State of Minnesota

HOUSE OF REPRESENTATIVES

NINETY-SECOND SESSION

H. F. No. 230

01/21/2021   Authored by Quam
The bill was read for the first time and referred to the Committee on Transportation Finance and Policy

1.1   A bill for an act

1.2   relating to transportation; establishing microtransit rideshare pilot program;
1.3   establishing a microtransit rideshare account; requiring a report; appropriating
1.4   money.

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

1.6   Section 1. **MICROTRANSIT RIDESHARE PILOT PROGRAM.**

1.7   Subdivision 1. **Pilot program established.** The Department of Transportation, in

1.8   coordination with the Metropolitan Council, the University of Minnesota Center for

1.9   Transportation Services, local government entities, and private business organizations, must

1.10   develop a microtransit rideshare pilot program to provide needed mass transit options to

1.11   underserved areas of the state, offer more flexible mass transit options, and explore the use

1.12   of autonomous vehicles to deliver mass transit to the people of Minnesota.

1.13   Subd. 2. **Definitions.** (a) For purposes of this section, the following terms have the

1.14   meanings given.

1.15   (b) "Autonomous vehicle" means a motor vehicle equipped with an automated driving

1.16   system, designed to function without an operator, and classified as level four or level five

1.17   by the "Taxonomy and Definitions for Terms Related to Driving Automation Systems for

1.18   On-Road Motor Vehicles" published by SAE International in September 2016.

1.19   (c) "Commissioner" means the commissioner of the Minnesota Department of

1.20   Transportation.

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

2.1 (e) "Electric vehicle" has the meaning given in Minnesota Statutes, section 169.011,

2.2 subdivision 26a.

2.3 (f) "Flexible-route" means a vehicle route updated by algorithm-based software using

2.4 mapping and GPS technology in real time based on traffic or ride requests and is not fixed

2.5 to a singular path between origin and termination points.

2.6 (g) "Geo-targeted advertising" means delivering electronic advertisements to potential

2.7 program users based on their geographic locations.

2.8 (h) "Greater Minnesota" means the area of the state outside the metropolitan area.

2.9 (i) "Metropolitan area" has the meaning given in Minnesota Statutes, section 473.121,

2.10 subdivision 2.

2.11 (j) "Natural gas vehicle" means a motor vehicle capable of being propelled by natural

2.12 gas, including compressed natural gas and liquefied natural gas.

2.13 (k) "On-demand" means a ride may be requested at any time during regular operation

2.14 hours by a user, causing a vehicle within a predetermined zone to deviate from its current

2.15 route to pick up the user. On-demand does not include vehicle stops at particular locations

2.16 at predetermined times.

2.17 (l) "Service area" means an area of no more than five square miles in the metropolitan

2.18 area or 15 square miles in greater Minnesota designated by the department within which

2.19 the microtransit rideshare program operates.

2.20 Subd. 3. **Request for proposals.** (a) Consistent with subdivisions 4 and 5, the department

2.21 must issue a request for proposals to vendors to design, launch, and maintain:

2.22 (1) algorithm-based software designed to create and update flexible routes, dispatch

2.23 vehicles to on-demand ride requests, and provide drivers with turn-by-turn directions to

2.24 complete users' on-demand rides; and

2.25 (2) a mobile device application to serve as a user gateway into the microtransit rideshare

2.26 program.

2.27 (b) Final vendor selection and contracts for services are subject to Minnesota Statutes,

2.28 chapter 16C.

2.29 Subd. 4. **Software development.** (a) The algorithm-based software required under

2.30 subdivision 3 must be capable of completing at least the following tasks:

2.31 (1) map routes to all verified pick-up and drop-off sites within a service area;

3.1 (2) identify and cordon off zones within a service area where a limited number of vehicles

3.2 are assigned by the software to operate, thus maximizing the efficiency of pick-ups and

3.3 drop-offs within the service area;

3.4 (3) receive and prioritize on-demand requests from the user application developed under

3.5 subdivision 5;

3.6 (4) dispatch the nearest vehicle to a pick-up site nearest the most recent on-demand

3.7 request within the vehicle's operation zone within the service area, including alerting the

3.8 driver that a new pick-up site has been added to the route;

3.9 (5) reroute a vehicle in real time based on new, on-demand requests;

3.10 (6) reroute a vehicle in real time to accommodate previously scheduled pick-ups;

3.11 (7) reroute a vehicle in real time to new pick-up sites within a zone within a service area

3.12 up to the passenger capacity of the vehicle and prioritize the route to drop-off sites to ensure

3.13 ride times of no more than 20 minutes per user;

3.14 (8) track individual ride times;

3.15 (9) reroute a vehicle in real time based on traffic patterns to ensure the quickest possible

3.16 route to the next destination is taken;

3.17 (10) alert the driver when the route is being recalculated; and

3.18 (11) give the driver audible, turn-by-turn directions to complete the current route.

3.19 (b) The software must be capable of operating on a small to midsize tablet or other

3.20 mobile device that can be mounted on the dashboard of the vehicle.

3.21 Subd. 5. **User application development; data privacy.** (a) The user application required

3.22 under subdivision 3 must allow users to perform at least the following tasks:

3.23 (1) review a map of their service area, including pick-up and drop-off sites;

3.24 (2) set up a user profile;

3.25 (3) securely store credit or debit card information;

3.26 (4) request an on-demand ride;

3.27 (5) schedule a ride up to seven days in advance;

3.28 (6) pay fares;

3.29 (7) receive text message or e-mail alerts when the rideshare vehicle is near the pick-up

3.30 location; and

4.1   (8) provide feedback about the user's experience with the rideshare program, including

4.2   feedback about the driver, vehicle, rideshare punctuality, ride time; quality and convenience

4.3   of pick-up and drop-off sites, and overall satisfaction.

