### **MEETING NOTES**

Iowa Advisory Council on Automated Transportation (ATC) Policy & Legislation Subcommittee Meeting

Thursday, August 13, 2020 2-3pm

#### **Action Items:**

- Gannett Fleming and Iowa DOT continue updating P&L work plan and maintain on ATC SharePoint
- Subcommittee chair and members review work plan on <a href="SharePoint">SharePoint</a> and continue working toward tactical priorities
- 1. Welcome and introductions Jacob Heiden, UI National Advanced Driving Simulator
  - Dylan Mullenix (Policy & Legislation Subcommittee Chair) Des Moines Area Metropolitan Planning Organization
  - Travis Grassel Iowa Insurance Division
  - Mark Nahra Woodbury County
  - Peter Rafferty, Lia Yakumithis Gannett Fleming
  - Kelli Huser, Joe Drahos, Garrett Pedersen, Melissa Spiegel, Kristen Forret, Sara Siedsma, Renee Jerman, Mindi Nguyen, Andy Lewis, Adam Shell, Tim Simodynes – Iowa DOT
  - Dan McGehee, Omar Ahmad, Jacob Heiden University of Iowa, National Advanced Driving Simulator
- 2. Chair Update Dylan Mullenix, Policy & Legislation Subcommittee Chair (5 minutes)
  - The <u>Policy & Legislation subcommittee last met on February 5, 2020</u> with a presentation from Daniel Yeh on work being done by the American Association of Motor Vehicle Administrators Automated Vehicle subcommittee, Peter Rafferty on the work plan development process, and an open discussion from the group on the legislation session.
  - The last Council meeting was held on March 11 with subcommittee updates, lowa rulemaking updates, and presentations from Local Motors on their automated shuttle, National Advanced Driving Simulator, and Gannett Fleming. Since the meeting, <a href="Lowa's Automated Transportation Vision">Lowa's Automated Transportation Vision</a> has been finalized and subcommittee work plans have been in development.
  - A derecto storm devastated lowa and the Midwest on August 10, 2020. The storm was equivalent to a
    major hurricane and caused damage and power outages across the state due to little warning.
- 3. The Automated Vehicle Car Accident: Considerations to Protect both Drivers and Injured Parties Kelli Huser, Iowa DOT (15 minutes)
  - Kelli Huser is an attorney and discussed the shift of thinking around liability in an automated vehicle car crash.
  - In a traditional crash, *Driver A* hits *Driver B* causing \$6000 in property damages. *Driver A* acted or failed to act, which caused the accident. *Driver A/Insurance* pays the \$6000 on behalf of *Driver A*. As technology advances, there may not be a driver in a future car crash. *Car AV* hits *Driver B* causing \$6000 in property damages. *Car AV* acted or failed to act, which caused the accident. Who is liable to pay the \$6000 for mistakes that *Car AV* made: *Driver B, Owner AV/Insurance, Manufacturer*, or *Government?*
  - Automated vehicles are claimed to lead to safer roads, but the reality is they aren't safer yet. AVs have
    had issues with the unpredictability of human behaviors, even if the human isn't acting illegally or
    erratically. Studies show Uber AVs are 50 times more dangerous than a human driver (500 deaths per
    billion VMT) and Waymo AVs are 10,000 times more dangerous (100,000 deaths per billion VMT).

