

DRAFT MCOTA News, September 2022

This email newsletter is an effort by the [Minnesota Council on Transportation Access \(MCOTA\)](#) to provide periodic updates about its initiatives to the public and to interested stakeholders. Please let us know what you think by contacting Tom Gottfried at tom.gottfried@state.mn.us.

MCOTA Virtual Volunteer Driver Forum: October 6

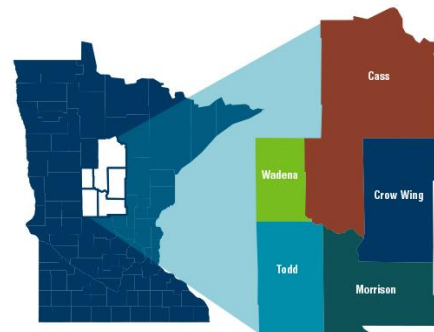
Join us for the first event in the 2022-2023 MCOTA volunteer driver virtual forum series, Minnesota's Road to Volunteer Drivers. The series provides participants with the opportunity to share information to help maintain and strengthen these programs.



The October 6 Forum will include background on current volunteer driver efforts in Minnesota, guidance on recent state legislative changes and proposed federal legislation, and a presentation on the Hop Scott program in Scott/Carver County. The forum will be virtual and recorded and available online.

Region 5 RTCC grant targets more livable community through better access for all

When the annual AARP Community Challenge was announced, staff at the MnDOT-funded Region 5 RTCC wasted no time in generating potential project ideas to further leverage its existing partnerships and funding for community benefit. The highly competitive AARP program provides small grants to fund quick-action projects that can help communities become more livable for people of all ages.



Region 5 RTCC staff considered an incentive program for volunteer drivers who recruited other volunteer drivers, as well as transit passes and memberships to the Brainerd Food Co-Op. But, in the end, AARP selected their proposal to provide transit passes, transit training and memberships to a local health and wellness center for low-income seniors, veterans, and members of the Leech Lake Band of Ojibwe.

In 2021, AARP received more than 3,500 applications from nonprofit and government entities and distributed nearly \$3.4 million to fund 244 projects nationwide. AARP set seven possible project outcome areas, including transportation and mobility options that increase connectivity, walkability, bikeability, wayfinding, access to transportation options, and roadway improvements.

With their winning grant award, the RTCC produced five short transit training videos, provided gym memberships in partnership with local gyms for six months and offered transportation on an as-needed basis. It promoted and increased awareness about the project by printing and distributing flyers, emailing various groups, producing a video, promoting it on the radio, and boosting Facebook posts.

The project garnered more than 100 participants, aging in range from 12-years-old to 85-years-old. It offered some community members their first-ever gym membership, for others the opportunity to rejoin a gym, and for many, the opportunity to make new friends and pursue a healthier lifestyle.

The project also helped bring new riders to transit services and supported the development of educational tools, such as videos on how to ride the bus, which will continue to help community members gain access to existing transportation options.

Mid-Minnesota RTCC expands volunteer driver recruitment strategies

In its continuous search for fresh ways to attract more volunteer drivers, the Mid-Minnesota Rural Transportation Coordinating Council tapped its members for new ways to increase awareness about the critical shortage of volunteer drivers. MMRTCC transportation resource coordinator Terry Smith shared driving opportunities with students of local mature driver accident prevention classes, still often referred to as “55-Alive” classes.

The safety-focused classes help older drivers — who often can receive auto insurance discounts by attending — improve their driving skills. Smith discovered that most participants are completely unaware of the volunteer driver program, let alone the opportunity to volunteer themselves. For MMRTCC, the success of this strategy hinges on establishing good relationships with course instructors. Though the instructors may have some initial skepticism, Smith has found that they have come to see his short presentation as a nice course enhancement. “While they do believe it’s valuable for their classes to know there is a volunteer driver service available for them when they need it,” Smith said, “they’re also

happy to present their classes with the opportunity to help their nondriving neighbors while they're still feeling comfortable and competent behind the wheel.”

Supporting volunteer drivers and volunteer driver programs is just one of the initiatives undertaken by the Mid-Minnesota Rural Transportation Coordinating Council, which is funded by a MnDOT grant (both state and federal dollars) with a 10% program match from the Mid-Minnesota Development Commission.

