



NEIGHBOURHOOD GREENWAYS GUIDE

TRANSPORTATION SERVICES
CITY OF TORONTO



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WHAT ARE NEIGHBOURHOOD GREENWAYS?

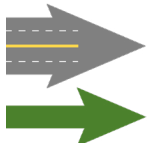
Neighbourhood Greenways are routes where people cycling and pedestrians are given priority by creating an environment with low motor vehicle volumes and speeds.

Neighbourhood Greenways typically feature speed management features, one-way streets, raised crossings, contra-flow bicycle lanes, traffic diverters, wayfinding signage, and safe crossings of major roadways.



Image 1. A diagonal diverter is located at the intersection of Lindsey Avenue and Gladstone Avenue, which forces drivers to turn either westbound or eastbound, while people cycling and pedestrians are permitted to travel in all directions.
Photo by Elsa Hashemi.

WHY BUILD NEIGHBOURHOOD GREENWAYS?



They provide parallel routes to major corridors

Neighbourhood Greenways provide an alternative route to major corridors where installing bikeways may be less feasible, due to transit priority or space constraints.



They create safe environments for all road users

Neighbourhood Greenways are typically located on residential streets, and incorporate elements that reduce motor vehicle volume and speed, making it safer and more comfortable for people cycling and pedestrians to use.



They reduce non-local traffic infiltration and speeds

Neighbourhood Greenways are intended to deter cut-through motor vehicle traffic from using these streets as an alternative to major corridors.



They connect people cycling to trails or bikeways

Neighbourhood Greenways are efficient routes that connect people cycling from one dedicated bikeway to another. Wayfinding signage helps people navigate the area on foot or bicycle.



They encourage cycling among less experienced cyclists

Neighbourhood Greenways are appealing to people who are learning to cycle or are less experienced because they are located on low volume and speed streets, are designed to minimize conflict with other road users, and create “low-stress” environments.

WHAT ARE THE CRITERIA FOR A NEIGHBOURHOOD GREENWAY?

Neighbourhood Greenways are only comfortable for people of all ages and abilities when motor vehicle volumes and speeds are low. The City of Toronto uses the following criteria:

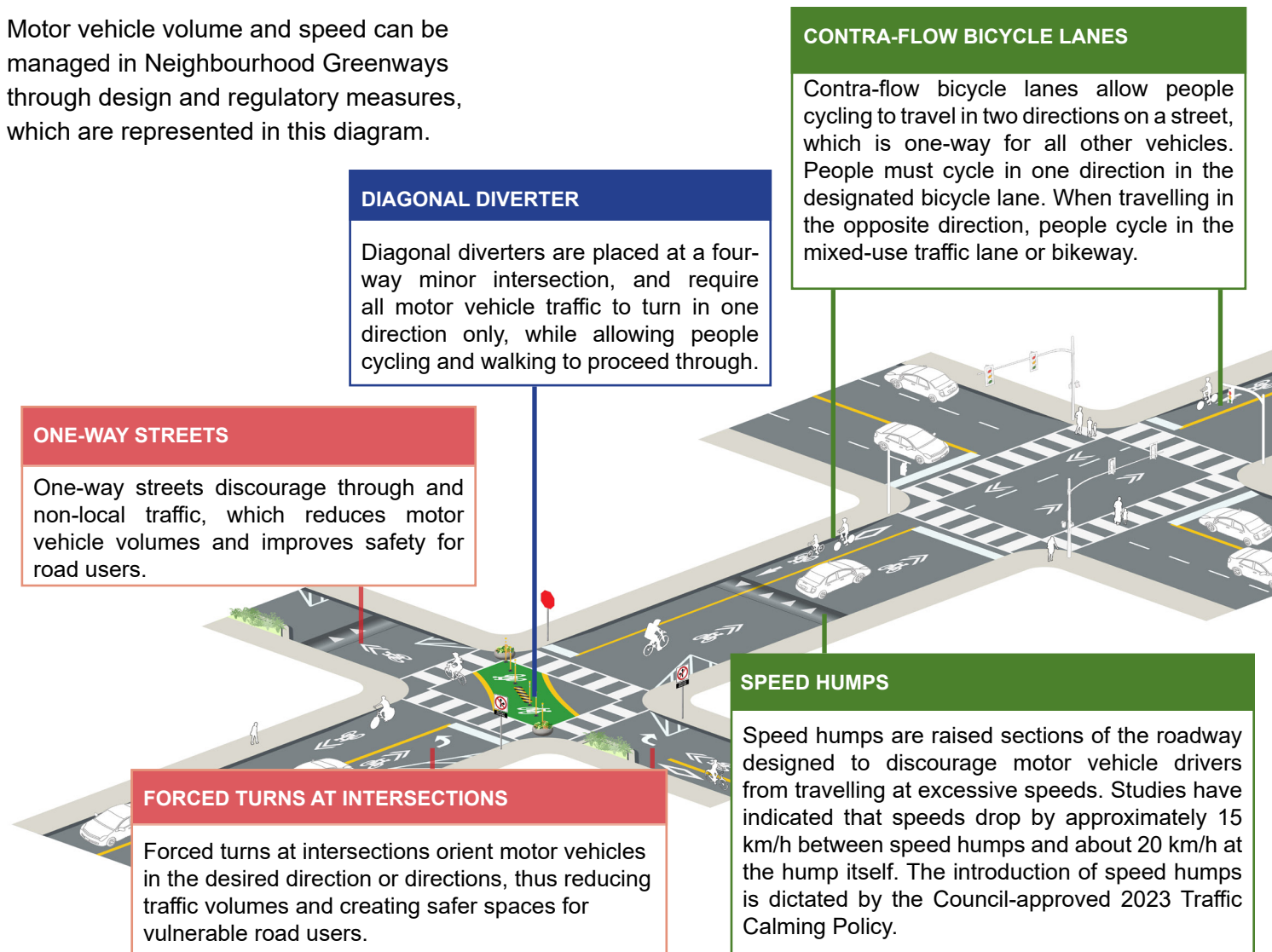
- No more than 75 motor vehicles per peak hour per direction
- Less than 750 motor vehicles/eight hours
- 95th percentile speeds should be lower than 30 km/h
- Aim to increase cycling volumes to 40-50% of all traffic
- Installation of safe crossings at all major intersections

