

Law Enforcement Protocol for Fully Autonomous Vehicles

I. Policy

Arizona allows the testing or operation of autonomous vehicles equipped with automated driving systems on public roads with or without a person present in the vehicle. All autonomous vehicles are required to comply with federal law, Arizona law, and all Arizona Department of Transportation regulations and policies. These vehicles may be involved in situations that require law enforcement intervention or contact, such as collisions, violations of Arizona traffic laws, and criminal conduct involving the vehicle or occurring inside the vehicle. This directive is intended to provide procedural guidance and information as officers have increasingly more contact with autonomous vehicles. Officers shall follow the procedures outlined in this policy when investigating a collision, traffic or criminal violation, or incident involving a fully autonomous vehicle with no operator present. In all situations officers shall also be guided by existing policies, procedures, statutes and rules.

II. Definitions

For the purposes of this policy the following definitions apply:

- A. “Automated Driving System” means the hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether it is limited to a specific operational design domain.
- B. “Drive” means to operate or be in actual physical control of a vehicle.
- C. “Dynamic driving task” means all the real time operational and tactical functions required to operate a vehicle in on-road traffic, excluding the strategic functions such as trip scheduling and selection of destinations and waypoints, and including without limitation:
 - 1. Lateral vehicle motion control via steering;
 - 2. Longitudinal motion control via acceleration and deceleration;
 - 3. Monitoring the driving environment via object and event detection, recognition, classification, and response preparation;
 - 4. Object and event response execution;
 - 5. Maneuver planning; and
 - 6. Enhancing conspicuity via lighting, signaling, and gesturing.
- D. “Fully autonomous vehicle” means a motor vehicle that is equipped with an automated driving system designed to function as a level four or five system under SAE J3016. Such a vehicle may be designed to function solely by use of the automated driving system, or when the automated driving system is not engaged, to permit operation by a human person.
- E. “Minimal risk condition” means a low-risk operating mode in which a fully autonomous vehicle operating without a human person achieves a reasonably safe state, such as bringing the vehicle to a complete stop upon experiencing a failure of the vehicle’s automated driving system that renders the vehicle unable to perform the entire dynamic driving task.
- F. “Operational design domain” means a description of the specific operating domain(s) in which an automated driving system is designed to properly operate, including but not limited to geographical area of operation, roadway types, speed range, environmental conditions (weather, daytime/nighttime etc.), and other domain constraints.

- G. "Person" includes a corporation, company, partnership, firm, association or society, as well as a natural person. When the word "person" is used to designate the party whose property may be the subject of a criminal or public offense, the term includes the United States, this state, or any territory, state or country, or any political subdivision of this state that may lawfully own any property, or a public or private corporation, or partnership or association. When the word "person" is used to designate the violator or offender of any law, it includes corporation, partnership or any association of persons.

III. Requirements of Fully Autonomous Vehicle Companies

- A. The person operating a fully autonomous vehicle shall provide the Arizona Department of Public Safety and the Arizona Department of Transportation a copy of a law enforcement interaction protocol that will instruct first responders in the vicinity of the operational design domain how to interact with the fully autonomous vehicle in emergency and traffic enforcement situations. This interaction policy shall be on file with Operational Communications and available through the Arizona Department of Transportation Motor Vehicle Division (MVD).
- B. The law enforcement interaction protocol shall include:
1. How to communicate with a fleet support specialist who is available during the times the vehicle is in operation;
 2. How to safely remove the vehicle from the roadway;
 3. How to recognize whether the vehicle is in autonomous mode and steps to safely tow the vehicle;
 4. A description of the cities where the vehicle will be in operation;
 5. Any additional information the manufacturer deems necessary regarding hazardous conditions or public safety risks associated with the operation of the autonomous vehicle.

IV. Enforcement

For the purposes of this section, vehicle owner, registration, insurance, and contact information for the fully autonomous vehicle can be accessed through the Arizona Department of Transportation Motor Vehicle Division system. Exchange of information, issuance of citations and/or repair orders with the fully autonomous vehicle owner shall be done through the electronic mail or physical mailing address provided, which can be accessed through the MVD system.

A. Traffic Collisions

Collisions involving fully autonomous vehicles shall be investigated in accordance with Arizona Revised Statutes Title 28, Chapter 3, Article 4.

1. The fully autonomous vehicle's owner, contact information, registration, and insurance information shall be noted on the Arizona Crash Report.
2. If injury to a person, damage to any vehicle, or damage to any other property occurred in the collision, the officer shall provide the fully autonomous vehicle's owner's name, address, and insurance information to the drivers of all other vehicles, any injured parties involved in the collision, and owners of damaged property.

3. If the fully autonomous vehicle violates a traffic law resulting in the collision, the officer may issue a citation to the registered owner of the vehicle.

B. Disabled Vehicles

1. If a fully autonomous vehicle becomes disabled as a result of a collision or malfunction, and the owner is unable to provide for its custody or removal, the officer shall remove the vehicle or cause it to be removed for any of the following:
 - a. Pursuant to A.R.S. §§ 28-871, 28-872.
 - b. For seizure pursuant to law.
 - c. For obstruction of traffic.
 - d. When disabled in a gore point.
 - e. When disabled or abandoned in a hazardous location.
2. Officers shall inventory the fully autonomous vehicle prior to its removal, documenting the contents and condition of the vehicle on the *Vehicle Removal Report*.

C. Arizona Revised Statute: Title 28 Violations

1. If a fully autonomous vehicle that is operated on a roadway is not registered or does not display license plates for the current registration year, officers shall issue a citation to the vehicle owner pursuant to A.R.S. § 28-2532.
2. If a fully autonomous vehicle does not have documents on file with the MVD that show it meets the financial responsibility requirements under A.R.S. § 28-4135, officers shall issue a citation to the registered owner of the vehicle.
3. Repair orders may be issued to the registered owner of fully autonomous vehicles for equipment violations.
4. All citations and/or repair orders shall be issued to the electronic mail or physical mailing address to the person listed on file through the Arizona Department of Transportation MVD system.