Canadian Automated Vehicle Initiative

CAV Update November 2025

From the Editors

The *Trans-Canada Autonomous Truck Demonstration Project* is moving into Phase 2. In Phase 1, we announced the vision for a driverless tractor-trailer that will complete a journey from Halifax to Vancouver in 2028. This will establish a global record for autonomous vehicle travel while demonstrating Canada's leadership in addressing critical infrastructure challenges. We have received support from stakeholders in industry, academia and government from across Canada.

In Phase 2, we will develop detailed plans. To do this, we are creating six Functional Committees.

- Coordinating these Functional Committees is the project Steering Committee, which comprises ten people. The Chair is Barrie Kirk, and the Vice-Chair is Andrew Miller of **Paladin Consulting**.

- The six Functional Committees will develop the technical plan, a safety plan, a financial plan, tasks and schedule, marketing and communications plan, and Provincial regulatory harmonization.

- We have developed draft terms of reference for all 6 Functional Committees. If you would like a copy and explore getting more involved in the project, please message Barrie Kirk or write to cav-truck@cavi-icva.ca

- We have had an excellent response to our call for volunteers for the Functional Committees. We plan to announce the Chairs and Members of the committees in early December, so that they can start work in the New Year.

- On November 24, 2025, **Truck News** published an excellent article on the project. You can read it here.

The big picture is that this is a major nation-building project that will be essential if there is going to be significant growth in inter-Provincial trade. This project will also cement Canada’s position as a world leader in autonomous vehicle technology and artificial intelligence.

Canadian CAV News

Intertraffic is a global organization for the mobility and traffic technology sector. In October 2025, Intertraffic conducted an extensive interview with Bern Grush – Founder and CEO of Toronto-based company **Pudocity** on the topic of orchestration of robotaxis in the future. Once robotaxis go mainstream, there will be multiple companies operating their fleets of robotaxis as well as other forms of transport such as shuttles, public transit, taxi, ride-hail, household vehicle and aerial drone all competing for the limited curb space for passenger pick-up and drop-off (pudo). To avoid chaos and congestion at public places such as airports, arenas, stadiums and other venues attracting large crowds, a carefully designed traffic management system will be needed to manage/orchestrate all these arrivals and departures. It is akin to how runways at large airports are managed for orderly arrival and departure of aircraft. In the interview, Bern explains the intricacies of such an orchestration system that is currently under development. The interview can be viewed at this link.

The *Volvo VNL* is a heavy-duty truck produced by the Swedish vehicle manufacturer **Volvo Trucks**. Leading Canadian autonomous truck developer, Toronto-based **Waabi** has expanded its current partnership with Volvo to equip a version of Volvo VNL specifically designed for autonomous operation. Waabi hopes to be the first company to commercialize self-driving trucks without a human safety driver or observer. The Volvo VNL trucks will incorporate Waabi's AI-based technology, including its sensor suite, compute, and the *Waabi Driver* software. Volvo, **Uber** and **Nvidia** have invested significant sums in Waabi. More information is at this link.

On October 10, 2025, the *Ingenuity Labs Research Institute* at **Queen's University** hosted the fifth annual *Robotics and AI Symposium* (RAIS2025). This event was held in conjunction with the **Canadian Robotics Council** symposium on October 9th. The keynote speaker was Dr. Elizabeth Croft of the **University of Victoria**'s Department of Mechanical, Electrical and Computer Engineering. Her topic was *Human-Robot Interaction* (HRI). This is a hot area of research given the prevalence of all kinds of robotics systems and the nascent field of *Physical AI*. HRI is of particular importance in designing robots that can interpret and respond to human intent through motion and gesture. Dr. Croft's research focuses on predictive motion planning, shared

autonomy, and non-verbal communication, enabling robots to work safely and intuitively alongside humans. Her keynote address can be viewed on YouTube at this link.

