Agenda – Executive Policy Committee – March 13, 2023

Report – Standing Policy Committee on Public Works – March 7, 2023

Moved by Councillor

That Rule 10(3) of The Procedure By-law No. 50/2007 be suspended in order that the following item, which was received less than four business days preceding the committee meeting, be considered by Committee.

Item No. 5 Neighbourhood Greenway Reduced Speed Pilot Results and Recommendations

STANDING COMMITTEE RECOMMENDATION:

On March 7, 2023, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service, as amended, and submitted the following to Council:

1. That the streets listed in Appendix A to this report be designated as permanent Neighbourhood Greenways with reduced speed limits (30 km/h) in effect 24 hours per day, seven days per week on a permanent basis with associated traffic calming measures, with the following amendment:

   A. Delete Clauses 11, 12, 13 and 14 in their entirety

2. That the City Solicitor and Director of Legal Services be instructed to prepare such by-law amendments as may be necessary to implement Recommendation 1 of this report and bring same directly to Council for enactment.

3. That the Future Expansion and Implementation Process be implemented in accordance with this report.

4. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Agenda – Executive Policy Committee – March 13, 2023

Report – Standing Policy Committee on Public Works – March 7, 2023

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On March 7, 2023, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service, with the following amendment:

- In Recommendation 1, delete the period after the words "traffic calming measures" and replace with the following:

  ", with the following amendment:

  A. Delete Clauses 11, 12, 13 and 14 in their entirety."

and submitted the matter to the Executive Policy Committee and Council.

The following persons submitted communications in support of the matter:

- Mel Marginet, Green Action Centre, Sustainable Transportation Team
- Chelsea Dyck
- Anita Penner

The following persons submitted communications with respect to the matter:

- Sonny Pichette
- Atul Sharma
- David Grant

Chris Ranick submitted a communication in opposition to the matter.

ADMINISTRATIVE REPORT

Title: Neighbourhood Greenway Reduced Speed Pilot Results and Recommendations

Critical Path: Standing Policy Committee on Public Works, Executive Policy Committee, Council

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P. Eng.	J. Berezowsky	C. Kloepfer	M. Jack

EXECUTIVE SUMMARY

In Summer 2021, the Neighbourhood Greenway Reduced Speed Pilot saw speed limits on four existing neighbourhood greenways reduced to 30 km/h. Additional traffic calming measures, ranging from new signage and barricades to speed humps and enhanced pedestrian crossings, were also implemented on each route.

The pilot brought conditions on these existing neighbourhood greenways up to North American best practice; the routes were monitored for a period of one year to ensure evaluation looked at usage through all four seasons.

As a result of data collected through the pilot and to maintain best-practice conditions, the Public Service is recommending: the pilot be made permanent; that 10 additional routes referred from the 2022 Enhanced Summer Bike Route Program also be made into reduced-speed neighbourhood greenways; and that future neighbourhood greenways be subject to a new set of recommended criteria and conditions.

RECOMMENDATIONS

1. That the streets listed in Appendix A to this report be designated as permanent Neighbourhood Greenways with reduced speed limits (30 km/h) in effect 24 hours per day, seven days per week on a permanent basis with associated traffic calming measures.

2. That the City Solicitor and Director of Legal Services be instructed to prepare such by-law amendments as may be necessary to implement Recommendation 1 of this report and bring same directly to Council for enactment.

3. That the Future Expansion and Implementation Process be implemented in accordance with this report.

4. That the proper officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

On July 7, 2020, the Standing Policy Committee on Infrastructure Renewal and Public Works received the *Speed Limit Review: Process and Residential Speed Limits* administrative report as information. This report included the recommendations for the Neighbourhood Greenway Reduced Speed Pilot, which indicated a report back to this committee be presented a minimum of 365 days from the installation of the pilot. The pilot was installed on July 26, 2021.

IMPLICATIONS OF THE RECOMMENDATIONS

Implementing new traffic calming measures for the recommended routes, which will bring them up to best practice standards for neighbourhood greenways, is anticipated to cost approximately $692,969. Capital costs will be funded by the Pedestrian Cycling Project budgets and the Road Safety Improvement capital budget. No new funding is requested.

