



## 104TH GENERAL ASSEMBLY

### State of Illinois

2025 and 2026

HB4789

by Rep. Michael J. Kelly

#### SYNOPSIS AS INTRODUCED:

New Act

Creates the Automated Driving Systems Development Act. Provides that the operation of highly automated vehicles participating in an automated vehicle pilot project is subject to all applicable federal and State laws. Sets forth eligibility requirements for participation in an automated vehicle pilot project. Establishes the application process for participation in an automated vehicle pilot project. Creates a review committee within the Department of Transportation. Requires the Secretary of State to develop a driving test to evaluate the capability of highly automated vehicles to safely operate on State roads. Sets forth permit requirements and requirements concerning the suspension, revocation, and reinstatement of a permit. Creates reporting and data sharing requirements. Contains other provisions. Effective immediately.

LRB104 19907 LNS 33357 b

1 AN ACT concerning transportation.

2 **Be it enacted by the People of the State of Illinois,**  
3 **represented in the General Assembly:**

4 Section 1. Short title. This Act may be cited as the  
5 Automated Driving Systems Development Act.

6 Section 5. Definitions. As used in this Act:

7 "Automated driving system" means hardware and software  
8 that are collectively capable of performing the entire dynamic  
9 driving task on a sustained basis, regardless of whether  
10 limited to a specific operational design domain.

11 "Autonomous vehicle operator" means a person or business  
12 operating highly automated vehicles on public roads and  
13 highways of this State in connection with an automated vehicle  
14 pilot project.

15 "Automated vehicle pilot project" means a pilot or  
16 demonstration project that is performed under this Act and  
17 that authorizes eligible autonomous vehicle operators to make  
18 a highly automated vehicle available to the public for testing  
19 on the public roads and highways of this State.

20 "Crash" means any physical contact between the highly  
21 automated vehicle and any object that results in damage to the  
22 object or the vehicle or any physical contact between the  
23 highly automated vehicle and another vehicle, person, mammal,

1 or reptile.

2 "Dynamic driving task" means all of the real-time  
3 operational and tactical functions required to operate a  
4 vehicle in on-road traffic, excluding the strategic functions,  
5 such as trip scheduling and selection of destinations and  
6 waypoints. "Dynamic driving task" includes, without  
7 limitation:

8 (1) lateral vehicle motion control via steering;

9 (2) longitudinal motion control via acceleration and  
10 deceleration;

11 (3) monitoring the driving environment via object and  
12 event detection, recognition, classification, and response  
13 preparation;

14 (4) object and event response execution;

15 (5) maneuver planning; and

16 (6) enhancing conspicuity via lighting, signaling, and  
17 gesturing.

18 "Evaluation data" means any data necessary to support the  
19 testing, development, legal and regulatory compliance,  
20 operation, safety, and improvement of automated driving  
21 systems or highly automated vehicles, including, but not  
22 limited to, real-time perception, crash avoidance, and sensor,  
23 environmental, traffic, communication, network, camera, and  
24 incident data.

25 "Highly automated vehicle" means a motor vehicle equipped  
26 with an automated driving system that is designed to function

1 without a human driver in the vehicle at a level of driving  
2 automation of 4 or 5 as specified in the Society of Automotive  
3 Engineers International Standard J3016 (April 2021).

4 "Incident report" means a report containing information on  
5 collisions and other incidents as described in Section 35.

6 "Operational design domain" means the specific operating  
7 conditions under which a given automated driving system is  
8 specifically designed to function, including, but not limited  
9 to, geographic area, roadway type, speed range, environmental  
10 conditions, and other domain constraints.

11 "Permit to participate in an automated vehicle pilot  
12 project" means a permit issued by the Secretary of State  
13 allowing for an autonomous vehicle operator to operate the  
14 highly automated vehicle on State roadways within the  
15 operational design domain as described on the permit.

16 "Public information portal" means a publicly available  
17 website maintained by an autonomous vehicle operator,  
18 containing all necessary disclosures required by this Act.

19 "Processing" or "process" means any operation or set of  
20 operations that is performed on data or on sets of data,  
21 whether by automated means, including, but not limited to,  
22 collection, recording, organization, structuring, storage,  
23 adaptation or alteration, retrieval, consultation, use,  
24 disclosure by transmission, dissemination or otherwise making  
25 available, alignment or combination, restriction, erasure, or  
26 destruction.