Motor Vehicle Volume Design Domain	Peak Hour, Peak Direction	Annual Average Daily Traffic, Each Direction
Target Maximum	50	750
Upper Limit (for short segments, e.g. 100m)	75	1,500

Table 1. Motor vehicle volume thresholds for shared streets. (City of Toronto, 2023b, p. 49.)

FEATURES OF NEIGHBOURHOOD GREENWAYS

Motor vehicle volume and speed can be managed in Neighbourhood Greenways through design and regulatory measures, which are represented in this diagram.



DIAGONAL DIVERTER
 Diagonal diverters are placed at a four-way minor intersection, and require all motor vehicle traffic to turn in one direction only, while allowing people cycling and walking to proceed through.

ONE-WAY STREETS
 One-way streets discourage through and non-local traffic, which reduces motor vehicle volumes and improves safety for road users.

FORCED TURNS AT INTERSECTIONS
 Forced turns at intersections orient motor vehicles in the desired direction or directions, thus reducing traffic volumes and creating safer spaces for vulnerable road users.

CONTRA-FLOW BICYCLE LANES
 Contra-flow bicycle lanes allow people cycling to travel in two directions on a street, which is one-way for all other vehicles. People must cycle in one direction in the designated bicycle lane. When travelling in the opposite direction, people cycle in the mixed-use traffic lane or bikeway.

SPEED HUMPS
 Speed humps are raised sections of the roadway designed to discourage motor vehicle drivers from travelling at excessive speeds. Studies have indicated that speeds drop by approximately 15 km/h between speed humps and about 20 km/h at the hump itself. The introduction of speed humps is dictated by the Council-approved 2023 Traffic Calming Policy.

Legend

- Design Measure - Volume Management
- Design Measure - Speed Management
- Regulatory Measure - Volume Management

Design Measures are physical changes that are intended to reduce motor vehicle volume and increase cycling and pedestrian volumes. These may include traffic diverters, curb extensions, on-street parking or the implementation of bikeways.

SPEED LIMIT REDUCTIONS

Speed limit reductions are part of the City's Speed Management Strategy, which aims to reduce the number of traffic-related injuries and fatalities associated with speeding through short and long-term measures. Lowering speed limits should be considered in conjunction with more effective measures, such as modifying roadways to reduce speeds.

THROUGH RESTRICTIONS

Through restrictions discourage cut-through traffic on quiet residential streets and aim to lower speed and improve comfort levels for all road users.

ON-STREET PARKING

On-street parking reduces the roadway width available for vehicle movement by allowing motor vehicles to park adjacent and parallel to the curb.

CURB EXTENSIONS

Curb extensions reduce crossing distances for pedestrians and turning vehicle speeds, increase space for people to wait or pass, and improve accessibility and user experience for pedestrians.

