WAYFINDING STRATEGY (PHASE TWO) FOR THE CITY OF TORONTO





Toronto Cycling Wayfinding Strategy

CYCLING CHAPTER MARCH 2015



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Introduction

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Completed in March 2015. All images by Steer Davies Gleave unless otherwise stated... The purpose of this document is to set out a cycle wayfinding strategy. It includes guidance for on-street cycle route wayfinding, sign types, sign destination priorities and design details. The aim of the strategy is to be applicable across all types of cycle lanes in Toronto.

This strategy has been tested through a pilot study covering three areas: **Shaw Street** (between Queen Street West and Davenport), **Edwin Street** (linking Dupont Street Bike Lanes to the West Toronto Railpath Connection) and **Dixon/Sarah Ashbridge** (linking Dundas East Bike Lanes to the Waterfront Trail).

ABOUT THIS DOCUMENT

The document is structured as follows:

- Context TO36o describes wayfinding schemes currently being undertaken in Toronto, of which the cycling strategy is one
- Background and issues summarizes current cycle wayfinding provision, benchmarking and issues
- Principles of signing identifies the key principles that underpin the wayfinding strategy
- Destination hierarchy describes distances and destinations within the destination hierarchy
- Design guidelines outlines the principal design decisions adopted for the system
- Sign family summarizes the agreed family of signs
- **Pilot implementation plan** outlines the three pilot areas and the number and types of signs required to create a complete wayfinding system
- Next steps provides an overview of the tasks needed to implement this wayfinding scheme

Context

Wayfinding encompasses all the ways in which people understand their surroundings and navigate from place to place. Wayfinding is more than signs - it also includes names, landmarks, conventions, maps and new media.

Other relevant wayfinding schemes currently being undertaken in Toronto are described below to provide context for the cycling wayfinding strategy.

The need to specifically address cycling wayfinding became apparent during the analysis and consultation activities delivered in the early stages of these two projects.

TO360 WAYFINDING STRATEGY

In 2011 the City of Toronto launched the Toronto 360 (TO360) Wayfinding Strategy to develop a unified multimodal wayfinding system for the city.

The Strategy is a three-phase process:

- Phase One (2011-2012) develop guiding principles, themes, and a conceptual design for the system
- Phase Two (2014-2015) detailed design, implementation and evaluation of a pilot scheme centred on the city's Financial District
- Phase Three (2016 and beyond) creation of final design guidelines and roll-out city-wide

TORONTO PARKS & TRAILS WAYFINDING STRATEGY

The focus of the Toronto Parks & Trails (TP&T) Wayfinding Strategy is on improving wayfinding in all parklands managed by the City of Toronto.

The TP&T strategy is a three-phase process:

- Phase One (2014) establish a design framework and provide strategic direction for subsequent phases
- Phase Two (2015) detailed design, implementation and evaluation of a Pilot scheme in the Lower Don Valley
- Phase Three (2016 and beyond) creation of final design guidelines and city-wide rollout

This document defines a Cycling Wayfinding Strategy that will support and enable the inclusion of relevant and consistent cycling information in the both of these systems - leading to the development of a family of proprietary on- and off-street cycle signage. This stage of the project is dedicated to the development of cycle wayfinding for on-street as well as Transportation-owned hydro/rail corridors.

Cycling and the TO360 map

Some notable additions to the prototype TO360 wayfinding map are related to cycling and include:

- Inclusionof directionalarrows on allone-way streets
- Inclusion of bike symbols on all streets with protected cycle lanes (cycletrack, cycle lane and contraflow)
- Inclusion of all Toronto Bike Share locations
- Inclusion of multi-bike parking locations (with 16 spaces or more)

Additionally the TO360 map database is expected to include cycle lanes and other cycle-related infrastructure, supporting the future production of mode-specific online and printed maps.



Background and issues

A range of techniques were used to assess the current state of cycle wayfinding in Toronto - including desk based research, guidance document reviews and cycle audits.

Previously installed bike signage system.

