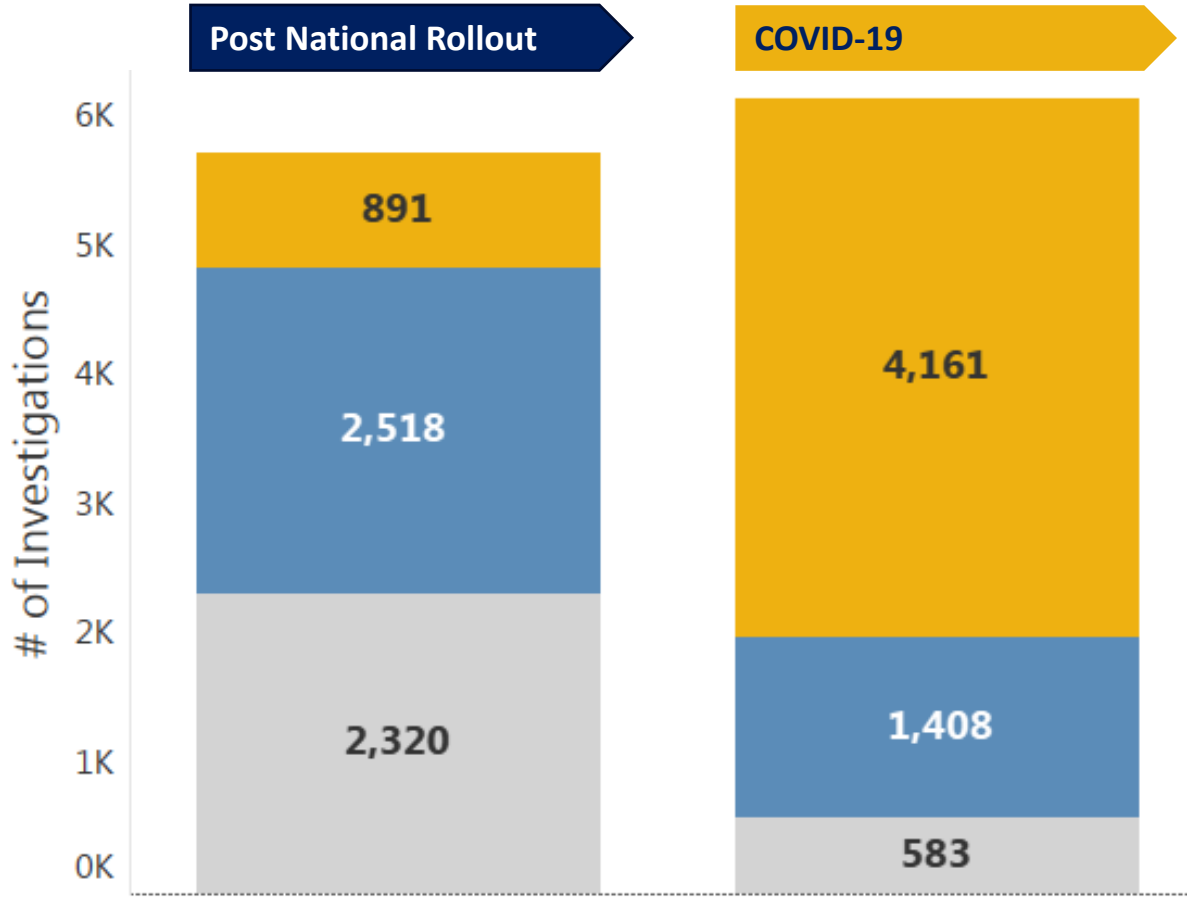
2021 Enforcement Update

March 10, 2021

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

Impacts of FMCSA Compliance Activities Due To COVID-19 National Health Emergency

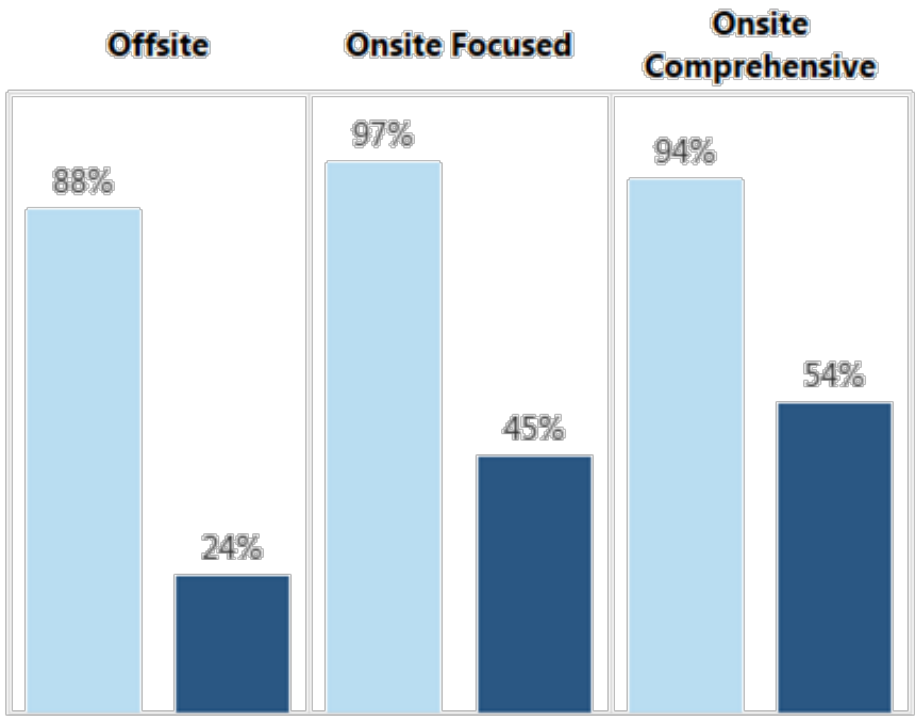


# Investigations FY 2020	
Offsite	5,052
Onsite Focused	3,926
Onsite Comprehensive	2,903
Total	11,881

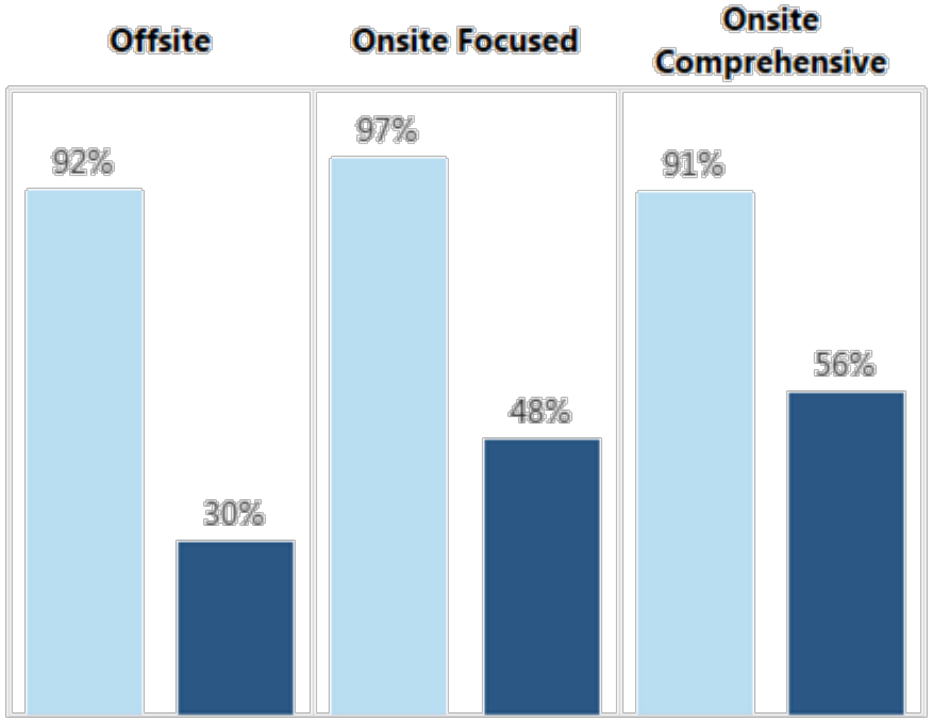
Offsite
Onsite Focused
Onsite Comprehensive

Remote Investigations Do not Hamper Ability to Discover Violations

Post National Rollout
(Oct. 1, 2019-Mar. 17, 2020)



COVID-19
(Mar. 17-Sep. 30, 2020)



Violation Rate

Acute/Critical Violation Rate

Hours of Service (HOS) Final Rule

- FMCSA published a revised HOS final rule on June 1, 2020
- Effective date of September 29 2020
- HOS final rule changes the following 4 provisions

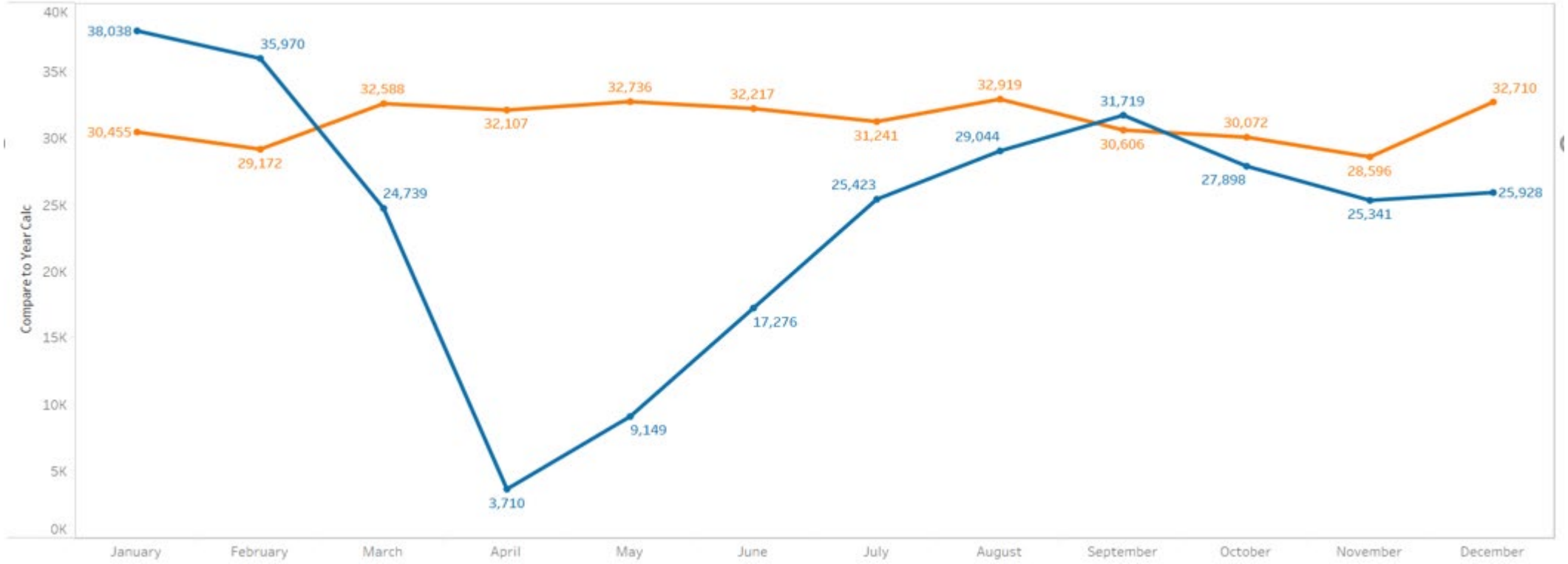
Short-Haul Exception

Adverse Driving Conditions Exception

30-Minute Break Requirement

Sleeper Berth Provision

Roadside Inspections: HOS Violations 2019 vs 2020



Total Inspections
2019 375,419
2020 294,235
Inspections were lower by 22%

Roadside Inspections: HOS Violations Calendar Year 2020

Fmcsa Code	Viol Code Desc	OOS Indicator: N	OOS Indicator: Y
395.8(e)	False report of drivers record of duty status	11,532	23,497
