

## CAV Update

**July 2025** 

### From the Editors

The **Government of Canada** has invited Canadians to provide their ideas and priorities for the Fall 2025 Budget. This is an excellent opportunity for all stakeholders to advocate for significant CAV funding.

The more submissions that the Government receives, the greater the impact. We are therefore asking everybody in the Canadian CAV ecosystem to provide their input to the Government of Canada, including the Department of Finance, and with copies to Ministers and politicians. The Department of Finance's request for submissions is <a href="here">here</a>. The deadline is August 28, 2025.

CAVI has prepared draft messaging and other information that stakeholders can adapt and use in their own messaging. In summary:

- Canada is lagging in its investment and preparations for the era of Connected and Automated Vehicles.
- Canada's inter-provincial trade faces a crisis: we are short 25,600 long-distance truck drivers, with shortfalls reaching 30,000 by 2030 -- with some people forecasting a shortage of 50,000 by the 2030s. This chronic shortage directly threatens the 90% of inter-provincial trade that moves by truck, undermining federal and provincial economic growth strategies. A nation-wide demonstration project of an autonomous tractor-trailer will help to accelerate the use of autonomous trucks.
- A government investment would create high-tech jobs and strengthen Canada's transportation sector. For this to happen, however, Federal coordination is necessary to ensure that automated trucks can operate coast-to-coast.
- Canada brings significant strengths to the CAV landscape. Canada's approach
  has been fragmented however, unlike those of its peer countries. We need to
  focus on developing synergies.

We recommend that Canada includes a significant CAV investment in the Fall 2025 Budget, starting with \$30–\$50 million for the Trans-Canada Automated Truck Demonstration project and supporting CAV frameworks. This will strengthen inter-Provincial trade and position Canada as a global CAV leader while creating jobs and export opportunities for Canadians.

Please consider making a submission to the Government of Canada. To help you, a more detailed version of this messaging is here.

#### Canadian CAV News

Related to the above, **CAVI** is hosting a webinar on the *Trans-Canada Autonomous Truck Demonstration Project*, an ambitious initiative for Canada to achieve a milestone

in automated trucking: a driverless truck travelling from Halifax to Vancouver by 2028.

Join us to learn about the business case, project plans, regulatory challenges, and how this groundbreaking demonstration could position Canada as a global leader in automated trucking while addressing critical driver shortages.

The agenda includes presentations on the project as a whole, its implementation phases, the stakeholder coordination required, and an interactive discussion to collect your feedback. The webinar is free and open to all.

#### Hold the date: Thursday September 4, 2025 at 1:00pm ET

Registration details coming soon.

For any questions about the project or the webinar, please write to cav truck@cavi-icva.ca

Waterloo-based **Dejero** is a leading telecommunication company specializing in providing mobile broadcast equipment to TV companies, first responders and others. In partnership with Quebec-based **Cyberkar Systems** and U.S. company **Nomad GCS**, Dejero is now adapting its technology for connected and autonomous vehicle applications. A key piece of its technology is *Smart Blending* to support critical applications in

its technology is *Smart Blending* to support critical applications in fleet connectivity and public safety. The *blending* refers to the

way Dejero utilizes various telecommunication networks including 4G/5G cellular, GEO/MEO/LEO satellite, and fixed broadband, to create a software-defined *network of networks* managed in the cloud. This provides highly reliable connectivity, which is a key requirement in CAV applications. The project is financially supported by the **Ontario Vehicle Innovation Network** (OVIN - \$187,115), and \$380,000 from the industry. Founded in 2008, Dejero has so far raised US\$124 million in funding. More information is at this link.

On June 23, 2025, the BeBot beach cleaning robot was unveiled at Lake Simcoe in

Ontario. This automated robot can operate up to 8-hours on a single charge and cover an area of about 3,000 m<sup>2</sup>. It is designed to pick up beach garbage such as food wrappers, plastic bottles, bottle caps, cardboard, cotton buds, cigarette butts and plastic pieces that have broken down into fragments. The project is a collaborative effort by Pollution Probe, Unsmoke Canada, and the Ontario Ministry of the Environment, Conservation and Parks. BeBot will be on duty at various Great Lakes locations



until the end of summer. *BeBot* was developed by France's **Searial Cleaners** and Italy's **Niteko**. More information is at <u>this link</u>. A short YouTube video of *BeBot* in action can be viewed at <u>this link</u>.