HISTORY/DISCUSSION

BACKGROUND

Neighbourhood greenways (also known as bicycle boulevards) are a critical component of a city's bike network. Neighbourhood greenways are on-street routes designated to comfortably and safely move both cyclists and pedestrians *and* motor vehicles. Greenways are appropriate on local roads and some collector roads, and typically include a range of treatments from low-impact things like signage, bike signals, and pavement markings, to varying degrees of traffic calming including a best-practice speed limit of 30 km/h. These components work together as a system that results in a street that has low traffic volumes and speeds, which in turn creates a safe and comfortable cycling environment.

The 2015 Winnipeg Pedestrian and Cycling Strategies identifies several hundred kilometres of proposed neighbourhood greenways. Winnipeg currently has 11 routes, which – until the pilot – all operated with a speed limit of 50 km/h.

The Neighbourhood Greenway Reduced Speed Pilot resulted from a 2020 Standing Policy Committee on Infrastructure Renewal and Public Works (SPC-PW) direction to pilot reduced speeds on four existing neighbourhood greenways. Working with area Councillors, the Public Service selected the following four pilot routes (all of which already had some existing traffic calming treatments and enhanced pedestrian crossings):

- Eugenie Street from St. Mary's Road to Youville Street
- Warsaw Avenue from Thurso Street to Pembina Highway
- Machray Avenue from Fife Street to Main Street
- Powers Street from Dufferin Avenue to Partridge Avenue

The pilot was implemented in July 2021. In addition to the reduced speed limit, each of the four routes received traffic calming measures, ranging from new signage and barricades to speed humps and enhanced pedestrian crossings. This brought conditions on these four routes up to North American best practice for neighbourhood greenways.

EVALUATION

The routes were monitored for one year to ensure they operated through all four seasons. This allowed ample time for people to experience them and the City to collect data midway through the pilot period, which is an ideal time to collect data after people had time to experience the change. Evaluation was based on two primary metrics: traffic data (vehicle and bicycle volumes, and vehicular speeds) and public feedback via a survey conducted in Spring 2022.

Traffic data

The Public Service monitored the number of cyclists using the routes and both vehicle volumes and operating speeds. The desired vehicle volume for a neighbourhood greenway is below 1,000 vehicles per day. The desired 85th percentile operating speed (the speed at or below which 85 percent of vehicles travelled) is approximately 30 km/h.

Across all four routes, the 85th percentile operating speed was between 29 km/h and 35 km/h, with an average of 32 km/h. Daily traffic volumes were between 263 vehicles per day and 739 vehicles per day, with an average of 517 vehicles per day on the pilot routes.

These numbers show the reduced speed limit slowed vehicle traffic and traffic volumes on the routes were low, as is illustrated in Table 1.

Table 1 – Pilot Data Collection Summary

Metric	Machray East of Penningham	Machray East of Powers	Powers North of Kilbride	Warsaw West of Nassau	Eugenie East of Braemar	Average
85th percentile speed (km/h)	35	31	32	29	34	**32**
95th percentile speed (km/h)	40	35	37	35	37	**37**
Vehicle volume (veh/day)	406	739	494	263	683	**517**
Bike volume (cyclists/day)	41	32	46	72	227	**92**

Public feedback

Two phases of public engagement were conducted as part of the pilot: one prior to implementation to determine baseline opinions on neighbourhood greenway conditions, and one in Spring 2022 to determine whether opinions had changed in the year since the reduced speed limit and traffic calming measures were installed. Winnipeggers had the opportunity to provide feedback both digitally via an online survey and in-person via pop-up events along each route. The survey and pop-ups were promoted via news release, social media posts, email, postcards mailed to residents along and one block adjacent to each pilot route, and signage posted along each route during the survey period.

The online survey and pop-up events garnered 771 responses. Survey responses illustrated mixed opinions of the neighbourhood greenways. For the most part, those who identified as a motorist indicated they felt the routes provided a negative experience while those who identified as a cyclist or pedestrian indicated they felt the routes provided a positive experience.

Overall, the top reasons why respondents support the pilot are:

1. I like vehicles moving slower on the street (222 of 589 respondents)
2. I like that more cyclists and pedestrians use the street (182 of 589 respondents)
3. I feel safer using the street (168 of 589 respondents)

Overall, the top three reasons why respondents do not support the pilot are:

1. I am concerned it has pushed vehicle traffic to neighbouring streets (216 of 589 respondents)
2. I find the reduced speed and/or other interventions inconvenient, and do not like to be inconvenienced while driving (170 of 589 respondents)
3. I do not like going over speed humps (148 of 589 respondents)

Overall, residents of the pilot routes support making permanent the pilot changes. Residents of adjacent streets were split in their opinion of making the changes permanent (see Figure 1).