395.8	Record of Duty Status violation (general/form and manner)	32,052	
395.8A-ELD	ELD - No record of duty status (ELD Required)		24,670
395.22H4	Driver failed to maintain supply of blank drivers records of duty status graph-grids	16,328	
395.22H2	Driver failing to maintain ELD instruction sheet	16,308	
395.8F01	Drivers record of duty status not current	15,828	
395.22G	Portable ELD not mounted in a fixed position and visible to driver	15,737	
395.22H1	Driver failing to maintain ELD user's manual	13,236	
395.24C2III	Driver failed to manually add shipping document number	12,495	
395.30B1	Driver failed to certify the accuracy of the information gathered by the ELD	10,674	
395.8A-NON-ELD	No record of duty status when one is required (ELD Not Required)		9,614
395.3A2-PROP	Driving beyond 14 hour duty period (Property carrying vehicle)	6,874	2,599
395.3(a)(3)(ii)	Driving beyond 8 hour driving limit since the end of the last on duty, off duty, or sleeper period of a..	8,950	
395.22H3	Driver failed to maintain instruction sheet for ELD malfunction reporting requirements	8,935	
395.3A3-PROP	Driving beyond 11 hour driving limit. (Property Carrying Vehicle)	5,522	1,787
395.8(k)(2)	Driver failing to retain previous 7 days records of duty status		6,191
395.8(a)	No drivers record of duty status when one is required		6,053