GCXpo 2025 - a free event co-hosted by Area X.O and the Government of Canada - returns September 24, 2025 to spotlight 80+ of Canada's top innovators showcasing transformative technologies including:

- · Connected and autonomous vehicles (CAVs)
- · Defence innovation and dual-use technologies
- · Robotics, Al. drones, and cleantech
- Smart City infrastructure and public digital twins
- · Agri-tech and sustainable farming
- · IoT, telecom, cybersecurity, and more

The program includes demonstrations in the Innovation Zones, networking, and the food truck rally. GCXpo is a hub for connecting Canada's top tech, talent, investors, and trailblazers. Click <a href="here">here</a> for more information and to register.

The **Aerial Evolution Association of Canada** (AEAC) has announced that the 2025 Aerial Evolution Conference & Exhibition will be hosted at **Edmonton International Airport** from November 4-6, 2025.

The conference program will explore how drone technology is shaping the future of security, enhancing Environment, Social and Governance (ESG) initiatives, and driving the seamless integration of Remotely Piloted Aircraft System (RPAS) into national airspace.



The conference will have live drone demonstrations, technology exhibits, and workshops in support of regulatory changes. More information is <a href="here">here</a>.

#### International CAV News

On June 26, 2025, **The New York Times** (NYT) published an article about a possible deal between **Uber** and its previous CEO – Travis Kalanick, to buy an established self-driving car start-up. According to the NYT report, the acquisition target is the U.S. subsidiary of China-based **The New York Times** 

**Pony.ai**. The company has licenses for operating

robotaxi business in both China and United States. This is not the only bet Uber is making on robotaxis. The company has struck roughly 18 partnerships with autonomous vehicle companies like **Wayve**, **May Mobility** and **WeRide** to initiate pilot programs for driverless car services in Europe, the Middle East and Asia. According to the report, Uber feels threatened by the rapid inroads **Waymo** is making in the ride-hailing business with its driverless robotaxis. At present, Pony.ai has a market capitalization of US\$4.8 billion. More information on NYT's site at this link or this one.

The State of Texas has been a hotbed of autonomous truck development for a long time. This is due to Texas' business-friendly environment and being open to new technologies. Leading autonomous truck companies such as **Aurora**, **Kodiak**, **Waymo** and Canada's **Waabi** have chosen Texas for their R&D efforts and highway testing for these reasons. In a surprising development, *Bill 4402* has been introduced in the Texas legislature to require autonomous trucks to have a safety driver behind the wheel at all times. This of course negates the whole notion of a driverless vehicle. Should the bill pass in both the House and the

Senate, it will go into effect on September 1, 2025. Unsurprisingly, the **Teamsters Union** is very supportive of this bill as they see driverless trucks as a big threat to the jobs of its members. More information at <a href="this link">this link</a>. A copy of the proposed Texas Bill 4402 can be viewed/downloaded at <a href="this link">this link</a>.

Staying with **Texas**, a recent article in **verge.com** describes how Texas became so AV-friendly starting in early 2010s. According to a well-known autonomous vehicle expert, *If* you show up and you tell the state you're operating (an

AV business), and you have insurance, you're good to go. That's about it. The Texas AV regulations paving the way for AV companies came into force in 2017. According to

The<sup>T</sup>/erge

these regulations, AVs operating in Texas must comply with all traffic laws and be equipped with a video recording device, and it holds the vehicle's manufacturer

responsible when an AV breaks the law. But what's more notable is what the legislation doesn't say. There are no licensing or registration requirements for verifying the capabilities of autonomous vehicles, and no set standards for when a carmaker can remove safety drivers. Crucially, the law also states that no local government can enact regulations that supersede those of the state. The mayors of large Texas cities are not happy with this. The Verge article can be viewed at <a href="this link">this link</a>. Copy of Texas' AV legislation is available at the state's site at <a href="this link">this link</a>.

Amazon-owned **Zoox** is building a new factory in California designed for mass producing its robotaxis. It has capacity for assembling up to 10,000 vehicles annually. At present, Zoox is active in Las Vegas, but it has expansion plans for other cities such as San Francisco, Austin, Miami, and other cities. Although a modern production facility, use of assembly robots is limited. Most of the assembly work is done manually by workers. The Zoox robotaxi is not equipped with conventional vehicle controls such as a steering wheel, brakes, or accelerator pedals. It is also symmetrical; the front and back of the vehicle are identical. More information on Zoox's site at <a href="this link">this link</a>. A short YouTube video of the new assembly line can be viewed at <a href="this link">this link</a>. At one time, **General Motors** was planning to manufacture custom robotaxis similar to Zoox in Michigan. However, those plans were abandoned when GM made a corporate decision to unwind its robotaxi division, **Cruise**.