- To help answer who is liable in an AV crash, we must consider control and fairness. In terms of control, the human driver is still responsible in vehicles with automation levels SAE 1 & 2. There are questions on who is in control in SAE level 3. The AV is control in levels 4 & 5. Under existing law, *Driver B* would be responsible to cover the costs in an AV-controlled crash if things get expensive or time-consuming. Is this fair though?
- If Owner of Car AV is financially responsible for crash, it would be most akin to our current system of dividing fault. Insurance companies have started looking at the "operator" as the person who puts the vehicle in motion. This scenario would make sense when someone is in the vehicle and can hit a "stop" button where the human arguably has the ultimate decision-making authority. In this instance, owner's car insurance would increase, and there would be a possibility that insurance wouldn't cover the crash. Current marketing doesn't suggest that a human will always be present or in control in the vehicle.
- If Manufacturer of Car AV is financially responsible for crash, it would be most in-line with the purpose of tort law, that the "wrongdoer" is held responsible to make it right. This is relatable to product liability suits under lowa law: design defect, manufacturing defect, and failure to warn. Manufacturers could be proven liable under these laws, but the current process is time-consuming and expensive. The Owner of Car AV would bear the costs of litigation. Strict liability may be the fairest path forward to hold the manufacturer financially responsible. This route would lead to optimal results including maximum interest for the manufacturer to minimize total crash costs, probability of litigation is lower, and cost and time are decreased if litigation arises. However, strict liability may slow technological advances, liability costs would be shifted to the consumer, and no distinction yet between small defects and large defects from manufacturers point of view.
- If Government is financially responsibly in an AV crash, the process would be comparable to the National Vaccine Injury Compensation Program. This method is a no-fault alternative to resolve vaccine injury petitions. Lawsuits against vaccine companies threatened to create vaccine shortages and reduce vaccinations. The compensation program allows individuals to file a petition with the possibility of receiving compensation if determined to be injured by the vaccine program. This process wouldn't slow technological advancement, the cost and time of litigation would be reduced, and the Owner of the AV is removed from the liability conversation entirely. One the other hand, are vaccine injuries comparable to car crashes? A system like this for AV crashes would be very costly. It wouldn't be in line with the principles of tort and the incentive to prevent the accident from happening again.
- The questions of who is in control and what is fair will continue to be asked moving into an automated future. If the AV is in control, who fairly bears the cost of the car crash – Driver B, Owner AV/Insurance, Manufacturer, or Government?

#### 4. P&L Work Plan & Actions – Peter Rafferty, Gannett Fleming (5 minutes)

- <u>The ATC SharePoint site</u> is the hand-off point for subcommittee work plans and other documents. The SharePoint resides with the subcommittee to use and update as needed, especially with the work plan being a living document.
- The work plan lays out the Iowa ATC background and specific subcommittee tactical priorities including
  details, actions, roles, resourcing, and timelines. Again, workplans are a living breathing document for
  subcommittees to update as needed. Priorities may change moving forward so subcommittees have the
  ability to adapt.
- The road to automated transportation will take time. Work plans won't be completed by December 2020. It will require continual conversations and effort over time.

#### a. Monitor Legislation (10 minutes)

- Commissioner Bayens was not present at this meeting due to another work commitment. His update will be a standing item on the P&L agenda moving forward.
- Renee Jerman shared brief updates on state and federal legislation. More will be discussed in detail at the ATC meeting on August 31.
- Adam Shell discussed the NHTSA Rulemaking Schedule that included Removing Regulatory Barriers for Automated Driving Systems and Safety Principles for Automated Driving Systems. The P&L subcommittee will want to be engaged in upcoming and future discussions related to the NHTSA

- rulemaking, and the ATC or member agencies may want to consider responding. (List included after meeting slides)
- The FCC is considering reallocating the 5.9 GHz Safety Spectrum that is currently reserved for transportation-related communications among devices that support connected and automated vehicles. There is uncertainty around this wireless spectrum due to current lack of deployment uses competing with interest from the private sector. The FCC began seeking input on spectrum reallocation in 2016. This year they submitted a notice of proposed rulemaking for the reallocation, and the responses were 89% opposition, 9% in support, and 2% neutral. The FCC is still working on drafting an order, and ITS America doesn't anticipate any final decisions until October at the earliest. This subcommittee will want to stay engaged in this rulemaking as well.