International CAV News

Autonomous vehicles such as robotaxis and shuttles operate for longer periods than regular vehicles. Theoretically, robotaxis can operate 24/7. It is reported that a typical **Waymo** robotaxi is on the road 10-12 hours per day. This necessitates vehicle components specially designed for such vehicles. The German multinational – **Continental AG**, is addressing one such need by manufacturing tires made with AVs in mind. The company has launched its *aContact* tire line for robotaxis, shuttles, and delivery services. First deployments are planned for U.S. cities such as San Francisco and Las Vegas. The tires feature customized technologies for extended operational periods, reinforced sidewalls for longer service life, lower rolling resistance to maximize electric vehicle range, and narrow, tall profiles that reduce air resistance while supporting heavy battery packs. More information at this link.

Connected Vehicle (CV) technology has been around for 25-years or more. Initially in the form of *Dedicated Short Range Communication* (DSRC) and currently utilizing cellular technologies such as 4G and 5G. The Chinese automotive conglomerate, **Geely**, has now taken CV technology to the next level by launching and operating its own satellite constellation in *Low-Earth-Orbit* (LEO). Geely's LEO satellites orbit the earth at a height of about 600 Km, and speeds of 7.56 Km/s. Dubbed the *Future Mobility Constellation*, its purpose is to provide high-precision positioning and seamless data communication for autonomous and connected vehicles, as well as IoT devices. Geely plans to operate 72 satellites by the end of 2025. More information is at this link.

Arizona-based **Revolute Robotics** is a startup with a unique product. It has developed a hybrid vehicle that can roll on the ground to do inspections and collect data, and when necessary, it can take-off and fly, say to get over an obstacle in its path. This hybrid vehicle has found applications in construction, surveying, the military, and surveillance such as perimeter patrol. The system is designed to be a multi-tool for robotic inspection of facilities and sites. It supports visual, thermal, gas, and radiation detection, lidar mapping, and ultrasonic testing for oil and gas, power, chemicals,

construction, mining, and other industries. To date, the company has raised US$2.23 million in funding. More information at this link. The hybrid robot can be seen in action in a short YouTube video at this link.

On November 6, 2025 shareholders of **Tesla** voted overwhelmingly on a compensation package for CEO Elon Musk that could be worth up to US$1 trillion if all performance milestones are met. Among the milestones are deployment of one million Tesla robotaxis, and one million Tesla humanoid robots known as *Optimus* over a 10-year period ending in September 2035. Additionally, Tesla must reach a valuation of roughly US$8.5 trillion and deliver 20 million vehicles annually and earn around US$400 billion in core profit. More information is at this link.

More airports are adopting autonomous vehicles for transporting baggage carts to and from the baggage handling facility to the aircraft; as well as deploying automated shuttles for transporting passengers from the terminal buildings to the airliners. UK-based **Aurrigo International plc** is a leading company manufacturing both types of these AVs. One of its latest customers is the UK's **Teesside International Airport**. The contract worth US$1.36 million will see Aurrigo deploy autonomous baggage and passenger systems for the airside operations at this airport. Starting in mid-October, the company's eight-seat *Auto-Shuttle* will kick off work to transport passengers directly from the aircraft steps to the terminal building. In early January 2026, Aurrigo will follow this by introducing the *Auto-DollyTug*, a fully driverless vehicle designed to move cargo and baggage around the airport. Aurrigo's automated airport vehicles have also been deployed in Amsterdam, Stuttgart, Ottawa, Singapore and Cincinnati airport in the United States. More information is at this link.

Staying with airports, the **Federal Aviation Authority** (FAA) in the United States has issued guidelines for *Autonomous Ground Vehicle Systems* (AGVS) operating in and around airports to perform various tasks such as self-driving jet bridges, aircraft tugs, baggage carts, de-icing trucks, snow removal equipment, grass-cutting vehicles, employee buses, maintenance vehicles, and passenger shuttles. More information is at this link. The guidance documents can also be downloaded at the same link.

