Summer 2025 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Hub is pleased to offer current UBC graduate students the opportunity to work on sustainability internship projects. Successful candidates work under the guidance of a mentor from the partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region. The pay rate for the summer 2025 program is \$31.25/hour or \$7,812.50 for a 250-hour project.

- Visit the Sustainability Scholars Program website to learn how the program works and to apply.
- Be sure to review the application guide on the Apply page to confirm your eligibility before applying.

Applications close at 11:59 pm on Sunday January 26, 2025.

Project title: Exploring Multi-Modal Transportation Systems in Transit Oriented Areas

Project Background & Overview:

In December 2023, the Province of British Columbia (BC) made amendments to the Local Government Act and Vancouver Charter to establish transit-supportive densities adjacent to transit stations. These areas are referred to as Transit-Oriented Areas (TOAs) in the new legislation. TOAs are intended to be areas of high-density mixed-use, complete communities around rapid transit stations and bus exchanges.

Multi-modal transit refers to a transportation system that integrates various modes of transport to provide passengers with a more seamless, efficient, and flexible experience. The primary goal of multi-modal transportation is to create an interconnected system where passengers can easily switch between different modes. In alignment with the City of Vancouver's Climate Emergency Action Plan, which promotes walking, cycling, and public transit for the majority of trips, leveraging a multi-modal transit system in TOAs contributes to enhanced environmental sustainability primarily through reduced energy consumption and greenhouse gas emissions due to fewer and shorter automobile trips in high-density urban environments. Additionally, it supports social sustainability by providing high-quality transportation options and improved access to public spaces for all community members, regardless of age or ability.

With the City's Climate Emergency Action Plan and Transportation 2040 introducing a strategic framework to promote active transportation choices and build a more sustainable transit network, this project contributes to developing an actionable design framework for a Multi-Modal Transit System in Transit-Oriented Areas (TOAs) in Vancouver.

Project description

This project is in alignment with the Climate Emergency Action Plan and the objectives of promoting active transportation choices in the Vancouver Plan 2050 and Transportation 2040. The purpose of this project is to research and develop a design framework that will ensure

effective multi-modal connectivity at Vancouver's existing and future proposed rapid transit stations in high-density TOAs. Specifically, this research will focus on subway station multimodal connections, exploring domestic and international design precedents that have proven successful in creating seamless transitions between subway and other modes of transportation, including buses, cycling infrastructure, and walking pathways. The outcomes of this project are expected to include an inventory of existing multi-modal transit at pre-existing rapid transit stations in Metro Vancouver, a high-level summary of outstanding challenges, and actionable design options through case studies.

Project scope

Part 1: Context setting, inventory study, gap analysis (70 hrs)

- Review background documents pertaining to relevant City of Vancouver projects (City of Vancouver Complete Streets Policy Framework, TransLink Transit Passenger Facility Design Guidelines, etc.). Compile a problem statement.
- Conduct a high level inventory of existing Multi-Modal Transportation strategies at 3 rapid transit stations and TOAs (800m radius from transit stations). This work will involve site visits. Contextual information, such as site base maps, will be provided by City staff.
- Conduct a high-level summary of the existing gaps, to identify top problematic aspects that require improvement.

Part 2: Jurisdictional scan, case studies (100 hrs)

- To address the current gaps identified in the inventory study, the student will conduct case studies research on 3 to 5 jurisdictions that exemplify advanced multi-modal transportation design for high-density rapid transit station areas (TOA prescribed area) in North America, such as Toronto, Portland, San Francisco, and possibly in key international locations.
- Based on the case studies, identify lessons learned and actionable recommendations from other jurisdictions and conduct a high-level feasibility analysis tailored to the City of Vancouver context. This analysis should include identifying potential constraints and specifying the roles and scopes of each partner (the Province of BC, TransLink, and the City of Vancouver).

Part 3: Finalize key findings and provide recommendations and potential constraints. (80 hrs)

• Compile key finding and write well-structured report.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing <u>Scholars Project Library</u>.
- Presentations to Integrated Project branch and other potential partner branches.

Time Commitment

• This project will take 250 hours to complete.

SUSTAINABILITY SCHOLARS PROGRAM

- This project must be completed between May 1 to August 15.
- The Scholar is to complete hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.

Required/preferred Skills and Background

- Excellent research and writing skills
- oxtimes Demonstrated interest in sustainability
- Excellent public speaking and presentation skills
- ⊠ Strong analytical skills
- oxtimes Ability to work independently
- I Deadline oriented
- ☑ Project management and organizational skills
- I Demonstrated experience in Architectural design or urban design
- \boxtimes GIS training or experience.
- ☑ Comfortable interacting with strangers to conduct public/in person surveys
- ☑ Familiarity preparing feasibility studies
- ⊠ Design and layout skills
- Experience in transit-oriented community design will be an asset

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Apply here: Click here to apply

Contact Karen Taylor at <u>sustainability.scholars@ubc.ca</u> if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 21, 2025. <u>Click here for details and to register.</u>

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