

1.1 Senator moves to amend the delete-everything amendment (SCS3988A-1)
1.2 to S.F. No. 3988 as follows:

1.3 Page 20, after line 6, insert:

1.4 "Sec. 19. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
1.5 to read:

1.6 Subd. 3b. **Automated driving system.** "Automated driving system" means the hardware
1.7 and software that are collectively capable of performing the entire dynamic driving task on
1.8 a sustained basis, regardless of whether the dynamic driving task is limited to a specific
1.9 operational design domain.

1.10 Sec. 20. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
1.11 to read:

1.12 Subd. 3c. **Autonomous vehicle.** "Autonomous vehicle" means a motor vehicle equipped
1.13 with an automated driving system designed to function as a level 4 or 5 system under SAE
1.14 J3016.

1.15 Sec. 21. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
1.16 to read:

1.17 Subd. 24a. **Dynamic driving task.** (a) "Dynamic driving task" means the real-time
1.18 operational and tactical functions required to operate a vehicle in on-road traffic, including
1.19 but not limited to:

1.20 (1) lateral vehicle motion control via steering;

1.21 (2) longitudinal motion control via acceleration and deceleration;

1.22 (3) monitoring the driving environment via object and event detection, recognition,
1.23 classification, and response preparation;

1.24 (4) object and event response execution;

1.25 (5) maneuver planning; and

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

1.27 (b) Dynamic driving task does not include strategic functions such as trip scheduling
1.28 and selection of destinations and waypoints.

2.1 Sec. 22. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
2.2 to read:

2.3 Subd. 24b. **Dynamic driving task fallback.** "Dynamic driving task fallback" means:

2.4 (1) the response by the person or human driver to either perform the dynamic driving
2.5 task or achieve a minimal risk condition after occurrence of a dynamic driving task
2.6 performance-relevant system failure or upon operational design domain exit; and

2.7 (2) the response by an automated driving system to achieve minimal risk condition,
2.8 given the same circumstances.

2.9 Sec. 23. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
2.10 to read:

2.11 Subd. 29a. **First responder interaction plan.** "First responder interaction plan" means
2.12 a document of procedures specifying how first responders should interact with an autonomous
2.13 vehicle that, at a minimum, describes:

2.14 (1) how to communicate with a fleet support specialist who is available during the times
2.15 the autonomous vehicle is in operation;

2.16 (2) how to safely remove the autonomous vehicle from the roadway and steps to safely
2.17 tow the vehicle;

2.18 (3) how to recognize whether the autonomous vehicle is in autonomous mode; and

2.19 (4) any additional information the person operating the autonomous vehicle, manufacturer
2.20 of the autonomous vehicle, or manufacturer of the automated driving system deems necessary
2.21 regarding hazardous conditions or public safety risks associated with the operation of the
2.22 autonomous vehicle.

2.23 Sec. 24. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
2.24 to read:

2.25 Subd. 34a. **Human driver.** "Human driver" means a natural person in a vehicle with a
2.26 valid license to operate a motor vehicle who controls all or part of the dynamic driving
2.27 task."

2.28 Page 20, after line 17, insert:

3.1 "Sec. 26. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
3.2 to read:

3.3 Subd. 40c. **Minimal risk condition.** "Minimal risk condition" means a condition to
3.4 which a person, a human driver, or an automated driving system may bring a vehicle after
3.5 performing the dynamic driving task fallback in order to reduce the risk of a crash when a
3.6 given trip cannot or should not be completed. "

3.7 Page 21, after line 17, insert:

3.8 "Sec. 29. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
3.9 to read:

3.10 Subd. 49a. **On-demand autonomous vehicle network.** "On-demand autonomous vehicle
3.11 network" means a transportation service network that uses a software application or other
3.12 digital means to dispatch or otherwise enable the prearrangement of transportation with
3.13 autonomous vehicles for purposes of transporting passengers or goods, including for-hire
3.14 transportation and transportation of passengers or goods for compensation.