The City of Toronto has installed cycling route signage on most routes, to help cyclists navigate from one neighborhood to another.

North-south routes are odd numbered (1,3,5....) and east-west routes are even numbered (2,4,6...). Toronto's

numbered cycling routes are smallest in the southwestern corner of the City (Etobicoke Lake Shore) and increase the further north and east you go.

CURRENT CYCLE PROVISION

Toronto has several types of on-street cycle infrastructure. These include cycle tracks, cycle lanes, contra-flow cycle lanes, and sharrows. Some signage for cyclists includes cycle route signs with route numbers, and indications of cycle lanes. Maps which show cycle streets are available as online or handheld maps, and are installed on-street at bike share points. All of these elements show cycle information but do not provide wayfinding information to: guide cyclists to their final destination; help them build a better understanding of the city; or advise them on available cycle routes. On-street signage tends to focus on the management of conflicts with drivers. It is expected that, once cycling infrastructure becomes a regular feature in Toronto, there will be more awareness of cyclists and hence less

need for conflict management information.

ISSUES

Based on the audits, a number of key issues were identified:

- **Information** is lacking in many crucial locations, such as at key decision points, on one-way streets and to connect between streets with cycle infrastructure.
- Continuity is needed where current cycle routes (and information) end. Suggested connections are often difficult to identify on-street and/or on maps. Connections between on- and offstreet routes are often challenging and where information does exist it tends to lack continuity.
- Concept of a network is needed to create a system which is easier to use, especially by newer cyclists or those unfamiliar with an area.
- Route numbering route numbers and their visibility is receding. Most recent routes are identified by street names.





Benchmarking

A benchmarking exercise compared relevant cycling wayfinding systems and documents from across Canada as well as other countries and cities.

Benchmarking was undertaken against relevant cycling standards. These included Ontario Traffic Manual, NACTO (National Association of City Transportation Officials), MUTCD (Manual on Uniform Traffic Control Devices) and Vélo Québec, as well as city specific cycling wayfinding guidelines.

The following documents were reviewed to compare recommendations for types of signs, destination hierarchy, placement guidance, colour, font, sign frequency, route numbering, distance or time shown and icons. A comparison table was created based on this review and is included on the facing page.

- Ontario Traffic Manual (Book 18 Cycling facilities)
- NACTO: Bike Route Wayfinding Signage and Markings System
- MUTCD: Part 9 Traffic control for bicycle facilities
- Vélo Québec: Planning and Design for Pedestrians and Cyclists
- Vancouver: Wayfinding guidelines for utility cycling in Metro Vancouver

Oregon: Bicycle and pedestrian design guide

Portland, USA

 City of Oakland: Design guidelines for bicycle wayfinding signage

 Transport for London: Cycling Design Standards (2014 draft)

FINDINGS

Most international and national systems share similar principles, mainly adapted from vehicular traffic signage standards. These include: limited sign types, simple layouts, and use of the bike icon alongside a limited numbers of fonts, arrows and colours. Main differences relate to the use of colour (mostly blue in Europe and green in North America), inclusion of average cycling distance and/or time, route numbers and number of sign types used in the system.