1 "Review committee" means the committee formed by the  
2 Department of Transportation under Section 20.

3 Section 10. Automated vehicle pilot project eligibility.

4 (a) The operation of highly automated vehicles  
5 participating in an automated vehicle pilot project is subject  
6 to all applicable federal and State laws.

7 If the highly automated vehicle is used for transporting  
8 persons in a manner consistent with a taxi, livery, or  
9 ridesharing service, then all applicable municipal ordinances  
10 which govern taxi, livery, and ridesharing services set forth  
11 by the municipalities contained within the operational design  
12 domain shall apply to the autonomous vehicle operator and  
13 highly automated vehicle. This provision is applicable  
14 regardless of whether money is exchanged for the service  
15 provided. This provision does not apply if the person being  
16 transported is an employee of the autonomous vehicle operator.

17 (b) An autonomous vehicle operator is eligible to apply  
18 for participation in an automated vehicle pilot project if the  
19 highly automated vehicle to be operated meets all applicable  
20 certificate of title, registration, licensing, and insurance  
21 requirements of the State.

22 (c) An autonomous vehicle operator shall develop for each  
23 manufacturer and model of highly automated vehicle:

24 (1) a law enforcement interaction plan, which shall  
25 include:

1 (A) instructions on how to communicate with the  
2 autonomous vehicle operator or its employees,  
3 including providing a contact telephone number for the  
4 autonomous vehicle operator or its employees;

5 (B) instructions on where, in the vehicle, to  
6 obtain autonomous vehicle operator information,  
7 vehicle registration, and proof of insurance in the  
8 event of a crash or traffic violation involving the  
9 vehicle;

10 (C) instructions on how to safely remove the  
11 vehicle from the roadway; and

12 (D) any additional information the autonomous  
13 vehicle operator deems necessary regarding hazardous  
14 conditions or public safety risks associated with the  
15 operation of the highly automated vehicle;

16 (2) a first responder and firefighting plan, which  
17 shall include:

18 (A) schematics showing the routing of electrical  
19 cables throughout the vehicle which may cause death or  
20 serious injury if contact is made with them while  
21 energized;

22 (B) information regarding the chemical composition  
23 and location of any battery storage present on the  
24 vehicle along with hazards presented by those  
25 batteries;

26 (C) step-by-step instructions on how to disconnect

1 and render electrical cables safe if possible, or a  
2 warning if it is not possible; and

3 (D) the recommended extinguishing agent for  
4 suppressing any fire that originates from or  
5 encompasses the vehicle.

6 (d) The highly automated vehicle must meet safety  
7 standards set forth for passenger vehicles by the National  
8 Highway Traffic Safety Administration, and emissions  
9 requirements set forth by the United States Environmental  
10 Protection Agency.

11 (e) An autonomous vehicle operator must publish the  
12 following on a public information portal prior to applying for  
13 participation in an automated vehicle pilot project:

14 (1) a contact form or contact information that allows  
15 any law enforcement agency in this State to contact the  
16 autonomous vehicle operator and receive a copy of all law  
17 enforcement interaction plans that pertain to highly  
18 automated vehicles which the autonomous vehicle operator  
19 intends to operate in this State; and

20 (2) all first responder and firefighting plans that  
21 pertain to highly automated vehicles which the autonomous  
22 vehicle operator intends to operate in this State.

23 Section 15. Application for participation in an automated  
24 vehicle pilot project.

25 (a) An autonomous vehicle operator shall submit the

1 following to the Secretary of State for each highly automated  
2 vehicle that the autonomous vehicle operator intends to  
3 operate:

4 (1) a written description of the highly automated  
5 vehicle that includes, but is not limited to,  
6 manufacturer, model, model year, color, gross vehicle  
7 weight, the maximum number of passengers the vehicle will  
8 carry, and the name and version number of the software of  
9 the automated driving system;

10 (2) a written statement acknowledging all of the  
11 following:

12 (A) when required by federal law, the highly  
13 automated vehicle is in compliance with all applicable  
14 federal laws and federal motor vehicle safety  
15 standards and bears the required certification labels,  
16 including reference to any applicable exemption  
17 granted by the National Highway Traffic Safety  
18 Administration;

