

## Summer 2026 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 February 1, 2026.**

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## Project title: Comparing the Long-Term Costs of Greenfield Development and Urban Infill in Surrey

### Project Background

The City of Surrey (City) adopted the Climate Change Action Strategy (CCAS) on July 24, 2023. The CCAS serves as the City's roadmap to achieving a zero-carbon, climate-resilient Surrey by 2050. As part of this strategy, the CCAS identifies actions the City will take to meet the following greenhouse gas (GHG) reduction targets:

- Reduce Surrey's community GHG emissions from non-agricultural and non-industrial activities to net zero before 2050; and
- Demonstrate corporate leadership by reducing the City of Surrey's corporate GHG emissions to absolute zero before 2050.

Of the 123 actions outlined in the CCAS, several are designated as Quick-Start actions, being priority initiatives intended to be initiated within two years of adoption. These actions are particularly important, as they serve as catalysts for advancing other CCAS initiatives over the medium and long term.

One key Quick-Start action that has yet to begin is Action N1.9: "Undertake an analysis of development economics to quantify long-term impacts of greenfield development vs. intensification and infill." This action recognizes that how and where the City develops has major implications for long-term financial outcomes and sustainability objectives.

Greenfield development—the construction of new buildings on previously undeveloped lands—typically requires new municipal infrastructure and servicing such as roads, utilities, and community amenities. In contrast, infill development—the construction of new buildings on vacant or underutilized land within existing urban areas—can make use of existing

infrastructure, though upgrades are often needed to accommodate increased density and population growth.

This project will compare the long-term costs and revenues associated with three development typologies, considering both capital and operating implications for municipal infrastructure and servicing:

1. Infill development through small-scale multi-unit housing (SSMUH) in established single-family neighbourhoods;
2. Infill development through medium- to high-rise housing in transit-oriented areas (TOAs); and
3. Greenfield development within unserviced areas inside the Urban Containment Boundary (UCB).

## **Sustainability Considerations**

Land use and development patterns are major drivers of community GHG emissions. Compact, well-connected neighbourhoods can lower operational GHG emissions by reducing vehicle dependency and per capita energy use, while also minimizing embodied GHG emissions associated with new infrastructure construction. In contrast, greenfield development increases travel distances and infrastructure footprints, leading to higher embodied and operational GHG emissions.

By evaluating the full lifecycle costs and revenue implications of different growth patterns, this project will provide evidence to support more sustainable, climate-aligned land-use decisions.

## **Project Significance**

This project will equip City staff with a clear and measurable understanding of how different growth patterns influence Surrey's fiscal and climate objectives. Specifically, the analysis will:

- Clarify the long-term costs and revenues associated with greenfield versus infill development;
- Support policy and bylaw updates through robust, evidence-based recommendations; and
- Strengthen the City's ability to align growth management policies with its sustainability objectives.

The results will help support City staff when recommending:

- Official Community Plan growth phasing and future neighbourhood plan sequencing;
- Development Cost Charge program updates;
- Amenity Contribution Charge and Density Bonus recalibration;

- Subdivision and infill servicing standards review; and
- 15-minute neighbourhood and amenity planning frameworks.

Ultimately, this work will help guide growth management decisions in Surrey that are fiscally responsible and aligned with climate objectives.

## **Project description**

This project will develop a clear and evidence-based understanding of the long-term financial and climate implications of different development patterns in Surrey. Guided by Action N1.9 of CCAS, the Scholar will review existing City data and policies to compare the costs and revenues associated with various development forms, including SSMUH infill, TOA redevelopment, and greenfield development within the UCB. The Scholar will also examine best practices from neighbouring municipalities and academic research to identify transferable lessons and recommendations for Surrey's context. The study's findings will help the City understand which growth patterns deliver the greatest long-term value in terms of fiscal and climate benefits.

## **Project scope**

The Scholar's primary activities will include:

1. Policy and Research Scan – Review and synthesize relevant City policy and research on densification and 15-minute neighbourhoods.
2. Best Practices Review – Review academic literature (e.g., Calgary Sustainable Suburbs Study, University of Calgary), municipal studies (e.g., Ottawa Development Charges Background Study), and relevant precedent work (e.g., Smart Prosperity Institute's The Canada-Wide Costs of Sprawl; Pembina Institute's Toward Smart Growth). Identify and summarize transferable lessons, metrics, and methodologies applicable to Surrey's context.
3. Data Collection – Meet with key internal stakeholders to gather data on servicing, amenity and operating costs, property tax and utilities revenue, walkability and transit access, and amenity access and service levels.
4. Cost and Revenue Analysis – Develop a scenario-based model to compare lifecycle costs and revenues across three development forms: SSMUH infill, TOA redevelopment, and greenfield development within the UCB. Calculate per-dwelling and per-hectare costs and revenues, compare scenarios, and identify key cost drivers.
5. Amenity and Mobility Analysis – Conduct a 15-minute neighbourhood mapping exercise to compare access to community amenities across each scenario.
6. Analysis and Recommendations – Assess the fiscal and climate implications of each development pattern. Synthesize findings and develop clear, evidence-based

# SUSTAINABILITY SCHOLARS PROGRAM

recommendations on development sequencing, growth management, and policy alignment. Present key findings and recommendations to City staff.

## Deliverables

- Draft report for staff review and feedback.
- Final report containing a summary of the research, including an executive summary, project background, research methodology, results, discussion, and recommendations for the online public-facing [Scholars Project Library](#).
- Final presentation to City staff summarizing key project findings and recommendations.

## Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 14.
- The Scholars is to complete their hours between 8 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 conducting stakeholder interviews
- Strong analytical skills
- Ability to work independently
- Project management and organizational skills
- GIS training or experience
- Experience with financial modelling and analysis
- Familiarity with land-use planning and policy is an asset
- Familiarity with life cycle assessments is an asset

Applications close at **11:59 pm Sunday February 1, 2026**

Apply here: [Click here to apply](#)

Contact Karen Taylor at [sustainability.scholars@ubc.ca](mailto:sustainability.scholars@ubc.ca) if you have questions

## Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 19, 2026. [Click here for details and to register.](#)

Below are some links to useful resources to help you with your resume, cover letter and preparing for an interview (there are many more online).

<https://students.ubc.ca/career/career-resources/>

<https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services>