#### b. Ensure CAT in Planning (10 minutes)

- Dylan Mullenix is the president of the Iowa Chapter of American Planning Association (APA). He
  commented on the importance of automated/connected vehicles in long range, comprehensive
  plans. There is a need to develop a checklist-style framework for automation considerations in
  planning. Dylan wants to use the APA Iowa Chapter to get others involved and align AT readiness
  tactic. It will be important to consider regional/state planning along with local planning.
- Joe Drahos is a passenger planner with the Iowa DOT that is involved in the Iowa Public Transit Long Range Plan. This plan considers barriers to public transit and will incorporate stakeholder feedback that has been gathered. Automation plans are included in the passenger transportation trend section where forecasts are fluid. Iowa will consider what services could benefit from automation and how to address 1st mile/last mile.
- Garrett Pedersen is involved in the Strategic Highway Safety Plan (SHSP) and State Transportation Plan. The state is considering CAT in these plans. A topic that has been recently added to the discussion is vulnerable road users after a Public Safety & Enforcement subcommittee meeting. The SHSP would be a good place to include CAT language because the plan applies to all roads. Another good place would be the state's long-term multimodal comprehensive planning that is updated every five years. AV considerations in this plan could include updating the current state of technology, estimating the impact on multimodal transportation, and optimal sizing of investments.

#### c. Bolster State Leadership (10 minutes)

- Dan McGehee and Adam Shell are involved with <u>Partners for Automated Vehicle Education (PAVE)</u>. PAVE is a coalition of industry, nonprofits and academics with the goal of informing the public about automated vehicles and their potential. Dan McGehee is on the academic advisory council. The lowa DOT is a member of the public sector advisory council and Adam Shell is involved with this group.
- Adam Shell is also involved in other groups including Mid America Association of State
  Transportation Officials (MAASTO) AV Subcommittee, Institute of Transportation Engineers (ITE),
  American Association of State Highway and Transportation Officials (AASHTO), Intelligent
  Transportation Society of America (ITS), and more.
- Mark Nahra is the Woodbury County Engineer. He has been a member of the National Association of County Engineers (NACE) delegation to the National Committee on Uniform Traffic Control Devices (NCUTCD) since 2011. He is one of six county engineers from across the country on this committee. Issues of automated and connected vehicles have been prominent since 2017. They have assembled a working group that is coordinating with relevant stakeholders to gain understanding of the signage and markings needed for CAV. Mark has been involved with the rewrite related to widths of pavement markings and found that lines wider than 10 inches can cause difficulties for current CAV recognition technologies. More discussion and collaboration are needed moving forward. (Note: Mark Nahra was present for the meeting, but he was having technical difficulties and wasn't able to communicate with the subcommittee This update was submitted after the meeting.)
- ATC members and subcommittee members are encouraged to become involved and engaged in national, regional, and local organizations with a transportation focus to bring an Iowa and automation perspective to the table.

- d. Open Discussion (What's in the News?) All subcommittee members (5 minutes)
  - ATC Press Clippings that feature news articles related to lowa's AT Vision will be shared with council and subcommittee members every two weeks. The most recent was sent on August 17.
- e. Information and key upcoming dates Jacob Heiden, UI National Advanced Driving Simulator
  - Iowa ATC Meeting: Monday, August 31 from 1-3pm. Remote only.



Policy & Legislation August 13, 2020

### Arrival: 08:55 pm - Distance 783 r TCP/IP:192.56.327.684.1 Cameras: Automated Destination: 50° 43' 50.34" N 6° 10' 55.294" E Arrival: 08:55 pm - Distance 783 miles TCP/IP:192.56.327.684.1 SYNC: enabled | Sensors: | Cameras:

### WELCOME AND INTRODUCTIONS

Jacob Heiden, University of Iowa





### CHAIR UPDATE ON THE ATC MEETING HELD MARCH 11, 2020

Dylan Mullenix, Des Moines Area MPO

## THE AUTOMATED VEHICLE CAR ACCIDENT: CONSIDERATIONS TO PROTECT BOTH DRIVERS AND INJURED PARTIES

Kelli Huser, Iowa DOT





The Automated Vehicle Car Crashes: Considerations to Protect both Drivers and Injured Parties August 13, 2020



Driver A hits Driver B causing \$6,000\* in damages.

# The current law of car crashes



Driver A acted or failed to act, which caused the accident.



Driver A/Insurance pays \$6,000 on behalf of Driver A.

<sup>\*</sup> According to the Insurance Information Institute, this is the average loss payment for passenger vehicle collision coverage for 2016-2018 model years. <a href="https://www.iii.org/fact-statistic/facts-statistics-auto-insurance">https://www.iii.org/fact-statistic/facts-statistics-auto-insurance</a>



Driver A hits Driver B causing \$6,000 in damage to Driver B's vehicle.

