

ARKANSAS REGISTER

Proposed Rule Cover Sheet



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Name of Department _____

Agency or Division Name _____

Other Subdivision or Department, If Applicable _____

Previous Agency Name, If Applicable _____

Contact Person _____

Contact E-mail _____

Contact Phone _____

Name of Rule _____

Newspaper Name _____

Date of Publishing _____

Final Date for Public Comment _____

Location and Time of Public Meeting _____

Arkansas Department of Transportation

Revised Rules for the Autonomous Vehicle Program

In 2019, the 92nd General Assembly of the State of Arkansas enacted Act 468 during the Regular Session which established the opportunity for the implementation of Autonomous Vehicle Pilot Programs by commercial entities. Act 468 required the Arkansas Highway Commission to adopt rules necessary for the implementation of a program. Act 468 established that in order for a program to be approved, information must be submitted to the Arkansas Highway Commission including the purpose of the program, proof of insurance, statement that the vehicles are capable of complying with all traffic and motor vehicle safety laws and are capable of maintaining a reasonably safe state of operation if a failure of the automated driving system occurs. Each program was allowed to operate a maximum of three autonomous vehicles on the streets and highways of the State.

In 2021, the 93rd General Assembly of the State of Arkansas enacted Act 619 during the Regular Session which amended the law concerning Autonomous Vehicle Programs. The most significant change made by Act 619 is that it allows an unlimited number of autonomous vehicles to be operated under each Autonomous Vehicle Program that has been approved by the Department.

In order to accommodate the changes made by Act 619, the adopted rules must be revised. Attached are the revised Autonomous Vehicle Program Rules, which will be promulgated in order to implement these changes.

DRAFT

ARKANSAS DEPARTMENT OF TRANSPORTATION
AUTONOMOUS VEHICLE PILOT PROGRAM RULES

I. Introduction

Pursuant to Arkansas Code Annotated (A.C.A.) § 27-51-2002, the Arkansas State Highway Commission (Commission) may approve a proposed autonomous vehicle ~~pilot~~ program submitted by a person. These rules are issued in accord with the statutory authority set out in subsection (d).

II. Definitions

(a) As used in these rules:

(1) "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 the automated driving system is limited to a specific Operational Design Domain.

(A) An Operational Design Domain (ODD) is the description of the specific operating domain(s) in which an automated function or system is designed to properly operate, including but not limited to roadway types, speed range, environmental conditions (weather, daytime/nighttime, etc.), and other domain constraints.

(2) "Autonomous vehicle" means a vehicle equipped with an automated driving system that can drive the vehicle for any duration of time without the active physical control or monitoring of a human operator.

(3) "Dynamic driving task" means the real-time operational and tactical functions required to operate a vehicle in on-road traffic, including without limitation the operational functions of:

(A) Lateral vehicle motion control via steering;

(B) Longitudinal motion control via acceleration and deceleration;

(C) Monitoring of the driving environment using object and event detection, recognition, classification, and response preparation;

(D) Object and event response execution;

(E) Maneuver planning; and

(F) Lighting and signaling operation designed to enhance conspicuity of the vehicle.

(4) "Dynamic driving task" does not include the strategic functions of:

(A) Trip scheduling; or

(B) Selection of destinations and waypoints.

(5) "Fully autonomous vehicle" means a vehicle equipped with an automated driving system designed to function as a level four-"high automation" or level five-"full

automation" system under Society of Automobile Engineers "Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles" and 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 operator.

(6) "Person" means every natural person, firm, co-partnership, association, corporation, or any political subdivision of the State of Arkansas, individually or collectively, including all counties, municipal corporations, public transit authorities, school districts, and special improvement districts.

(7) "Minimal risk condition" means a low-risk operating mode in which a fully autonomous vehicle operating without a human operator is brought 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.

(8) "Disengagement of the autonomous mode" means a deactivation of the autonomous mode when a failure of the autonomous technology is detected or when the safe operation of the vehicle requires that a human operator that is physically in the vehicle or that is remotely located takes control of the vehicle.

