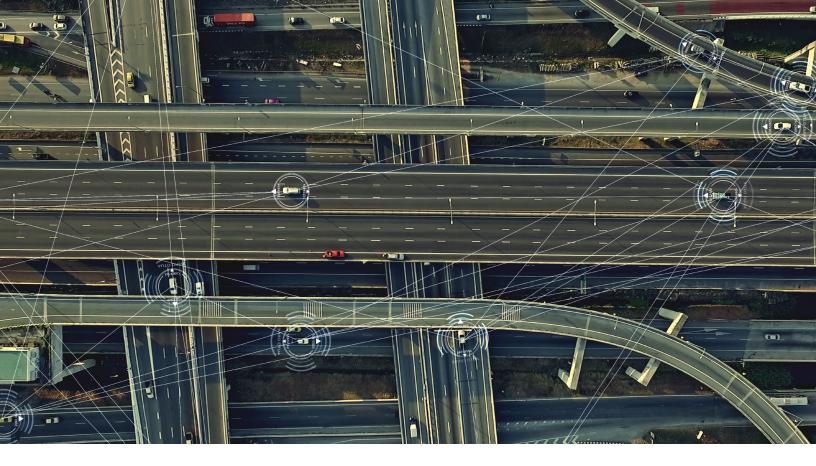
Blakes

Autonomous Vehicle Regulation in Canada

Car manufacturers are busy adding autonomous features to their new vehicles, but are the regulators keeping up? In Canada, each province regulates safety on public roads, so the rules vary across the country.



In Canada and around the world, many regulations reference the Society of Automotive Engineers International (SAE) standards for levels of driving automation in autonomous vehicles (AVs), which are:

SAE Level	Human Responsibilities	Features	Examples	
0		limited to warnings and momentary assistance	lane departure warning, emergency braking, blind spot warning	
1	driving and constantly supervising support features	steering <i>or</i> brake/acceleration support	adaptive cruise control <i>or</i> lane centring	
2		steering <i>and</i> brake/acceleration support	adaptive cruise control <i>and</i> lane centring	
3	not driving when features engaged, must be ready to take over	features can drive vehicle under	traffic-jam chauffeur	
4		certain conditions	local driverless taxi, pedals/steering wheel may not be installed	
5	not driving when features engaged	features can drive vehicle under all conditions	same as #4, but features can drive everywhere in all conditions	

We have assembled a reference chart showing the current state of AV regulations as of April 25, 2021. Check back for future updates.

SAE Automation Level	0	1	2	3	4	5
British Columbia	•	•	•	Pilot	Pilot	Pilot
Alberta	•	•	•	Pilot	Pilot	Pilot
Saskatchewan	•	•	•	Pending	Pending	Pending
Manitoba	•	•	•	Pending	Pending	Pending
Ontario	•	•	•	•	Pilot	Pilot
Quebec	•	•	•	•	Pilot	Pilot
New Brunswick	•	•	•	-	-	-
Prince Edward Island	•	•	•	-	-	-
Nova Scotia	•	•	•	Pending	-	-
Newfoundland & Labrador	•	•	•	-	-	-



British Columbia

AVs are not regulated by the British Columbia *Motor Vehicle Act* or by any provincial policy statements. However, AVs are permitted in two environments:

- Municipal Level: In February and March 2019, the city of Surrey offered rides in a driverless shuttle on a monitored route. The shuttle was funded by the federal government's Smart City Challenge. This shuttle is an example of an SAE Level 4 vehicle.
- University/Provincial Level: The University of British Columbia (UBC) has created the ACTIVE-AURORA Project in conjunction with the University of Alberta. An ACTIVE-AURORA driving test site was set up on the UBC Vancouver campus throughout five intersections with roadside units equipped to research "connected vehicle technology," which is the technology inside AVs that helps them communicate with other cars, roadways, etc.

Alberta

AVs are not regulated by the Alberta *Traffic Safety Act* or by any provincial policy statements. However, AVs are permitted in two environments:

- **Municipality Level:** An SAE Level 4 driverless public-transportation vehicle created by Pacific Western operates under the Autonomous Vehicle Pilot Project in the cities of Edmonton, Calgary, Wetaskiwin and Beaumont.
- University/Provincial Level: The University of Alberta ACTIVE-AURORA Project permits applicants to test AVs and technology in "test-bed" areas on specific public roadways spanning over 65 km in Edmonton.

Saskatchewan

No policies exist at this time. However, proposed amendments to the *Traffic Safety Act* include automated driving systems that open up the possibility for future regulation of AVs in the province.

Manitoba

AVs are currently not regulated in Manitoba. However, Bill 23, *The Vehicle Technology Testing Act*, is moving through the provincial legislature and would permit the Minister to issue a "technology testing permit" to allow an autonomous test vehicle to be driven on provincial roadways.

Ontario (Policy)

SAE Level 3 vehicles that are available in Canada can be driven by the general public on Ontario roads under the following conditions:

- The human driver is required to take back the driving task when the vehicle requests.
- Drivers are expected to be in full care and control of the vehicle at all times.
- Existing laws, like impaired driving and distracted driving laws, are in full effect for these drivers. Vehicles that are SAE Levels 4 and 5 can be driven by Ontario's Pilot Program participants if they are an approved applicant, own the vehicle and use the vehicle on Ontario roadways for testing purposes.
- Restriction for non-driverless testing: the driver must remain in the driver's seat at all times.
- Restriction for approved driverless testing: the vehicle must be overseen by a passenger or individual monitoring the vehicle remotely.

Quebec

- SAE Level 3 vehicles that are available in Canada can be driven by the general public on Quebec roads.
- Vehicles that are SAE Levels 4 and 5 can be driven by approved applicants through Quebec's Pilot Projects.

The following Pilot Project is in effect:

• **Bus/Shuttle Pilot Project:** The city of Candiac and Montréal's Olympic Park allow autonomous buses, minibuses and shuttles to operate on certain public roads in Quebec on a trial basis.

Nova scotia

AVs will be regulated under the new *Traffic Safety Act* in Nova Scotia once it receives royal proclamation. The Act permits the Minister to make regulations regarding AVs. Similar to Ontario, the driver must remain in the driver's seat at all times, ready to take control of the autonomous vehicle should the situation arise. Moreover, all distracted driving laws apply equally to AVs.

Contact any member of our <u>Automotive group</u> or <u>Autonomous & Connected Vehicles</u> group to learn more.

