

Job Title: Sustainable Transportation Specialist

**Department:** Parking Services/Sustainable Transportation

**Reports To**: Associate Director, Fleet Management and Sustainable Transportation

Jobs Reporting: Co-op students

Salary Grade: USG 9

Effective Date: October 2023

### **Primary Purpose**

Reporting to the Associate Director, Fleet Management and Sustainable Transportation, the Sustainable Transportation Specialist will lead the development and implementation of a campus-wide Sustainable Transportation Plan (STP). The STP will add detail to and formalize actions and strategies from directions articulated in the Campus Master Plan, Environmental Sustainability Strategy, and Climate Action Plan. Project examples include development of plans for improvement to commuting infrastructure, programs, policies, and incentives to encourage students and employees to walk, cycle, take transit, carpool, and use electric transportation. Responsibilities require engagement of a wide range of stakeholders including academic and operational units as well as government agencies and third-party vendors.

University of Waterloo infrastructure comprises of over eight million square feet of space, more than eighty major buildings, and three distinct campuses supporting state of the art teaching and ground-breaking research.

Responsibilities will align with the Plant Operations goal of contributing towards providing a safe and accessible, invitingly clean and comfortable, functionally-enriched and well-maintained campus environment through service excellence.

#### **Key Accountabilities**

# **Strategic Planning & Implementation**

- Provide technical leadership in various UW transportation related sustainability initiatives.
- Establish ambitious targets and implementation strategies to reduce carbon footprint of our University related to campus commuting.
- Work closely with Sustainability Office and provide support to any governance bodies and advisory
  groups to develop a Sustainable Transportation Plan (STP) for the University, integrating the
  directions of the University's Strategic Plan, the Campus Master Plan, Environmental Sustainability
  Strategy, and Climate Action Plan.
- Work closely with Officer Fleet Operations & Vehicle Maintenance in the creation of UW Fleet Standard
- Work closely with Accessibility and EDI-R to ensure integration of key principles into the STP.

### **Commuter Support Services**

- Create key pathways and actions that will need to be integrated into the Transportation Management Plan (TMP) based on all research and consultation with various stakeholders.
- Develop business cases for expenditures, including both financial costs/savings and benefits such
  as emissions reductions, health and wellness, mobility and accessibility, and reputation.
- Articulate phasing approaches for implementation of identified actions and pathways.



- Work closely with Grand River Transportation, Metrolinx, and other transit providers supporting UW
  campus and advocate for service level improvements.
- Provide transportation and traffic related expertise in managing issues arising from GRT Transit Terminal operation.
- Review GRT bus routes and to examine if changes need to be made to address UW user needs and campus safety (routing, parking, stop locations, etc.).
- Liaise with UW users to align UW operated shuttle services and ensures that services efficiently support user needs while promoting low carbon practices.
- Coordinate programs that support movement through UW campuses such as bike-share or scooterrent programs.
- Manage expansion and operation of secure bicycle storage.
- Develop plans for expansion of EV charging stations (as required) and manage maintenance.
- Work closely with Plant Operations Infrastructure and Planning, Design, Construction teams in development of commuter infrastructure improvements and updates.
- Design and implement digital outreach strategies to increase awareness of and participation in all existing and new sustainable transportation initiatives.
- Coordinate or host events, booths, or other activities to educate on and encourage active and sustainable transportation, in collaboration with other campus stakeholders.
- Develop communication materials to promote the TMP and its actions to a wide variety of audiences.
- Liaise with external stakeholders, as necessary, at the city and regional levels within which Waterloo
  operates, as well as the local Transportation Management Association, to integrate campus
  planning with other community initiatives, including infrastructure development, micromobility
  programs, and community campaigns and targeted outreach.

#### **Data Analysis**

- Prepare documentation required for the procurement of engineering transportation/traffic studies.
- Lead interpretation and application of data prepared by external consultants.
- Conduct extensive research to understand best practices for the development of a STP or equivalent (i.e. Transportation Demand Management Plan) for a large institutional setting.
- Analyze data collected through the University of Waterloo/Region of Waterloo biennial travel survey
  and other relevant sources of information (Parking Data, student surveys, etc., transit data, etc.) to
  create detailed profiles of commuting patterns for the campus.
- Develop base case scenario for long-term transportation modal and resultant infrastructure and resource needs using existing data and projected population increases and other institutional and regional trends.
- Connect information from leading peer institutions through semi-structured interviews or other means to understand best practices, common challenges, and critical success factors.
- Create best practices summary and campus operating guide to commuting infrastructure, programs, policies, and incentives.
- Lead analysis utilizing various data sources to enable long-term sustainable transportation planning (scenario analysis linking materiality and change potential based on survey data and existing preferences and constraints) and prepares materials for presentation to senior administration.

