

Laying Down the Foundation to Increase Bike Racks in the City of Hamilton

SUSTAIN 3S03: Implementing Sustainable Change



Installing a hammer hoop bike rack at a Shelter Health Network located in downtown Hamilton.
Photo Credit: Alison Carlyle, City of Hamilton

Student Authors

Eden Pang (Social Sciences), Megan Pereira (Science), Fiona Rezene (Science), Fiona Sharpe (Social Sciences), Navjot Warraich (Science)

Community Project Champions

Alison Carlyle, Project Coordinator Mobility Integration – Sustainable Mobility, Planning and Economic Development, Transportation Planning & Parking, City of Hamilton

Marijke Jurriaans, Manager, Environmental Sustainability, Primary Care, Mental Health and Addictions, Greater Hamilton Health Network

Overview

Climate change is a systemic issue, however, in a world experiencing the destructive consequences of unmanageable carbon emissions, it is imperative that this problem be tackled in any way possible, including sustainable transportation solutions (Turrentine, 2022). Promoting eco-friendly transportation, such as cycling, can help foster healthier communities and reduce carbon emission production (United Nations, n.d.). Research from a systematic review displayed that the fear of bike theft, lack of safety and security, and inaccessibility and inconvenience in bicycle parking discourage cycling (Heinen & Buehler, 2019). The goal of our project was to implement a safe and accessible bike rack at a community or healthcare centre in Hamilton, which was achieved with the installation of two bike racks at a Shelter Health Network location in downtown Hamilton.

Objectives

1. Develop bike rack location criteria
2. Assess and apply criteria to install racks in the community
3. Design and publish a bike rack location guide

Reporting

Over three weeks, a detailed criteria form was created that provides structured guidance for City of Hamilton staff to determine bike rack locations. The criteria form provides a score out of 19 and is divided into five categories: basic requirements, accessibility and convenience, pedestrian traffic, vehicle traffic, and safety and security.

In response to one request submitted through the bike parking request form, we visited Shelter Health Network on November 14th. We employed our criteria form for three possible locations and identified the location with the highest scoring metric, 89%. High scores may not always be explicitly relevant due to various variables, but this guideline enables staff to evaluate all potential options. Then, on November 30th, two bike racks were installed, one across the street and one in front of the building.

To support businesses and landowners, content for a bike rack location guide was developed for publication on the Smart Commute website. This guide discusses the importance of installing a bike rack and outlines specific guidelines for implementation that landowners, such as healthcare centres, can leverage if there isn't a suitable location on City land.

Ultimately, these objectives contributed significantly to our project's main goal of implementing a bike rack at a local community service centre as we created guidelines to ensure the bike parking was safe and accessible and installed two bike racks. We extended our goal to support safe and accessible bike parking city-wide by expanding our target audience from City staff to business owners and the public.

Collaborators

We would like to extend our gratitude to our CPCs, Marijke Jurriaans, and Alison Carlyle, for their guidance and support during this project. We would like to thank Evan Nopper from the City of Hamilton for his invaluable feedback on our bike parking criteria. We would like to thank Dr. Kate Whalen and Nathan Butterworth from the ASP Office for their insights on our project direction, and our course instructional team, Liana Bontempo and Rebecca Smith, for their mentorship. Lastly, our project would not have been possible without the partnership of the SUSTAIN 2SS3 group and the Shelter Health Network.



References

Heinen, E., & Buehler, R. (2019). Bicycle parking: a systematic review of scientific literature on parking behaviour, parking preferences, and their influence on cycling and travel behaviour. *Transport Reviews*, 39(5).

<https://doi.org/https://doi.org/10.1080/01441647.2019.1590477>

Turrentine, J. (2022, December 13). What are the solutions to climate change?. Be a Force for the Future.

<https://www.nrdc.org/stories/what-are-solutions-climate-change>

United Nations. (n.d.). Sustainable Development Goal 9: Industry, innovation, and infrastructure.

[\[https://sdgs.un.org/goals/goal9\]](https://sdgs.un.org/goals/goal9)

United Nations. (n.d.). Sustainable Development Goal 11: Sustainable cities and communities.

[\[https://sdgs.un.org/goals/goal11\]](https://sdgs.un.org/goals/goal11)

United Nations. (n.d.). Sustainable Development Goal 13: Climate action.

[\[https://sdgs.un.org/goals/goal13\]](https://sdgs.un.org/goals/goal13)

