

Opportunities and Barriers to the Implementation of Active Transportation Infrastructure in Canadian Cities

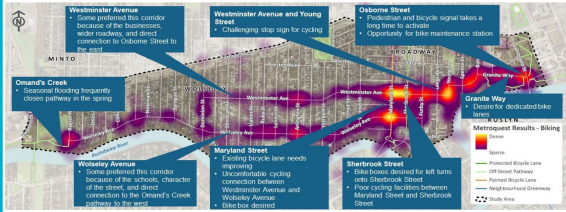
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Introduction

- Active transportation (AT) is a method of travel that describes human-powered means of transportation
- Alternative to personal vehicles and public transportation
- Benefits to AT
 - Decreased carbon emissions, noise levels, and traffic congestion, and increased physical activity and accessibility¹
- Uptake can be confounded by numerous factors¹
- Canada has focused on initiatives to implement AT²
- Objective: Compare and contrast case studies of AT projects in Winnipeg and Toronto to explore opportunities and barriers to implementation

Methods

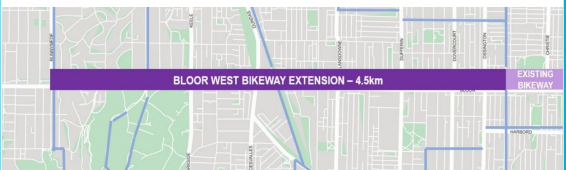
- Two case studies selected for analysis
 - Wolesey to Downtown Walk Bike Project in Winnipeg
 - Bloor Street West Runnymede Road to Shaw Street Bikeway Extension in Toronto
- Analyzed through document analysis: READ approach³
- Documents of use were identified through public domain websites
- Inductive approach was used to develop the key themes



Winnipeg Bike Lane Map⁴

Results

Winnipeg	
Key Themes	Details
Safety	Vehicle speed, traffic calming, protected bike lanes, right turns, collisions, education
Traffic	One way street conversions, curb extensions, removal of turning lanes, parking
Parking	Lack of parking, impacts on businesses, parking pockets, side street parking
School Routes	Physical activity, safety
Cycling Connectivity	Improved coherence, comfort, easier transitions



Bloor West Bikeway Extension⁵
 Toronto

Key Themes	Details
Safety	Protected bike lanes, Vision Zero, traffic calming, collisions
Traffic	Lane reduction, congestion, complete streets, signal timing
Parking	Lack of parking, impacts on businesses, on-street parking, side street parking, off-street parking
Transit/Cycling Connectivity	Shared facilities, multi-use paths, transit route connectivity
Initiatives	Vision Zero, Climate Action, Road to Health, Complete Streets

Discussion

- Multiple parallel themes and strategies
 - Safety** - most prominent theme
 - Traffic
 - Parking
 - Cycling connectivity
- Protected/separated bike lanes as a safety feature
- Vision Zero
 - Reducing traffic-related fatalities to zero
 - Implementing AT infrastructure can support the goal
- Beneficial to take into account the commonalities between projects in order to develop a framework

Conclusion

- Safety is the primary opportunity and barrier for AT implementation
- Winnipeg and Toronto were able to address barriers
- Further research needed to develop framework



Toronto Bike Lane⁶

References

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