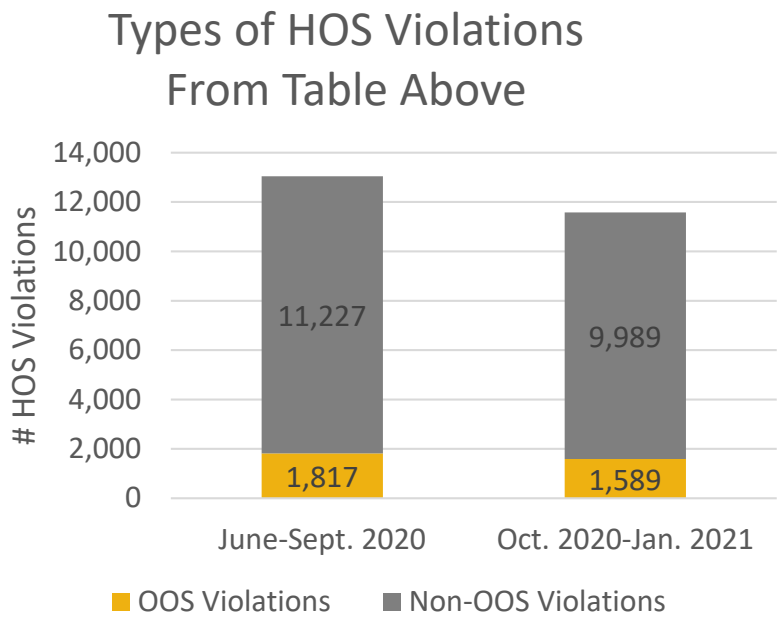
OOS Indicator

N

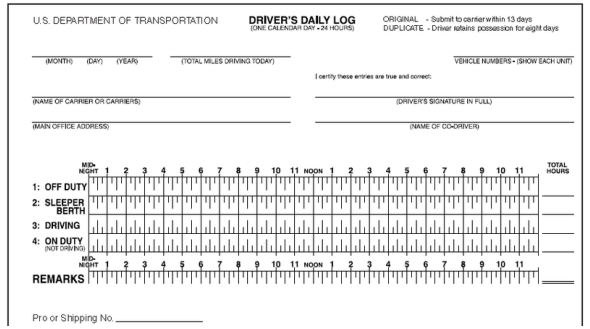
Y

Hours of Service Data – By Violation

	June 2020 – September 2020		October 2020 – January 2021	
	Total Violations	OOS Violations	Total Violations	OOS Violations
14-Hour Violation (Property)	4705	1024	4707	890
14-Hour Violation (Property) Nominal	1275	71	1302	56
30-Minute Break Violation	3597	13	1712	8
11-Hour Violation (Property)	2578	671	2793	598
11-Hour Violation (Property) Nominal	889	38	1064	37
Total	13044	1817	11578	1589



Electronic Logging Device (ELD)



U.S. DEPARTMENT OF TRANSPORTATION **DRIVER'S DAILY LOG** (ONE CALENDAR DAY - 24 HOURS)

ORIGINAL - Submit to carrier within 13 days
DUPLICATE - Driver retains possession for eight days

(MONTH) (DAY) (YEAR) (TOTAL MILES DRIVING TODAY) VEHICLE NUMBERS - (SHOW EACH UNIT)

I certify these entries are true and correct:

(NAME OF CARRIER OR CARRIERS) (DRIVER'S SIGNATURE IN FULL)

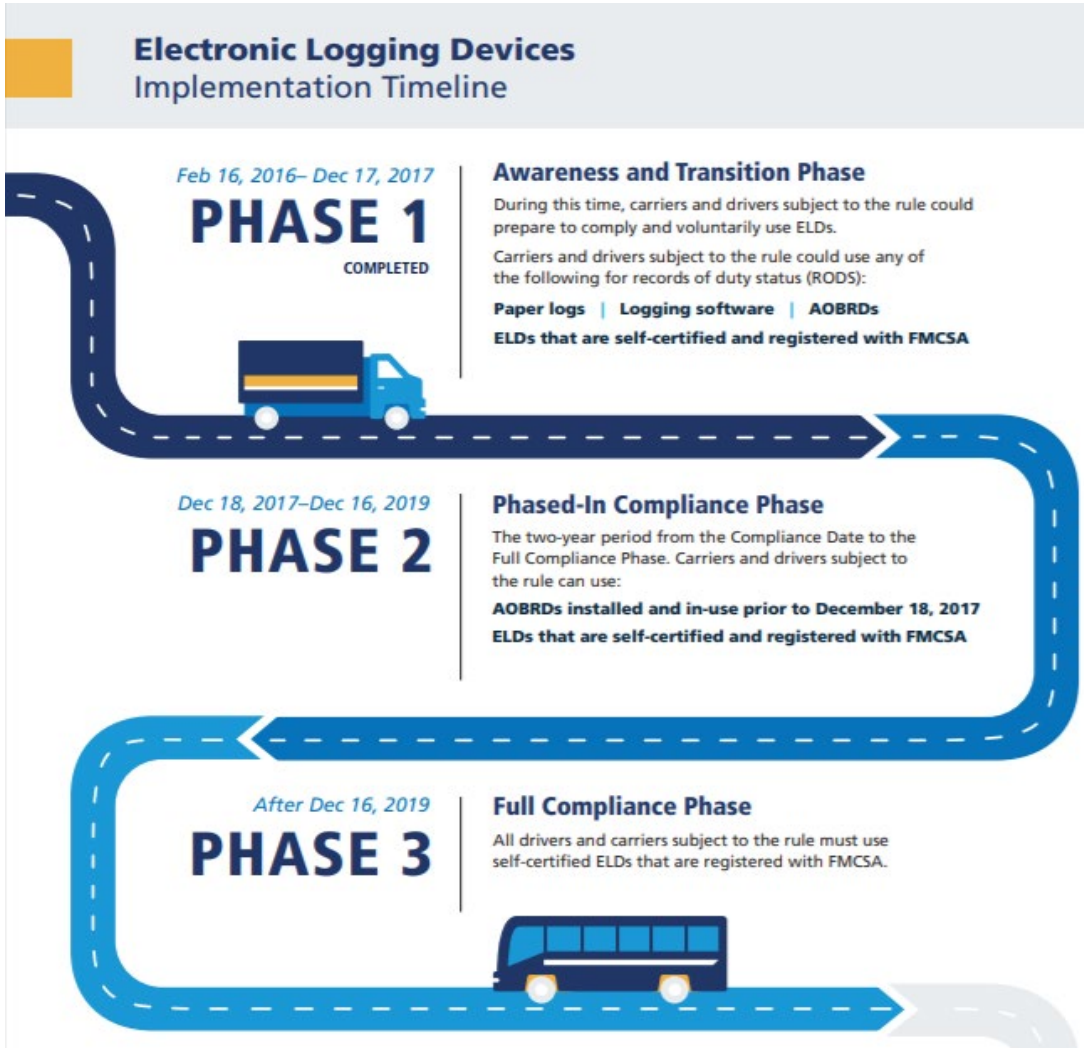
(MAIN OFFICE ADDRESS) (NAME OF CO-DRIVER)