4.4   (b) All personal data about the user collected under this section are private data subject

4.5   to Minnesota Statutes, chapter 13.

4.6   Subd. 6. **Service areas.** (a) The department must select four initial pilot service areas

4.7   to introduce the microtransit rideshare program, including two service areas in the

4.8   metropolitan area, one service area in Rochester, and one service area in greater Minnesota.

4.9   The department must determine service area eligibility based on the following criteria,

4.10   specific to each service area:

4.11   (1) current access to mass transit options;

4.12   (2) need for additional mass transit options;

4.13   (3) current mass transit ridership;

4.14   (4) whether current mass transit options are operating at or below capacity;

4.15   (5) whether the addition of flexible-route, on-demand mass transit may alleviate transit

4.16   concerns; and

4.17   (6) availability of additional local, state, and federal funds.

4.18   (b) After the initial launch of the microtransit rideshare program, the department may

4.19   designate additional service areas. The department must expand the program in both the

4.20   metropolitan area and greater Minnesota as equally as is practicable. Additional service

4.21   areas must be determined by the criteria in paragraph (a).

4.22   Subd. 7. **Vehicles and drivers.** (a) The department must procure a fleet of vehicles for

4.23   each service area. Metropolitan service areas must be served by no fewer than ten vehicles.

4.24   Greater Minnesota service areas and the Rochester service area must be served by no fewer

4.25   than three vehicles. Program vehicles must seat no more than 20 passengers, including the

4.26   driver, and may either be purchased new as funds are available or may be refurbished surplus

4.27   vehicles.

4.28   (b) The department is encouraged to include electric vehicles and natural gas vehicles

4.29   in each fleet when the program launches. By 2026, one-half of each fleet must consist of

4.30   electric or natural gas vehicles.

4.31   (c) The department is encouraged to immediately begin testing the use of autonomous

4.32   vehicles within at least one service area at launch. By 2028, at least one service area must

5.1   have at least one operational autonomous vehicle in its fleet. By 2030, each service area

5.2   must have at least one operational autonomous vehicle in its fleet.

5.3   (d) All drivers must be properly licensed and must be trained on the use of onboard

5.4   devices that utilize the algorithm-based software developed under subdivision 4.

5.5   Subd. 8. **Fares; account established.** (a) The department must set user fares for the

5.6   program. Fares must not exceed 150 percent of the current metropolitan-area rush-hour bus

5.7   fare. All fares collected must be deposited in the microtransit rideshare account created

5.8   under paragraph (b).

5.9   (b) A microtransit rideshare account is established in the state transportation fund. Money

5.10   in the account is annually appropriated to the commissioner for expenditures related to the

5.11   rideshare program under this section.

5.12   Subd. 9. **Marketing.** Prior to launch, the department must conduct a marketing campaign

5.13   to ensure potential users of the rideshare program are aware of the program and understand

5.14   how to use the service. Advertising materials should include direct mailers to local businesses

5.15   and residences, informational brochures at transit stations and on existing bus and light rail

5.16   routes, and web-based and mobile-based geo-targeted advertising with links to a website

5.17   maintained by the department and dedicated to the microtransit rideshare program.

5.18   Subd. 10. **Additional requirements.** (a) All pick-up and drop-off sites must be vetted

5.19   for safety by the department. Users must be able to safely walk to and from each site.

5.20   Vehicles must be able to safely load and unload passengers at each site.

5.21   (b) The department must designate a sufficient number of pick-up and drop-off sites to

5.22   ensure users must walk no more than five minutes to or from any site.

5.23   (c) All rides must take no more than 20 minutes from pick-up to drop-off. Ride time

5.24   does not include walking to or from pick-up and drop-off sites.

5.25   (d) To ensure a smooth launch and for continued testing purposes, the rideshare program's

5.26   initial operating hours may be restricted to off-peak times, such as 9 a.m. to 3 p.m. on

5.27   weekdays. The department must strive to increase the hours of operation to include weekends

5.28   and rush hour availability.

5.29   (e) The department may establish a call center for users who do not have access to the

5.30   mobile device application or the Internet. Users may call to request an on-demand ride or

5.31   schedule a ride up to seven days in advance. Representatives in the call center may receive

5.32   users' requests and input them into the user application under subdivision 5 to reserve a ride

5.33   for the caller.

6.1 Subd. 11. **User feedback.** At least quarterly, the department must review user feedback

6.2 regarding the efficacy of the rideshare program. In consultation with stakeholders and

6.3 vendors, the department must modify the rideshare program to meet user concerns and

6.4 maximize the program's utility for riders. This may include but is not limited to modifying

6.5 the algorithm-based software, expanding or contracting a service area, eliminating service

6.6 areas, adding new service areas, adjusting the features of the application, opening a call

6.7 center, adding or removing vehicles from a service area's fleet, adjusting fares or hours of

6.8 operation, adjusting marketing strategies, increasing user education, or selecting new pick-up

6.9 and drop-off sites.

6.10 Subd. 12. **Report.** Annually by January 1 the commissioner must submit a report to the

6.11 chairs and ranking minority members of the committees of the legislature with jurisdiction

6.12 over transportation. The report must outline the pilot program's current objectives and

6.13 outcomes; discuss resources, technology, and research required for the next phase of the

6.14 pilot; detail the program's current costs and concerns; and make recommendations for

6.15 legislation to advance the program.

6.16 Sec. 2. **APPROPRIATION; MICROTRANSIT RIDESHARE PILOT PROGRAM.**

6.17 $....... in fiscal year 2022 is appropriated from the general fund to the commissioner of

6.18 transportation for the microtransit rideshare pilot program under section 1. Any balance in

6.19 the first year does not cancel and is available in the second year.