(9) "Human operator" means an individual who operates a vehicle by manually controlling the:

(A) Brake;

(B) Accelerator pedal;

(C) Steering wheel; or

(D) Transmission gear selection;

(10) "On-demand driverless capable vehicle network" means a transportation service network that uses a software application or other digital means to dispatch autonomous vehicles or fully autonomous vehicles for purposes of transporting persons or goods, including without limitation vehicles used for:

(A) For-hire transportation;

(B) The transportation of multiple passengers who agree to share the ride in whole or in part; or

(C) Public transportation; and

(11) "Remote operator" means an individual who is:

(A) Able to provide remote assistance to a fully autonomous vehicle in driverless operation; or

(B) Not seated in a position to manually control a vehicle's:

(i) Brake;

(ii) Accelerator pedal;

(iii) Steering wheel; or

(iv) Transmission gear selection.

III. Application

(a) Any person seeking approval for an autonomous vehicle ~~pilot~~ program shall submit to the Commission an application providing the following information:

(1) A filled application form (downloadable from <https://www.ardot.gov/AVForm>)

~~(1)~~ (2) A statement of the commercial purpose of the autonomous vehicle ~~pilot~~ program;

~~(2)~~ (3) The identification of any additional requirements for proof of insurance under the Motor Vehicle Safety Responsibility Act, A.C.A. §§ 27-19-101 et seq., and 27-22-101 et seq. Proof that the autonomous vehicle program complies with the minimum liability insurance coverage requirements for a motor carrier of property under 49 C.F.R. § 387.9 as it existed on January 1, 2021;

~~(3)~~ (4) A statement acknowledging that:

(A) The autonomous vehicle or fully autonomous vehicle is capable of complying with all applicable traffic and motor vehicle safety laws of this state and rules adopted by the Office of Motor Vehicle, including without limitation the laws and rules concerning the capability to safely negotiate railroad crossings, if applicable unless an exemption for the operation of autonomous vehicles or fully autonomous vehicles at railroad crossings has been obtained from the owner of the railroad by the person submitting the application;

(B) The fully autonomous vehicle is capable of achieving ~~reasonably safe state or~~ “a minimal risk condition” if a failure of the automated driving system occurs that renders the automated driving system unable to perform the entire dynamic driving task; ~~and~~

(C) The autonomous vehicle or fully autonomous vehicle meets Federal Motor Vehicle Safety Standards and Regulations, 49. C.F.R. Part 571 as it existed on January 1, 2021, for the vehicle's model year, except to the extent an exemption has been granted under applicable federal law, and all other applicable safety standards and performance requirements stated in state and federal law and rules adopted by the commission; and

~~(C)~~ (D) A The remote operator of a fully autonomous vehicle involved in a motor vehicle accident is capable of meeting the requirements of A.C.A. §§ 27-53-101, 27-53-102, and 27-53-105.

~~(4)~~ (5) A description of how a fully autonomous vehicle is capable of meeting the requirement of the statement required in A.C.A. § 27-51-2002 (b)(3)(C).

(6) An autonomous vehicle or fully autonomous vehicle shall be registered and titled as required under the Motor Vehicle Administration, Certificate of Title, and Antitheft Act, § 27-14-101 et seq.

IV. Application Review, Approval, Denial, or Withdrawal of Approval

(a) Upon receipt of an application, the Commission will refer it for consideration to the Director of the Arkansas Department of Transportation.

~~(b) An autonomous vehicle pilot program is automatically approved sixty days after the date of submission of the application to Commission unless the Director approves or denies the application prior to the end of the sixty days.~~

~~(c)~~ (b) The Director will:

- (1) Review the application, and approve or deny the application based upon its compliance with these rules; and
- (2) Notify the applicant of the decision in writing.

~~(d)~~ (c) The Director can withdraw approval of an autonomous vehicle pilot program at any time for any reason. If approval of an autonomous vehicle pilot program is withdrawn, the Director will notify the applicant of the decision in writing.

~~(e)~~ (d) The applicable administrative adjudication provisions of the Arkansas Administrative Procedure Act found in A.C.A. §§ 25-15-208 to -210, and §§ 25-15-212 to -214, shall apply to a decision of the Director to deny an application or withdraw approval of an application.