# The shift in thinking



Driver-A acted or failed to act, which caused the accident.



Driver A/Insurance pays \$6,000 on behalf of Driver A.

# The shift in thinking



Car AV hits Driver B causing \$6,000 in damage to the Driver B's vehicle.



Car AV acted or failed to act, which caused the accident.



\$6,000 on behalf of Car AV.

Who should be responsible for the \$6000? That is the focus of today's presentation.



DRIVER B



OWNER AV/INSURANCE



**MANUFACTURER** 



**GOVERNMENT** 

But before we dive in, isn't the idea that AVs will be safer? Well that's the idea, but:

- AVs aren't safer yet.
- AVs and conventional drivers are likely going to share the road for awhile.
  - In the past, certain AVs had had issues with:
    - Failure to yield for cross traffic
    - Delaying braking behind a car that cut quickly in front
    - Illegal behaviors by other drivers
    - Failure to give way to another vehicle trying to enter a lane
    - Turning into roadway with oncoming traffic approaching
    - Trouble handling drivers who failed to yield
    - Trouble handling other drivers who drifted out of the lane
    - Failure to capture data on approaching vehicles
    - Turning into a lane of traffic without room
    - Encroaching on vehicle during a left turn.

How do we decide who should pay the \$6000?



**DRIVER B** 



OWNER AV/INSURANCE



**MANUFACTURER** 



**GOVERNMENT** 

To make a decision, we look to:



Control



**Fairness** 

### Car A hits Driver B. Who or What is in control of Car A?





#### **Conventional Human Driver**

SAE Level 1 SAE Level 2 SAE Level 3? AV

SAE Level 4 SAE Level 5 If the AV is in control of Car A, who should pay the \$6000?



**DRIVER B** 



OWNER AV/INSURANCE



**MANUFACTURER** 



**GOVERNMENT** 

### If Owner of Car AV should be financially responsible for the car crash



### Pros:

Most akin to our current system of dividing fault

Insurance companies have started looking at the "operator" as the person who puts the vehicle into motion

If someone is in the vehicle and can hit a "stop button" arguably the ultimate decision-making is by the human present in the vehicle



### Cons:

Increase in Owner's car insurance

Possibility car insurance does not cover the crash

Marketing is not reflecting that a human will always be present in the vehicle

No motivation for entity "in control" to prevent it from happening again

### If Manufacturer of Car AV should be financially responsible for the car crash

Pros:

 Most in line with the purpose of tort law, that the "wrongdoer" is held responsible to make it right

Cons:

- Existing law makes the process time-consuming and expensive
- Owner AV will bear the cost of litigation

#### 668.12 Liability for products — defenses.

- In any action brought pursuant to this chapter against an assembler, designer, supplier
  of specifications, distributor, manufacturer, or seller for damages arising from an alleged
  defect in the design, testing, manufacturing, formulation, packaging, warning, or labeling of
  a product, a percentage of fault shall not be assigned to such persons if they plead and prove
  that the product conformed to the state of the art in existence at the time the product was
  designed, tested, manufactured, formulated, packaged, provided with a warning, or labeled.
- Nothing contained in subsection 1 shall diminish the duty of an assembler, designer, supplier of specifications, distributor, manufacturer, or seller to warn concerning subsequently acquired knowledge of a defect or dangerous condition that would render the product unreasonably dangerous for its foreseeable use or diminish the liability for failure to so warn.

#### 668.12 Liability for products - defenses.

- 1. In any action brought pursuant to this chapter against an assembler, designer, supplier of specifications, distributor, manufacturer, or seller for damages arising from an alleged defect in the design, testing, manufacturing, formulation, packaging, warning, or labeling of a product, a percentage of fault shall not be assigned to such persons if they plead and prove that the product conformed to the state of the art in existence at the time the product was designed, tested, manufactured, formulated, packaged, provided with a warning, or labeled.
- 2. Nothing contained in subsection 1 shall diminish the duty of an assembler, designer, supplier of specifications, distributor, manufacturer, or seller to warn concerning subsequently acquired knowledge of a defect or dangerous condition that would render the product unreasonably dangerous for its foreseeable use or diminish the liability for failure to so warn.