One of the best-known names in management consulting is the U.S. firm **McKinsey & Company**. McKinsey offers professional services to corporations, governments, and other organizations. At a recent McKinsey conference in California, a McKinsey partner conducted a wide-ranging interview with **Waymo**'s Chief Product Officer. According to Waymo, robotaxi technology has reached an *inflection point* in terms of going from an experimental mode to a fully commercial one. Waymo says it has built trust across diverse demographics - from seniors to visually impaired individuals to families, who feel safe riding a Waymo robotaxi, have more personal autonomy, and practical benefits such as eliminating parking stress, enabling productive use of travel time, and providing privacy for calls or conversation with fellow riders. The interview can be viewed/downloaded at this link.

Staying with **Waymo**, the company has partnered with a company called **Via** in Chandler, Arizona to provide transit-on-demand (micro-transit) services in that city. This effectively makes Waymo part of the public transportation system in Chandler. The service is very affordable - charging US$2 for regular riders, US$1 for seniors and wheelchair users, and free for middle and high school students. Via sells software and operational services to cities, transit agencies, schools, and other institutions that want to combine on-demand ridesharing with public transit. More information is at this link.

Large seaports are always looking for greater operational efficiency and lowering costs. Greater automation of port operations is one path for this goal. One such port is the port of **Antwerp-Bruges** in Belgium. This port is the second largest seaport in Europe after Rotterdam. The port recently partnered with the Swedish automated truck manufacturer **Einride** to demonstrate how Einride's cabless, electric and autonomous trucks can operate within a busy port such as Antwerp-Bruges, and its surrounding public roads. The significance of this demonstration is the fact that a fully autonomous truck has managed to tackle one of the most complex logistics centers in the world. In its 9-years existence, Einride has raised US$652 million in venture funding, the latest round was for US$100 million in October 2025. More information is at this link.

Nvidia Corporation has been engaged in autonomous vehicle development for a long time. On the hardware side, its latest *DRIVE AGX Thor* is used by a number of AV developers. And, on the software side, its *DRIVE AV* is a full-stack software purpose-built for Level 4

autonomy, featuring active safety, parking, hands-off and eyes-off driving capabilities. Nvidia has also invested in a number of AV companies such as **Waabi**, **WeRide**, **Nuro** and others. This includes Britain's **Wayve Technologies Ltd.** based in London. Nvidia CEO (Jensen Huang) was recently in London for high-level meetings with the British Prime Minister and its Minister of Science, Innovation and Technology. He also met with the CEO of Wayve and presented him with a signed box containing the latest of Nvidia's AI *Thor* processors for deploying in Wayve's latest Gen 3 AVs. The two CEOs then took a ride in a Wayve AV in the busy streets of London. Nvidia has also announced its intention of investing up to US$500 million in Wayve, and up to US$2.7 billion investment in the UK's wider AI startup ecosystem. More information at this link. A short YouTube video of the AV ride in London can be viewed at this link.

And finally, it is no secret that driverless taxis can be easily gamed by placing traffic cones in front of them; or walking in front of them and other distractions. In a new prank played on Waymo in the summer in San Francisco, and only reported on in October 2025, 50 people requested a Waymo robotaxi for a pickup at San Francisco's longest dead-end street at the same time. It appears that Waymo's system got fooled and dispatched 50 vehicles to the same dead-end road. This prank is somewhat similar to a *Distributed Denial of Service* (DDoS) which is a technique used by bad actors to overwhelm websites and crash them. It is reported that Waymo vehicles dutifully showed up, waited about 10 minutes and then went on their way when no one actually boarded the robotaxis. Waymo charged US$5 for each order because of the passenger *no show*. Waymo did not publish any public statement about this prank. More information 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

January 6-9, 2026	Consumer Electronics Show (CES), Las Vegas
March 10-13, 2026	Intertraffic Amsterdam, Netherlands
April 27-29, 2026	17th ITS European Congress, Istanbul, Türkiye
April 29-30, 2026	Discovery X by Ontario Centre of Innovation, Toronto, ON
June 2-4, 2026	AutoTech 2026, Suburban Collection Showplace, Novi, MI
June 9-12, 2026	ITS America Conference & Expo, Detroit, Michigan
October 19-23, 2026	ITS World Congress, Gangneung, S.Korea

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.

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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.

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