

# iCity 2.0: Urban Data Science for Future Mobility Postdoctoral Fellow: Theme 2 Building Complete Communities: Housing, Jobs & Mobility

**Areas of Research:** Mobility, Emerging Mobility Technologies, Cities & City-Regions, Complete Communities

#### **Overview of the Position:**

iCity 2.0 is a multi-year project to undertake urban data science research that advances complete community design in Ontario urban areas. The project will focus on both existing and new neighbourhoods, with an emphasis on significantly improving the quality, cost-effectiveness and performance of urban mobility through improved design of both our urban transportation systems and our local urban forms. The iCity 2.0 project consists of a coordinated set of three inter-related research themes:

- 1. Emerging Mobility Technologies and Services.
- 2. Building Complete Communities: Housing, Jobs and Mobility.
- 3. Building Complete and Integrated Mobility Networks.

The iCity 2.0 project is housed within Mobility Network, the University of Toronto (UofT) transportation research institute. Mobility Network is a UofT Institutional Strategic Initiative whose vision is to catalyze transformation in the ways mobility is achieved and how this results in a more equitable, sustainable and prosperous future. iCity 2.0 will build on UofT's renowned multidisciplinary, tri-campus expertise to advance Mobility Network's mission to establish UofT as a global leader in advancing mobility-related knowledge. The Principal Investigator for iCity 2.0 is Prof. Eric J. Miller, Director of Mobility Network, and an international leader in travel behaviour research and sustainable transportation planning.

We are seeking candidates for a postdoctoral fellowship (PDF) for a **two-year appointment** (with the potential to renew). The PDF will play a coordinating role and contribute substantively to research and knowledge mobilization activities within **Theme 2** of the iCity 2.0 project, under the direct supervision of **Prof. Eric J. Miller**.

The postdoctoral fellow will have office space within Mobility Network on the St. George Campus and will have opportunities to collaborate with interdisciplinary transportation researchers in multiple departments across UofT's three campuses. The University of Toronto is a globally ranked research university that offers <u>postdoctoral fellows</u> the highest levels of opportunity for professional and scholarly training, network development, and the opportunity to engage with stakeholders throughout the Greater Toronto Area and beyond.

## **Description of Duties:**

The successful candidate will act as project coordinator within Theme 2, conducting primary research on the topic of emerging mobility services and technologies, and will have the opportunity

to be lead author on journal articles and conference presentations. The PDF will assist in cross-theme coordination within the iCity 2.0 project team, as well as gain experience in graduate student research supervision. The focus of the PDF's research will be on developing large-scale integrated models of transportation – land use within the ILUTE modelling framework.

### **Required Qualifications:**

- PhD degree in civil engineering, economics, geography or a related field, awarded within the past 5 years.
- Extensive knowledge of transportation and land use modelling and urban spatial processes.
- Demonstrated strong experience in quantitative analysis, data analytics and visualization, GIS.
- Experience in the design and conduct of quantitative and qualitative data collection methodologies for transportation research.
- Excellent written and oral communication in English.
- Excellent personal time management, project management and organizational skills.
- Demonstrated capability to work effectively within a multi-disciplinary team environment.

**Salary**: \$60,000/ year + conference travel + benefits + 15 days of vacation The successful candidates will be eligible to apply for additional travel and research supports designated for UofT PDFs.

# **Application instructions**

All individuals interested in this position must **submit a cover letter with short research statement** and a CV to Eric J. Miller (eric.miller@utoronto.ca) by the closing date. Please email materials in a single PDF with the subject line: **iCity 2.0 PDF Application**.

Closing date: Screening of applications will commence on May 1 and continue until the position is filled.

**Supervisor:** Prof. Eric J. Miller **Expected start date:** July 1, 2023.

Term: 2 years

FTE: 1 Full-time equivalent

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) recognizing that the needs of the employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

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The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.