#### **Financial and Operational Analysis**

- Model financial commitments of parking & sustainable transportation operation.
- Evaluate capital renewal needs for all aspects of parking operation.
- Model financial impact of sustainable commute initiatives on annual budget.
- Identify & evaluate various approaches to parking fee re-structure to ensure optimal support to campus community.



- Analyze impact of various parking fee strategies on lot utilization and revenue.
- Supports Sustainability Office and Campus Services in developing financial background for campus Transportation Management Plan (TMP).

# Facilitation, Consultation, and Integration

- Lead structured engagement processes to communicate changes and receive feedback from various parts of the campus community on the visioning, development, and implementation of the Transportation Management Plan. This process could include focus groups, town halls, open houses, additional surveys, or other consultations for the wider community, as well as targeted consultations with core departments and user groups.
- Iteratively integrate feedback received into project planning and development.
- Design mechanisms for continuous feedback and engagement beyond the development of the Transportation Management Plan.

## Implementation Support

- Support implementation of all TMP initiatives from development research and consultations, through business cases and operational plans, to funding requests and procurement as necessary.
- Support management of existing programs and services related to sustainable transportation, including for example EV Charging, secure bike parking, corporate transit passes, carpool management, and more.
- Develop a list of funding sources that can support implementation of all TMP actions, from local through national levels.
- Create business plans and submit applications for internal and external funding to implement actions identified through the TMP, and lead implementation as actions and funding are approved.
- Assist in development of relevant policies, procedures, and guidelines as appropriate to support TMP implementation.

#### Other

- Performs other related duties and responsibilities as assigned and supports departmental activities, including performing work of other classifications within the level of incumbent's capability/ competency/ skills, and/or regulatory requirements.
- Promotes the participation of faculty, students, and staff relative to all UW sustainability initiatives.

\*All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.

## **Required Qualifications**

#### Education

- Bachelor's degree required preferably in transportation engineering, planning, or sustainability.
- Training or courses in transportation demand management, environmental policy or practice is an asset.

#### **Experience**

- Minimum three years professional work experience related to transportation planning, urban planning, or sustainability.
- Experience in a large institutional setting is an asset.

# **Knowledge/Skills/Abilities**

Knowledge of transportation planning and urban planning.



- Intermediate-level skills in Microsoft Excel (graphing, pivot tables, descriptive statistics), Word (report writing and editing), and PowerPoint (presentation design)
- Intermediate-level skills with mapping software such as ArcGIS or equivalent.
- Exceptional facilitation skills demonstrated through developing or leading planning sessions, workshops, or other similar activities.
- Excellent relationship management skills evidenced through participation in collaborative partnerships and multi-stakeholder planning processes.
- Exceptional analytical skills.
- Strong communication skills, both fluent and written.
- Strong ability to develop quality funding proposals, including high-level cost estimates and create business plans to sell programs and investments to internal and external audiences.
- Graphic design skills and familiarity is an asset.

## **Nature and Scope**

- Contacts: Internal: maintains relationships with a variety of departments and individuals across
  campus through the delivery of institution-wide consultation sessions and activities. This can include
  academic units, academic support units, ancillaries, and various committees. External: Maintains
  relationships with relevant transportation-related contacts such as through the Region of Waterloo,
  City of Waterloo, relevant transit agencies such as GRT/ION/Metrolinx, Intermunicipal Partnership for
  Active Transportation, and the TravelWise Transportation Management Association.
- **Level of Responsibility:** The job has specialized work and involves initiating programs, and creation of recommendations and proposals for further action and long-term planning.
- **Decision-Making Authority:** Makes logistical decisions related to TMP development and project implementation, subject to approval through relevant processes; makes financial decisions within the context of relevant reporting department/allocated funding and on deployment of any external funding received.
- Physical and Sensory Demands: Minimal sensory and physical demands. Organizing and attending various stakeholder meetings with potentially high impact or adversarial settings.
- Working Environment: Primarily office based with regularly scheduled working hours, and site visits
  as necessary to relevant facilities and sustainable transportation amenities on campus and in the
  community, as necessary for program implementation. Occasional evening and weekend work may be
  required, as may limited travel.