Prairie Five Community Action Council received a \$80,000 grant to purchase a wheelchair-accessible van for veterans

From Minnesota Community Action Partnership (MinnCAP), August 24, 2022

Prairie Five's Support Our Troops van will provide accessible transportation to veterans in the five-county region of Big Stone, Chippewa, Lac qui Parle, Swift and Yellow Medicine.

[Prairie Five RIDES](#) and the RTCC ([Regional Transportation Coordinating Council](#)) were looking for a way to better serve veterans in the 5 counties. The RTCC Program Directors searched for grants for veterans and found the [Support Our Troops License Plate Fund](#) grant opportunity through the Minnesota Department of Veteran Affairs (MDVA). Ranging from \$1,000 to \$100,000, these grants are focused on supporting and improving the lives of Veterans and their families. Prairie Five RIDES and the RTCC reached out the 5 county Veteran Service Officers and presented this opportunity to the rest of the Regional Transportation Coordinating Council. As a group, they came up with the idea of purchasing a wheelchair accessible van to offer free rides to veterans.

[More](#)

Could remote drivers be the future of ride-hailing?

A new technology combining nearly autonomous vehicles with remote “tele-operators” has the potential to overcome both the technological and societal hurdles posed by driverless vehicles. Ride-hailing providers will be an important application for remote-

driving technology, and U of M researchers found it offers clear advantages for companies and their customers.

“Fully autonomous vehicles may take longer than initially expected to become a reality because of technological challenges, public acceptance, and safety concerns,” says [Saif Benjaafar](#), Distinguished McKnight University Professor in

the [Department of Industrial and Systems Engineering](#). “Tele-operated vehicles could provide the efficiency and flexibility of autonomous vehicles while keeping humans in the loop and ultimately responsible for driving decisions.”



Tele-operated vehicles would offer several advantages for providers. Perhaps the most important is that remote drivers would be a common resource interchangeably assigned to fulfill trips regardless of a trip's origin or destination. A remote driver would not be dedicated to a single vehicle, so the service could operate with more vehicles than drivers. This would reduce the inefficiencies evident in today's service when drivers move from low-demand to high-demand locations—repositioning that can cost providers and drivers time and money. Tele-driving would also be important in places where drivers are costly or in short supply.

In this study, Benjaafar's research team examined efficiencies that could be gained by operating a ride-hailing service with remote drivers in a region such as the Twin Cities metro. Here's how it would work:

- The service operator at a central command center matches a vehicle and remote driver to a customer.
- The remote driver takes control of the vehicle, drives it to the customer (similar to a drone operator), picks up the customer, and drives them to their destination.
- Once the trip is complete, the remote driver and vehicle are unpaired and become independently available for future requests.

The researchers studied the impact of operating with more vehicles than drivers—specifically, the extent to which the number of drivers relative to the number of vehicles can be reduced without reducing the quality of the service to customers. They considered two scenarios: one where customers are impatient and leave the system if they cannot be immediately matched with a vehicle and driver, and one where they are patient and willing to wait to be matched. The researchers modeled the dynamics of these two scenarios with a multi-server queueing model.

The models showed that whether customers are patient or not, a system with more vehicles than drivers can maintain or even improve the amount of demand that can be served and the corresponding quality of service (i.e., delay experienced by customers).

Benjaafar says the results, which may seem counterintuitive, can be explained as tradeoffs between faster service times and more drivers, with three key factors at work:

the number of idle vehicles, where vehicles are located (distant or close to pick-up sites), and pick-up wait times.

Other benefits are possible. Teledriving would eliminate the discriminatory behavior of onboard drivers who avoid locations they perceive to be unsafe, and personal safety would no longer be a concern for drivers and riders. Tele-drivers wouldn't need to own a vehicle, broadening labor participation. And policymakers could set access and pricing regulations.

The researchers note that several pilot projects are demonstrating the commercial viability of teledriving, including one by Vay, a German TNC, and several involving remotely controlled robots for food delivery.

This research was funded as part of a National Science Foundation (NSF) Smart and Connected Communities grant (award no. CMMI-1831140)—[Leveraging Autonomous Shared Vehicles for Greater Community Health, Equity, Livability, and Prosperity](#) (HELP).

