SUSTAINABILITY SCHOLARS PROGRAM

Summer 2020

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on funded sustainability internship projects. Successful candidates work under the mentorship of a partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region.

- Visit the Sustainability Scholars Program website to learn how the program works and to apply.
- Be sure to review the application guide to confirm your eligibility before applying.
- **Applications close at midnight on Sunday February 2, 2020.**

Research project title: Supporting the Urban Freight Strategy: Mapping the City's loading facilities for on- and off-street delivery activity

Research supports the following policies -

☒ Greenest City Action Plan/ Climate Emergency Response Plan
Specific goal area/ big move(s): Green Transportation & Big Move 1,2,3 (bit of each)
☒ Renewable City Action Plan
☒ Other: Transportation 2040

Outline scope of project and why it is of value to City and describe how and when the scholar's work will be actionable

Problem Statement:

- Over the last few decades, the City of Vancouver has taken an ad hoc approach to planning, managing, and designing for freight delivery. As our city continues to densify and emerging trends like e-commerce take hold, the expectations for the efficient movement of goods also increases and we need to provide an equally dynamic platform for managing our finite street space. One of our biggest challenges today is that the City lacks a comprehensive understanding of the existing assets that help accommodate freight delivery, which ultimately limits our ability to effectively manage it.

Purpose:

- The purpose of this work is to develop the initial framework for a modern city approach to managing our freight delivery activity within the City of Vancouver. By studying other cities successes (and failures) and establishing a comprehensive data inventory of our loading facility assets, we can move forward with a variety of progressive urban freight solutions that will ultimately reduce GHGs, promote livability, and support our thriving economy.

Scope of Work:

- Undertake a peer city review of other relevant city examples of cities that have completed this type of modern urban freight planning work. Approximately 5 to 10 cities should be included within the review (an initial list will be provided by the project mentor for consideration based on alignment with the City of Vancouver's emerging directions in the area of sustainable urban freight.) *[Approximately 15% of overall effort]*
- Review current availability of data mapping at the City of Vancouver and identify current constraints & opportunities for strategic data collection and cataloguing. This will include the City-owned public streets assets (e.g., curbside loading zones, laneways "alleys"), as well as private (off-street) loading facilities within or adjacent to buildings (e.g. loading bays). *[Approximately 15% of overall effort]*
- Using GIS and other supportive tools as a foundation, develop an initial strategy for data collection within a sub-area of downtown Vancouver (e.g. Yaletown, West End, Central Business District) that will be scalable for other parts of the City in the future. The size and scope of this area will be developed with the mentor and will be subject to the resource requirements of the data collection, and later steps for cataloguing the data and reporting out the findings. *[Approximately 30% of overall effort]*
- Undertake the data collection necessary for developing the data inventory and asset map of loading facilities. This should include detailed characteristics of the facility (e.g. length of curbside zone, number of loading bays, etc.). *[Approximately 25% of overall effort]*
- Summarize the findings of the work and discuss in detail the challenges and opportunities associated with this type of work and develop recommendations for how the City can best manage loading facilities in order to reduce congestion, lower GHG's and improve road safety. *[Approximately 15% of overall effort]*

Why this work is of value:

- The Transportation Planning team has just launched an Urban Freight Strategy, which will focus on ways to address the many challenges associated with freight delivery within the City of Vancouver. One of the major challenges is to more efficiently manage "last mile" delivery, which currently results in many failed delivery attempts, delivery trucks circling blocks to finding loading zones, or illegally parking. Together, these all contribute to congestion, additional vehicle emissions, and increased road safety risks. In order to provide better solutions to these challenges, the City is interested to advance the understanding of our transportation loading facilities and ultimately develop tools that help us inform land use policy, plan better facilities, and more efficiently manage the assets we have.

Deliverables

The Scholar will deliver a final report containing a summary of their completed work with recommendations, complemented by a final presentation to key stakeholders. The report should include:

- A summary of strategies used in other cities to manage urban freight delivery and the associated loading facilities, and how they compare to Vancouver.
- A recommended strategy for how the City of Vancouver should develop a city-wide tool for better managing on- and off-street loading facilities.
- A summary of the tools used to collect and manage the data (e.g. GIS).
- Detailed maps, diagrams, photos and other visual aids to help articulate the scope of the work.
- A public facing final report (or executive summary) for the UBC USI website

Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between ***May 4 and August 14, 2020.***
- The scholar is to complete hours between **8:30 AM – 5:00 PM, Monday through Friday**, approximately **18** hours per week.

Skill set/background required/preferred

☒ Excellent research and writing skills.
☒ Demonstrated interest in transportation systems.
☒ Familiarity with research methodologies and survey techniques
☒ Strong analytical skills
☒ Ability to work independently
☒ Demonstrated time management skills
☒ Deadline oriented
☒ Project management and organizational skills
☒ Computer programming skills (considered an asset, but not required)
☒ GIS training or experience.
☒ Familiarity with benchmarking methods and tools an asset
☒ Familiarity with quantitative research methodologies and implementation
☒ Experience with statistical analysis
☒ Familiarity preparing feasibility studies an asset
☒ Comfortable conducting fieldwork to collect data for the analysis

Applications close **midnight Sunday February 2, 2020**.

Apply here: http://sustain.ubc.ca/scholarsapply

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.

https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae

https://www.grad.ubc.ca/current-students/graduate-pathways-success

https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services

The Centre for Student Involvement & Careers will host a resume & cover letter webinar tailored for graduate students on Tuesday, January 21, 2020 from 12:00-1:30. Registration will open approximately two weeks before the webinar, and can be accessed at Careers Online.