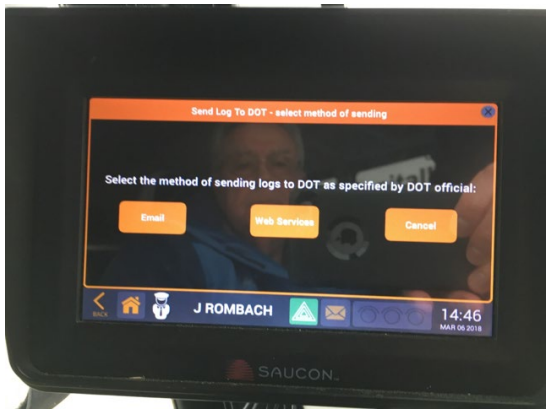
MID-NIGHT 1 2 3 4 5 6 7 8 9 10 11 NOON 1 2 3 4 5 6 7 8 9 10 11 MID-NIGHT — TOTAL HOURS

1: OFF DUTY
2: SLEEPER BERTH
3: DRIVING
4: ON DUTY (NOT DRIVING)

REMARKS

Pro or Shipping No. _____





ELD Data Transfers

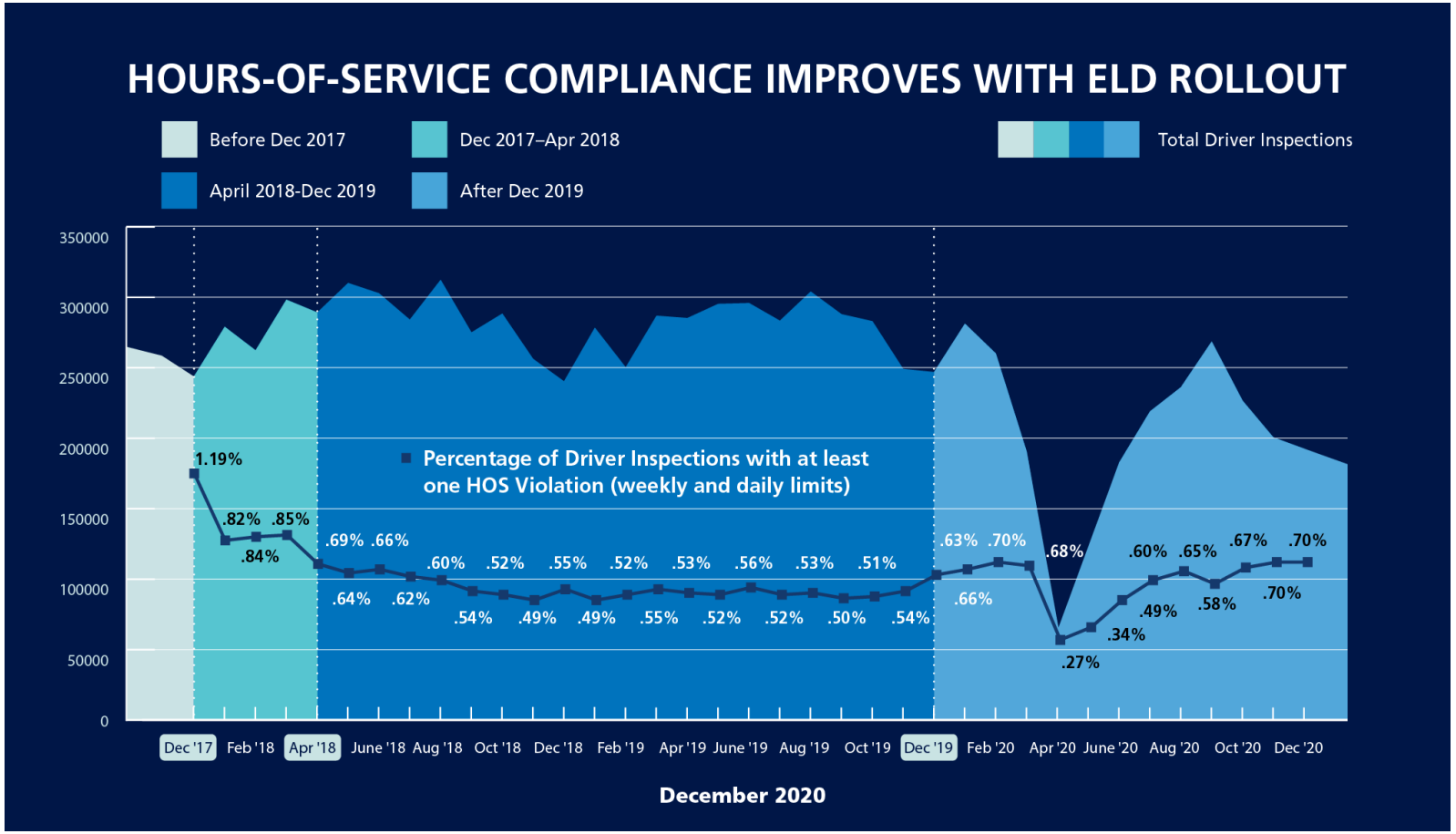
Transfers of ELD Output Files To FMCSA by Web-Based Methods (web services, email, Bluetooth)