3.15 Sec. 30. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
3.16 to read:

3.17 Subd. 50a. **Operational design domain.** "Operational design domain" means the
3.18 operating conditions under which an automated driving system is specifically designed to
3.19 function, including but not limited to environmental, geographical, and time-of-day
3.20 restrictions and the requisite presence or absence of certain traffic or roadway characteristics.

3.21 Sec. 31. Minnesota Statutes 2024, section 169.011, is amended by adding a subdivision
3.22 to read:

3.23 Subd. 70a. **SAE J3016.** "SAE J3016" means the April 2021 revision of the Taxonomy
3.24 and Definitions for Terms Related to Driving Automation Systems for On-Road Motor
3.25 Vehicles published by SAE International."

3.26 Page 28, after line 25, insert:

3.27 "Sec. 40. **[169.251] OPERATION OF AUTONOMOUS VEHICLES.**

3.28 Subdivision 1. **Autonomous vehicle requirements.** (a) A person must not cause or
3.29 allow an autonomous vehicle to operate on the public roads of Minnesota with the automated
3.30 driving system engaged unless the vehicle meets the conditions in this subdivision.

4.1 (b) If a failure of the automated driving system occurs that renders that system unable
4.2 to perform the entire dynamic driving task relevant to the automated driving system's intended
4.3 operational design domain, the autonomous vehicle must achieve a minimal risk condition.

4.4 (c) The autonomous vehicle must be capable of operating in compliance with the
4.5 applicable traffic and motor vehicle safety laws and regulations of Minnesota when
4.6 reasonable to do so, except when an exemption has been granted by the commissioner.

4.7 (d) When required by federal law, the autonomous vehicle must have the required
4.8 manufacturer's certification label indicating that, at the time of the autonomous vehicle's
4.9 manufacture, the autonomous vehicle has been certified to be in compliance with all
4.10 applicable federal motor vehicle safety standards, including reference to any exemption
4.11 granted by the National Highway Traffic Safety Administration.

4.12 (e) The autonomous vehicle owner or the automated driving system operator must provide
4.13 proof of financial responsibility that satisfies the requirements of section 169.253.

4.14 **Subd. 2. Operating an autonomous vehicle without a human driver.** (a) A person
4.15 must not cause or allow an autonomous vehicle to operate on the public roads of Minnesota
4.16 without a human driver, unless:

4.17 (1) the automated vehicle satisfies the requirements of subdivision 1;

4.18 (2) the person receives and maintains authorization from the commissioner to operate
4.19 autonomous vehicles without a human driver; and

4.20 (3) the person provides the commissioner and the commissioner of public safety with a
4.21 first responder interaction plan.

4.22 (b) A person seeking authorization to operate an autonomous vehicle without a human
4.23 driver must submit an application to the commissioner with the following information:

4.24 (1) the name, address, and principal point of contact for the person applying for
4.25 authorization;

4.26 (2) the vehicle information for each autonomous vehicle to be operated under the
4.27 authorization;

4.28 (3) a written statement certifying that each autonomous vehicle in clause (2) complies
4.29 with subdivision 1; and

4.30 (4) a first responder interaction plan.

5.1 (c) The commissioner must verify that an application submitted under paragraph (b) is
5.2 complete and accurate and approve the application within 30 days of receipt. The
5.3 commissioner must deny incomplete or inaccurate applications within 30 days of receipt.

5.4 (d) An authorization issued by the commissioner under this subdivision does not expire
5.5 and remains active unless suspended, revoked, or canceled by the commissioner.

5.6 (e) The authorization holder must provide the commissioner with an update to the
5.7 information described in paragraph (b) no later than 30 days after the information materially
5.8 changes.

5.9 (f) The commissioner may immediately suspend, revoke, or cancel the authorization
5.10 issued under paragraph (c) if the authorization holder fails to comply with paragraph (e).
5.11 The commissioner must promptly rescind the suspension, revocation, or cancellation upon
5.12 receiving the updated information.

5.13 Subd. 3. **Human drivers permitted to operate.** Nothing in this section prohibits or
5.14 restricts a human driver from operating an autonomous vehicle equipped with controls that
5.15 permit the human driver to take control of part or all of the dynamic driving task.

