

1.1 moves to amend H.F. No. 1555, the delete everything amendment
1.2 (H1555DE3), as follows:

1.3 Page 79, after line 9, insert:

1.4 "Sec. Minnesota Statutes 2018, section 169.011, is amended by adding a subdivision
1.5 to read:

1.6 Subd. 3b. **Automated driving system.** "Automated driving system" means hardware
1.7 and software that allow a motor vehicle to perform all the functions of a human driver within
1.8 the conditions for which the system is designed."

1.9 Page 79, after line 20, insert:

1.10 "Sec. Minnesota Statutes 2018, section 169.011, is amended by adding a subdivision
1.11 to read:

1.12 Subd. 29a. **Federal motor vehicle safety standards automated vehicle**
1.13 **exemption.** "Federal motor vehicle safety standards automated vehicle exemption" means
1.14 an exemption from the United States Secretary of Transportation from the motor vehicle
1.15 safety standards under the National Traffic and Motor Vehicle Safety Act.

1.16 Sec. Minnesota Statutes 2018, section 169.011, is amended by adding a subdivision
1.17 to read:

1.18 Subd. 34a. **Highly automated vehicle.** "Highly automated vehicle" means a motor
1.19 vehicle equipped with an automated driving system designed to function without a human
1.20 operator physically present in the vehicle. A highly automated vehicle does not include a
1.21 vehicle enabled with active safety systems or operator assistance systems, including but not
1.22 limited to a system to provide electronic blind spot assistance, crash avoidance, emergency
1.23 braking, parking assistance, adaptive cruise control, lane-keeping assistance, lane departure

2.1 warning, or traffic jam and queuing assistance, unless these technologies alone or in
2.2 combination with other systems enable the vehicle to test without any control or monitoring
2.3 by an operator.

2.4 Sec. Minnesota Statutes 2018, section 169.011, is amended by adding a subdivision
2.5 to read:

2.6 Subd. 40b. **Minimal risk condition.** "Minimal risk condition" means a low risk operating
2.7 mode in a highly automated vehicle that allows the vehicle to reach a reasonably safe state
2.8 such as bringing the vehicle to a complete stop or activating the hazard lamps if the automated
2.9 driving system experiences failures or operates outside of its design parameters.

2.10 Sec. Minnesota Statutes 2018, section 169.011, is amended by adding a subdivision
2.11 to read:

2.12 Subd. 40c. **Operator.** "Operator" in the following order of precedence means:

2.13 (1) the person who drives while physically present in a vehicle or who is in actual physical
2.14 control of a vehicle;

2.15 (2) the natural person who is remotely testing a highly automated vehicle; or

2.16 (3) the natural person who engages an automated driving system."

2.17 Page 80, after line 22, insert:

2.18 "Sec. Minnesota Statutes 2018, section 169.035, is amended by adding a subdivision
2.19 to read:

2.20 Subd. 5. **Automated vehicle.** An operator who is not driving while physically present
2.21 in a vehicle or is not in actual physical control of a vehicle has all the rights and duties
2.22 applicable to a driver or operator of any other vehicle under Minnesota law."

2.23 Page 97, after line 2, insert:

2.24 "Sec. **[174.46] AUTOMATED VEHICLE TESTING.**

2.25 Subdivision 1. **Definitions.** (a) For purposes of this section, the following terms have
2.26 the meanings given.

2.27 (b) "Automated driving system" has the meaning given in section 169.011, subdivision
2.28 3b.

2.29 (c) "Commissioner" means the commissioner of transportation.

3.1 (d) "Federal motor vehicle safety standards automated vehicle exemption" has the
3.2 meaning given in section 169.011, subdivision 29a.

3.3 (e) "Highly automated vehicle" has the meaning given in section 169.011, subdivision
3.4 34a.

3.5 (f) "Minimal risk condition" has the meaning given in section 169.011, subdivision 40b.

3.6 (g) "Operator" has the meaning given in section 169.011, subdivision 40c.

3.7 Subd. 2. **Permit required.** A permit issued by the commissioner is required to engage
3.8 an automated driving system on a highly automated vehicle on the public roads of this state.
3.9 The permit may include conditions and restrictions to ensure safety, minimize congestion,
3.10 and address other transportation needs.

3.11 Subd. 3. **License and vehicle registration requirements.** (a) A license to lawfully
3.12 operate a motor vehicle is not required if the highly automated vehicle does not have the
3.13 ability to be operated by a human.

3.14 (b) Commercial vehicles, as defined in section 169.011, subdivision 16, must have a
3.15 human operator present in the highly automated vehicle able to immediately assume control
3.16 of the vehicle.

3.17 (c) The highly automated vehicle must be registered in accordance with state law or
3.18 lawfully registered outside of this state.

