



UBC Sustainability Scholars Program

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on paid sustainability internship projects. Successful candidates work under the guidance of a mentor from one of our partner organizations, and are immersed in real world learning where they can apply their research skills and contribute to advancing organizational sustainability goals.

For more information about the Sustainability Scholars Program and to apply to work on this project, please visit the [Student Opportunities](#) page.

Don't forget to review the application guide (PDF) before applying.

Applications close **midnight Sunday September 22, 2019.**

Research project title

Is One-Way Car-Sharing a First-and-Last Mile Solution for Transit? Lessons from BCAA's Evo Carshare.

Sustainability Goal or Operations Plan objective

Increase transit ridership and reduce auto dependency and associated carbon emissions.

Outline scope of project and why it is of value to your organization. Describe how and when the Scholar's work will be actionable.

- One of the biggest challenges in attracting transit ridership is the First-and-Last mile problem. While transit can provide an efficient, cost-effective and quick journey for heavily traversed routes, the low density first-and-last mile poses challenges.
- Private new mobility options are opening up for riders to complete those first and last miles, including micromobility devices, shared bikes, and one-way car-sharing. These options can complement transit service by bringing people to transit in a more efficient, timely manner.
- TransLink and BCAA Evo seek a UBC Scholar to investigate the role that one-way car-sharing already plays in serving first-and-last mile connections from transit hubs to homes and workplaces. The key research question is *"How does one-way car share support first and last mile connections to transit?"*
- This work will involve:
 - Reviewing case studies from other jurisdictions on the role of one-way car-sharing in providing first-and-last mile service to transit, including any best practices in cross-communications / promotions, incentives or system integration (e.g., Mobility-as-a-service);
 - Using historic travel data, develop a methodology to figure out which trips are serving first and last mile based on proximity to transit stations and exchanges;
 - Questions to explore using the historic trip data:
 - Understanding when these trips are made? What activities are they consistent with? (commuting? Going out for fun?)
 - Are they mostly used from home to transit or transit to work and vice versa? (in other words, are they mostly first mile or last mile)
 - What are the typical travel distances?

- Accessing what bus routes could fulfill these trips as a comparison to understand what the alternative would have been.
- Conduct analysis of historic trip data, potentially using GIS mapping and analytical tools;
- Identify some implications from the research and create a set of recommendations.

Deliverables

Note that a final deliverable (either a full report or, if the report contains confidential information, an executive summary) is required by the end of the program (March 15, 2020). The deliverable will be archived in the online public-facing [Scholars Project Library](#).

- A final report, containing a summary of completed work with recommendations, complemented by a final presentation to key stakeholders.
- An executive summary for the UBC Sustainability Scholars online project library.

Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between October 21, 2019 and March 15, 2020
- The Scholar is to complete approximately 12 hours per week.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with research methodologies and survey techniques
- Statistical analysis
- Excellent public speaking and presentation skills
- Strong analytical skills
- Ability to work independently
- Project management and organizational skills
- GIS training or experience.
- Familiarity with benchmarking methods and tools

Note that the successful candidate will be required to sign a non-disclosure agreement (NDA) with BCAA-Evo as they will be dealing with confidential information.

Applications close **midnight Sunday September 22.**

Apply here:

<http://sustain.ubc.ca/scholarsopportunities>

To learn more about the program here:

<https://sustain.ubc.ca/ubc-sustainability-scholars-program>

Read the FAQ and application guidelines to confirm your eligibility to participate in the program here:

<http://sustain.ubc.ca/scholarsopportunities>

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