

Centre for Automated and Transformative Transportation Systems (CATTS)
Department of Civil and Mineral Engineering
University of Toronto
35 St. George street
Toronto, ON M5S3G2
catts@utoronto.ca

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Councillor Mike Colle, Chair
Infrastructure and Environment Committee
City of Toronto
100 Queen Street West
Toronto, ON M5H 2N2

RE: Automated Vehicle Pilot Deployment in Toronto Under the Highway Traffic Act
[Agenda Item History – 2025.IE21.7](#)

Dear Councillor Colle and Members of the Infrastructure and Environment Committee,

Urban mobility solutions are rapidly evolving especially with the emergence and increasing maturity of autonomous vehicle (AV) technologies. This presents both transformative opportunities and complex challenges for Canadian cities. To ensure our communities remain competitive, livable, and future-ready, it is important that we strengthen our understanding of AV systems and proactively prepare for their integration into our urban environments.

Recent advancements in AV technologies have moved beyond simulations and controlled environments into real-world applications. Major industry players in many North American cities are deploying autonomous delivery and passenger solutions in more complex urban settings. These technologies are no longer speculative, and they are arriving soon on our streets. In a city like Toronto, we must be prepared to learn more about such technologies and maximize their impacts on our societies while enabling sustainable transformations.

Toronto is uniquely positioned to lead in this domain. As Canada's largest and most diverse urban centre, Toronto provides ideal conditions for AV testing for its complex

multimodal transportation system, diverse population, dense neighbourhood, and active policy innovation across environmental sustainability and air quality, equity, and

technology. These qualities make Toronto an excellent environment to surface real-world challenges and explore opportunities for AV integration to generate insights that can inform broader regulatory and policy frameworks and AV standards across the country.

The City has already demonstrated leadership in this space through leading an autonomous shuttle pilot program in 2021 that connected the West Rouge community neighbourhood, and the Rouge Hill GO Station. This project has established valuable groundwork in studying public perception, stakeholder coordination, and on-road testing. Although the pilot ended before providing service to the public, due to factors beyond the City's control, it reinforced the importance of early-stage technology testing and learning, inter-agency and stakeholder collaborations, and technological validation. Further, the City of Toronto in collaboration with the University of Toronto's Centre for Automated and Transformative Technologies ([CATTS](#)) published a journal paper about this project that addresses user perception and intentions to use automated shuttle services in mixed traffic conditions¹.

Building on that momentum, AV pilot deployments, in a City like Toronto, are not just about showcasing technology but rather are about structured learning. Such pilots offer vital opportunities to: evaluate urban infrastructure readiness; adaptation, and operational safety; assess AV technology efficiency and reliability; understand public perception; promote engagement and technology trust; understand interactions with pedestrians, cyclists, and other road users in mixed-use corridors; test data governance, cyber security, and regulatory frameworks; and shape inclusive evidence-based policy.

The University of Toronto's Centre for Automated and Transformative Technologies ([CATTS](#)) strongly encourages the committee to support continued and expanded AV testing within the City. We believe that proactive, research-informed pilot approaches coupled with community engagement and regulatory foresight, can position Toronto not only as an innovation site but as a global leader in shaping the future of automated urban mobility solutions.

¹ DeGuzman, Chelsea A., Toka S. Mostafa, Kareem Othman, Birsan Donmez, Baher Abdulhai, Amer Shalaby, and Jennifer Niece. "What influences intention to use a first-mile/last-mile automated shuttle service in a suburban area? A case study in Toronto, Canada." *Transportation Planning and Technology* (2024): 1-19

Thank you for your attention to this timely and transformative matter. We welcome the opportunity to discuss how we might contribute to or collaborate on ongoing efforts in this space.

Sincerely,

On behalf of the Centre for Automated and Transformative Transportation Systems

Baher Abdulhai, Professor
Amer Shalaby, Professor
Matthew Roorda, Professor
Toka Muhammad, PhD, Senior Research Associate

University of Toronto
Department of Civil and Mineral Engineering
35 St, George Street, Toronto, ON M5S 1A4
Toka.muhammad@utoronto.ca