

UBC Sustainability Scholars Program 2019

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 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.

Please review the application guide (PDF) before applying.

Applications close **midnight Monday February 25, 2019.**

Research project title

Using Autopiloted Aerial Vehicles (Drones) to Provide Passenger Mobility and Freight Services

Sustainability Goal or Operations Plan objective

Understanding the potential for a new form of transportation in our region.

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

TransLink seeks a UBC Sustainability Scholar to complete a high-level review of Autopiloted Aerial Vehicle (Drone) technology and its future applicability to move passengers and freight throughout the Metro Vancouver Region.

The development in on-demand autonomous air taxis and package delivery services are in their infancy with test flights using autonomous passenger air vehicles showing some promise. In theory, these vehicles will participate in the shared use mobility services ecosystem, similar to ride-hailing, carsharing and bikesharing, which may allow people and goods movement to take advantage of shared, electric sustainable transportation modes via urban flight networks. These can potentially allow people use more sustainable modes of transportation, reducing reliance on single-occupant vehicles, and helping to create inclusive, diverse, active, healthy communities.

With companies such as Uber Air targeting the launch of their services by 2023, TransLink is interested in a high-level review of:

- The state of play of Autopiloted Aerial Vehicle (a.k.a drones) technology for passenger and freight-based services (Uber Air/Elevate, Amazon Prime Air Drones, Google's Project Maven Drone AI, etc.), including research on developments in drone electrification, automation and business models;
- A review of current municipal, provincial, and federal regulations in Canada that impact drone technology, operations and deployment;
- A review of best practice municipal, provincial, and federal regulations elsewhere in the world impacting drone technology, operations and deployment (the number of jurisdictions to review will be determined in discussion with the Scholar);
- Research on potential impacts of drone technology on mobility, environment, local economy, etc.; and

- Identification of linkages to / complementarity with other new mobility services such as Mobility-as-a-Service trip planning and payment.

Deliverables

- A draft report;
- A final report for the UBC Sustainability Scholars online project library; and
- Up to three presentations of results and findings to interested TransLink or municipal staff.

Time Commitment

- This project will take **250*** hours to complete.
- This project must be completed between April 29 and August 12, 2019.
- The scholar is to complete approximately 12 hours per week.
- The scholar must be available to meet over the phone or in person on a bi-weekly basis with the project team. Research and report writing can be completed by the scholar at their convenience.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Interest in alternative modes of transportation
- Experience reviewing and analysing policy

Applications close **midnight Monday February 25.**

Apply here:

<https://sustain.ubc.ca/student-opportunities>

To learn more about the program here:

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

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

<https://sustain.ubc.ca/student-opportunities>

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