	Dec 2020	Total Since December 2017
Total Transfers	84,654	1,744,455
Invalid File	6,419	198,108
Successful (Valid/OK + Warning)	78,235	1,546,347
Valid/OK	71,902	1,372,138
Warning	6,333	174,209
Percent Successful	**92.4%**	**88.6%**

All ELD output files that are transferred to FMCSA by a web-based method are validated before being retrieved and opened by a safety official using the eRODS software.

Hours-of-Service Violations

The graph below illustrates that the rate of driver inspections resulting in at least one Hours-of-Service Violation (weekly and daily limits only) has decreased significantly between December 2017 and December 2020.



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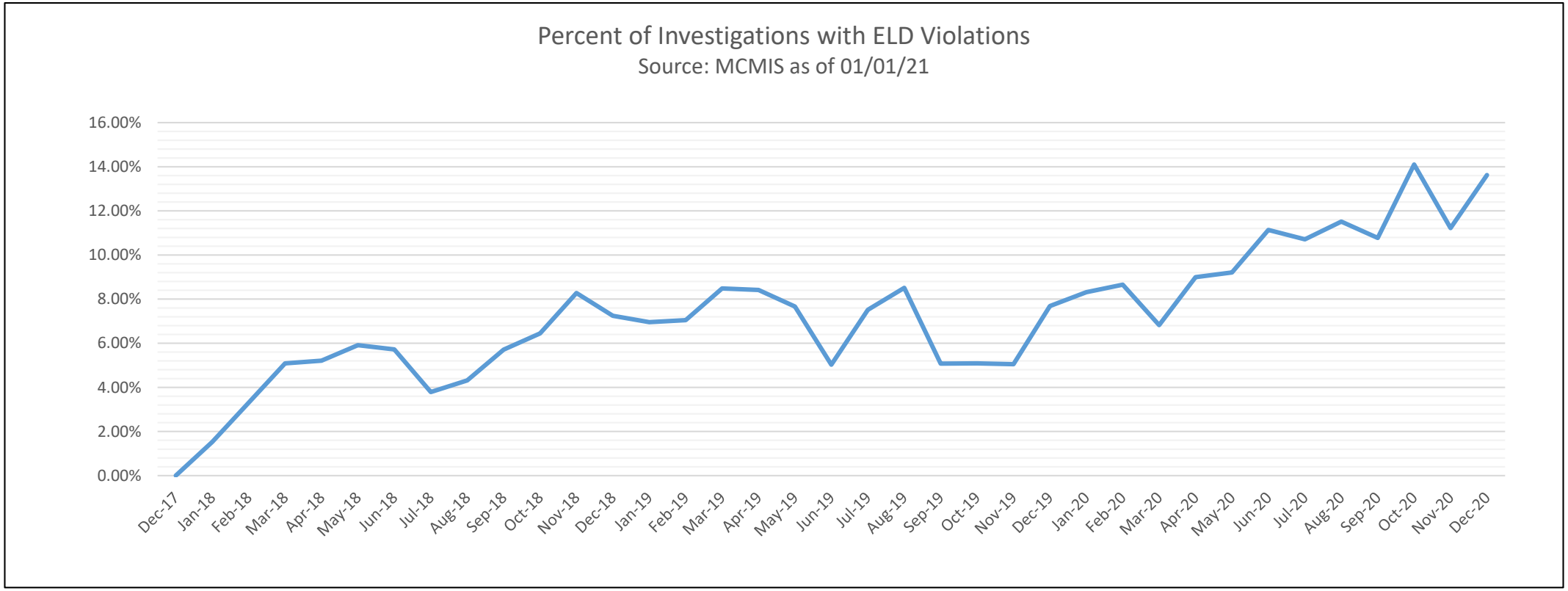
Investigations with ELD Violations



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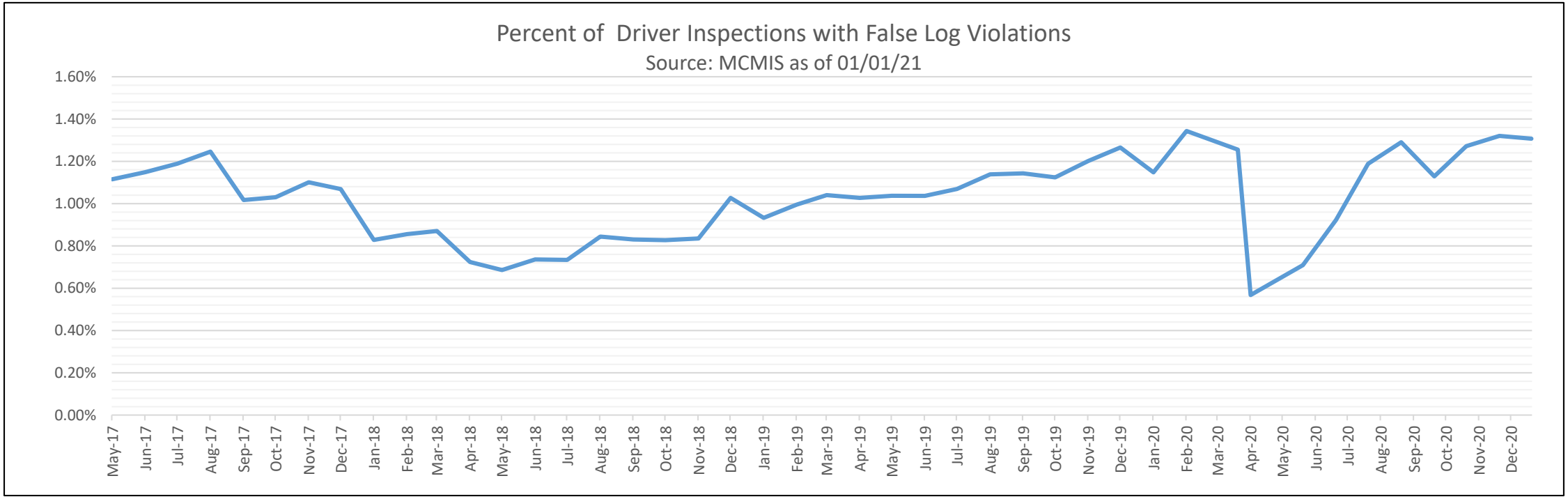
False Log Violations

The rate of driver inspections with false logs increased fairly steadily between summer 2018 and spring 2020. These are likely false logs that would have been more difficult to detect without ELDs and eRODS technology.



