SUSTAINABILITY SCHOLARS PROGRAM

Fall 2020

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 sustainability across the region.

Note: Projects must be completed remotely during the COVID-19 pandemic.

- Visit the Sustainability Scholars Program website to learn how the program works and to apply.
- Be sure to review the application guide to confirm your eligibility before applying.

Applications close at midnight on Sunday September 20, 2020.

Research Project Title: Feasibility study on the conversion of parking garages into affordable housing

Project Overview:

As the need for climate action becomes more urgent and people become more conscious of their ecological footprint and how their individual behaviours contribute to climate emergency, shifts in transportation patterns have caused cities to rethink the role of parking lots and parking garages in urban planning strategies. Many cities are

 simultaneously "overbuilt," in that there is an overabundance of parking spaces in proportion to people (in the US in 2018, for example, there were 500 million parking spots for 326 million citizens), [1] and "underbuilt," in that the often-empty spaces devoted to parking could be redeveloped to serve far more useful purposes. [2] In a city like Vancouver that faces significant challenges in housing and homelessness, replacing parking garages with housing could be a viable way to address both sustainability and the affordable housing shortage. [3,4]

In accordance with the City of Vancouver's Greenest City Action Plans, specifically the goals to reduce greenhouse gas emissions and make walking cycling and public transit preferred transportation options, [5] as well as the City of Vancouver's Healthy City Strategy Goal 2: A home for everyone, [3] Atira Women's Resource Society (Atira) is exploring innovative solutions to housing through parking garage conversion, with a specific focus on the conversion of EasyPark Lot 4, the parking garage located near our 101 East Cordova Non-Residential Programs Office.

Purpose of the Project:

Cities and companies around the world have sought creative and inventive solutions for repurposing parking garages into spaces that could fulfill other urgent societal needs, including housing. [2, 6, 7, 8, 9, 10] Atira would like to learn from these examples so that we can better advocate and fight for housing

solutions that would illustrate similar ingenuity, starting with a study into the feasibility of such a transformation at the EasyPark Lot 4 location at 107 East Cordova Street. The lessons and recommendations synthesized from this project would allow us to determine the concrete possibilities of developing housing from converted parking garages, as well as provide insight into changes to government policy that could encourage the development of such projects (e.g. further reductions to parking requirements).

Scope of Work:

- Conduct a literature review of scholarship around innovative housing solutions repurposing existing infrastructure (especially parking garages and parking lots) into affordable housing.
- Identify and prepare case studies of parking garage conversions into housing which could serve as applicable examples for Atira's case for the conversion of the parking garage at 107 East Cordova Street.
- Conduct a minimum of four interviews with urban planners, architects, designers and other industry experts to identify the challenges, technical issues and requirements involved in the conversion of the parking garage at 107 East Cordova Street.
- Conduct a minimum of three interviews with women-serving agencies with a focus on housing.
- Conduct at least one focus group with women affected by housing shortages.
- Identify the City of Vancouver by-laws relating to parking, building, zoning and development that would be relevant to parking garage conversion projects, and gaps in policy which could serve as a hindrance to the realization of such conversion projects (e.g. parking requirements).
- Work with Atira staff to understand the nature, design and development of affordable housing buildings and their particular requirements.
- Prepare a feasibility study that lays out the opportunities for converting the parking garage at 107 East Cordova Street into affordable housing.

References

1. Overstreet, Kaley. "Transforming the Parking Garages of Today Into the Housing of Tomorrow." ArchDaily, August 5, 2018. https://www.archdaily.com/899598/transforming-the-parking-garages-of-today-into-the-housing-of-tomorrow.
2. Pattison, John. "6 Ways to Take Back Your Community from the 'Parking Void.'" Strong Towns, November 29, 2019. https://www.strongtowns.org/journal/2019/11/29/6-ways-to-take-back-your-community-from-the-parking-void.
3. Context Ltd. "Vancouver's Housing and Homelessness Strategy 2012-2021: A Home for Everyone." City of Vancouver, June 2011. https://vancouver.ca/files/cov/Housing-and-Homeless-Strategy-2012-2021pdf.pdf..
4. Homelessness Services Association of BC, BC Non-Profit Housing Association, and Urban Matters CCC. "Vancouver Homeless Count 2019." Vancouver: City of Vancouver, 2019. https://vancouver.ca/files/cov/vancouver-homeless-count-2019-final-report.pdf.
5. City of Vancouver. "Greenest City 2020 Action Plan Part Two: 2015-2020." City of Vancouver, 2015. https://vancouver.ca/files/cov/greenest-city-2020-action-plan-2015-2020.pdf.

