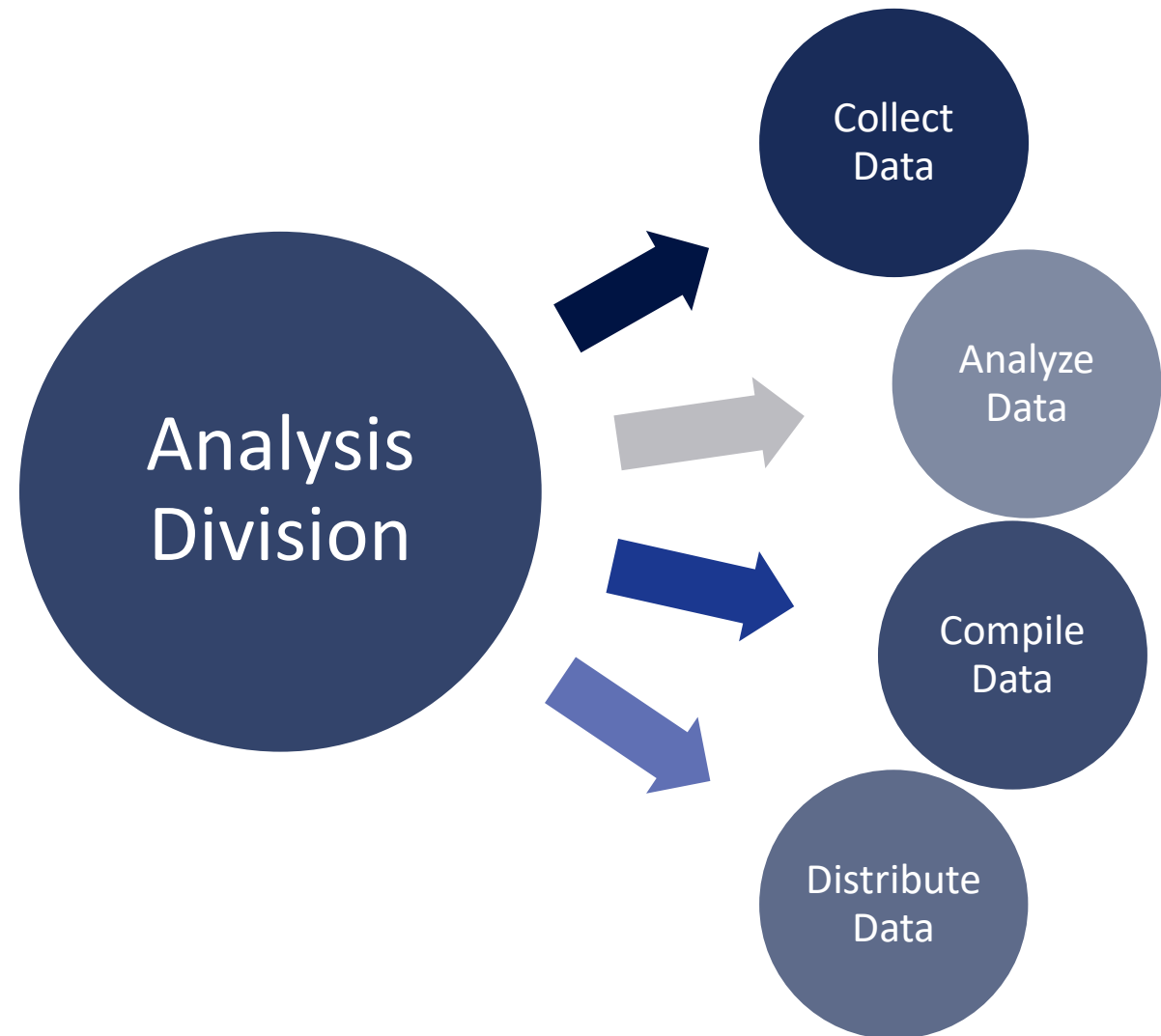
- Basic & Applied CMV Industry Research (6)
- Survey Methodology (7)



