

CAV Update

August 2025

From the Editors

The *Trans-Canada Automated Truck Demonstration Project* is moving ahead very well. Here are the highlights:

- The list of stakeholders who are interested in the project is growing, with increasing levels of interest from government, industry and academia.
- CAVI is hosting a webinar to provide more information on this ground-breaking demonstration. The agenda includes presentations on the project, its design and implementation phases, the planned coordination with multiple partners, and an interactive discussion to collect your feedback. Two special features will be a briefing from the Ontario Ministry of Transportation on its pilot program to allow testing of large automated, commercial trucks on public roads, and an Executive Summary in French. The webinar is on Thursday September 4, 2025 at 1:00-2:00pm ET. There is no charge, but we ask that attendees register by going to CAVI's web site here and clicking on "Events".
- In October, we will announce seven working groups to plan the demonstration in more detail. For these working groups, we will seek Chairs and members. These working groups will include defining the pilot in greater detail, developing a safety plan, a communications plan, and a financial plan.

Canadian CAV News

Calgary-based **Bright Autonomy** was a developer of last-mile delivery robots for groceries before changing course and becoming a specialist for autonomous vehicles

designed for maintaining golf courses. The company retrofits existing equipment with its autonomous technology for addressing labour shortage and greater operational efficiency. It works with equipment from major brands such



as **John Deere**, **Toro**, **Cushman** and others. The company's software suite complements its hardware by providing a 360-degree live view, providing real-time alerts for issues and obstacles. Furthermore, the system collects and analyzes data such as the turf condition and other functions related to the golf course's maintenance and operation. At present, three Calgary area golf courses are using the company's automated equipment. More information about Bright Autonomy is at the company's website at this link. A short YouTube video showing the company's automated equipment in action can be viewed at this link.

On August 5, 2025, the **Ontario Government** announced its initiative for *Automated*

Commercial Motor Vehicle (ACMV) testing on Ontario's public roads, under both provincial and municipal jurisdictions. The program spans 10-years, from August 1, 2025 to August 1, 2035. The broad aims of this pilot program are to evaluate the



automated truck technology, and to assess opportunities to improve road safety and support the trucking sector. Interested parties need to submit an application and to have a minimum of \$10 million liability insurance. Detailed information about ACMV is available at the Ontario Government site at this link.

A briefing on this program by the Ontario Ministry of Transportation will be part of CAVI's webinar on September 4, 2025. See above for more details.

More information has been published by **Aurrigo International plc**, a leader in autonomous vehicle technology, on the deployment of its nine-seater passenger Auto-Shuttle® in Kanata ON. This marks the start of Canada's first all-season, medium-speed autonomous shuttle on public roads.

The project is delivered in collaboration with the Kanata North Business Association (KNBA), Area X.O operated by Invest Ottawa, and several other project partners each contributing unique expertise. It will connect eight stops across Kanata North Technology Park, Canada's largest tech



park. The 4.5 km route has been strategically designed to link businesses, restaurants, community spaces, and public transit, providing safe and accessible mobility for workers, residents, and visitors.

The winter-ready, Level 4 electric and autonomous shuttle has been engineered to operate in challenging Canadian conditions, including snow, ice, rain, wind, and falling leaves. Following a period of rigorous testing at Area X.O, the vehicle will begin service on public roads, operating in mixed traffic at medium speeds.

David Keene MBE, CEO of Aurrigo International plc, commented: "We have been working with Kanata North Business Association for over six years on how we can effectively bring autonomous vehicles to the streets of Canada. "This important project accelerates this vision, and we believe we have the real-world technology in place in Auto-Shuttle® that will prove that driverless vehicles can operate safely and effectively in all weather conditions. More information is <a href="https://example.com/here/bessel/cean-auto-safely-auto-sa

One of the reasons often cited for the progress of autonomous systems is to address the labour shortage. Whether the industry is trucking, forestry, warehousing, mining, or

agriculture, where qualified help is scarce, companies look to automation. One such company is Salmon Arm-based **4AG Robotics, Inc.** in British Columbia. The company has developed an autonomous system for mushroom growers. Using advanced



vision systems, AI and robotics, the company's system uses cameras, suction cups, and advanced motion control to handle delicate produce with human-like precision for plucking, trimming, and packing commercially grown mushrooms. So far, sixteen of these systems have been deployed in Canada, the U.S., Ireland, the Netherlands, and Australia where they work 24/7. To date, 4AG Robotics has raised \$57.5 million in funding. More information is at this link.

GCXpo 2025 will be held on September 24, 2025. Co-hosted by Area X.O and the Government of Canada, GCXpo 2025 will highlight 80+ of Canada's top innovators that will showcase transformative technologies



across many sectors, including Connected and Autonomous Vehicles (CAVs), IoT, telecom, cybersecurity, and more. More information is here.