CYCLING AND WALKING-ONLY BLOCK

Cycling and walking-only blocks are located at intersections and restrict travel by motor vehicles, while allowing people cycling and walking to pass through. Cycling and walking-only blocks eliminate traffic infiltration on adjacent streets, encourage low stress cycling, create roadway space for seating, planting and bike share stations, and create two distinct traffic blocks.

Regulatory Measures are by-laws pertaining to travel restrictions and changes to traffic flow. These are indicated by signage and traffic signals, and are intended to reduce the motor vehicle volume.

Image 2. A rendering of a cross-section of a neighbourhood greenway features several regulatory and design measures.

SUCCESS STORY: SHAW STREET



Image 3. Following road safety upgrades on Shaw Street in 2020, peak cycling volumes were more than 4,300 trips daily.

Shaw Street is a significant north-south route that provides access to neighbourhood schools, community centres, TTC stations and stops, retail corridors and existing bikeways on Bloor Street West and Harbord Street. In 2013, a contra-flow bicycle lane was installed on Shaw Street between Dupont Street and Dundas Street West.

From data counts conducted between 2016 and 2019, Shaw Street became one of Toronto's busiest cycling corridors, with more than 300 people in the peak hour per day. An Origin-Destination study revealed that many people driving were using Shaw Street as a cut-through route and the motor vehicle speeds and volumes remained above the Neighbourhood Greenway thresholds.

In 2020, Shaw Street was scheduled for road resurfacing between Dupont Street and Dewson Street, which presented an opportunity to convert the corridor into a Neighbourhood Greenway. The upgrades were focused on improving the safety and comfort for pedestrians and people cycling and reducing the volume and speed of motor vehicles. After installation, peak cycling volumes grew from 1,000 cycling trips per day to more than 4,300 cycling trips per day, and motor vehicle volumes decreased.

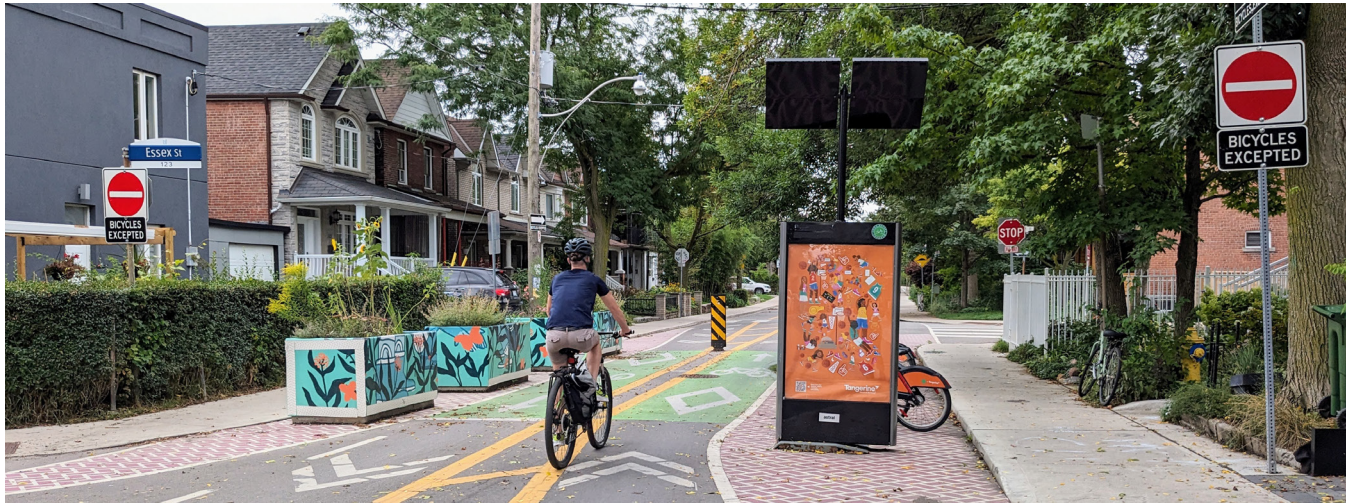


Image 4. Cycling-only block on Shaw Street between both Essex Streets.