V. Operational Allowances and Limitations

(a) Operation of on-demand driverless capable vehicle network.

- (1) A person may operate an on-demand driverless capable vehicle network in the state.
- (2) An on-demand driverless capable vehicle network may connect a passenger or goods to a fully autonomous vehicle either exclusively or as part of a digital network that also connects passengers or goods to human drivers who provide transportation services in vehicles that are not fully autonomous vehicles.

~~(a) Upon approval of an autonomous vehicle pilot program, a person may operate a maximum of three autonomous vehicles or fully autonomous vehicles simultaneously on the streets and highways of this state;~~

~~(b) During the first six months of an approved autonomous vehicle pilot program, a human operator will be required to be physically present in the vehicle while it is operating on the streets and highways of this State;~~

~~(c) After completion of the first six months of the autonomous vehicle pilot program, an application may be submitted to the Commission to remove the requirement of a human operator to be physically present in the vehicle while it is operating on the streets and highways of this State providing the following information:~~

- ~~(1) A copy of the approved application for the autonomous vehicle pilot program;~~
- ~~(2) Total number of trips accomplished;~~
- ~~(3) Total number of miles traveled;~~
- ~~(4) Total number of times a disengagement of the autonomous mode occurred;~~
- ~~(5) A copy of all law enforcement accident reports that have involved an autonomous vehicle operating under the autonomous vehicle pilot program or a statement that no accidents have occurred that involved an autonomous vehicle operating under the autonomous vehicle pilot program; and~~

(d) The review, approval, denial, or withdrawal of approval of the application to remove the requirement of a human operator to be physically present in the vehicle will be handled as noted in Section IV of these rules.

(e) Upon approval of an autonomous vehicle ~~pilot~~ program that does not require a human operator to be physically present in the vehicle, a person may operate autonomous vehicles or fully autonomous vehicles that are not equipped with the following:

- (1) Seat belts, unless transporting persons as required by § 27-37-701 et seq.;
- (2) A steering wheel; and
- (3) A rearview mirror.

(f) If a vehicle operating under an autonomous vehicle ~~pilot~~ program is involved in a serious injury or fatal accident, the following actions will be taken:

- (1) The person responsible for the autonomous vehicle ~~pilot~~ program will notify the Director immediately;
- (2) All vehicles operating under the autonomous vehicle ~~pilot~~ program will cease operations until a review of the accident can be completed;
- (3) The person responsible for the autonomous vehicle ~~pilot~~ program will submit the following to the Director:
 - (A) A copy of the accident report;
 - (B) A report of actions taken by the human operator that was physically located within the vehicle or actions taken by the human operator that was remotely located or a statement that no actions were taken by a human operator;
 - (C) A description of actions taken to prevent subsequent accidents;
 - (D) A request to restart operations of the autonomous vehicle ~~pilot~~ program, if the person responsible for the autonomous vehicle ~~pilot~~ program desires to do so;
- (4) The review, approval, or denial of the application to restart the autonomous vehicle ~~pilot~~ program will be handled as noted in Section IV of these rules.

VI. Reporting

(a) A report will be submitted to the Director by January 31st for the previous calendar year's operations providing the following information:

- (1) A copy of the approved application for the autonomous vehicle ~~pilot~~ program;
- (2) Total number of trips accomplished;
- (3) Total number of miles traveled;
- (4) Total number of times a disengagement of the autonomous mode occurred; and
- (5) A copy of all law enforcement accident reports that have involved an autonomous vehicle operating under the autonomous vehicle ~~pilot~~ program or a statement that no accidents have occurred that involved an autonomous vehicle operating under the autonomous vehicle ~~pilot~~ program.