Full results of the engagement program are found in Appendix B.

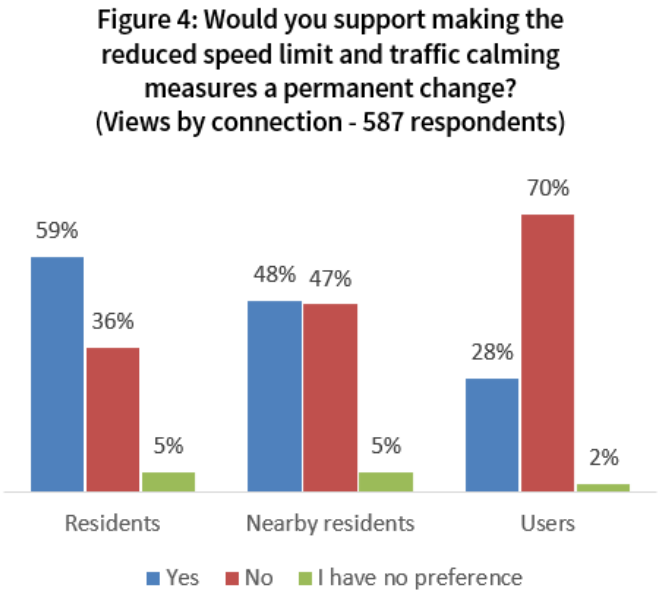


Figure 1 – Public Engagement Summary Figure – Support for Permanent Facility

Additional feedback was provided by the director of the Bicycle Education and Skills Training (BEST) program, which operates in Seven Oaks School Division (which houses a portion of the Powers Street route). Students in the BEST program learn within their school day how to safely cycle on the road and, according to the program director, had their learning supported by the routes. A letter of support from the BEST program is included in Appendix C.

RECOMMENDATIONS AND RATIONALE

The Public Service recommends making permanent each of the four pilot routes for the following reasons.

1. Vehicular volume on the four routes is an average of fewer than 1,000 vehicles per day; operating speeds are at or around 30 km/h.
2. 70 percent of respondents who cycle the route (95 to 136 respondents who cycle) support the changes introduced by the pilot as well as making them permanent.
3. 64 percent of respondents who drive the street (211 of 330 respondents who drive) do not support the interventions, whether temporary or permanent. These opinions were generally attributed to the inconvenience of reduced speeds and traffic calming; this is the essence of the neighbourhood greenway concept as pedestrian and cyclist safety increases as the speeds and number of vehicles who travel the route decreases. The reduced convenience for drivers and increased safety for walking and cycling is an acceptable and required trade-off.
4. Not designing and implementing best-practice neighbourhood greenways in Winnipeg would make it very challenging for the City to create an interconnected cycling network designed for users of all ages and abilities. The pavement width and context of local roads does not allow for including separated bike lanes at most locations. Neighbourhood greenways represent hundreds of kilometers of the total proposed bike network.
5. Implementing neighbourhood greenways as part of the overall cycling network is supported by the following Council-adopted policies:

    a. Pedestrian and Cycling Strategies

    1B Expand & Enhance the Bicycle Network
    i. Develop a complete, connected, and dense bicycle network throughout the City.
    iv. Develop local bicycle networks for each neighbourhood that connect to the spine network and to the Downtown.

    3B Improve Pedestrian and Cyclist Safety
    iv. Include traffic calming and reduced design speeds as specific measures to increase safety and improve the walking and cycling environment, particularly on neighbourhood greenways and in areas with high concentrations of children, seniors and people with disabilities.

    b. Road Safety Strategic Action Plan

    S01 Implement 30 km/h neighbourhood greenways

Neighbourhood greenways are a bicycle facility type where motorists and cyclists share the roadway. While the majority of Winnipeg's greenways are currently designated 50 km/h, best practice is to have greenways operate with 30 km/h speed limits. A pilot program to trial these reduced speeds is currently in progress on four existing greenways. Further progress on this action is dependent on the outcomes of the pilot program.

C02 Upgrade cycling infrastructure
Accelerate implementation of the updated Pedestrian and Cycling Strategies.

c. Climate Action Plan

3.4 Increase Active Transportation Rates
Accelerate the implementation of the Pedestrian and Cycling Strategies (e.g. through increased funding and staffing)

FUTURE EXPANSION AND IMPLEMENTATION PROCESS

The Public Service recommends expanding the best practice application of 30 km/h, traffic calming and volume management as the new standard for neighborhood greenways and expanding the program over time as outlined in this report.

