PUBLIC OPINION OF CYCLING INFRASTRUCTURE

Situating divergent perceptions of a rapid-cycling network in Montréal, Canada

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INTRODUCTION

- As cities work to accelerate sustainable-transport transitions, the expansion of cycling networks has become a significant topic of debate.
- Policy makers in Montréal have worked to expand the connectivity and accessibility of the city's cycling infrastructure over the past decade and to implement a new rapid-cycling network—The Réseau Express Vélo (REV).
- Once complete, the REV will consist of 184 kilometres of wide, protected cycling routes along 17 axes (Figure 1), adding to the over 700km of cycling facilities crisscrossing the city.
- The REV has been presented as the main component of a \$214 millions investment in Montréal's cycling network over the 2020-2031 period.
- Still, the city's pro-cycling investments remain controversial, requiring attention to context specific social, political, and environmental factors.
- Drawingfromamixed-methodssurveyandspatialdata, this paper contributes a nuanced understanding of factors that influence positive and negative perceptions of cycling infrastructure.
- In doing so, we aim to move beyond one-size-fits-all interventions towards more equitable, inclusive, and situated urban planning.

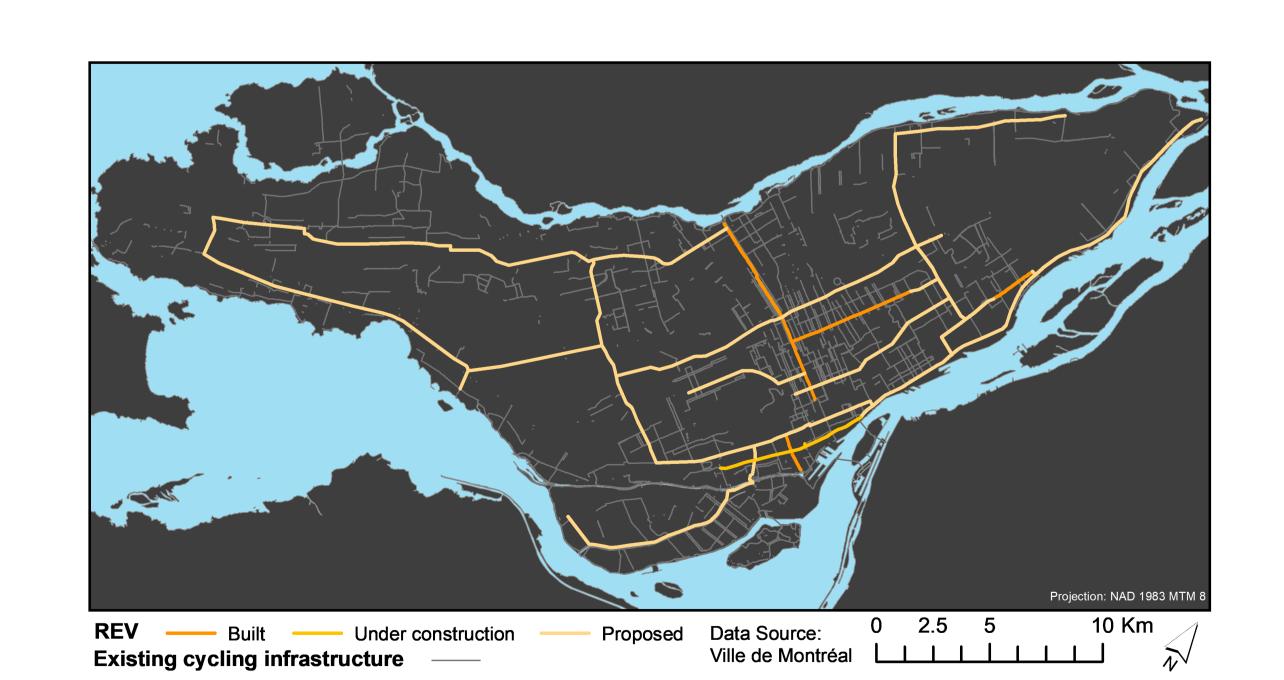


Figure 1. Built, under-construction, and proposed REV on the Island of Montréal

METHODS

Data collected from the second wave of the Montreal Mobility Survey (Fall 2021). Respondents were asked if they were aware of the REV. If so, they were asked the following open-ended question:

"Is there anything else you would like to share about the anticipated impacts of the REV? If you do not have any suggestions, you do not need to respond to this question."

Total respondents N=387 Cyclists N=193 Non Cyclists N=194

Applied thematic analysis was used to categorize responses into different themes through an inductive approach.

RESULTS

We identified six emerging patterns to help situate our analysis of these public perceptions:

1. Safety and family friendly infrastructure

Overall, Montréal's new investments in quality cycling infrastructures were well received from a safety perspective.

The perceived improvement in safety of the REV by users and its ability to promote cycling as a family-friendly option signifies a positive improvement given that past research has highlighted the lack of accessibility of Montréal's cycling network for children as a major limitation.

2. Conflicts over parking spaces and impacts on business

Even as the modal share of cycling is increasing and gaining public support in Montréal, resistance to the removal of parking spaces remains a major source of 'bikelash' (or opposition to cycling facilities), in addition to concerns over the potential impacts on local businesses.

3. Politics and planning process

One of the primary critiques of the REV relates to the need for more public-consultation processes prior to project implementation.

Despite these critiques, the speed at which the project is being implemented was praised by many respondents.

4. Distributional inequalities

While the city has pledged to improve its cycling infrastructure, concerns about distributional inequities were prevalent, especially considering that the REV expansion still excludes many underserved communities.

The quality of cycling infrastructure in Montréal remains very uneven, with only 37.76% being considered high comfort (i.e., wide enough and with physical separation from car lanes).