Reprinted from [CTS Catalyst, August 2022](#)

More Information

- [SCC: Leveraging Autonomous Shared Vehicles for Greater Community Health, Equity, Livability, and Prosperity](#)
- ["Human in the Loop Automation: Ride-Hailing With Remote \(Tele-\) Drivers." June 7, 2022.](#)

In the news

Below is a sampling of recent news and research on transportation technology, equity, and sustainability that are relevant to transportation access in Minnesota. Several of these are from [weekly alerts curated by the MnDOT Library](#).

- [Minnesota will add EV charging stations along I-94 and I-35 to counter range complaints](#)
KMSP (September 19, 2022)
- [Minnesota acquires \\$3.4M in public transit funding, six electric buses to hit roads by 2025](#)
Inforum (September 17, 2022)
- [Governor Tim Walz reveals sweeping plan to slow climate change](#)
WCCO CBS Minnesota (September 16, 2022)
- [How the Twin Cities is making transit accessible to immigrants and refugees](#)
Next City (September 16, 2022)

- [University of Michigan study finds 1 in 4 four adults experience transportation insecurity](#)
Michigan News (September 15, 2022)
- [Truly autonomous cars may be impossible without helpful human touch](#)
Reuters (September 12, 2022)
- [Metro Transit introduces public rideshare services in north Minneapolis](#)
WCCO CBS Minnesota (September 10, 2022)
- [Public transit across the U.S. is not nearly as crowded as it was before the pandemic](#)
NPR (September 8, 2022)
- [With autonomous vehicle caucus, Congress members aim to advance technology for self-driving cars](#)
Smart Cities Dive (September 8, 2022)
- [California poised to give \\$1,000 to residents for not owning a car](#)
Smart Cities Dive (September 6, 2022)
- [A glance at southeastern Minnesota's electric vehicle charging infrastructure](#)
KIMT 3 (September 5, 2022)
- [The drive to advance technology world-wide through human connections: Residents of Itasca County are starting to notice goMARTI self-driving cars](#)
Grand Rapids Herald-Review (September 4, 2022)
- [NC State researchers test safety benefits of self-driving cars](#)
WNCN (September 3, 2022)
- [Self-driving cars roll around Austin](#)
KXAN (September 2, 2022)
- [Med City Mover is leaving Rochester](#)
Post Bulletin (August 31, 2022)
- [In some cities, on-demand public transit is replacing old-fashioned buses](#)
Fast Company (August 24, 2022)
- [MnDOT launches Bear Tracks automated shuttle project in White Bear Lake - News Releases - MnDOT \(state.mn.us\)](#)
[MnDOT News Release, August 5, 2022](#)

Upcoming Events

National RTAP: All Onboard for Mental Health Twitter Chat

October 11, 2022

1:00 – 2:00 p.m. Central Time

Join us for an [#allonboard4mentalhealth](#) Twitter Chat that will discuss best practices and equitable strategies for serving riders with mental health issues, including dementia and Alzheimer’s Disease. The chat will be moderated by Heather Edmonds and Jane Mahoney of the National Aging and Disability Transportation Center (NADTC), Angie Jones of the Oregon Department of Transportation, and National RTAP staff.

FTA webinar on Coordinating Council on Access and Mobility Strategic Plan

November 30, 2022

1:00 p.m. Central Time

Federal Transit Administration webinar to release the updated Coordinating Council on Access and Mobility (CCAM) Strategic plan. Sign up for email notifications: <https://www.transit.dot.gov/coordinating-council-access-and-mobility>

Upcoming MCOTA meetings

MCOTA usually meets bimonthly on a Wednesday from 1:00 to 3:00 p.m. The meetings are open, and members of the public are welcome to attend. Each meeting includes time for public comments. See the [MCOTA website](#) for more details.

- November 16, 2022, 1 p.m. to 3 p.m.
- January 25, 2023, 1 p.m. to 3 p.m.

About MCOTA

The Minnesota Council on Transportation Access was established by the Minnesota Legislature in 2010 to “study, evaluate, oversee, and make recommendations to improve the coordination, availability, accessibility,

efficiency, cost-effectiveness, and safety of transportation services provided to the transit public.”

www.CoordinateMNTransit.org