# Analysis Division Focus Areas

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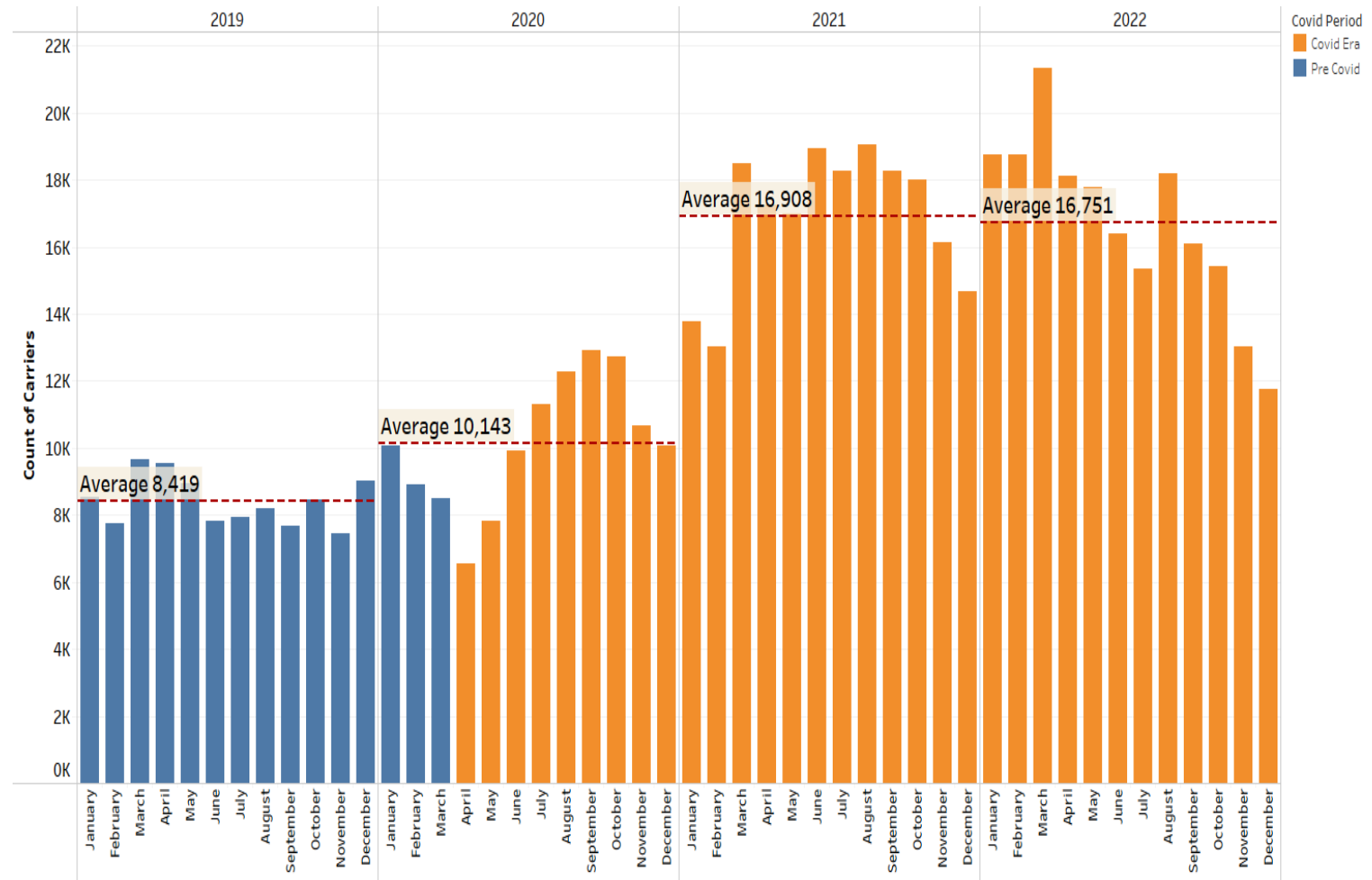
The primary responsibilities of the Analysis Division are to collect, compile, distribute, and analyze CMV safety and industry data



# Trends In New Carrier Registration

- Overview of trends in new carrier registration
  - Carrier size
  - Summary crash statistics
- Goal
  - in-depth analysis of the characteristics and safety performance of new carriers joining the industry
- Data Source
  - carrier registration and safety data from the Motor Carrier Management Information System (MCMIS)
- Potential Research Area(s)
  - CMV Safety Data Research and Analysis (5)