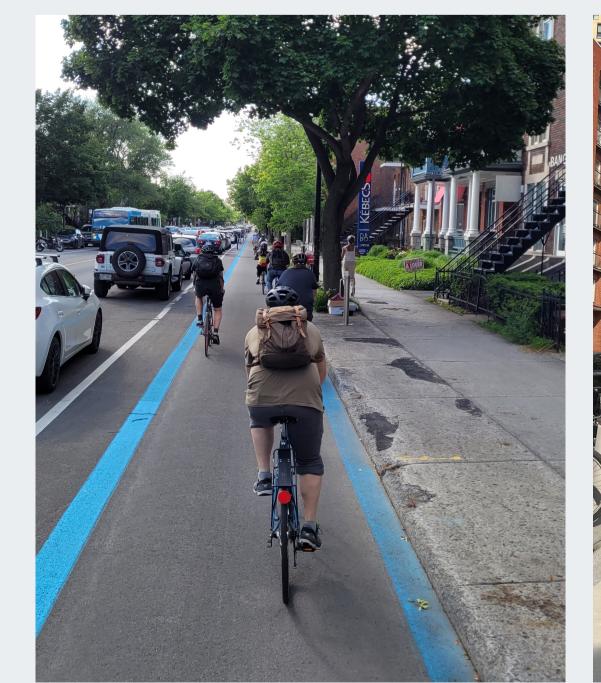
5. Seasonality of cycling

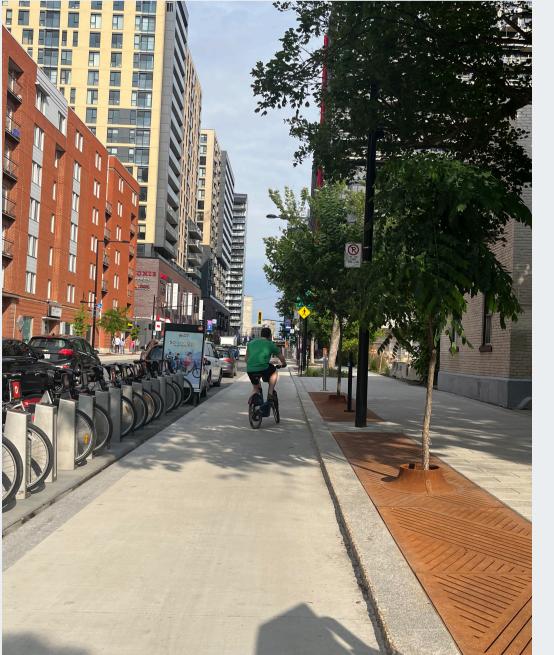
While many residents are not willing or able to cycle year-round, others would benefit from more tailored winter-cycling facilities (e.g., added covered parking for cyclists, better and more rapid plowing of cycling lanes, or increased accommodations for intermodal travel in the Metro or bus systems).

6. Modal integration

A frequent, but often underacknowledged, critique of cycling facilities relates to their integration (or lack thereof) with other travel modes. Indeed, a number of respondents expressed concerns about cycling speeds and the safety of pedestrians and mobility-aid users at intersections.

While clear communication to promote cycling as an inclusive mode of transport is a good starting place, these initiatives should be supported by significant anti-ableist planning interventions, including more inclusive signage, the removal of barriers for mobility-aid users on cycling paths, and the provision of an adaptive bicycle-sharing system.





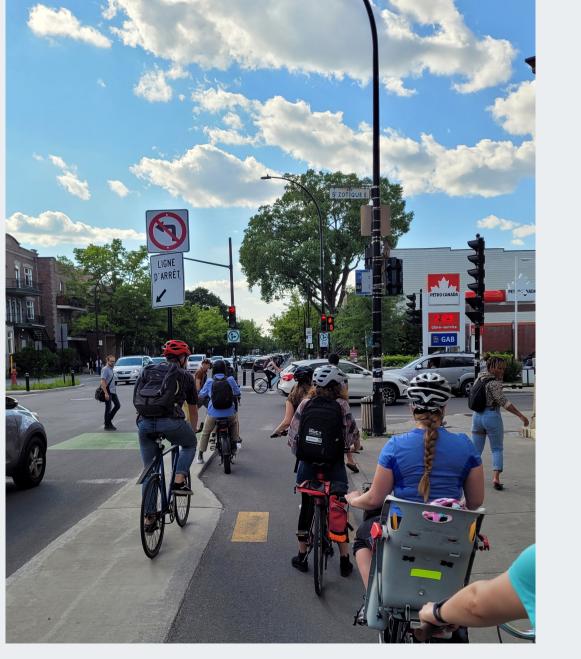


Figure 2. Different REV corridors in Summer 2022

CONCLUSION

- As cycling expressways make their mark through cities across the globe, contextualized research is needed to ensure that these interventions are being implemented in inclusive and equitable ways.
- We suggest that more research be done to understand the role of the media in shaping public perceptions of cycling.
- To foster appropriate and equitable infrastructure provisions for active travellers, we propose greater situated research across regions and cities with unique climate and topographical conditions.
- Ensuring careful integration of cycling facilities with other transport modes, while working to continually enhance public-transit and pedestrian infrastructure, could go a long way to ease residents' apprehension about new express-cycling facilities.
- It is crucial to ensure that cycling infrastructure do not present additional challenges to pedestrians, public-transit users, and people with disabilities. Raised crosswalks or continuous sidewalks would present one way to support street sharing.
- We emphasize the need to bring cycling research into better conversation with the critical disabilities scholarship to ensure that the language and infrastructural interventions aimed at fostering active travel can reflect the realities of people with diverse mobility needs.

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