

International Experience Award: Oulu, Finland

Benjamin Morin - April 2016



View from downtown Oulu

Research Topic: Investigating Winter Cycling in Oulu, Finland

Learning Experiences:

During my visit to Oulu, I had the opportunity to interview:

- An architect and PhD student in arctic urbanism
- A postdoctoral researcher at the University of Oulu specializing in participatory land use planning
- An economics professor at the University of Oulu examining winter cycling attitudes
- An urban planner at the City of Oulu
- A master of architecture student at the University of Oulu

I also discussed winter cycling with internationally recognized cycling advocate and vice-president of the Winter Cycling Federation, Pekka Tahkola, during a 25 kilometre bike ride throughout Oulu. I was able to experience Oulu's cycling network extensively and visit Hiukkavaara, a district in Oulu created upon the principles of sustainable winter planning.

Context:

Oulu, Finland is a city of approximately 200,000 people in Northern Finland. The city has been praised extensively for its transportation planning, which has allowed 98% of bike paths to remain open and useable in the winter through innovative engineering and urban design. In 2013, Oulu hosted the first international Winter Cycling Conference and has been hailed widely as an example for cold Canadian cities.

Research Topic:

One of the greatest challenges in achieving consistent active transportation usage in Canadian cities is the harsh climate. Many cities abandon cycling paths in the winter months, putting more cars on the road and resulting in less physical activity. Canadian cities have recently begun examining methods to encourage active transportation in the winter and so I travelled to Oulu, Finland; the city dubbed winter cycling capital of the world, for guidance.

The goal of my research was to understand and document the infrastructure and urban design features that allow Oulu to maintain Finland's largest cycling

network and keep it usable and attractive in the winter. My objective was to apply this knowledge towards having a greater understanding of how to create similar results in Canada. During my time in Oulu, I reached out to experts from the University, the City, and the Winter Cycling Federation to learn about the challenges and successes of the city's policies and initiatives.



An Oulu street shared by pedestrians and cyclists

Research Findings:

The footprint for Oulu's success in winter cycling traces back several decades, when city staff and citizens abandoned Modernist trends in planning to instead ensure that cyclists and pedestrians could maintain a

place of power in the city. Oulu is different from Canada in that its pedestrians and cyclists share sidewalks, which are at least 3 meters wide. This is found in the downtown and in the suburbs, though the city has now begun to experiment with separated bike lanes. Many of the interview participants view winter as an asset and feel that engaging with it contributes to the popularity of winter cycling in the city. Oulu both utilizes winter in its infrastructure, an example being an added cycling path atop a frozen stream, and also incentivizes people to stay outside. People will tolerate the frigid temperatures to enjoy the vibrant market in the city square, or warm up in the city's many public saunas or personal saunas that can be found in many apartments. One interviewee noted that encouraging people to stay outside in the winter is beneficial for the city, because its unique environment encourages tourism as well as spending at local businesses.

The city encourages winter cycling through its infrastructure. There is ample bike parking in the downtown and the cycling network spans the entire city, well into the suburbs. The city has mandatory indoor bike parking requirements for residential developments and bike theft is a lesser issue in the city than in Kingston. Many interview participants noted that maintenance plays a large role in encouraging winter cycling and the city uses small trucks to remove snow. The city is incentivized to remove snow for cyclists in a timely manner as their network is shared with pedestrians. Oulu has also begun to use excess steam from other energy sources to heat some of its sidewalks. The streets are designed to make cyclists, as well as pedestrians, feel safe. Comprehensive

traffic lights direct bikes and crosswalks for bike and foot traffic are found along each street, often at a distance of 50 meters or less. Roads in suburbs are designed for low speeds - cyclists share these with cars but only local traffic may use them. As I explored the city I noticed traffic lights and tracks in public parks, and an interview participant told me that these were put in place to teach children road safety at a young age.



One of Oulu's many crosswalks for cyclists and pedestrians

Reflections

My experience in Oulu gave me a glimpse of the many dynamics that allow the city's winter cycling to succeed. While some cultural elements were deep rooted, there



A multi-use pathway and crosswalk in Oulu

are many aspects of Oulu's planning that can be used in Canada, such as its traffic system, bicycle parking requirements and early traffic education. Though Finland shares similar weather to Canadian cities, its history and culture are entirely separate and this manifests into its use of active transportation as well as land use planning as a whole. One aspect that an interview participant notes was particularly impactful: Oulu is currently Finland's fastest growing city and with the effects of climate change, cities in the north will become more populous. Winter cycling is but one aspect of creating a sustainable northern city, and cities in Canada should attempt to ensure their sustainability in anticipation of the coming changes.