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: Analyzing Local Roads to identify candidates for urban ecological corridors

Project Background & Overview:
The Streets Design Branch in Engineering Services at the City of Vancouver manages the rehabilitation and reconstruction of the City's street infrastructure. In response to the climate emergency, Vancouver City Council approved a motion to reallocate a minimum of 11% of road space to non-car uses. This motion also aligns with the 2022 Vancouver Plan which lays out an 'ecological vision' to create a connected network of habitat throughout the City.

The City is already striving to reduce its total amount of paved area for many practical reasons including reducing maintenance and renewal costs, improving rainwater infiltration, reducing pollution in receiving waters, and reducing urban heat through tree planting. In some areas, street asset decommissioning and renewal decisions can allow nature to be restored in highly urban spaces while continuing to allow for sustainable transportation options and environmentally conscious social gathering spaces.

Making room for urban ecological corridors has many benefits including providing people with access to nature, supporting climate adaptation through shade and cooling, and mitigating biodiversity loss.

Creative thinking is required as the City increasingly needs to look at repurposing or reducing pavement on streets to create ecological corridors and achieve the ecological vision as well as 11% road space reallocation.

Ecological spaces are not equally distributed across Vancouver and, moving forward, the City is looking to create additional ecological corridors in neighbourhoods with lower tree canopy cover and higher areas of impervious surface.

Key issues include:

- Many Local Roads include driveways and are the primary access points to residential and commercial properties.
- Impervious street infrastructure (e.g., asphalt pavements, concrete sidewalks) does not provide the ideal growing conditions for new plants, trees and water infiltration opportunities.
- The amount of street right-of-way (ROW) dedicated to impervious surface contributes to the urban heat island effect and produces urban rainwater runoff.
- Concrete and asphalt are carbon intensive materials, and we should work to reduce their use, and/or the extent/frequency of replacement, where possible.
- Creating ecological corridors requires cooperation between many departments within the City.

Project description

The purpose of the project is to identify Local Roads that would provide greater public benefit if repurposed from primarily vehicular space to ecological corridors.

The ecological vision in the Vancouver Plan provides an overview of what Vancouver can look like in the next 75-100 years. However, we know that in order to achieve that vision and other targets the City has (such as tree planting goals, mode share targets, 11% road space reallocation and GHG reduction targets) early implementation of ecological corridors is needed. The value of this project is to help determine which Local Roads could be ready for ecological corridor implementation in the short term, thus allowing City staff to make policy decisions and begin implementation of some corridors in the next few years.

The products of this project will support City staff to implement the ecological vision and achieve road space reallocation targets. Well researched and comprehensive planning materials will help staff explain the opportunities to colleagues, decision makers, and the public, and can serve as inspiration for future capital projects.

Project scope

- Assessment of the preliminary list of ecological corridors (which has been developed by the City's REFM department) for feasibility to close or alter Local Roads.
    - Work will include GIS analysis of: Pavement Condition Index (PCI) scores, sidewalk condition data, street tree health/maturity data, draft corridor locations and underground utilities to help the City prioritize project locations.
- Literature review or case study research of similar projects locally and across Canada. Literature review and case study research to supplement recent Sustainability Scholar projects in Streets Design Branch.
- Review and summary of relevant City policies and directions.
- Review the City's current standards for street right of way dimensions along Local Roads to maintain partial or full vehicle access and conduct 2-3 short site visits to familiarize the Scholar with the City's typical cross section.

- Interviews and reviews of planned projects with other City teams listing common limitations as well as common opportunities for implementation of ecological corridors.
- Based on the research above and the City's preliminary list of ecological corridors, the scholar will produce a list of recommended corridors (or sub-corridors) that the City should consider prioritizing for nearer-term implementation in the next 5-10 years.
- This project will be completed in close collaboration between Streets Design, REFM and Transportation, to advance Roadspace Reallocation and ecological corridor work.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing Scholars Project Library.
- GIS map and files of near-term, prioritized Local Road ecological corridor implementation opportunities
- Summary of factors/considerations that would inform future ecological corridor decision making

Time Commitment

- This project will take 250 hours to complete.
- 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
☒ Demonstrated interest in sustainability
☒ Familiarity with research methodologies and survey techniques
☒ Excellent presentation skills
☒ Strong analytical skills
☒ Ability to work independently
☒ Deadline oriented
☒ Project management and organizational skills
☒ Demonstrated experience (or knowledge of) Street/Landscape Design, Planning, Urban Forestry, and/or Green Infrastructure
☒ GIS training or experience

Applications close **at 11:59 pm Sunday January 26, 2025**
Apply here: Click here to apply
Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

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

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