19 (B) if a failure of the automated driving system  
20 occurs that renders that system unable to perform the  
21 entire dynamic driving task relevant to its intended  
22 operational design domain, the vehicle will achieve a  
23 minimal risk condition, which is a stable, stopped  
24 condition to which an employee of the autonomous  
25 vehicle operator or an automated driving system may  
26 bring a vehicle in order to reduce the risk of a crash;

1 (C) the highly automated vehicle is capable of  
2 complying with all applicable traffic and motor  
3 vehicle safety laws and the autonomous vehicle  
4 operator will be issued a traffic citation or other  
5 applicable penalty if the vehicle fails to comply with  
6 applicable traffic or motor vehicle laws when the  
7 automated driving system is engaged;

8 (D) when the highly automated vehicle is under the  
9 control of an employee or representative of the  
10 autonomous vehicle operator, and is physically present  
11 in the vehicle, the employee or representative will be  
12 issued a traffic citation or other applicable penalty  
13 if the vehicle fails to comply with applicable traffic  
14 or motor vehicle laws; and

15 (E) if the highly automated vehicle is involved in  
16 a crash, the autonomous vehicle operator shall be  
17 considered the financially responsible party for all  
18 liability issues and insurance settlement processes,  
19 regardless of whether the automated driving system was  
20 engaged;

21 (3) proof of comprehensive automotive insurance  
22 listing the autonomous vehicle operator as the covered  
23 party with minimum coverage amounts of \$3,000,000 per  
24 instance of personal injury up to \$6,000,000 overall and  
25 \$1,000,000 per instance of property damage up to  
26 \$2,000,000 overall;

1           (4) a description of the desired operational design  
2 domain for the automated vehicle pilot project, including,  
3 but not limited to:

4           (A) a full description via boundary coordinates  
5 and illustrated map of the desired geographic  
6 boundaries in which the highly automated vehicle will  
7 operate. These boundaries must fall entirely within  
8 Cook, St. Clair, and Madison Counties;

9           (B) the desired weekly schedule of operation of  
10 the highly automated vehicle, specifying start and  
11 finish each day of a standard 7-day week;

12           (C) the desired weather conditions that the highly  
13 automated vehicle would operate in, including cloud  
14 cover, wind speed, and precipitation types and  
15 amounts;

16           (D) the maximum speed at which the highly  
17 automated vehicle will operate; and

18           (E) the type of roadways that the highly automated  
19 vehicle will operate on, including descriptions of the  
20 type of road along with the surface conditions and  
21 maximum camber of roadway;

22           (5) the preferred start date and end date of the  
23 automated vehicle pilot project; and

24           (6) an application fee of \$2,500 payable to the  
25 Secretary of State.

1 Section 20. Review committee.

2 (a) The Department of Transportation shall form a standing  
3 review committee and develop administrative rules to  
4 facilitate the review committee's operation. The review  
5 committee shall meet at least once per month once the members  
6 have all been seated. Membership shall consist of the  
7 following:

8 (1) 2 members from the Department of Transportation,  
9 appointed by Department of Transportation staff;

10 (2) 2 members from the Secretary of State, appointed  
11 by Secretary of State staff;

12 (3) one member from the Illinois State Police,  
13 appointed by the Director of the Illinois State Police;

14 (4) one member from an alliance representing the  
15 automotive industry, appointed by the Department of  
16 Transportation via an application process that shall only  
17 be open to such alliances;

18 (5) one member from an association representing  
19 bicyclists and pedestrians, appointed by the Department of  
20 Transportation via an application process that shall only  
21 be open to such associations;

22 (6) one member from a State motorcycle rights  
23 organization, appointed by the Department of  
24 Transportation via an application process that shall only  
25 be open to such organizations;

26 (7) one member from a public transit labor union,

1 appointed by the Department of Transportation via an  
2 application process that shall only be open to such  
3 unions;

4 (8) one member from a transportation union  
5 representing CDL drivers, appointed by the Department of  
6 Transportation via an application process that shall only  
7 be open to such unions; and

8 (9) one member from an organization representing  
9 trucking companies, appointed by the Department of  
10 Transportation via an application process that shall only  
11 be open to such organizations.

