July 13, 2021

Announcement: "iCity 2.0: Urban Data Science for Future Mobility" receives funding from the Ontario Research Fund – Research Excellence Round 10

New urban data science research hub builds on strong partnerships

Our project "iCity 2.0: Urban Data Science for Future Mobility" aims to improve accessibility and mobility, in support of heightened economic productivity, quality of life and environmental sustainability in Ontario, by advancing the design of urban transportation systems and "complete communities". We will achieve this by focussing on three interrelated challenges facing cities today:

- Managing the risks and reaping the benefits of emerging mobility services and trends such as ride hailing, ride sharing, on-demand transit, e-bikes and autonomous vehicles;
- Developing new analysis tools and design concepts to plan, build, and evaluate complete communities in both retrofitted existing neighbourhoods and new developments; and
- Transit route and tactical improvement strategies to meet GTHA travel needs.

iCity 2.0 follows our highly successful project "iCity: Urban Informatics for Sustainable Metropolitan Growth" (2015-2020) also funded by ORF, and builds on its successful leadership, partnerships and lessons learned.

"iCity 2.0: Urban Data Science for Future Mobility" was one of 15 projects funded by the Ontario Research Fund – Research Excellence Round 10. The project, which will run for four years until 2024, received $3.9 million dollars which is being matched by institutional and industry support.

The team

Principal Investigator Dr. Eric J. Miller, Director of the University of Toronto Transportation Research Institute (UTTRI) and a professor in the Department of Civil and Mineral Engineering, and Co-Principal Investigator Dr. Sara Diamond, President Emerita of OCAD University, will lead a multidisciplinary team of 13 professors with expertise in transportation engineering, computer science, visual analytics, geographic information science, urban planning, economics, sociology, architecture and design.

We very much look forward to working with partners Autodesk Canada Co., City of Toronto, Daniels Corporation, Diamond Corporation, Environics Analytics Group, Esri Canada Ltd., Hatch Ltd., Maximum City, Pantonium Inc., Real Property Solutions, Swiftride, York Region, Toronto Transit Commission, United Way Greater Toronto, and supporters Metrolinx, Ontario Ministry of Infrastructure, Ontario Ministry of Transportation, and Regional Municipality of Peel Public Health and Transportation. Together we will create an urban mobility innovation ecosystem that ensures *iCity 2.0* will achieve impact.

What the reviewers said

"The project iCity 2.0 aims at addressing with a scientific program of four years the urban challenges of the fast growing urban region of Toronto, with a thematic focus on mobility and affordable housing."

"The PI and Co-PI have the right expertise and excellent backgrounds in this area. There is a history of collaborations between all members of the team which is a strength of the proposal."

"This is a multidisciplinary project on transportation and land use. The project is likely to lead to strong impact to Ontario because of societal benefits and job creation."

"The HQP training plan and youth outreach is strong with the potential to gain expertise in industry and academic. It is important to engage the next generation on how they want to live in their cities over a 10-year span."

"The collaborations with the private and public sectors are impressive, including support from the City of Toronto, local developer and the Toronto Transit Commission (TTC). This is a strength of the proposal."

About the University of Toronto Transportation Research Institute (UTTRI)

UTTRI brings the considerable depth and breadth of UofT research to bear on real-world urban transportation problems. It fills a critical gap between traditional academic research, professional consulting and public sector transportation planning and operations. Building upon our research expertise and working relationships with both the public and private sectors, UTTRI seeks innovative ways to improve urban transportation system performance and design efficient, sustainable cities for the well-being of individuals and society.

About OCAD University

OCAD University is Canada's "university of imagination." Founded in 1876, the university is dedicated to art, design and media education, practice and research and to advancing knowledge and innovation across a wide range of disciplines. OCAD University is building on its traditional, studio-based strengths, adding new approaches to learning that champion cross-disciplinary practice, collaboration and the integration of emerging technologies. OCAD University community members are uniquely qualified to act as catalysts and innovators for the next advances in culture, technology and quality of life for all Canadians.

Contact:

Dr. Judy Farvolden, Manager
Executive Director, University of Toronto Transportation Institute
P: 416-978-3357
E: judy.farvolden@utoronto.ca