International CAV News

The main production facility for **Waymo**'s robotaxis is in Mesa, Arizona. The 239,000 sq. ft. facility was opened in October 2024 in collaboration with Canada's **Magna International Inc. Forbes** magazine was given a tour of the robotaxi factory. At present, this plant produces Waymo's battery-powered Jaguar I-PACE robotaxis at a rate of six per day. Previously, the Jaguars were produced at Magna's plant in Graz, Austria. Given the rapid expansion of Waymo's robotaxi business, Waymo plans to increase production to thousands of robotaxis annually. Currently, the 1,500 Waymo robotaxis have provided more than rides a week or about 24 a day per vehicle. This is vastly more use than and trucks that are driven only a few times a day. Waymo projects that we





annually. Currently, the 1,500 Waymo robotaxis have provided more than 250,000 paid rides a week or about 24 a day per vehicle. This is vastly more use than personal cars and trucks that are driven only a few times a day. Waymo projects that with 10,000 robotaxis on the road, its fleet could be booking 250,000 rides a day. That is well over 1.5 million a week. Waymo's parent company Alphabet may in the future make its self-drive technology available for use in personal vehicles, according to the company CEO. Forbes report can be viewed at this link or this one.

The **BBC** published a recent report titled *On board the driverless lorries hoping to* transform China's transport industry. The BBC correspondent had an opportunity to ride in an autonomous heavy haul truck and speak to several vehicle automation experts from Pony.ai and

Rino.ai. The latter company specializes in the so-called *middle* mile where autonomous vans deliver goods from large warehouses to local distribution hubs where scooter riders do the last mile delivery. The company has 500 such vans operating in various parts of China. Rino.ai has plans to introduce its technology in Australia later this year when a supermarket chain will start using their



driverless delivery vehicles. The company behind long-haul transport trucks is Pony.ai. Similar to their counterparts in the west, these companies believe in reducing operational costs by removing the human driver from the vehicle. Autonomous vehicles of all shapes and forms - robotaxis, delivery vans and transport trucks have found a strong foothold in China; partly from a more liberal regulatory regime, encouragement, and funding by the central government. The BBC report can be viewed at this link.

An article in the **New York Times** titled *Waymo Limits Service in San Francisco as Immigration Protests Spread* delves into how the Trump Administration immigration policies have had an impact on Waymo's robotaxi

operations in Los Angeles and San Francisco. Five of Waymo's robotaxis were destroyed in Los Angeles by

The New Hork Times

protestors opposed to the administration's immigration actions. Waymo suspended its service in downtown Los Angeles to stop further vandalization of its vehicles which are worth US\$100,000 each. Based on what happened in Los Angeles, Waymo also suspended its service in parts of San Francisco where protests were planned. A quote from one of the protestors: Waymos don't have human drivers, they're devoid of humanity. Destroyed robot taxis are symbolic of the attempts, throughout the history of this country, by the tech industry to strip us of community. The New York Times article can be viewed at this link.

Leading U.S. passenger drone companies **Archer Aviation**, **Inc.** (market cap US\$5.9 billion) and Joby Aviation, Inc. (market cap US\$12.2 billion) are making rapid progress in gaining FAA certification for starting commercial passenger services. According to reports, Archer has logged 400 hours of autonomous flights. It hopes to offer its passenger drone services for the FIFA World Cup in Los Angeles scheduled for June and July 2026. On August 5, 2025, it was reported that Joby had signed a US\$125 million agreement to





buy New York-based **Blade Air Mobility, Inc.** (a helicopter service company), in anticipation of starting its passenger service in the New York City area. Through this acquisition, Joby gains access to Blade's infrastructure, maintenance, and other facilities. More information on Archer at this link, and for Joby at this link.

The **United Nations**' Office of Counter-Terrorism has published a 58-page report titled Algorithms and Terrorism: The Malicious Use of Artificial Intelligence for Terrorist

Purposes. In its Enabling Physical Attacks section, it identifies three new attack vectors: Autonomous Vehicles, Drones and Genetically Targeted Bio-weapons. It states that vehicles have long been used for terrorist attacks. AVs now open a new front for such attacks. Increased autonomy in cars could very well be an amenable



development for terrorist groups, allowing them to effectively carry out one of their most traditional types of attacks remotely, without the need for a follower to sacrifice his or her life or risk being apprehended. Aside from facilitating attacks with fully autonomous vehicle-borne improvised explosive devices, it has also been suggested that self-driving cars could be used to cause serious accidents, blocking the roads or cause self-driving carnage .A copy of the UN report can be viewed/downloaded at their most traditional types of attacks remotely, without the need for a follower to sacrifice his or her life or risk being apprehended. Aside from facilitating attacks with fully autonomous vehicle-borne improvised explosive devices, it has also been suggested that self-driving cars could be used to cause serious accidents, blocking the roads or cause self-driving carnage .A copy of the UN report can be viewed/downloaded at their most types.