BENCHMARKING COMPARISON TABLE					
	Ontario Traffic Manual Book 18 cycling facilities	Vancouver wayfinding guidelines for cycling	Vélo Québec: Planning and Design for Pedestrians and Cyclists	NACTO Bike route wayfinding	
Type of guidance	Province (Canada)	City (Canada)	ty (Canada) Province (Canada)		
Types of signs	Bicycle route marker signs; 'Additional wayfinding signs'	Decision signs; Confirmation signs; Turn fingerposts; Bicycle route markers; Off-network waymarkers	urn fingerposts; Bicycle route Decision signs; Route signs		
Destination hierarchy	No	Level 1 (Urban centres up to 8km) Level 2 (Local neighbourhoods up to 4km) Level 3 (Major attractions up to 2km) Level 4 (Local destinations up to 2km)		Primary (up to 5 miles, e.g. 'Downtown') Secondary (up to 2 miles, e.g. transit stations) Tertiary (up to 1 mile, e.g. park)	
Placement guidance	Minimal, only that route marker should be placed on far side of major intersections and at other major decision points	Yes (with diagrams of how to use combinations of signs to guide cyclists)	No	Yes (basic placement guidance for decision, turn and confirmation signs)	
Colour	Green (alternative designs and colours can be implemented by municipality)	Highway green	Green (or colour of specific route)	Green (unless branded)	
Font	?	Clearview ADA Condensed	?	Clearview Hwy	
Sign frequency	Urban: one every 400-800m	Decision signs: 45m, 35m minimum before intersection Confirmation signs: 20-30m after decision point, in built up areas repeat every 400m, in other areas 800-1000m	No	Decision signs: In advance of decision points Confirmation signs: Every ½ to ½ mile off-street and every 2 to 3 blocks on-street	
Route numbers	n/a	Not currently part of system (but design provisions made if introduced in future)	Yes	Warns that route numbering "may not be intuitive for bicyclists without a map or directory"	
Distance/minutes		Kilometres (unit not shown)	Kilometres (unit not shown)	Miles (unit not shown)	
Pictograms		TransLink icons, brand logos, other (if shared path)	?	Yes in some examples	
Sign plate sizes	n/a	Decision: 600 x 750mm Confirmation: 600 x 600mm Turn: 215 (or 285) x 850mm	n/a	n/a	
Standalone signs	n/a	n/a	n/a	n/a	

BENCHMARKING COMPARISON TABLE (CONTINUED)					
	MUTCD Part 9 bicycle facilities	Oregon bicycle and pedestrian plan	Oakland Design guidelines for bicycle wayfinding	Transport for London Cycling Design Standards (2014 draft)	Toronto Cycling Wayfinding Strategy
Type of guidance	National (USA)	State (USA)	City (USA)	City (UK)	City (Canada)
Types of signs	Decision signs; Confirmation signs	Decision signs	Decision signs; Turn signs; Confirmation signs	Advance direction (stack or map); Turn signs; Confirmation signs	Advance decision signs; Confirmation signs; Turn signs
Destination hierarchy	No	No	Primary (up to 5 miles, jurisdictions and 'Downtown') Secondary (up to 2 miles, transit stations and districts) Tertiary (up to 1 mile, relevant parks, landmarks, colleges, hospitals, high schools, trails)	Main primary (one should be used as primary destination, furthest distance 5 miles) Other primary Local Supplementary (incl. parks, sports centres, stations, attractions and named routes)	Primary (up to 8km, large districts - for continuous routes) Secondary (up to 5km, neighbourhoods and large transit hubs) Tertiary (up to 1km, attractions, local transit)
Placement guidance	Yes (basic guidance for decision and confirmation signs)	No	Yes (section on placement principles for each type of sign)	Yes (basic placement guidance for decision, turn and confirmation signs)	Yes (guidance for each sign type)
Colour	Green	Green	Green	Blue	Blue (in line with current cycle signs)
Font	?	?	FHWA 2000 C series	Transport Medium	Clearview
Sign frequency	"at regular intervals"	No	Confirmation signs: Every ½ to ½ mile on off-street facilities and every 2 to 3 blocks along bicycle facilities	Confirmation signs: At least every half mile and after decision points Advance direction: before more complex scenarios	Advance decision: 40-50m in advance of key decision points Confirmation: 20-30m after change point, then approx. 400m as repeater Turn: Approx. 5-10m before turning point (or across for T and Y junctions)
Route numbers	Only on stand alone route confirmation signs	No (exception for state and national routes)	No	Yes (number on coloured background, cycle superhighways have route number on coloured panel)	Currently used, no new numbers to be added
Distance/minutes	Miles (unit not shown)	Miles and minutes (1 mile = 5min)	Miles (unit not shown)	Miles (unit not shown), minutes on Cycle Superhighways and quietways	Kilometres (unit shown)
Pictograms	Yes (for shared path)	Yes (city logo)	Yes (BART, Amtrak, hospital, park)	Quietway, Cycle Superhighway	No
Sign plate sizes	n/a	n/a	Decision: 406 x 610mm Confirmation: 406 x 610mm Turn: 224 x 610mm	Stack sign: 425 x 645mm Confirmation: 255 x 720mm Turn: 255 x 845mm	Decision: 600 x 750mm Confirmation: 300 (or 450) x 750mm Turn: 200 x 750mm
Standalone signs	"Signs for the exclusive use of bicyclists should be located so that other road users are not confused by them." (Section 98.01)	n/a	n/a	n/a	Yes