12 (b) The review committee shall review all applications for  
13 participation in an automated vehicle pilot project sent to  
14 the review committee by the Secretary of State and return a  
15 recommendation within 60 days for approval or denial of the  
16 application in whole, or approval of the application with a  
17 recommended modification of the operational design domain.

18 (c) The review committee shall review all incident reports  
19 sent to them by autonomous vehicle operators and make  
20 recommendations to the Secretary of State as to any corrective  
21 actions, up to and including suspension, that may need to be  
22 taken on affected permits to participate in an automated  
23 vehicle pilot project.

24 (d) The Department of Transportation shall maintain an  
25 email address for the public to submit complaints about the  
26 operation of highly automated vehicles in this State,

1 including any photos or videos they wish to submit.

2 (e) The review committee shall review complaints submitted  
3 by the public and make recommendations to the Secretary of  
4 State as to any corrective actions, up to and including  
5 revocation, that may need to be taken on affected permits to  
6 participate in an automated vehicle pilot project.

7 Section 25. Testing, permit approval, suspension,  
8 reinstatement, and revocation.

9 (a) The Secretary of State shall develop a driving test to  
10 evaluate the capability of highly automated vehicles to safely  
11 operate on State roads. The test shall have similar standards  
12 to the testing required to qualify for a Class D driver's  
13 license and be conducted in a manner that reduces the risk to  
14 human life either through a closed-circuit course or tightly  
15 controlled on-road test with the ability to shut the vehicle  
16 down instantly.

17 (b) The Secretary of State may issue a permit for an  
18 autonomous vehicle operator to participate in an automated  
19 vehicle pilot project after the following conditions are met:

20 (1) the highly automated vehicle described in the  
21 application for permit has successfully completed a  
22 driving test developed by the Secretary of State under  
23 subsection (a) and the automated driving system was  
24 engaged for the duration of the test; and

25 (2) the Secretary of State has received a

1 recommendation to approve the application for a permit to  
2 participate in an automated vehicle pilot project either  
3 in whole or with modifications to the operational design  
4 domain.

5 (c) A permit to participate in an automated vehicle pilot  
6 project shall at least include the following:

7 (1) a unique permit number to be filed and tracked by  
8 the Secretary of State;

9 (2) the description of the highly automated vehicle as  
10 submitted by the autonomous vehicle operator;

11 (3) a description of the operational design domain as  
12 recommended by the review committee; and

13 (4) a unique number to be displayed on the highly  
14 automated vehicle consisting of at least one letter and 4  
15 numbers.

16 (d) The Secretary of State shall suspend an autonomous  
17 vehicle operator's permit to participate in an automated  
18 vehicle pilot project when any of the following conditions are  
19 met:

20 (1) the Secretary of State, the Illinois State Police,  
21 or the Department of Transportation has determined the  
22 continued operation of the highly automated vehicle under  
23 the conditions of the permit pose a hazard to public  
24 safety; or

25 (2) a recommendation to suspend the permit has been  
26 received from the review committee.

1           (e) The Secretary of State shall provide a notice  
2 suspending the permit to participate in an automated vehicle  
3 pilot project to the autonomous vehicle operator which shall  
4 include a brief summary of the determination and evidence  
5 supporting the determination.

6           (f) An autonomous vehicle operator shall have 30 days from  
7 the receipt of a notice of suspension to ensure that the issues  
8 identified in the notice are corrected and provide to the  
9 Secretary of State, in the form and manner prescribed by the  
10 Secretary of State, a certification acknowledging that the  
11 issues identified in the notice have been corrected. A  
12 certification provided under this subsection must include an  
13 explanation of how the issues identified by the notice have  
14 been corrected, such as identifying specific adjustments made  
15 to the automated driving system or repairs made to the highly  
16 automated vehicle.

17           (g) If the autonomous vehicle operator fails to correct  
18 the issues within the 30-day timeframe, or if the Secretary of  
19 State determines that the corrective actions taken are  
20 insufficient, then the permit to participate in an automated  
21 vehicle pilot project is revoked. Such determinations may be  
22 made with or without recommendations from the review  
23 committee.

24           (h) If the Secretary of State determines that the  
25 corrective actions taken by the autonomous vehicle operator  
26 are sufficient, then the permit to participate in an automated

1 vehicle pilot project is reinstated. Such determinations may  
2 be made with or without recommendations from the review  
3 committee.