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Speeding Violations

The following data looks at speeding violations based on driver inspections before and after the ELD Compliance Date (December 18, 2017) to determine the impact, if any, on speeding violations since the ELD implementation.

	Total Post-ELD Implementation * Dec 2017– Dec 2020	Total Pre-ELD Implementation Jul–Nov 2017
# Driver Inspections	9,444,992	1,402,326
# Inspections with Speeding Violations	437,469	63,228
% All Driver Inspections with Speeding Violations	4.63%	4.51%

Automated Driving Systems (ADS) Policy Development for Commercial Vehicle Operations

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

March 10, 2021

Automated Vehicles Comprehensive Plan – Jan. 11, 2021

Building upon the principles stated in AV 4.0, the Automated Vehicles Comprehensive Plan defines three goals to achieve USDOT's vision for Automated Driving Systems (ADS).

1. Promote Collaboration and Transparency
2. Modernize the Regulatory Environment
3. Prepare the Transportation System

- U.S. DOT is seeking public comments on the AV Comprehensive Plan
- (Federal Register Notice, DOT-OST-2021-0005 - comment period closes 3/22/2021)

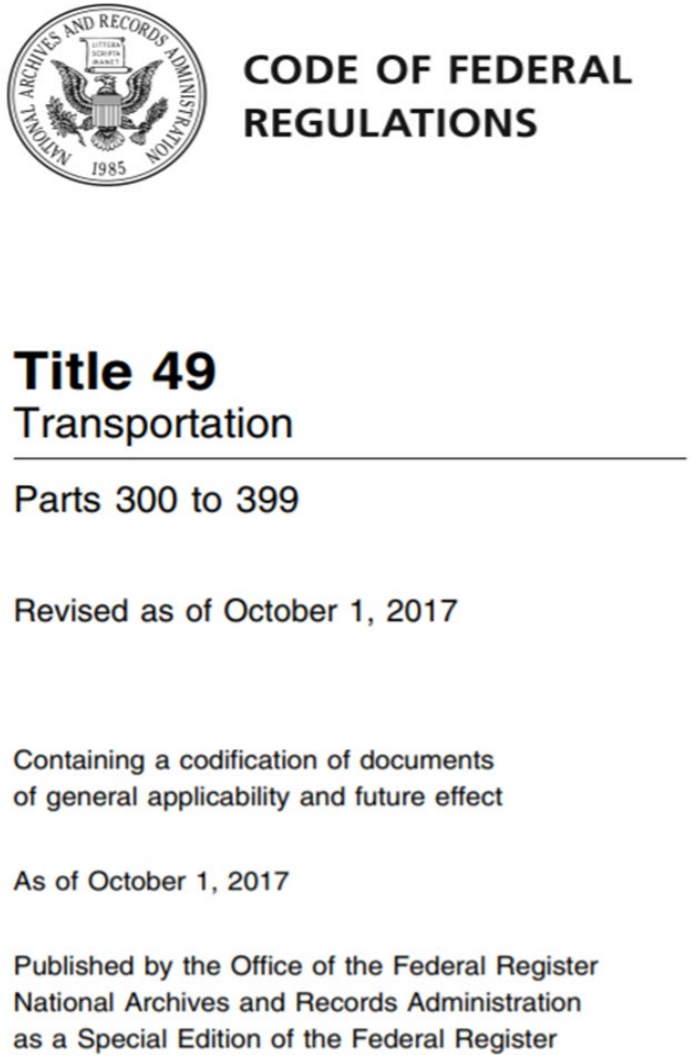
DOT's AV 4.0

- On February 6, 2020, the Department published "Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0," (AV 4.0) – 39 comments received.
- Builds upon "Preparing for the Future of Transportation: Automated Vehicles 3.0," (AV 3.0) and "Automated Driving Systems 2.0: A Vision for Safety," (AV 2.0)
- Expanded the scope to all on-road transportation systems;
- Committed to making the regulatory process more nimble to help match the pace of private sector innovation

2019 – FMCSA's Advance Notice of Proposed Rulemaking (ANPRM)

- Safe Integration of Automated Driving Systems—Equipped Commercial Motor Vehicles
- Published: May 28, 2019
- Docket Closed: August 28, 2019
- Summary: FMCSA requested public comment about Federal Motor Carrier Safety Regulations (FMCSRs) that may need to be updated, modified, or eliminated to facilitate the safe introduction of automated driving systems (ADS) equipped commercial motor vehicles (CMVs) onto our Nation's roadways.
- FMCSA received 180 comments on the ANPRM, 122 from individuals and 58 from organizations.