Expanding the pilot to become best practice treatment for neighbourhood greenway will be phased as staff and funding resources allow. These ongoing upgrades will be reported in the annual Pedestrian and Cycling Program report presented annually in September to SPC-PW.

Tier system
The implementation program is based on a system of tiers that include the criteria below. To maintain flexibly on implementation, work may start in a subsequent tier even if all routes in the previous tier are not complete.

Tier 1 – The first tier will include routes that are ready for upgrade to comply with best practice as they already have some level of enhancement for cycling, a Walkbike study has been conducted and have baseline data including volume and speed. These include:

- Routes previously included in the Enhanced Summer Bike Route program for which implementation would not require further study.
- Routes for which a WalkBike study or traffic study has determined such a treatment would be appropriate.
- Existing neighbourhood greenways as per the City of Winnipeg Bike Map.
- New neighbourhood greenways identified in the upcoming 2023 Pedestrian and Cycling Strategies (PCS) update that are included in the annual Regional and Local Street Renewal Program, starting in 2024.

Tier 2 – The second tier will include both routes that have been previously improved or studied but require further study prior to implementation and those identified as high priority for designation as a neighbourhood greenway. These include:

- Routes previously included in the Enhanced Summer Bike Route program for which implementation would require further study.
- Existing neighbourhood greenways that would require further study prior to being brought up to best practice standards.
- New neighbourhood greenways identified as a primary route or higher-level priority in the upcoming 2023 PCS update.

Tier 3 – The third tier will include new neighbourhood greenways including those identified as a primary or secondary route in the upcoming 2023 PCS update and those not identified in the PCS update but rather in a subsequent WalkBike or other traffic study.

Additional considerations
Reduced Speed School Zones that fall within the boundaries of a 30 km/h neighbourhood greenway will be removed, as a full-time 30 km/h speed limit will be in place on these streets. The School Area signs will remain in place to designate the start of the school area surrounding each school, but the time-specific reduced speed school zones will be removed. An amendment to the Reduced Speed School Zone By-Law will come forward for Council's approval at a subsequent meeting.

2023 – 2024 implementation recommendations
The first round of streets recommended to be brought up to best practice standards are 10 existing and/or planned neighbourhood greenways that were previously included in the Enhanced Summer Bike Route Program. Rather than continue as annually approved summer bike routes, the Public Service recommends these routes be designated permanent reduced-speed neighbourhood greenways with a full-time 30km/h posted speed limit and the application of traffic calming measures.

The following points support this recommendation:

1. Vehicular traffic on the 10 routes in question was found to be operating within or close to the intended thresholds of approx. 30km/h and under 1,000 vehicles per day.
2. A full-time, all-season designation provides a higher level of service for users and more clarity for the public. Physical traffic calming measures will help to reaffirm the 30 km/h posted speed limit.
3. Staff time required to maintain the temporary routes is not required on a permanent route. This will free up time to accomplish other tasks.
4. Respondents to the 2022 Enhanced Summer Bike Route survey indicated support to convert all these streets (except Ravelston Avenue) to permanent neighbourhood greenways.
5. Not designing and implementing best practice neighbourhood greenways in Winnipeg would make it very challenging for the City to create an interconnected cycling network designed for users of all ages and abilities. The pavement width and context of local roads does not allow for including separated bike lanes. Neighbourhood greenways represent hundreds of kilometers of the total proposed bike network.
6. Implementing neighbourhood greenways as part of the overall cycling network is supported by the following council adopted policies (specific policies and actions presented above):
    a. Pedestrian and Cycling Strategies
    b. Road Safety Strategic Action Plan
    c. Climate Action Plan

Routes recommended for designation are:

- Egerton Road between Morier Avenue and the southern terminus.
- Alexander Avenue between Arlington Street and Princess Street.
- Youville Street between Marion Street and Haig Avenue.
- Ruby Street from Palmerston Avenue to Portage Avenue / Banning Street from Portage Avenue to Notre Dame Avenue.

