

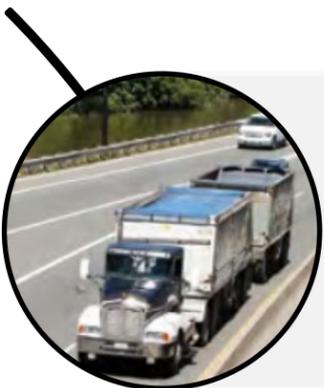
Research Study:

Call for volunteer commercial carrier companies

The Ontario Ministry of Transportation, Virginia Tech Transportation Institute, and Ryerson University are conducting a naturalistic driving study to learn more about the road safety impact of new in-vehicle technologies and electronic device use by commercial drivers.

Results from this study will provide insight on sources of distraction within commercial vehicles during a period of rapid technological change. This will allow Ontario to tailor its policies and education programs to maintain road user safety without placing unnecessary burden on businesses. Results may also provide insight into the safety benefits or risks associated with in-vehicle technologies, including various advanced driver assistance systems (ADAS).

For this study we are looking to recruit a small number of volunteer commercial carrier companies that operate at least some portion of their fleet entirely within Canada, and that employ their own team of mechanics/technicians.



What are we asking from our volunteer partners?

Researchers from Virginia Tech will install/de-install data acquisition systems (DAS) in a small number of your vehicles (10-20). These DAS consist of in-cab and outward facing cameras, telematics that measure various aspects of vehicle operation (e.g., braking), GPS sensors, lane-position tracking and other elements. Data recorded via DAS will allow our team to observe the relationship between driving environment and safety critical events (collisions or near collisions) and will remain installed and recording for a period of six months.



How will the privacy of my company and drivers be protected?

All video and telematics data recorded by DAS will be encrypted and stored in real time. At various times, this data will be uploaded in fully encrypted form to secure servers at Virginia Tech. Decryption will be performed by a small number of authorized researchers who will then render study data anonymous before use by research teams at the Ontario Ministry of Transportation and Ryerson University. De-anonymized data will be stored securely at Virginia Tech. The study will also be conducted under appropriate Research Ethics Board approval, which is currently being secured both by Virginia Tech and Ryerson University.



Why should my company participate?

Volunteer drivers will receive a monetary incentive for participating in the study.

Partner companies will receive anonymized data about their own fleet and operations that may allow them to better optimize their policies and procedures. This may be of special interest to companies wishing to better understand the impact of ADAS on their operations.

Companies will benefit from operating in a jurisdiction with the most fair and effective road safety legislation.

Has a study like this been done before?

Yes. The Virginia Tech Transportation Institute has successfully conducted similar naturalistic driving studies with both passenger and commercial vehicles in the U.S. and Canada. The Canadian commercial vehicle naturalistic driving study was completed in 2018, through a partnership between Virginia Tech, the University of Saskatchewan and the Council of Ministers of Transportation.

Have previous studies benefitted the commercial transportation industry?

Yes. CB-radio policy in Ontario provides an excellent example. In 2009, Ontario enacted a ban on the use of handheld electronic communication devices (e.g. smartphones) by drivers. However, commercial drivers continue to be exempted from this ban because of the results from previous naturalistic driving studies that showed their use does not negatively impact safe driving.

When will volunteers be needed?

We plan to install DAS in 20 vehicles from a small number of commercial carrier companies starting in the summer of 2021. After a data collection period of six months, devices will be transferred to a new set of vehicles for another six-month period.

For those interested in participating, contact Patrick A. Byrne at patrick.a.byrne@ontario.ca.