5.16 Subd. 4. **Definition of driver; licensure of autonomous vehicles.** When an automated
5.17 driving system installed on an autonomous vehicle is engaged and no human driver is
5.18 present:

5.19 (1) the person who receives authorization under subdivision 2 to operate an autonomous
5.20 vehicle may be issued a citation or other applicable penalty if the autonomous vehicle fails
5.21 to comply with traffic or motor vehicle laws;

5.22 (2) except as provided in clause (1), the automated driving system is considered the
5.23 driver of the autonomous vehicle for the purpose of assessing compliance with applicable
5.24 traffic or motor vehicle laws and is deemed to electronically satisfy all physical acts required
5.25 by a driver or operator of the vehicle; and

5.26 (3) an automated driving system is considered to be licensed to operate an autonomous
5.27 vehicle under chapter 171 if the autonomous vehicle has been authorized by the commissioner
5.28 under subdivision 2.

5.29 Sec. 41. **[169.252] COLLISIONS INVOLVING AUTONOMOUS VEHICLES.**

5.30 In the event of a collision involving an autonomous vehicle:

5.31 (1) a human driver of an autonomous vehicle must comply with the requirements of
5.32 section 169.09;

6.1 (2) an autonomous vehicle without a human driver must remain on the scene of the crash
6.2 when required by section 169.09, consistent with the autonomous vehicle's capability under
6.3 section 169.251; and

6.4 (3) the person authorized to operate an autonomous vehicle without a human driver
6.5 under section 169.251 must report any collision involving the autonomous vehicle consistent
6.6 with section 169.09.

6.7 **Sec. 42. [169.253] FINANCIAL RESPONSIBILITY REQUIREMENTS.**

6.8 (a) The owner of an autonomous vehicle must maintain proof of financial responsibility
6.9 in the same form and at the same minimum limits required for a motor vehicle under sections
6.10 65B.48 and 65B.49.

6.11 (b) A person must not operate an autonomous vehicle with the automated driving system
6.12 engaged unless the person maintains proof of financial responsibility for the autonomous
6.13 vehicle in an amount not less than \$1,000,000 combined single limit per occurrence for
6.14 third-party liability. Proof of financial responsibility under this paragraph must also satisfy
6.15 basic economic loss benefits and uninsured motorist benefits as required under section
6.16 65B.49 when the requirements are not satisfied by insurance policies or self-insurance
6.17 required under paragraph (a). Insurance policies and self-insurance applicable under
6.18 paragraph (a) and this paragraph may contract and coordinate with each other to determine
6.19 which will satisfy personal injury protection and uninsured motorist benefit requirements.
6.20 The satisfaction of financial responsibility under this paragraph satisfies financial
6.21 responsibility under paragraph (a).

6.22 (c) Financial responsibility under paragraph (b) may be satisfied by:

6.23 (1) an insurance policy issued by an insurer licensed in Minnesota; or

6.24 (2) a policy issued by an eligible surplus lines insurer pursuant to sections 60A.195 to
6.25 60A.2095.

6.26 (d) No higher limits of insurance or additional coverages are required solely due to a
6.27 vehicle's use of an automated driving system other than the financial responsibility minimum
6.28 requirement under paragraph (b).

6.29 **Sec. 43. [169.254] ON-DEMAND AUTONOMOUS VEHICLE NETWORK.**

6.30 Subdivision 1. **On-demand autonomous vehicle network permitted; requirements.** (a)
6.31 An on-demand autonomous vehicle network may transport passengers or goods in Minnesota,

7.1 including for-hire, if the on-demand autonomous vehicle network complies with the
7.2 requirements of sections 169.251 to 169.257.

7.3 (b) An on-demand autonomous vehicle network vehicle must not accept requests for
7.4 service via traditional street hail.

7.5 (c) An on-demand autonomous vehicle network vehicle must not park unlawfully on
7.6 any public way for a time longer than is reasonably necessary to pick up or drop off
7.7 passengers.

7.8 (d) An on-demand autonomous vehicle network must disclose to the rider the fare or
7.9 fare calculator method on the network's website or within the online-enabled technology
7.10 application service before the beginning of a prearranged ride.