4 (i) If a permit to participate in an automated vehicle  
5 pilot project is suspended more than 2 times during its  
6 duration, then the permit is revoked.

7 (j) Operation of a highly automated vehicle without a  
8 valid permit to participate in an automated vehicle pilot  
9 project shall result in the revocation of all of the  
10 autonomous vehicle operator's permits to participate in an  
11 automated vehicle pilot project and prohibits the autonomous  
12 vehicle operator from being issued a new permit for at least 18  
13 months.

14 Section 30. Automated vehicle pilot project commencement;  
15 operation.

16 (a) An automated vehicle pilot project may be commenced by  
17 an autonomous vehicle operator after the start date listed on  
18 the permit to participate in an automated vehicle pilot  
19 project, and during the times specified by the operational  
20 design domain on the permit.

21 (b) An autonomous vehicle operator may engage in multiple  
22 automated vehicle pilot projects as long as the autonomous  
23 vehicle operator has a valid permit for each project.

24 (c) A highly automated vehicle operated under the terms of  
25 a valid permit to participate in an automated vehicle pilot

1 project shall display the unique number described in paragraph  
2 (4) of subsection (c) of Section 25 in black vinyl or painted  
3 lettering at least 1.5 inches in height in a conspicuous spot  
4 on the vehicle above the right front tire, rear left tire, and  
5 on the rear of the vehicle at least 36 inches above the ground.

6 (d) An autonomous vehicle operator may charge fees to  
7 members of the public for passenger trips made in connection  
8 with each automated vehicle pilot project.

9 (e) Operation of a highly automated vehicle outside of the  
10 operational design domain described on the permit to  
11 participate in an automated vehicle pilot project shall result  
12 in revocation of the permit.

13 (f) A copy of the permit to participate in an automated  
14 vehicle pilot project must be present in the highly automated  
15 vehicle and available for inspection by law enforcement.

16 Section 35. Required reporting and data sharing.

17 (a) An autonomous vehicle operator shall publish a list of  
18 each highly automated vehicle under the autonomous vehicle  
19 operator's operation which is operating under the conditions  
20 of a permit to participate in an automated vehicle pilot  
21 project on a public information portal. The first publishing  
22 of a vehicle's information must occur within 3 days of the  
23 start date of the permit and then updated on a semi-monthly  
24 basis afterward. The list shall remain published after the end  
25 date listed on the permit to participate in an automated

1 vehicle pilot project and shall include:

2 (1) a description of the highly automated vehicle  
3 covered by each permit, including the color, model year,  
4 manufacturer, model, unique number assigned under  
5 paragraph (4) of subsection (c) of Section 25, and a  
6 picture of the vehicle;

7 (2) the odometer reading of the vehicle at the  
8 beginning of operation under the permit to participate in  
9 an automated vehicle pilot project, and the current  
10 odometer reading taken within the last 14 days;

11 (3) the number of crashes the vehicle has been  
12 involved in to date;

13 (4) the number of incidents as defined in subsection  
14 (b) that the vehicle has been involved in to date;

15 (5) the current software title and version number  
16 being used to serve as part of the automated driving  
17 system; and

18 (6) a description of the operational design domain as  
19 listed on the permit to participate in an automated  
20 vehicle pilot project.

21 (b) An autonomous vehicle operator shall publish an  
22 incident report to the public information portal within 5 days  
23 and send a copy of the report to the Secretary of State and the  
24 review committee within 5 days each time one of the following  
25 occurs:

26 (1) The autonomous driving system on the highly

1 automated vehicle is disengaged due to intervention of  
2 operators either present in the vehicle or remotely.  
3 Disengagements that occur to facilitate vehicle  
4 maintenance and storage do not apply to this Section.

5 (2) The highly automated vehicle is placed in a  
6 minimum risk condition. The incident report shall include  
7 a description of the vehicle as listed in paragraph (1) of  
8 subsection (a), the odometer reading of the vehicle at the  
9 time of the incident, a description of the events that  
10 caused the incident, a description of actions and  
11 revisions taken by the autonomous vehicle operator to  
12 mitigate a repeat of the incident, and the current  
13 software title and version number being used to serve as  
14 part of the automated driving system at the time of the  
15 incident.