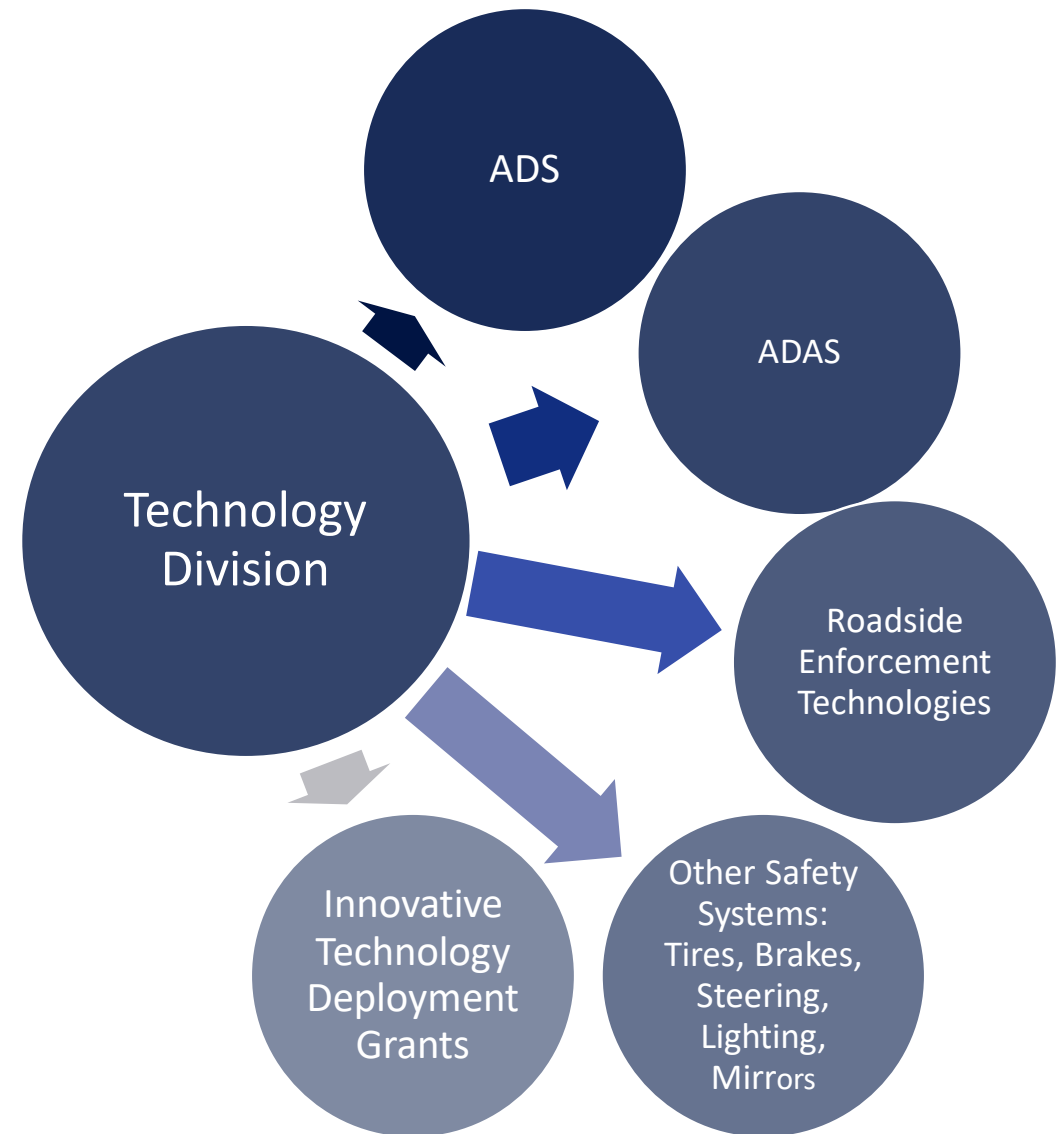
New Active Carriers Added to MCMIS Between 2019 and 2022



# Technology Division Focus Areas

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1. To identify, develop, test and deploy innovative technologies to improve the safety and security of commercial motor vehicles (CMV).
2. To conduct research and testing to support:
  - the deployment of existing CMV safety solutions; and
  - the safe introduction of Automated Driving Systems (ADS) in the National Transportation System.





# Automated CMV Evaluation (ACE) Program Demonstration and Testing Support

- **OBJECTIVES:**

- To support or research on the development and deployment of ADS-equipped CMVs under a wide range of real-life driving scenarios; to support outreach and demonstration activities; and to provide technical, logistical and operational support for the ACE research fleet

- **PERIOD OF PERFORMANCE:**

- September 2021 – September 2024

- **POTENTIAL RESEARCH AREAS**

- CMV Test Track and On-Road Testing Expertise (1)
- Conference and CMV Demonstration Logistics Support (8)



# What's Next...

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- Request for Information (Market Research) – Anticipated release October 2023 on [www.sam.gov](http://www.sam.gov).
- Request for Proposals – Anticipated release in late 2024.

Q&A



# Contact information

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