- Kildonan Drive between Helmsdale Avenue and the northern terminus.
- Ravelston Avenue between Wayoata Street and Plessis Road.
- Linwood Street between Portage Avenue and Silver Avenue.
- Harbison Avenue West between Henderson Highway and the eastern terminus.
- Rover Avenue between Hallet Street and Angus Street.
- Scotia Street between Armstrong Avenue and Cathedral Avenue, including one-block segments on Leila Avenue, Marymound Way, and Forrest Avenue; and St. Cross Street between Anderson Avenue and Cathedral Avenue, including the one block segment of Cathedral Avenue between St. Cross Street and Scotia Street.

Additional streets will be identified and included as part of the 2024 and future Regional and Local Street Renewal Program.

Implementation of the reduced speed limit would take place in 2023 and the traffic calming elements (mainly speed humps) would take place over the 2023 and/or 2024 construction seasons. At the time of this report, a design and construction method is still being confirmed. A map presenting the impact these routes will have to expanding the existing bike network is presented in Appendix D.

Further considerations for two routes are outlined below.

Scotia Street and Rover Avenue
Scotia Street and Rover Avenue are a part of the North Winnipeg Parkway, which connects The Forks to the Chief Peguis Trail multi-use path. Given the traffic volumes and speeds, a neighbourhood greenway would be the most appropriate cycling facility for these streets. There is existing funding in the Pedestrian and Cycling Program for a WalkBike study that includes the design and implementation of upgrades to the North Winnipeg Parkway as well as public engagement.

Initial upgrades were completed in 2021 with the construction of a multi-use path from Hallet Street to Pritchard Avenue through Michaëlle Jean Park. At that time, a commitment was made to the community that further engagement would take place regarding additional upgrades to the North Winnipeg Parkway. As this commitment has been made to the community, it is prudent to open some dialogue to check in that we are on the right track and reaffirm our commitment to moving toward the future WalkBike study. If approved, the Public Service would conduct a series of digital stakeholder meetings to assess the community's interest in seeing full-time neighbourhood greenways on both Scotia Street and Rover Avenue. Based on the outcomes of these discussions, these streets will either become permanent neighbourhood greenways or be referred back to the 2023 ESBR program until the future study can confirm the long-term design.

Ravelston Avenue
Ravelston Avenue did not receive strong support for a full-time facility; however, the Public Service is still recommending it become a permanent neighbourhood greenway. The street is currently in the 2015 PCS as a neighbourhood greenway and is currently in the draft update to the PCS. It is prudent to efficiently implement this facility now rather than pausing and coming back to open this discussion again in the future. Also, there are currently four 30 km/h school zones on Ravelston Avenue, which represents approximately 1.2 km of the approximately 2.6 km total roadway.

ONGOING MONITORING

As future neighbourhood greenways are implemented according to best practice, motor vehicle traffic patterns would be periodically monitored to ensure conditions are safe and appropriate for shared use with cyclists. The information learned through periodic monitoring would be used to make changes where necessary and to help refine the design of neighbourhood greenways moving forward.

The specific set of traffic calming measures used on neighbourhood greenways can evolve as more information is gained. For example, traffic calming circles were originally installed on several neighbourhood greenways when they were first implemented in the City of Winnipeg in 2010. Recent research from the University of British Columbia and the City of Vancouver found that, although traffic circles in Vancouver decreased the risk to motorists, they increased the risk to both cyclists and pedestrians. In light of this research, the Public Service is not currently intending to install new traffic circles on bike routes and intends to review the operation of existing traffic calming circles on neighbourhood greenways.

Traffic impacts on adjacent streets may also be monitored on a case-by-case basis, as resources allow, to understand the degree to which motorists are choosing to redirect to alternate routes. Although an outcome of neighbourhood greenways is that motorists often divert to other routes, it would be important to ensure that installing neighbourhood greenways does not significantly compromise safety and livability on adjacent streets.

FINANCIAL IMPACT

Financial Impact Statement **Date:** February 15, 2023

Project Name: **First Year of Program** **2023**

Neighbourhood Greenway Reduced Speed Pilot Results and Recommendations

	2023	2024	2025	2026	2027
Capital					
Capital Expenditures Required	$ 692,969	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	692,969	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ 2,906	$ 2,906	$ 2,906	$ 2,906
Less: Incremental Revenue/Recovery	28,669	-	-	-	-
Net Cost/(Benefit)	$ (28,669)	$ 2,906	$ 2,906	$ 2,906	$ 2,906
Less: Existing Budget Amounts	(28,669)	2,906	2,906	2,906	2,906
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Capital costs represent class 5 estimated costs for the streets in this report to be brought up to the best practice standards for neighbourhood greenways, including speed sign installation and traffic calming $664,350 plus overheads of $28,669. Capital costs will be funded by the Pedestrian Cycling Project budgets1832000120,1832000121,1832000122 and 1832000123 and the 2019 Road Safety Improvement capital budget 1831001019. Incremental Revenue/Recovery costs represent estimated departmental overheads and Corporate interest charges. Direct costs represent the interest cost of financing.