3 types of product liability suits under lowa law:

- Design defect: was the design practically and technologically sound
- Manufacturing defect: product departs from intended design
- Failure to warn: subsequently acquired knowledge of a defect that is "unreasonably dangerous"

- Design defect: must prove reasonable alternative designs to avoid the car crash
- Manufacturer's defect: must prove
  - (1) the defect,
  - (2) a connection between the defect and the harmful event, and
  - (3) that product was defective when provided
- Failure to warn: must prove the manufacturer knew and that the defect was "unreasonably dangerous"

- Design defect: must prove no reasonable alternative design to avoid the car accident
- Manufacturer's defect: must prove

# Who is having to prove this in litigation?

unicasonably dangerous:

### Owner A

### Owner A

And as an example of what this looks like:

- Car crash in **January 1965**
- Defective steering mechanism lawsuit filed
- Reached Iowa Supreme Court in September 1973
- Reversed and remanded for a new trial



If: object is defective, and defect is from design or manufacture, and defect caused injury or damage



Then: manufacturer is liable

Strict
Liability:
the
fairest
way
forward?

"Several reasons are traditionally evoked in suggesting that the application of strict liability rules to autonomous vehicles would lead to optimal results" including:

Manufacturer would have maximum interest to minimize total crash costs

Probability of litigation is lower

Even if
litigation
arises, costs
and length of
time are
decreased

The downsides to strict liability?





Liability costs shifted to consumers



No distinction between relatively small defects and large defects from the manufacturer viewpoint

### If Government should be financially responsible: comparison to the National Vaccine Injury Compensation Program

No-fault alternative to resolve vaccine injury petitions

In the 1980s, lawsuits against vaccine companies threatened to create vaccine shortages and reduce vaccination rates

Individual files a petition and may receive compensation if determined to be injured by a vaccine covered by the program

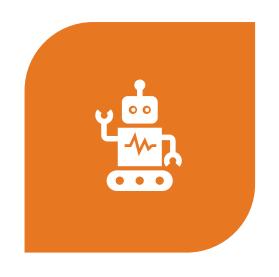
### If Government should be financially responsible: comparison to the National Vaccine Injury Compensation Program

#### **Pros**

- No chilling of technological advancement
- 2-3 years from filing to payment
- Could cover attorneys' fees and costs
- Removes Owner AV from the conversation entirely

#### Cons

- Are car crashes comparable to vaccine injuries?
- Potentially very costly: over a 30-year period, VICP paid out approximately \$4.4 billion
- Not in line with the principles of tort and the incentive to prevent the accident from happening again





CONTROL

**FAIRNESS** 

If the AV is in control, who fairly bears the cost of the car crash?



**DRIVER B** 



OWNER AV/INSURANCE



**MANUFACTURER** 



**GOVERNMENT** 

#### References

- Davola, Antonio. A Model for Tort Liability in a World of Driverless Cars: Establishing a Framework for the Upcoming Technology, 54 Idaho L. Rev. 3 (Oct. 2018).
- Hinkle, Daniel. Automated Driving and the Future of Auto Tort. Apr. 2020, Powerpoint Presentation.
- Institute for Legal Reform, Torts of the Future: Autonomous Vehicles, May 2018, <a href="https://www.ali.org/media/filer\_public/6a/26/6a26ebc5-3dfa-4c60-b1ba-7e596819ef43/dc-656837-v1-torts\_of\_the\_future\_autonomous\_emailable.pdf">https://www.ali.org/media/filer\_public/6a/26/6a26ebc5-3dfa-4c60-b1ba-7e596819ef43/dc-656837-v1-torts\_of\_the\_future\_autonomous\_emailable.pdf</a>.
- Insurance Information Institute, Background on: Self-driving cars and insurance, July 30, 2018.
- Kleve v. General Motors Corp. et al., 210 N.W.2d 568 (lowa 1973)