16 (c) An autonomous vehicle operator shall publish a crash  
17 report to the public information portal within 5 days and send  
18 a copy of the report to the Secretary of State and the review  
19 committee within 5 days each time the highly automated vehicle  
20 is involved in a crash. The crash report shall include a  
21 description of the vehicle as listed in paragraph (1) of  
22 subsection (a), the odometer reading of the vehicle at the  
23 time of the crash, a description of the events that caused the  
24 crash, a description of actions and revisions taken by the  
25 autonomous vehicle operator to mitigate future crashes, the  
26 current software title and version number being used to serve

1 as part of the automated driving system at the time of the  
2 crash, and a description of other property, mammals, reptiles,  
3 or vehicles involved in the crash. If the crash involved  
4 another vehicle, the description shall include the model year,  
5 manufacturer, model, and type of vehicle involved.

6 (d) When a highly automated vehicle covered by this Act is  
7 involved in a crash, the autonomous vehicle operator shall  
8 publish to the public information portal:

9 (1) a video file showing all video captured by the  
10 cameras on the vehicle for a period of time beginning 15  
11 minutes prior to the crash and ending 30 minutes after the  
12 crash. The video shall be titled with the date of the crash  
13 and the unique number of the highly automated vehicle as  
14 required in paragraph (4) of subsection (c) of Section 25;  
15 and

16 (2) a video representation of all sensor data used in  
17 detecting other objects, vehicles, and persons. The video  
18 shall clearly show when an object, vehicle, or person is  
19 detected or not detected. The video shall begin at least  
20 15 minutes prior to the crash and end no sooner than 30  
21 minutes after the crash. The video shall be titled with  
22 the date of the crash and the unique number of the highly  
23 automated vehicle as required in paragraph (4) of  
24 subsection (c) of Section 25.

25 (e) When a highly automated vehicle covered by this Act is  
26 involved in a crash which results in damage to property or

1 personal injury, the autonomous vehicle operator shall provide  
2 the following to the owner of the property, the person who has  
3 been injured, or the owner's or person's representative:

4 (1) a video file showing all video captured by the  
5 cameras on the vehicle for a period of one hour prior to  
6 the crash and ending one hour after the crash;

7 (2) a video representation of all sensor data used in  
8 detecting other objects, vehicles, and persons. The video  
9 shall clearly show when an object, vehicle, or person is  
10 detected or not detected. The video shall begin at least  
11 one hour prior to the crash and end no sooner than one hour  
12 after the crash; and

13 (3) a sworn statement that both videos accurately  
14 portray the events leading up to and after the crash and  
15 the data involved has not been manipulated beyond what was  
16 necessary to provide the videos.

17 Section 40. Evaluation data.

18 (a) As part of and to further the purposes of an automated  
19 vehicle pilot project, an autonomous vehicle operator is  
20 explicitly authorized to process evaluation data. An  
21 autonomous vehicle operator shall implement, maintain, and  
22 enforce for as long as the automated vehicle pilot project is  
23 in effect or as long as an autonomous vehicle operator stores  
24 or otherwise processes evaluation data, whichever is later,  
25 appropriate technical and organizational measures to ensure a

1 level of security appropriate to the risks presented by the  
2 processing of the evaluation data.

3 (b) An autonomous vehicle operator is not allowed to sell  
4 or share any evaluation data to any party, nor is an autonomous  
5 vehicle operator allowed to use it for any purpose other than  
6 developing an autonomous vehicle operator's own automated  
7 driving systems.

8 (c) An autonomous vehicle operator is not allowed to  
9 provide access to an autonomous vehicle operator's sensor or  
10 camera feeds to any law enforcement, federal agency, third  
11 party, business, or other entity except as provided for in  
12 this Section.

13 (d) An autonomous vehicle operator shall publish  
14 evaluation data as needed to satisfy the requirements of  
15 Section 35. This data must have any identifying features and  
16 information of other parties either blurred or redacted.

17 (e) All data gathered and processed under this Act shall  
18 comply with existing State laws governing data security and  
19 privacy rights.

20 Section 45. Exclusive regulation. This Act exclusively  
21 governs the operation of automated vehicle pilot projects in  
22 this State.

23 Section 99. Effective date. This Act takes effect upon  
24 becoming law.