J. Ruby, 2023-02-15

J. Ruby CPA, CA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

- Legal Services

OURWINNIPEG POLICY ALIGNMENT

2.1 Climate Action Targets - Meet and exceed greenhouse gas emissions reduction targets of 20 percent by 2030, relative to 2011, and net zero by 2050, by working towards partnerships with the community, businesses, and government bodies including Indigenous, Federal and Provincial governments.

3.17 Sustainable Transportation Connectivity - Prioritize enhancements to the integrated and sustainable transportation system that improve its viability and access to places such as educational institutions, employment opportunities, recreation and library facilities, providers of essential goods and services and health providers, especially for children, and for neighbourhoods most impacted by poverty.

4.10 Transportation Safety - Design, construct, maintain, and regulate an integrated and sustainable transportation system and related infrastructure that optimize safe, connected and reliable mobility, and minimize severe injuries and fatalities for all road users.

Transportation Master Plan

Section 5.2 Active Transportation

Enabling strategies

n) Seek innovative and new partnerships to support AT programs and facilities

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Strategic Opportunity #3 Advancing Sustainable Transportation 3.4 Increase Active Transportation Rates

Strategic Opportunity #3 Advancing Sustainable Transportation 3.5 Reduce Traffic Congestion

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Action #1 Adopt a poverty reduction approach to service delivery

Action #2 Use poverty data to inform decision making

SUBMITTED BY

Department: Public Works
Division: Transportation
Prepared by: C. Baker, MCIP, RPP, Senior Active Transportation Planner
R. Peterniak, M.Sc., P.Eng., RSP1, Community Traffic Engineer
E. Dickson, MCIP, RPP, Livable Streets Specialist
Date: February 15, 2023

Attachments:

Appendix A: Proposed Permanent Neighbourhood Greenways (see below)

Appendix B: Public Engagement Report

Appendix C: Bicycle Education and Skills Training (BEST) program letter of support

Appendix D: Map of Proposed 2023/2024 Neighbourhood Greenways

APPENDIX A – PROPOSED PERMANENT NEIGHBOURHOOD GREENWAYS

1. Alexander Avenue from Arlington Street to Princess Street
2. Banning Street from Portage Avenue to Notre Dame Avenue
3. Egerton Road from Southern Terminus of Egerton Road to Morier Avenue
4. Eugenie Street from St. Mary's Road to Youville Street
5. Harbison Avenue West from Henderson Highway to Eastern Terminus of Harbison Avenue West
6. Kildonan Drive from Helmsdale Avenue to Rossmere Crescent
7. Kildonan Drive from Larchdale Crescent to Northern Terminus of Kildonan Drive
8. Linwood Street from Portage Avenue to Silver Avenue
9. Machray Avenue from Fife Street to Main Street
10. Powers Street from Dufferin Avenue to Partridge Avenue
11. Ravelston Avenue West from Plessis Road to Day Street
12. Ravelston Avenue East from Day Street to Park Circle
13. Ravelston Avenue East from Park Circle to Wayoata Street
14. Park Circle from Ravelston Avenue East to Ravelston Avenue East
15. Rover Avenue from Hallet Street to Angus Street
16. Ruby Street from Palmerston Avenue to Portage Avenue
17. Youville Street from Marion Street to Haig Avenue
18. Warsaw Avenue from Thurso Street to Pembina Highway
19. St Cross Street from Anderson Avenue to Cathedral Avenue
20. Cathedral Avenue from St Cross Street to Scotia Street
21. Scotia Street from Southern Terminus of Scotia Street to Matheson Avenue East
22. Matheson Avenue East from Scotia Street to Scotia Street
23. Scotia Street from Matheson Avenue East to Forrest Avenue
24. Forrest Avenue from Scotia Street to Marymound Way
25. Marymound Way from Forrest Avenue to Leila Avenue
26. Leila Avenue from Marymound Way to Scotia Street
27. Scotia Street from Leila Avenue to Northern Terminus of Scotia Street