SENATE
STATE OF MINNESOTA
NINETY-FOURTH SESSION

S.F. No. 75

(SENATE AUTHORS: JASINSKI and Dibble)

DATE	D-PG	OFFICIAL STATUS
01/16/2025	70	Introduction and first reading Referred to Transportation
01/30/2025	210a	Comm report: To pass as amended and re-refer to Finance See First Special Session, HF14

A bill for an act

relating to transportation; authorizing research on autonomous mower technology by the Department of Transportation; requiring a report; appropriating money.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. **AUTONOMOUS MOWERS RESEARCH AND DEVELOPMENT.**

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

(b) "Autonomous mower" means a robotic or automated device designed, programmed, and operated to cut grass or vegetation with predefined routes to minimize the need for manual assistance or intervention.

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

(d) "Department" means the Minnesota Department of Transportation.

Subd. 2. **Research and development authorized.** (a) The commissioner must conduct research on the use of automation and robotics for mowing and vegetation management at property owned by the department. The research must examine the use of autonomous mower technology at the following locations:

(1) rest areas;

(2) highway rights-of-way, including ditches, shoulders, or other varied or sloped terrain; or

(3) other roadside or public-facing property owned by the department.

(b) The research must examine the use of autonomous mowing technology for mowing or vegetation management by other states or government entities. The research conducted under this section must analyze different configurations and types of autonomous mowers, including mowers that require different levels of human intervention, to research for future statewide deployment at rest areas, at or along the trunk highway system, or on other property owned by the department.

(c) The commissioner must research the current and potential commercial availability of autonomous mowing products used by public or private entities for applications that include but are not limited to rest area mowing, highway right-of-way ditch mowing, vegetation management, or other applications related to property or roadside maintenance.

(d) The commissioner must include research on Minnesota-based companies engaged in autonomous mower technology. If the commissioner elects to purchase autonomous mower technology for research under this section, the commissioner must purchase the technology from a Minnesota-based company.

(e) The research must analyze whether an autonomous mower can operate safely in varied terrain, including ditches, and navigate obstacles such as culvert ends, guardrails, signposts, other barriers, and unexpected debris that may be found on or alongside a highway right-of-way. The research must examine the potential impact of autonomous mowing technology on worker safety and maintenance staffing needs.

(f) The commissioner must propose an autonomous mower pilot project to further study and examine the challenges to implementing autonomous mower technology into roadside vegetation management activities. The proposed pilot project must include the proposed location for the pilot project, the autonomous mower activities examined, and the anticipated timeline for implementation of the proposed pilot project.

Subd. 3. **Report.** By February 15, 2027, the commissioner must submit a report to the chairs and ranking minority members of the legislative committees with jurisdiction over transportation finance and policy on the results of the autonomous mower research authorized in subdivision 2. The report must include:

(1) information and analysis of other governmental agencies or private entities using autonomous mowing operations;

(2) the commissioner's detailed plan for conducting a pilot project with autonomous mowing technology, once available, at rest areas; at or alongside trunk highway rights-of-way, including ditches, shoulders, and other terrain; and at other properties owned by the department;

(3) the timeline and funding needed to conduct an autonomous mowing pilot project established in subdivision 2, paragraph (f);

(4) a cost-benefit analysis of whether autonomous mowing technology can yield productivity or efficiency gains in maintenance of department property compared to traditional methods of mowing;

(5) an analysis of whether the operation of autonomous mowing technology by the department would yield improvements compared to traditional mowing methods in worker safety, congestion, environmental impact outcomes, cost savings, maintenance scheduling, or any other factor deemed relevant by the commissioner; and

(6) an analysis of the costs and any other short-term or long-term challenges posed by the pilot project or the future operation of autonomous mowing technology on property owned by the department.

Sec. 2. **APPROPRIATION.**

$150,000 in fiscal year 2026 is appropriated from the trunk highway fund to the commissioner of transportation for autonomous mowing research and the purchase of autonomous mowing equipment. The commissioner must use at least a portion of this appropriation to purchase an autonomous mower suitable for commercial mowing operations. The autonomous mower must be purchased from a company based in Minnesota.