For over a decade, various bills on regulating autonomous vehicles have been introduced in the **U.S. Congress**, only to die on the House or Senate floors. The latest effort on reviving this initiative is by a

Republican Wyoming senator in a proposed bill titled *Autonomous Vehicle Acceleration Act of 2025*. The intent of this bill is to cut through the red tape and establish a clear path forward for

United States Senate

WASHINGTON, DC 20510

getting safe autonomous vehicles on American roads, spur job creation, and to maintain United States' technological leadership. To this end, regulations on vehicle specifications and safety by the **Federal Motor Vehicle Safety Standards** will be reviewed to determine if they pose a challenge to the introduction of autonomous cars and trucks in the U.S. Furthermore, truck platooning will also be given a fresh look to determine if it can deliver on its promise of improved fuel economy and greater efficiency for carrying freight. More information at this link. A copy of the proposed Senate bill can be viewed/downloaded at this link.

It is generally assumed that if you take the driver out of a ride-hailing vehicle, there would be significant cost savings for operating that vehicle. A ballpark figure for the cost of the driver is about 40% of the cost of a ride. In theory, a robotaxi company such as **Waymo** has no driver costs and consequently should be cheaper than a traditional ride in a human-operated **Uber** or **Lyft**. A 25-page report published by New York based **Obi** in June 2025 finds that this is not the case. According to Obi's

findings, comparable rides in a Waymo robotaxi cost significantly more than Uber or Lyft. Obi analyzed 90,000 ride-hail records for the period March 25-April 25, 2025 in San Francisco. The analysis revealed that Lyft offered the lowest average price at US\$14.44. Uber was next at US\$15.58. Waymo's average price across the months' worth of data was US\$20.43. Part of the reason for people willing to pay a premium to ride in a robotaxi is a real sense of excitement for technology, novelty, and a preference to sometimes be in the car without a driver. More information at this link. The Obi report can be viewed/downloaded at this link.

The dominant countries leading the development of robotaxis are United States and China. In the U.S., **Waymo** has the largest robotaxi market share at present. In China, several companies are in fierce competition for market share. **Apollo Go** (owned by Baidu), **WeRide** and **Pony.ai** are the major players in the robotaxi business. When it comes to expanding robotaxi business beyond their borders, China is clearly in the lead. Whereas Waymo only has operations in Tokyo, the Chinese rivals have presence in Europe, Middle-east, Singapore, and S. Korea. Due to competition and scale, the average cost per mile of a robotaxi ride in China is about US\$0.35. Comparable Waymo cost is US\$2. More information and comparison chart at this link.

**Uber** has partnered with many robotaxi companies in the United States and elsewhere. One of the latest is with the UK robotaxi developer **Wayve**. According to a report by the **BBC**, part of the reason is the UK government's easing of some of its AV regulations concerning small autonomous bus and taxi commercial services to get them off the ground. The UK government predicts AVs will create 38,000 jobs and add £42bn (US\$56.8 billion at the current exchange rate) to the UK economy by 2035. By contrast, the **General, Municipal, Boilermakers** (GMB) trade union, one of the UK's largest labour unions with over 500,000 members warns about *significant social implications* driverless cars and taxis could have - including on unemployment. The BBC article can be viewed at this link.

Staying with **Uber**, a recent **Bloomberg** report highlighted growing concerns among investors about the company's future, as robotaxis continue to claim a larger share of the ride-hailing market. These concerns briefly caused a dip Bloomberg

in Uber's stock price. This isn't new: several years ago, Uber's former CEO warned that autonomous vehicles could

pose an existential threat to the company. In response, Uber began developing its own robotaxi program. However, after a fatal crash involving one of its self-driving test vehicles in Arizona in March 2018, Uber shut down the project and shifted its strategy to partnering with other companies working on the technology. Despite these challenges, Uber's shares have surged more than 60% to a record high this year, fueled in part by the company's continued expansion into food, grocery, and alcohol delivery services. More information is at this link.

And finally, on July 7, 2025, data visualization site visualcapitalist.com published an article and a chart showing the remarkable growth of Waymo's ridership in California

from August 2023 to May 2025, where the number of paid monthly riders went from 12,617 to 143,621, an 11-fold increase. The source of Waymo's ridership data is the California Public Utilities Commission, the agency that



grants permission to robotaxi companies for operating a commercial business in California. At present, Waymo's robotaxi service is available in San Francisco, Los Angeles, Phoenix, and Austin. The company has ambitious plans to expand to other U.S. cities and internationally. The Visual Capitalist article/chart 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**

August 24-28, 2025	ITS World Congress, Atlanta, Georgia
August 27-28, 2025	ADAS & Autonomous Vehicle Technology Summit North America, San Jose CA
September 4, 2025	CAVI webinar on the <i>Trans-Canada Autonomous Truck Demonstration Project</i> , at 1:00pm. Registration details TBA. Email <a href="mailto:cav_truck@cavi-icva.ca">cav_truck@cavi-icva.ca</a> for details if you are not yet on our mailing list
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