### **Contact information**

Kelli Huser
Policy & Appeals Coordinator
Vehicle & Motor Carrier Services
Iowa Department of Transportation
Kelli.Huser@iowadot.us



### POLICY & LEGISLATION WORK PLAN & ACTIONS

Peter Rafferty, Gannett Fleming

### **MONITOR LEGISLATION**

Commissioner Stephan Bayens-Legislative Update

Renee Jerman, Adam Shell -State & Federal Update





### **ENSURE CAT IN PLANNING**

Dylan Mullenix - American Planning Association

Joe Drahos - Iowa Transit Plan

Garrett Pedersen - SHSP/State Transportation Plan

### **BOLSTER STATE LEADERSHIP**

Dan McGehee, Adam Shell - PAVE

Adam Shell - MAASTO AV Subcommittee, CAT Coalition, ITE, AASHTO, ETC.

Dylan Mullenix - APA

Mark Nahra - NCUTCD

Others?





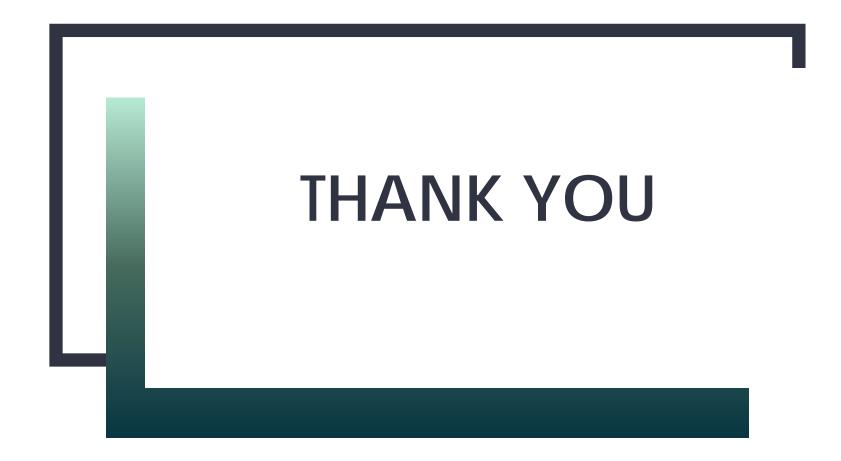
### OPEN DISCUSSION (WHAT'S IN THE NEWS?)

All subcommittee members

### INFORMATION AND KEY UPCOMING DATES

Next ATC Meeting

- Monday, August 31st, 1-3pm
- Remote only



#### Agency Rule List – Spring 2020 (NHTSA Only)

#### Published by OMB at

https://www.reginfo.gov/public/do/eAgendaMain?operation=OPERATION\_GET\_AGENCY\_RULE\_LIST&c urrentPub=true&agencyCode=&showStage=active&agencyCd=2100&csrf\_token=DAA2C1F8B0970DE788 0437230A92BB8B822217CA1DF0ECF9CDA2F3B8049EB236DB60C9F91CF7B973F54B06F19C4741B269A0

ADS-related rules are highlighted in yellow within list below.