3.19 Subd. 4. **Permit to test.** (a) The commissioner may grant or deny a permit application
3.20 for the testing of a highly automated vehicle. To obtain a permit for the testing of a highly
3.21 automated vehicle a person must submit an application on a form prescribed by the
3.22 commissioner. An application must include:

3.23 (1) dates and locations of the proposed test;

3.24 (2) certification that the highly automated vehicle meets federal safety standards, received
3.25 a federal motor vehicle safety standards automated vehicle exemption, or is otherwise in
3.26 compliance with federal safety regulations;

3.27 (3) a description of safety procedures to be used during testing;

3.28 (4) certification that operators meet the license requirements of subdivision 3;

3.29 (5) identification of the owner on the proof of insurance of the highly automated vehicle
3.30 to determine liability;

3.31 (6) proof that the highly automated vehicle is lawfully registered;

4.1 (7) a description of previous testing experience and results of previous tests, including
4.2 causes of crashes with the automated driving system engaged;

4.3 (8) whether or not a human safety operator will be present in the vehicle during testing
4.4 of the highly automated vehicle;

4.5 (9) whether an exemption from any state law is being requested;

4.6 (10) proof of valid and sufficient insurance, surety bond, or self-insurance in an amount
4.7 specified by the commissioner; and

4.8 (11) any additional information deemed necessary by the commissioner.

4.9 (b) The commissioner may require the highly automated vehicle to be tested at a closed
4.10 facility before the vehicle is allowed to operate on public roadways.

4.11 (c) The commissioner must obtain approval from the commissioner of public safety
4.12 before granting a permit.

4.13 (d) The commissioner must notify and coordinate with local and tribal governments if
4.14 the proposed testing route is located on local or tribal roads. A local road authority may
4.15 require a permit for testing if a permit would be otherwise required for a vehicle other than
4.16 a highly automated vehicle.

4.17 (e) If there are any material changes to the information provided in the permit application,
4.18 the applicant must immediately report the changes to the commissioner.

4.19 (f) The commissioner may deny an application. Notice of the reasons for denying an
4.20 application must be provided in writing. Failure to approve a permit application within 60
4.21 days does not constitute an approval of the application.

4.22 (g) Permits with a testing route that includes railroad crossings may be approved where
4.23 grade separated railroad crossings are available. When grade separated crossings are not
4.24 available, a highly automated vehicle must be capable of interacting properly with at-grade
4.25 railroad crossing signalization and operations. Prior to granting a permit with a testing route
4.26 that includes an at-grade railroad crossing, the commissioner must consult with the railroad
4.27 companies operating the railroad and include necessary restrictions within the permit.

4.28 Subd. 5. **Restrictions.** A highly automated vehicle may be tested with the automated
4.29 driving system engaged with or without a human driver being present in the vehicle if:

4.30 (1) the owner or operator has been granted a permit under this section;

4.31 (2) the vehicle has the capability to meet the applicable requirements of traffic and motor
4.32 vehicle safety laws and regulations of this state unless an exemption, as requested in

5.1 subdivision 4, has been granted by the commissioner of public safety for the limited purpose
5.2 of testing highly automated vehicles under this section;

5.3 (3) the vehicle is capable of achieving a minimal risk condition if the operator does not
5.4 or is unable to take control of the vehicle; and

5.5 (4) the operator continuously monitors the vehicle's performance while it is being operated
5.6 and, if necessary, immediately takes control of the vehicle's movements.

5.7 Subd. 6. **Collision reporting and data.** (a) In the event of a collision with the automated
5.8 driving system engaged, the operator or owner of a highly automated vehicle must promptly
5.9 contact law enforcement to report the accident, and the highly automated vehicle and its
5.10 operator must remain at the scene of the accident as otherwise required by law. If the highly
5.11 automated vehicle is being operated remotely, the operator must make reasonable efforts
5.12 to establish and maintain communication with law enforcement. The operator or owner
5.13 must comply with collision reporting requirements as otherwise required by law.

5.14 (b) In the event of a collision involving a highly automated vehicle, the operator must
5.15 submit information to the commissioners of transportation and public safety on whether the
5.16 automated driving system was engaged at the time of the collision and what specific
5.17 component of the automated driving system failed at the time of the collision, if known.

5.18 Subd. 7. **Public safety.** (a) A person may not engage the automated driving system of
5.19 a highly automated vehicle without a permit in accordance with this section.

5.20 (b) The commissioners of public safety or transportation may immediately prohibit
5.21 testing of a highly automated vehicle if it poses a risk to public safety or fails to comply
5.22 with the conditions of the approved permit.

5.23 Subd. 8. **Reporting.** (a) The tester must meet with the commissioner and the Minnesota
5.24 Council on Disability to discuss lessons learned and best practices.

5.25 (b) No later than October 31 each year until 2024, the commissioner must submit a report
5.26 to the chairs, ranking minority members, and staff of the legislative committees with
5.27 jurisdiction over transportation on highly automated vehicle testing. The report must include
5.28 the number of highly automated vehicles on the road, testing locations, whether the highly
5.29 automated vehicles were on public roads, and whether any collisions occurred.

5.30 Subd. 9. **Uniform laws.** (a) Unless otherwise provided in this section, highly automated
5.31 vehicles, automated driving systems, and any commercial use or operation of highly
5.32 automated vehicles is governed by this section, notwithstanding any other provision of law
5.33 or rule to the contrary. No rules, laws, ordinances, or regulations relative to the operation

6.1 of highly automated vehicles or automated driving systems shall be adopted which limit
6.2 the authority to operate such vehicles or systems conferred by this section or which conflict
6.3 with this section.

6.4 (b) This section does not limit a local unit of government's authority to enforce:

6.5 (1) local parking; and

6.6 (2) land use and traffic ordinances, if a local unit of government's ordinance would
6.7 otherwise apply to a vehicle other than a highly automated vehicle."

6.8 Renumber the sections in sequence and correct the internal references

6.9 Amend the title accordingly