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 <u>Student Opportunities</u> page.

Please review the application guide (PDF) before applying.

Applications close midnight Monday February 25, 2019.

Research project title

Benchmarking the impacts and effectiveness of City of Vancouver Street Sweeping Programs

Research supports the following City of Vancouver policies -

- ☑ Greenest City Action Plan. Specific goal area (s): Zero Waste, Green Transportation, Clean Air, Climate and Renewables
- ☐ Healthy City Strategy. Specific goal area (s): Getting Around
- ☑ Other: Rain City Strategy Green Infrastructure

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

Solid Waste Programs is seeking a Greenest City Scholar in order to quantify the impacts/benefits of street sweeping programs in the local context (focusing on environmental and health), and to benchmark our program against that of other major cities around the world. This information will be used to measure, adjust and refine City of Vancouver street sweeping programs.

Street Sweeping can have a direct impact on the amount and type of material on city streets, that ends up in storm sewers, and that then makes its way into waterways. Anything picked up by a Street Sweeper does not get a chance to get carried into a storm sewer, or to get blown into the air. Numerous studies have been done to quantify the impacts of street sweeping on debris on the street. Our hope is to use this information to quantify exactly what the impact is in Vancouver, as well as to determine what work other cities have done that we might learn from.

Deliverables

- Using current research and studies, determine and summarize the quantifiable benefits/impacts (focus on environmental and health) of street sweeping programs, considering the local context
- Research and summarize the range of sweeping practices currently being used and the pros and cons of each, such as fleet type, cleaning methodology, associated regulations, etc.
- Determine the most directly comparable major world cities to Vancouver from a street cleaning perspective (population, tourism, area, climate, infrastructure types, development, etc.)

- Compare City of Vancouver street sweeping programs to those of the above comparison cities (objectives, cost, fleet size/type, service levels, etc.)
- Determine and summarize best practices of other major cities that may be applicable to City of Vancouver street sweeping programs
- Determine potential improvements/recommendations to the City's existing sweeping program in order to maximize the quantifiable benefits/impacts identified earlier
- A public facing final report (or executive summary) for the UBC Sustainability Initiative website

Time Commitment

Please indicate the total numbers of hours your scholar will need to complete the project, the time frame (within April 29 to August 12, 2019), any critical dates for the project, and the optimal schedule for your scholar's work.

- This project will take 250 hours to complete.
- This project must be completed between April 29 and August 12

Skill set/background required/preferred

- \boxtimes Excellent research and writing skills.
- ☑ Demonstrated interest in waste reduction and public realm cleanliness.
- □ Familiarity with research methodologies and survey techniques
- ☑ Ability to work independently
- □ Demonstrated time management skills
- □ Deadline oriented
- ☑ Project management and organizational skills
- □ Familiarity with benchmarking methods and tools
- ☐ Comfortable interacting with strangers to conduct public/in person surveys

Additional Project Needs

Phone surveys – Scholar will need to contact numerous cities for information inquiries. A desk with a phone will be provided.

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.