One of the smaller players in the robotaxi business is Ann Arbor-based **May Mobility**. It has a fleet of about 40 Toyota Siennas deployed in various cities in the United States. It is also active in the cities of Tokyo, Nagoya, and Hiroshima in Japan. Due to its presence in Japan, the **Mitsubishi UFJ Financial Group** (MUFG)





has partnered with May Mobility to accelerate the spread of robotaxi business in Japan. Part of the motivation by MUFG is the shortage of drivers due to the declining birthrate and aging population, as well as the voluntary surrender of drivers' licenses by the elderly. These are expected to increase the number of people without sufficient access to transportation. Robotaxis are seen as a potential solution to address this issue. May Mobility has raised over US\$380 million in funding to date. More information at this link.

San Francisco-based **Civ Robotics, Inc.** is a developer of autonomous ground vehicles specializing in automating the labour intensive jobs land surveyors do with traditional equipment such as a theodolite, tripods, tape measures, spray paint, staves and rods, prisms, etc. Using such equipment, a surveying crew can manage to mark about 200-

450 survey points each day. By contrast, the *CivDot* automated survey robot can map

out up to 3,000 points or 17 miles (about 27 km) of markings per day. To start, the robot is loaded with a *Comma Separated Values* (CSV) file containing the coordinates of the project. The robot then autonomously surveys the field and blasts spray paint or shoots a beam of laser light at the exact locations needed to mark off the project's survey points. The company says that 100 *CivDots* are deployed on job sites around the world. They are used to do survey work for solar farms, earthworks, airports, roads, parking lots and other use cases. More information at this link. A short YouTube video showing *CivDot* in action can be viewed at this link.

And finally, the second **Abu Dhabi Autonomous Racing League** (A2RL) will be held in Abu Dhabi on November 15, 2025. The prize purse for this year's race is set at US\$2.25 million. The race is similar to a *Formula One*



(F1) race sans race drivers behind the steering wheel. The organizers describe A2RL as an extreme racing series that is pushing the envelope of autonomous technology. The intent is to accelerate the development of advanced autonomous systems while shining a spotlight on Abu Dhabi as a major city for autonomous technology development and deployment. To assist the teams with honing their skills, the organizers have developed the *A2RL SIM-Sprint Challenge*, a virtual racing series designed to help autonomous racing teams sharpen their algorithms long before race day. This is partly to address the scarcity of track time for the real cars to be put through their paces. The simulation environment can recreate A2RL's race cars, tracks, and racing conditions with remarkable accuracy. Similar to a digital twin, teams can run thousands of scenarios, fine-tune their decision-making models and iron out rare but critical edge cases. More information about A2RL at this link. A short YouTube video showing the highlights of the 2024 race can be viewed at this link.

CAVI Speakers' Bureau

CAVI provides speakers for many different types of events across Canada, the US and overseas. On the one hand, our keynotes and presentations have core messaging on the status of CAVs, their deployment scenarios, and the impact on business plans, government regulations, and almost all aspects of society. On the other hand, each presentation is customized for the audience and the time available.

To inquire about a speaker for your event, please write to speakers@cavi-icva.ca

Upcoming CAV-Related Events

September 4, 2025	CAVI webinar on the <i>Trans-Canada Autonomous Truck</i> Demonstration Project, at 1:00pm ET. For details and to register, go to CAVI's web site here and click on "Events"
September 8-9, 2025	Automotive Cybersecurity Summit 2025, Orange County, California
September 24, 2025	GCXpo co-hosted by Area X.O and the Government of Canada, Ottawa ON
October 5-8, 2025	TAC Conference & Exhibition, Quebec City
October 15-16, 2025	Software Defined Vehicles USA 2025, Detroit, MI
October 21-23, 2025	Future of Automotive Testing Conference, Novi, Michigan
November 4-6, 2025	Aerial Evolution Association of Canada annual conference and exhibition, Edmonton AB
November 18-20, 2025	Automotive Cyber Security, Connectivity & SDV Week 2025, Berlin, Germany
November 24-25, 2025	Autonomous Vehicles & Al Europe 2025, Frankfurt, Germany
January 6-9, 2026	Consumer Electronics Show (CES), Las Vegas
June 2-4, 2026	AutoTech 2026, Suburban Collection Showplace, Novi, MI

About CAV Update

CAV Update is a free, monthly summary of news and analysis in the world of connected and automated vehicles, and their impact on the private sector, government, and society.

Chief Editor: Ahmad Radmanesh Contributors to this issue: Barrie Kirk, Keith Fagan, and Donna Elliott

To subscribe, click <u>here</u>. To unsubscribe, click <u>here</u>. We welcome all comments; please send them <u>here</u>

The Canadian Automated Vehicle Initiative (CAVI) is an association for all stakeholders in industry, government and academia involved in any aspect of the ever-increasing automated vehicles ecosystem.

300 Earl Grey Drive, Suite 222, Ottawa ON K2T 1C1, Canada. info@cavi-icva.ca www.cavi-icva.ca

© CAVI 2025