QUESTIONNAIRE
FOR FILING PROPOSED RULES WITH THE
ARKANSAS LEGISLATIVE COUNCIL

DEPARTMENT/AGENCY _____
DIVISION _____
DIVISION DIRECTOR _____
CONTACT PERSON _____
ADDRESS _____
PHONE NO. _____ FAX NO. _____ E-MAIL _____
NAME OF PRESENTER AT COMMITTEE MEETING _____
PRESENTER E-MAIL _____

INSTRUCTIONS

- A. Please make copies of this form for future use.
- B. Please answer each question completely using layman terms. You may use additional sheets if necessary.
- C. If you have a method of indexing your rules, please give the proposed citation after "Short Title of this Rule" below.
- D. Rule" below.
- E. Submit two (2) copies of the Questionnaire and Financial Impact Statement attached to the front of two (2) copies of the proposed rule and required documents. Mail or deliver to:

Jessica C. Sutton
Administrative Rules Review Section
Arkansas Legislative Council
Bureau of Legislative Research
One Capitol Mall, 5th Floor
Little Rock, AR 72201

- 1. What is the short title of this rule?

- 2. What is the subject of the proposed rule?

- 3. Is this rule required to comply with a federal statute, rule, or regulation? Yes No
If yes, please provide the federal rule, regulation, and/or statute citation.

- 4. Was this rule filed under the emergency provisions of the Administrative Procedure Act?
Yes No
If yes, what is the effective date of the emergency rule? _____

When does the emergency rule expire? _____

Will this emergency rule be promulgated under the permanent provisions of the Administrative Procedure Act? Yes No

5. Is this a new rule? Yes No If yes, please provide a brief summary explaining the rule.

Does this repeal an existing rule? Yes No If yes, a copy of the repealed rule is to be included with your completed questionnaire. If it is being replaced with a new rule, please provide a summary of the rule giving an explanation of what the rule does.

Is this an amendment to an existing rule? Yes No If yes, please attach a mark-up showing the changes in the existing rule and a summary of the substantive changes. Note: The summary should explain what the amendment does, and the mark-up copy should be clearly labeled “mark-up.”

6. Cite the state law that grants the authority for this proposed rule? If codified, please give the Arkansas Code citation.

7. What is the purpose of this proposed rule? Why is it necessary?

8. Please provide the address where this rule is publicly accessible in electronic form via the Internet as required by Arkansas Code § 25-19-108(b).

9. Will a public hearing be held on this proposed rule? Yes No If yes, please complete the following:

Date: _____

Time: _____

Place: _____

10. When does the public comment period expire for permanent promulgation? (Must provide a date.)

11. What is the proposed effective date of this proposed rule? (Must provide a date.)

12. Please provide a copy of the notice required under Ark. Code Ann. § 25-15-204(a), and proof of the publication of said notice. _____

13. Please provide proof of filing the rule with the Secretary of State as required pursuant to Ark. Code Ann. § 25-15-204(e). _____

14. Please give the names of persons, groups, or organizations that you expect to comment on these rules? Please provide their position (for or against) if known.

FINANCIAL IMPACT STATEMENT

PLEASE ANSWER ALL QUESTIONS COMPLETELY

DEPARTMENT _____
DIVISION _____
PERSON COMPLETING THIS STATEMENT _____
TELEPHONE NO. _____ FAX NO. _____ EMAIL: _____

To comply with Ark. Code Ann. § 25-15-204(e), please complete the following Financial Impact Statement and file two (2) copies with the Questionnaire and proposed rules.

SHORT TITLE OF THIS RULE

1. Does this proposed, amended, or repealed rule have a financial impact? Yes No

2. Is the rule based on the best reasonably obtainable scientific, technical, economic, or other evidence and information available concerning the need for, consequences of, and alternatives to the rule?
Yes No

3. In consideration of the alternatives to this rule, was this rule determined by the agency to be the least costly rule considered? Yes No

If an agency is proposing a more costly rule, please state the following:

- a) How the additional benefits of the more costly rule justify its additional cost;

- b) The reason for adoption of the more costly rule;

- c) Whether the more costly rule is based on the interests of public health, safety, or welfare, and if so, please explain; and

- d) Whether the reason is within the scope of the agency's statutory authority, and if so, please explain.

4. If the purpose of this rule is to implement a federal rule or regulation, please state the following:

a) What is the cost to implement the federal rule or regulation?

Current Fiscal Year

Next Fiscal Year

General Revenue _____
Federal Funds _____
Cash Funds _____
Special Revenue _____
Other (Identify) _____

General Revenue _____
Federal Funds _____
Cash Funds _____
Special Revenue _____
Other (Identify) _____

Total _____

Total _____

b) What is the additional cost of the state rule?