6. The Agility Effect. "10 Ideas for Repurposing City Car Parks," September 12, 2019.
   https://www.theagilityeffect.com/en/article/10-ideas-for-repurposing-city-car-parks/.
7. Marshall, Aarian. "It's Time to Think About Living in Parking Garages." Wired, November 2, 2016.
   https://www.wired.com/2016/11/time-think-living-old-parking-garages/.
8. Howell, Brooks, and Tom Steidl. "How We're Innovating to Create Housing for All." Dialogue, 2020.
9. Mora, Tamsan. "Transforming Parking Garages Into Affordable Housing." Undergraduate Thesis, University of Arkansas, Fayetteville, 2019.
   https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=1035&context=archuht.
10. Kidd, David. "Neglected Parking Garages Are Being Given New Purpose." Government Technology, August 20, 2019. https://www.govtech.com/fs/infrastructure/Neglected-Parking-Garages-Are-Being-Given-New-Purpose.html.

Deliverables

The Scholar will deliver a final report summarizing and consolidating their project deliverables, alongside a final presentation made to Atira and key stakeholders. The report should include:

- A feasibility study analysing the possibility of converting the parking garage at 107 East Cordova Street into affordable housing, including practical considerations, challenges, and requirements.
- A literature review of existing scholarship on the subject of innovative housing solutions repurposed from existing infrastructure or other extant elements of the built environment.
- A summary of case studies of other parking garage conversions including a summary of their status, outcomes, limitations for their applicability to this project, and where possible, contact information for project developers.
- A summary of City bylaws with applicability to parking garage conversion projects including identified gaps in policy which could affect opportunities to undertake such projects.
- Summary report of interviews with key stakeholders, including industry experts and Atira staff, including advice and recommendations based on their experiences with similar projects.
- A final report for the UBC Sustainability Scholars online project library.

Time Commitment

- This project will take 250 hours to complete
- The project must be completed between October 19, 2020 and March 12, 2021
- While Atira's regular administrative work week is 40 hours, Monday to Friday, 8:30am to 5:00pm. The Scholar will coordinate and discuss with the Mentor their work arrangements and agree on a work Plan.
- The Scholar must be available to do an orientation and biweekly check-ins. The orientation and the check-ins timing will be decided according to availability of both the Scholar and the Mentor.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset
- Excellent public speaking and presentation skills
- Community engagement experience
- Familiarity conducting focus group research
- Strong analytical skills

- Ability to work independently
- Project management and organizational skills
- Strong technical and drafting skills
- Demonstrated experience in Urban planning and research into zoning and development by-laws.
- Familiarity preparing feasibility studies
- Experience with financial modelling and analysis
- Design and layout skills
- Criminal Record Check required [the successful candidate will be reimbursed for reasonable expenses to get a criminal record check done]
- Demonstrated alignment with Atira's mission, vision and values.
- Demonstrated interest in housing, especially housing affordability and ending housing.

Applications close **midnight Sunday September 20, 2020**.
Apply here: http://sustain.ubc.ca/scholarsapply
Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

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.

Resume workshop for prospective Sustainability Scholars: https://www.eventbrite.ca/e/resume-workshop-for-prospective-sustainability-scholars-tickets-117422877989

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

About Atira Women's Resource Society

Our Mission

Atira Women's Resource Society is dedicated to supporting women and children affected by violence by offering safe and supportive housing and by delivering education and advocacy aimed at ending all forms of gendered violence.

Our Vision

A world free of inequalities, where everyone's human rights are respected and where women and girls have the right to participate fully and effectively in all of the decisions that affect their lives.

Our Values

Our values guide our decision making and everything we do. Day in and day out, this is what we strive to be.

Inclusive Feminism

Our work is informed by our understanding that women's experience of oppressive institutions (sexism, racism, colonialism, classism, heterosexism, ableism, transphobia, xenophobia and other identity markers) are interconnected and cannot be examined separately from one another.

Women-Centred

Our work is informed by our understanding that in addition to providing safety and respect, all of our programs must invite and encourage women's collaboration and that women must have the opportunity to be active participants in all of our services.

Harm Reduction

Our work is informed by our understanding that women's experiences of gender-based violence is central to their use of substances and that understanding the intersections between women's experience of violence, poverty, racism, gendered patterns of drug use/harms, and lack of support for mothering, are critical to developing programs that are seamless and which increase opportunities for women to keep themselves and their children safe.

Innovation

Our work is informed by our understanding that the women who access our services and our staff are our greatest asset and so we encourage individuality, creativity, leadership, transparency and accountability.