ANPRM – Looking at the FMCSRs potentially affected



CODE OF FEDERAL REGULATIONS

Title 49
Transportation

Parts 300 to 399

Revised as of October 1, 2017

Containing a codification of documents
of general applicability and future effect

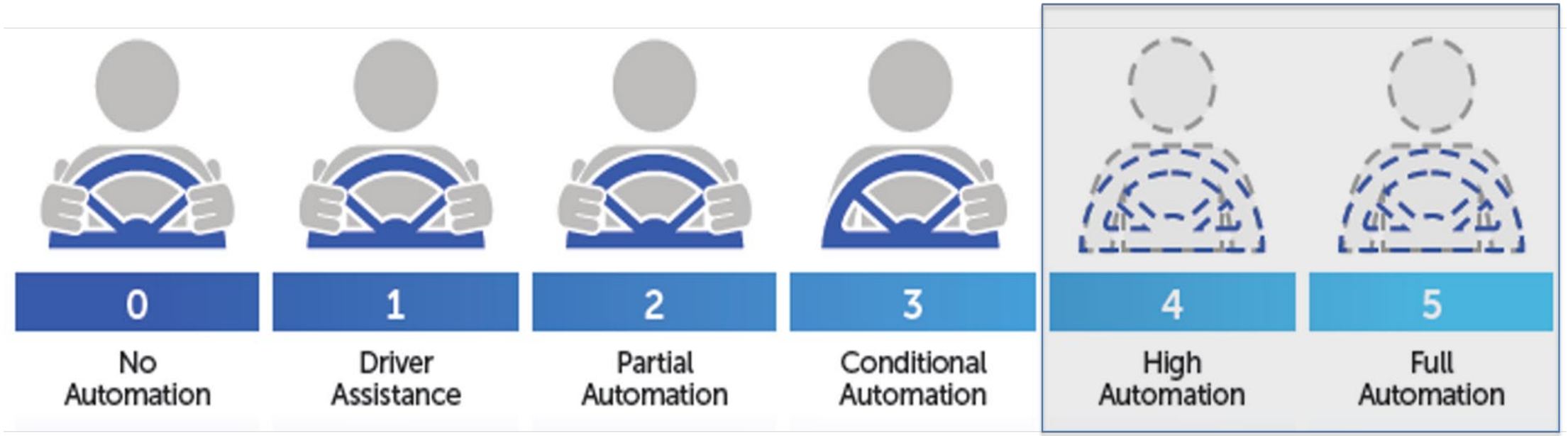
As of October 1, 2017

Published by the Office of the Federal Register
National Archives and Records Administration
as a Special Edition of the Federal Register

- Licensing and Driver Qualifications (Parts 383 & 391)
- Safe Driving (Part 392)
- Parts and Accessories (Part 393)
- Hours of Service (Part 395)
- Inspection, Repair and Maintenance (Part 396)
- Hazardous Materials (Part 397)

Levels of Automation of Greatest Interest: No Driver at the Controls

- **SAE Level 4, High Driving Automation:** The vehicle is capable of performing all driving functions under certain conditions. The driver may have the option to control the vehicle.
- **SAE Level 5, Full Driving Automation:** The vehicle is capable of performing all driving functions under all conditions.



2020 Draft – Notice of Proposed Rulemaking (NPRM)

- FMCSA proposed amending and revising certain Federal Motor Carrier Safety Regulations (FMCSRs) to ensure the safe introduction of automated driving systems (ADS)-equipped CMVs onto the Nation's roadways.
- The proposed changes to the commercial vehicle operations, inspection, repair, and maintenance regulations would prioritize safety and security, promote innovation, and foster a consistent regulatory approach to ADS-equipped commercial motor vehicles (CMVs).
- NPRM was at OST in prior administration but not published.

Current Status

- FMCSA Deputy Administrator reviewing draft.

Research with FMCSA Technology Office

Variability Analysis of FMVSS-121 Air Brake Systems: 60-mi/hr Service Brake System Performance Data for Truck Tractors (Jan 2021)

- The data used were retrieved from tests performed under the controlled conditions specified for FMVSS 121 air brake system compliance testing. The report also explores factors affecting FMVSS-121 stopping distance and stopping distance variability, such as brake type, weight, wheelbase, and tractor antilock braking system (ABS).

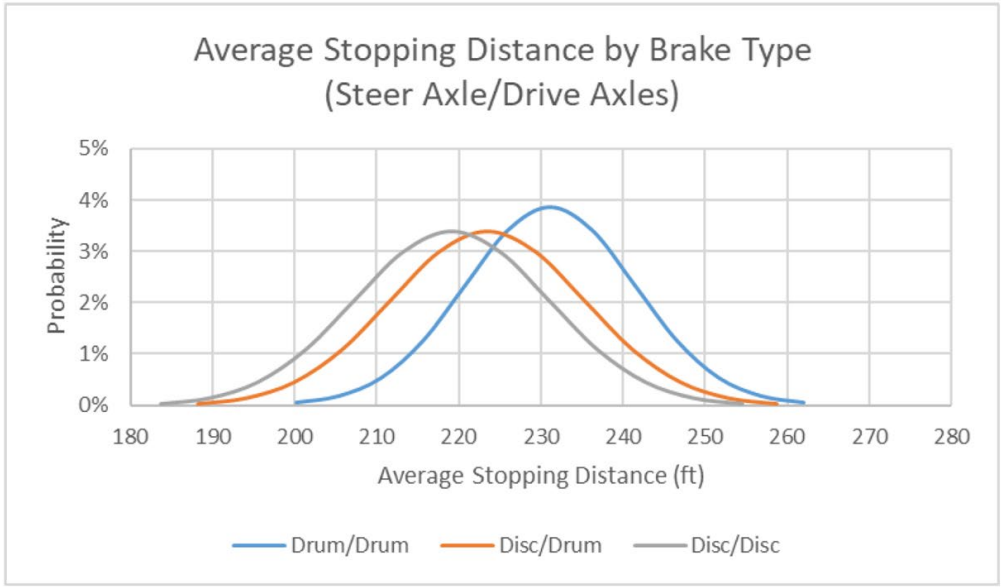


Figure 6. Chart. Probability distribution of stopping distances for various brake types derived from test data parameters.