Current Fiscal Year

Next Fiscal Year

General Revenue _____
Federal Funds _____
Cash Funds _____
Special Revenue _____
Other (Identify) _____

General Revenue _____
Federal Funds _____
Cash Funds _____
Special Revenue _____
Other (Identify) _____

Total _____

Total _____

5. What is the total estimated cost by fiscal year to any private individual, entity and business subject to the proposed, amended, or repealed rule? Identify the entity(ies) subject to the proposed rule and explain how they are affected.

Current Fiscal Year

Next Fiscal Year

\$ _____

\$ _____

6. What is the total estimated cost by fiscal year to state, county, and municipal government to implement this rule? Is this the cost of the program or grant? Please explain how the government is affected.

Current Fiscal Year

Next Fiscal Year

\$ _____

\$ _____

7. With respect to the agency's answers to Questions #5 and #6 above, is there a new or increased cost or obligation of at least one hundred thousand dollars (\$100,000) per year to a private individual, private entity, private business, state government, county government, municipal government, or to two (2) or more of those entities combined?
Yes No

If YES, the agency is required by Ark. Code Ann. § 25-15-204(e)(4) to file written findings at the time of filing the financial impact statement. The written findings shall be filed simultaneously with the financial impact statement and shall include, without limitation, the following:

- (1) a statement of the rule's basis and purpose;
- (2) the problem the agency seeks to address with the proposed rule, including a statement of whether a rule is required by statute;
- (3) a description of the factual evidence that:
 - (a) justifies the agency's need for the proposed rule; and
 - (b) describes how the benefits of the rule meet the relevant statutory objectives and justify the rule's costs;
- (4) a list of less costly alternatives to the proposed rule and the reasons why the alternatives do not adequately address the problem to be solved by the proposed rule;
- (5) a list of alternatives to the proposed rule that were suggested as a result of public comment and the reasons why the alternatives do not adequately address the problem to be solved by the proposed rule;
- (6) a statement of whether existing rules have created or contributed to the problem the agency seeks to address with the proposed rule and, if existing rules have created or contributed to the problem, an explanation of why amendment or repeal of the rule creating or contributing to the problem is not a sufficient response; and
- (7) an agency plan for review of the rule no less than every ten (10) years to determine whether, based upon the evidence, there remains a need for the rule including, without limitation, whether:
 - (a) the rule is achieving the statutory objectives;
 - (b) the benefits of the rule continue to justify its costs; and
 - (c) the rule can be amended or repealed to reduce costs while continuing to achieve the statutory objectives.

Summary of Proposed Amendment to the Autonomous Vehicle Pilot Program Rules

Pursuant to Ark. Code Ann. § 27-51-2002(d), the Arkansas Highway Commission proposes to amend the Autonomous Vehicle Pilot Program Rules. This amendment will remove limitations that currently exist within the ‘Pilot’ program set out the process for the public to apply for and obtain approval to operate autonomous vehicles pursuant to the requirements of Arkansas law.

The rules currently define terms used in the law, such as “automated driving system”, or “dynamic driving task”, and set out the information required to be submitted or acknowledged as part of the application process. The proposed amendment will define terms used in the law such as, “human operator”, “on-demand driverless capable vehicle network” and “remote operator”. The amendment also changes requirements such that autonomous vehicles must comply with the minimum liability insurance coverage requirements for a motor carrier of property under 49 C.F.R. § 387.9 as it existed on January 1, 2021.

The proposed amendment requires that the autonomous vehicle or fully autonomous vehicle meets Federal Motor Vehicle Safety Standards and Regulations, 49. C.F.R. Part 571 as it existed on January 1, 2021, for the vehicle's model year, except to the extent an exemption has been granted under applicable federal law, and all other applicable safety standards and performance requirements stated in state and federal law and rules adopted by the commission.

In addition, the proposed amendment requires autonomous vehicles or fully autonomous vehicles to be registered and titled as required under the Motor Vehicle Administration, Certificate of Title, and Antitheft Act, § 27-14-101 et seq.

The proposed amendment will also allow a person to operate an on-demand driverless capable vehicle network in the state.