7.11 (e) Within a reasonable period after the completion of a ride, an on-demand autonomous
7.12 vehicle network must transmit an electronic receipt to the rider that lists:

7.13 (1) the origin and destination of the ride;

7.14 (2) the total time and distance of the ride; and

7.15 (3) the total fare paid.

7.16 (f) At all times while an autonomous vehicle is active on an on-demand autonomous
7.17 vehicle network, the vehicle must display a consistent and distinctive signage or emblem.
7.18 Acceptable forms of distinctive signage include but are not limited to symbols or signs on
7.19 vehicle doors, roofs, or grilles, including magnetic or other removable signs or symbols.

7.20 (g) An autonomous vehicle must be inspected to confirm the vehicle is in good working
7.21 condition before being put into service on any on-demand autonomous vehicle network and
7.22 must be inspected annually thereafter. The on-demand autonomous vehicle network must
7.23 maintain documentation of autonomous vehicle inspections for three years.

7.24 (h) If an on-demand autonomous vehicle network cannot provide a wheelchair-accessible
7.25 transportation network vehicle, the network must direct the request to a provider of
7.26 wheelchair-accessible vehicles if reasonably available.

7.27 Subd. 2. **Not a common carrier.** An on-demand autonomous vehicle network is not a
7.28 common carrier or ground carrier. Chapter 221 does not apply to on-demand autonomous
7.29 vehicle networks.

8.1 Sec. 44. **[169.255] OPERATION OF COMMERCIAL AUTONOMOUS VEHICLES.**

8.2 (a) An autonomous vehicle authorized to operate under section 169.251 that is also a
8.3 commercial motor vehicle must operate pursuant to state laws governing the operation of
8.4 commercial motor vehicles, except that any provision that by its nature reasonably applies
8.5 only to a human driver does not apply to an autonomous vehicle operating without a human
8.6 driver.

8.7 (b) For an autonomous vehicle that is also a commercial motor vehicle, physical parts
8.8 of the automated driving system are considered a mirror or similar device for purposes of
8.9 measuring the width of the vehicle.

8.10 Sec. 45. **[169.256] AUTONOMOUS VEHICLE EQUIPMENT STANDARDS.**

8.11 An autonomous vehicle that is designed to be operated exclusively without a human
8.12 driver for all trips is not subject to motor vehicle equipment laws or regulations of Minnesota
8.13 that:

8.14 (1) relate to or support motor vehicle operation by a human driver seated in the vehicle;
8.15 and

8.16 (2) by their nature, are not relevant for an automated driving system.

8.17 Sec. 46. **[169.257] CONTROLLING AUTHORITY.**

8.18 (a) Unless otherwise provided in this chapter and notwithstanding any other provision
8.19 of law, autonomous vehicles, automated driving systems, and on-demand autonomous
8.20 vehicle networks are governed exclusively by state law. Any local ordinance that conflicts
8.21 with state law is preempted.

8.22 (b) A political subdivision, municipality, or local entity must not impose additional
8.23 requirements or restrictions specific to the operation of autonomous vehicles or automated
8.24 driving systems.

8.25 (c) A political subdivision, municipality, or local entity must not require a license or
8.26 permit or impose a tax, rate, or fee for the operation of an on-demand vehicle network that
8.27 is specific to the operation of an on-demand autonomous vehicle network.

8.28 (d) This section does not prohibit an airport from imposing reasonable fees on an
8.29 on-demand vehicle network consistent with any fees charged to companies that provide
8.30 similar services at the airport for the use of airport facilities. This section does not prohibit
8.31 an airport from designating locations for staging, pickup, or other similar on-demand vehicle

9.1 network operations at the airport, provided that the designated locations must be reasonably
9.2 equivalent to those required of other passenger transportation services.

9.3 (e) This section does not exempt an on-demand autonomous vehicle network company
9.4 from taxes of general applicability.

9.5 (f) This section does not prohibit any political subdivision from enforcing traffic and
9.6 road rule ordinances."

9.7 Renumber the sections in sequence and correct the internal references