Research with FMCSA Technology Office – Current Work

Brake Variability – 2021 Track Testing

- Investigating variability in (2) - five-axle tractor semitrailer's brake performance due to variations in brake friction specification, brake condition, and brake performance of the tractor and trailer.
- The initial testing will look at the following variables: brake friction materials (OE (RSD) and aftermarket), brake burnish condition (green/burnished), gross combination vehicle weights (65,000 lb/80,000 lb), and vehicle speed (20/40/60 mph).
- Incorporates evaluation/development of ORNL Real Time Dynamic Brake Assessment Model

Real Time Dynamic Brake Assessment

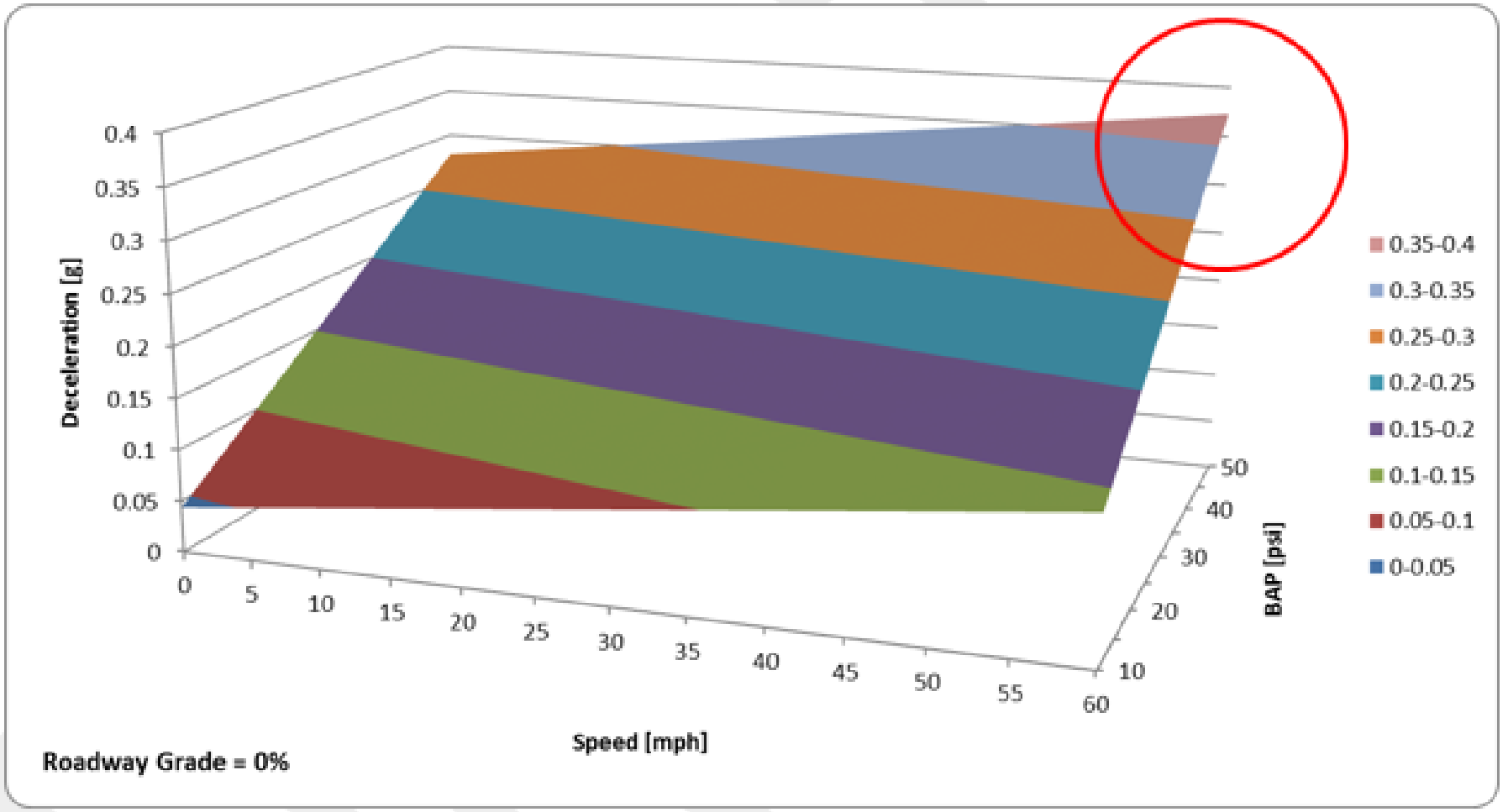


Figure 63 Deceleration Model as a Function of Speed and Brake Application Pressure

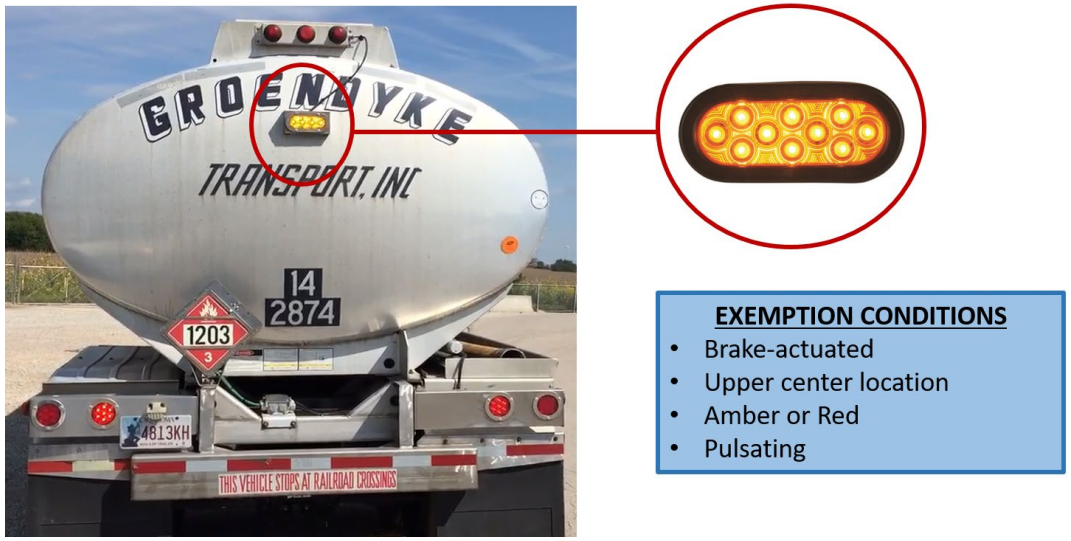
ADS Sensor Performance Testing

Figure 2. Installation Locations of Cameras, RADAR, LIDAR and rear amber light.

Rear Radar Activated Warning Lamp Research

Research into rear facing radar activated emergency warning lamp to reduce rear impact collisions.

- FMCSA has granted a number of temporary exemptions for rear brake activated warning lamps to tanker carriers (Groendyke) and tanker industries (NTTC)
- Previous FMCSA research into “Enhanced Rear Signalling” (2006)
- Utilizing FMCSA 2014 Prevost Motorcoach for development work.



EXEMPTION CONDITIONS

- Brake-actuated
- Upper center location
- Amber or Red
- Pulsating

Contact Information

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