DOT/NHTSA	Prerule Stage	Rear Seat Belt Reminder System	2127- AL37
DOT/NHTSA	Prerule Stage	Retroreflective Tape and Underride Guards for Single Unit Trucks	2127- AL57
DOT/NHTSA	Prerule Stage	Amendments to Federal Motor Vehicle Safety Standards for Lighting	2127- AL95
DOT/NHTSA	Prerule Stage	Amendments to Federal Motor Vehicle Safety Standards for Tires	2127- AL96
DOT/NHTSA	Prerule Stage	Pilot Program for Collaborative Research on Motor Vehicles With High or Full Driving Automation	2127- AL99
DOT/NHTSA	Prerule Stage	Removing Regulatory Barriers for Automated Driving Systems	2127- AM00
DOT/NHTSA	Prerule Stage	Alternative Options for Side Rearview Mirrors	2127- AM02
DOT/NHTSA	Prerule Stage	Amending Motor Vehicle Labeling Requirements	2127- AM03
DOT/NHTSA	Prerule Stage	Assessment of FMVSS Test Procedures	2127- AM04
DOT/NHTSA	Prerule Stage	Removing Regulatory Barriers for Innovative Motor Vehicle Technologies	2127- AM05
DOT/NHTSA	Prerule Stage	Considerations for Telltales, Indicators and Warnings in ADS Vehicles	2127- AM07
		Considerations for Telltales, Indicators and Warnings in ADS Vehicles  Safety Principles for Automated Driving Systems	
DOT/NHTSA			AM07 2127-
DOT/NHTSA	Prerule Stage	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving	AM07 2127- AM15 2127-
DOT/NHTSA	Prerule Stage Prerule Stage	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving Systems	AM07 2127- AM15 2127- AM18 2127-
DOT/NHTSA  DOT/NHTSA  DOT/NHTSA	Prerule Stage Prerule Stage Prerule Stage Proposed	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving Systems  Specialized Motor Vehicles With Automated Driving Systems	AM07 2127- AM15 2127- AM18 2127- AM19 2127-
DOT/NHTSA  DOT/NHTSA  DOT/NHTSA	Prerule Stage Prerule Stage Prerule Stage Proposed Rule Stage Proposed	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving Systems  Specialized Motor Vehicles With Automated Driving Systems  Tire Fuel Efficiency Consumer InformationPart 2  Establish Side Impact Performance Requirements for Child Restraint	AM07 2127- AM15 2127- AM18 2127- AM19 2127- AK76 2127-
DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA	Prerule Stage Prerule Stage Prerule Stage Proposed Rule Stage Proposed Rule Stage Proposed Proposed Rule Stage Proposed	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving Systems  Specialized Motor Vehicles With Automated Driving Systems  Tire Fuel Efficiency Consumer InformationPart 2  Establish Side Impact Performance Requirements for Child Restraint Systems (MAP-21)	AM07 2127- AM15 2127- AM18 2127- AM19 2127- AK76 2127- AK95 2127-
DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA	Prerule Stage Prerule Stage Proposed Rule Stage	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving Systems  Specialized Motor Vehicles With Automated Driving Systems  Tire Fuel Efficiency Consumer InformationPart 2  Establish Side Impact Performance Requirements for Child Restraint Systems (MAP-21)  FMVSS No. 218 and Enforcement Policy Concerning Novelty Helmets	2127- AM15 2127- AM18 2127- AM19 2127- AK76 2127- AK95 2127- AL01 2127-
DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA  DOT/NHTSA	Prerule Stage  Prerule Stage  Prerule Stage  Proposed Rule Stage  Proposed Proposed Rule Stage  Proposed Rule Stage  Proposed	Safety Principles for Automated Driving Systems  Passenger-Less Delivery Vehicles Equipped With Automated Driving Systems  Specialized Motor Vehicles With Automated Driving Systems  Tire Fuel Efficiency Consumer InformationPart 2  Establish Side Impact Performance Requirements for Child Restraint Systems (MAP-21)  FMVSS No. 218 and Enforcement Policy Concerning Novelty Helmets  Upgrade FMVSS No. 213 for Improved Child Occupant Protection	AM07 2127- AM15 2127- AM18 2127- AM19 2127- AK76 2127- AK95 2127- AL01 2127- AL34 2127-