Upgrades on Shaw Street included:

- Directional change of motor vehicle traffic flow on Shaw Street and adjacent streets to reduce cut-through traffic;
- A cycling-only block on Shaw Street between both Essex Streets, featuring planters, a Bike Share station, and signage, and
- Upgrades of the contra-flow bike lane

The Neighbourhood Greenway updates have resulted in an overall increase in cycling volumes and a decrease in motor vehicle traffic volumes on Shaw Street and connecting local streets:

- There was a 110 to 310% increase of cycling trips after installation. The peak cycling volumes are more than 4,300 cycling trips daily.
- There was a decrease of 8% to 60% of motor vehicle volumes on Shaw Street.
- There were small increases of motor vehicle volumes on adjacent streets. As with all Neighbourhood Greenways, the City continues to monitor trends and may propose modifications to improve road safety on these streets, where necessary.

REFERENCES

City of Toronto. (2023a). **2023 Traffic Calming Policy.**

Retrieved from <https://www.toronto.ca/wp-content/uploads/2023/12/8b1f-2023-Traffic-Calming-Policy.pdf>.



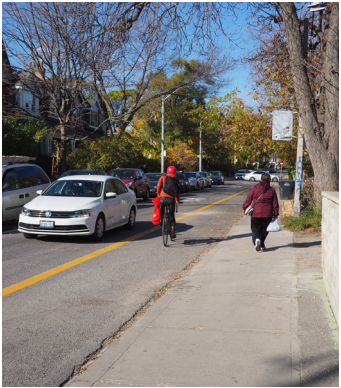
City of Toronto. (2023b). **On-Street Bikeway Design Guidelines, Chapters 1 - 3.**

Ministry of Transportation of Ontario. (2021). **Ontario Traffic Manual Book 18 - Cycling Facilities.** Retrieved from <https://www.library.mto.gov.on.ca/SydneyPLUS/Sydney/Portal/default.aspx?component=AAAAIY&record=9c49ce44-e3b2-4389-91cd-5e9b67aad03d>.



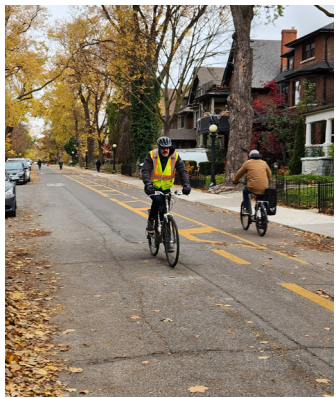
National Association of City Transportation Officials. (2015.) **Bicycle Boulevards.**

Retrieved from <https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/>.




APPENDIX A: EXAMPLES OF NEIGHBOURHOOD GREENWAYS

			
Project Name	Bartlett-Havelock-Gladstone	Brunswick-Borden	Denison Avenue & Bellevue Avenue
Year of Installation	2022-2023	2020	2017
Cycling Types	Contra-flow bicycle lane Sharrows Two-way cycle track Bike boxes	Contra-flow bicycle lane Sharrows	Contra-flow bicycle lanes Sharrows
Speed Management Characteristics	On-street parking Narrow roadways Painted curb extensions	On-street parking Bulb-outs	On-street parking
Volume Management Characteristics	One-way streets Diagonal diverter Cycling-only block Through restrictions	One-way streets	One-way streets
Project Webpage	toronto.ca/ bartletthavelockgladstone	toronto.ca/ brunswickborden	toronto.ca/denison

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Project Name	Dufferin-Waterloo-Florence	Winona Drive	Palmerston-Tecumseth
Year of Installation	2017	2021	2022-2023
Cycling Types	Contra-flow bicycle lanes Sharrows Two-way cycle track	Bicycle lanes Contra-flow bicycle lanes Sharrows Two-way cycle track Bike boxes	Contra-flow bicycle lanes (with some separation) Sharrows
Speed Management Characteristics	On-street parking Narrow roadways	On-street parking Speed humps	On-street parking
Volume Management Characteristics	One-way streets Speed limit reduction	One-way streets	One-way streets Turn prohibitions Through restrictions
Project Webpage	toronto.ca/argyle	toronto.ca/oakwoodcycling	toronto.ca/palmerstontecumseth

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Scarlett-Runnymede	Shaw Street	Woodfield Road- Monarch Park Avenue
2022	2013 (upgraded 2020)	2021-2022
Cycle tracks Contra-flow bicycle lanes Sharrows Bike boxes	Contra-flow bicycle lanes Sharrows	Multi-use trail connection Bicycle lanes Contra-flow bicycle lanes Sharrows
On-street parking	On-street parking Speed humps Painted curb extensions	On-street parking Speed humps
One-way streets Turn prohibitions	One-way streets Cycling-only block	One-way street reversal
toronto.ca/ scarlett-runnymede	toronto.ca/shaw	toronto.ca/woodfieldmonarch

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