Legislative Update - Minnesota

Following a special session in the end of May, the Minnesota Legislature approved the passage of omnibus tax and budget bills. Included in this package were a number of transportation funding requests and other transportation-related items. The Legislature passed a $5.9 billion, two-year transportation funding bill. It will shift $300 million from the state's general fund dollars to pay for transportation projects. It also calls for borrowing $940 million over four years, spending $640 million on general state road construction and $300 million on the Corridors of Commerce program. This program was created by the Legislature in 2013 as a mechanism to focus funding on improvements to key trunk highways in the state that support economic activity.

In addition to capital improvements to the state's colleges and universities, the bonding bill will fund approximately $255 million in road and bridge projects and railroad crossings. Included in this bill is $42.3 million for construction of a railroad grade separation at Main Avenue and 20th and 21st Streets in Moorhead. Bonding bills are typically passed during even-numbered years but the 2016 legislative session concluded before a formal bonding bill could be approved.

House and Senate members also passed a $988 million bond bill in the early hours of May 26. In addition to capital improvements to the state’s colleges and universities, the bonding bill will fund approximately $255 million in road and bridge projects and railroad crossings. Included in this bill is $42.3 million for construction of a railroad grade separation at Main Avenue and 20th and 21st Street in Moorhead. Bonding bills are typically passed during even-numbered years but the 2016 legislative session concluded before a formal bonding bill could be approved.

Since 2009, StreetsAlive! has brought the Fargo-Moorhead community together for a fun, interactive physical activity festival and has encouraged citizens and families to add non-motorized travel into their daily lives. People of all ages are able to partake in a variety of games, activities, and entertainment while safely enjoying streets and experiencing the city from a new perspective. Approximately 14,000 people participated in StreetsAlive! in 2016.

StreetsAlive! is also asking for volunteers to help with reinforcing “road closed” signs and to assist with first aid and bicycle repairs along the route. Shifts are from 11:30 am to 2:30 pm and 2:00 to 5:00 pm. For more information on Streets Alive! or to volunteer, please visit www.greatrides. org/streetsalive or visit their Facebook page.
Drones - The Evolution of a New Transportation Mode

On May 31 and June 1, Emerging Prairie hosted the third annual Drone Focus Conference at the Fargo Civic Center. The conference included appearances by U.S. Department of Transportation Secretary Elaine Chao, Governor Doug Burgum, and Senator John Hoeven, along with a host of industry specialists and stakeholders. The conference focused on a number of issues ranging from the need to modernize air traffic control systems to regulations that address security, safety, and privacy.

North Dakota has been at the forefront of drone technology since the unmanned aerial systems (UAS) industry began in 2005. Since then, North Dakota has invested nearly $40 million to advance the industry in the state and has become a national leader with leading-edge research, development, training, and education (RDT&E) projects, including product development and commercial applications. North Dakota was the first state to get approval FAA for beyond-line-of-sight drone flights at high altitudes, which allows for drone operators to fly vehicles without spotting from the ground or utilizing chase planes. The state is currently working at getting approval to fly beyond-line-of-sight at low altitudes, which would better allow companies to advance the industry in the state and has become a national leader with leading-edge research, development, training, and education (RDT&E) projects, including product development and commercial applications. North Dakota was the first state to get approval FAA for beyond-line-of-sight drone flights at high altitudes, which allows for drone operators to fly vehicles without spotting from the ground or utilizing chase planes. The state is currently working at getting approval to fly beyond-line-of-sight at low altitudes, which would better allow companies to advance the industry in the state and has become a national leader with leading-edge research, development, training, and education (RDT&E) projects, including product development and commercial applications. North Dakota was the first state to get approval FAA for beyond-line-of-sight drone flights at high altitudes, which allows for drone operators to fly vehicles without spotting from the ground or utilizing chase planes.

Drones are also beginning to be seen as a potential new autonomous vehicle option. While much of the focus of autonomous vehicles to date has been on cars, trucks, buses, and trains, transportation and industry experts, including the U.S. Department of Transportation, are beginning to look at the needs and impacts of autonomous aircraft and passenger drones. Several companies are exploring the use of passenger drones as air-taxis and for air-ambulance services. Challenges that passenger drone developers are working to overcome include noise, small and useful loads, short flight times, airspace regulations, and scarce data on both safety and general operations. The first driverless passenger drone was introduced at the Computer Electronics Show (CES) 2016 in Las Vegas by Chinese entrepreneurs. This human-size drone, the Ehang 184, is able to carry a single passenger and fly short distances at 62 miles per hour with a fully-charged battery. Routes are able to be programmed by a ground control center through an encrypted 4G network which monitors all flights.

The future of passenger drones remains uncertain since this technology is so new. However, innovation in aerial technology, and in aerial traffic coordination, control, and collision-avoidance could result in the rapid proliferation of passenger drones for civilian travel.

Remix - A Planning Platform for Public Transit

A new and exciting transit planning tool is coming to MATBUS and Metro COG. Remix is a web-hosted application for planning public transit systems. It automates the process of route and schedule scenario testing, letting planners sketch out routes onto a map and immediately see information about potential ridership and fleet requirements. This can exponentially decrease the time costs of experimenting with different scenarios. As of October 2016, over 150 transit agencies across the world are using Remix.

Planners can use this tool to quickly model scenarios and plan anything from a simple detour on a single route to an entirely new transit system. Remix also displays maps that show how far someone can go using transit within 15, 30, or 60 minutes. Remix can also be used as an outreach tool at public meetings by allowing presenters to give live demonstrations on possible changes to a system. These real-time cost adjustments give a clear representation of how feasible a plan is and help people better visualize transit systems and transit design.

Traffic Incident Management

Traffic incident management (TIM) is a planned and coordinated program to detect and clear traffic incidents and incident-related debris as safely and quickly as possible. For more than 20 years, transportation, public safety, and private sector professionals have worked cooperatively on TIM programs that restore traffic capacity through a range of technological and procedural strategies. As TIM programs have matured, program managers and field-level practitioners alike have benefited from state and federal efforts to collect, document, and distribute good practices, lessons learned, and the necessary steps for implementing, improving, and expanding TIM program components.

Traffic incident management programs start by coordinating with the traditional responders (law enforcement, towing and recovery, fire and rescue, and EMS) responsible with incident response efforts. This forms the basis of a multi-agency team and a cornerstone for a TIM program. This coordination has already begun as part of Metro COG’s Alternate Routes/Traffic Incident Management Guidebook. In May, a number of regional safety partners met for the first of three stakeholder meetings to discuss the TIM background in Fargo-Moorhead and touch upon task-specific challenges and strategies related to TIM programs. Challenges include obtaining accurate information from motorists, accessing incident scenes, and condemning a spilled load, as well as interagency coordination and communication, technology procurement and deployment, and performance measurement. These challenges are part of a broader discussion on five overlapping functional areas in TIM programs such as: incident detection and verification, traveler information, incident response, scene management and traffic control, and quick clearance and recovery.

For more information on this project, please contact Bill Christian at christian@fmmetrocog.org.