DOT/NHTSA	Proposed Rule Stage	Part 595, Remove the Sunset Date for Retrofit Air Bag On-Off Switches	2127- AL64
DOT/NHTSA	Proposed Rule Stage	New Make-Inoperative Exemptions for Roof Crush and Rear Visibility	2127- AL67
DOT/NHTSA	Proposed Rule Stage	49 CFR Part 510 Information Gathering Powers	2127- AL69
DOT/NHTSA	Proposed Rule Stage	Part 594-Schedule of Fees Authorized by 49 U.S.C. 30141	2127- AL74
DOT/NHTSA	Proposed Rule Stage	Whistleblower Program	2127- AL85
DOT/NHTSA	Proposed Rule Stage	23 CFR 1327, Code Appendix Update	2127- AL89
DOT/NHTSA	Proposed Rule Stage	Update Child Seat Data in FMVSS No. 208, Appendix A-1	2127- AL90
DOT/NHTSA	Proposed Rule Stage	Standard Reference Test Tire Change	2127- AL92
DOT/NHTSA	Proposed Rule Stage	Updating the Petition Process for Federal Motor Vehicle Safety Standards	2127- AL98
DOT/NHTSA	Proposed Rule Stage	Amending 49 CFR Part 581, Bumper Standard	2127- AM01
DOT/NHTSA	Proposed Rule Stage	Occupant Protection for Automated Driving Systems	2127- AM06
DOT/NHTSA	Proposed Rule Stage	Tire Fuel Efficiency and Wet Traction Minimum Performance Standards	2127- AM08
DOT/NHTSA	Proposed Rule Stage	New Make-Inoperative Exemptions for Flashing Amber Lamps on Commercial Vehicles	<u>2127-</u> <u>AM09</u>
DOT/NHTSA	Proposed Rule Stage	Updating the Process for Temporary Exemptions	2127- AM11
DOT/NHTSA	Proposed Rule Stage	Updating Event Data Recorder Standard for Time Capture	2127- AM12
DOT/NHTSA	Proposed Rule Stage	Expansion of Temporary Exemption Program to Domestic Manufacturers for Research, Demonstrations, and Other Purposes	2127- AM14
DOT/NHTSA	Proposed Rule Stage	EPCA CAFE Civil Penalties	2127- AM16
DOT/NHTSA	Proposed Rule Stage	Medium and Heavy-Duty Trailer Fuel Efficiency Standards	2127- AM17
DOT/NHTSA	Proposed Rule Stage	Part 572 THOR-50M Crash Test Dummy	2127- AM20
DOT/NHTSA	Proposed Rule Stage	FMVSS No. 208 THOR-50M Compliance Option	2127- AM21
DOT/NHTSA	Proposed Rule Stage	Part 572 WorldSID-50M Crash Test Dummy	2127- AM22
DOT/NHTSA	Proposed Rule Stage	FMVSS No. 214 WorldSID-50M Compliance Option	2127- AM23
DOT/NHTSA	Final Rule Stage	Motorcoach Rollover Structural Integrity (MAP-21)	2127- AK96
DOT/NHTSA	Final Rule Stage	Part 572 Q3s 3-Year-Old Side Impact Dummy	2127- AL04
DOT/NHTSA	Final Rule Stage	Amend FMVSS No. 210 to Incorporate the Use of a New Force Application Device	2127- AL05

DOT/NHTSA	Final Rule Stage	Use of ISO Warning Symbol for ABS Failure	2127- AL48
DOT/NHTSA	Final Rule Stage	Rear Visibility and Part 585 Phase-In Reporting Requirements Reconsideration	2127- AL75
DOT/NHTSA	Final Rule Stage	The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks	<u>2127-</u> <u>AL76</u>
DOT/NHTSA	Final Rule Stage	Replica Vehicles	2127- AL77
DOT/NHTSA	Final Rule Stage	49 CFR Part 576 Record Retention	<u>2127-</u> <u>AL81</u>
DOT/NHTSA	Final Rule Stage	FMVSS No. 108; Lamps, Reflective Devices, and Associated Equipment-Adaptive Driving Beam	2127- AL83
DOT/NHTSA	Final Rule Stage	Federal Motor Vehicle Safety Standards; Technical Corrections and Clarifications Related to Tires and Rims	2127- AL87
DOT/NHTSA	Final Rule Stage	Amend the Labeling Requirement for Visual Inspection of Compressed Natural Gas Fuel Containers Specified in FMVSS No. 304, Compressed Natural Gas Fuel Container Integrity	2127- AL88
DOT/NHTSA	Final Rule Stage	Amend FMVSS No. 141 to Allow Driver-Selectable Vehicle Sounds	2127- AL93
DOT/NHTSA	Final Rule Stage	Amendments to Hybrid III 5th Percentile Female Test Dummy	2127- AM13
DOT/NHTSA	Final Rule Stage	Final Listing of High-Theft Light Duty Truck and Exempted Lines for MY 2019	2127- AM24