Principles of wayfinding

Fundamental wayfinding principles need to be followed to establish a consistent and efficient on-street cycle signage system for Toronto, and also to inform how cycling information is communicated within third-party systems.



PREDICTABILITY

Information should be positioned in a consistent manner, enabling cyclist to predict where the next bit of information will be found. Implementation of complete routes are more beneficial than scattered interventions.

CONTINUITY

Cycle routes need to provide continuous connections in order to create a useful system - especially critical for newer cyclists or those unfamiliar with an area.

SIMPLICITY

A clear destination hierarchy and easy to understand signs will help realize a system that does not overload cyclists with information. Information should be delivered progressively - as cyclists move closer to a destination more detailed local information will be provided.

INTEGRATION WITH OTHER SYSTEMS

Presenting cycle information consistently across systems - such as TO360 and Toronto Parks & Trails - will ease learning and understanding and create a sense of familiarity for cyclists across the city.

Destination hierarchy

A destination hierarchy based on distance and destination type can be used to assess, select and prioritize primary, secondary and tertiary destinations, and identify cycling routes and connections between cycling routes.

The diagram below shows a conceptual distribution of different destination types for inclusion on cycle wayfinding signs. Destinations are distributed across three groups according to their distance from the decision point where the sign will be placed.

 Primary: Up to 8km, large districts (appropriate for long, continuous routes)

 Secondary: Up to 5km, neighbourhoods and large transit hubs

• **Tertiary:** Up to 1km, attractions (based on TO360), local transit (if appropriate)

Once a destination has been named on a sign, it needs to feature on every subsequent sign until the destination is reached. Large districts (e.g. Waterfront, Downtown) may be split into two or more specific destinations for signs in their vicinity (e.g. Waterfront > Exhibition Place, Fort York).

CORRIDOR NAMES

Corridors can be used as a destination if they are longer than 1km and are a significant cycling landmark, whether it be a cycling street or trail. However overall, neighbourhoods should be prioritised over routes. A consolidated list of neighbourhood is being prepared as part of the TO360 project and will be available by mid-2015.

As a general rule only attractions listed in the TO360 wayfinding system are elegible for inclusion on cycling signs. There are, however, exceptions for destinations that are relevant to cyclists (e.g. recreational trails, named routes).

Neighbourhoods should prevail as main destinations on signs.



Design guidelines

These guidelines establish an overarching set of rules that apply to all types of signs covered by this wayfinding strategy.

The following design guidelines apply to all signs created within this wayfinding strategy.

COLOUR

After deliberating and testing several colour options (including the standard North American green), blue was selected as the base sign colour to provide both continuity with current cycle signs in Toronto and to facilitate a staged implementation.

DISTANCE

Distance in kilometres will be included on some sign types (further details in the next section). The signifier km will be shown.

AVERAGE CYCLING TIMES

The inclusion of average cycle time equivalents in addition to kilometres was considered but these were ultimately excluded to avoid information overload and to avoid discrepancies between cyclists of differing abilities.

It is recommended, however, that time-based information is considered for inclusion on printed and online maps and/or for off-street and recreational trails as a means of encouraging cycling - acknowledging that this information provides a useful guide for newer cyclists and for those in unfamiliar areas. With this in mind the precision of the time and how the numbers are rounded up should be based on the target audience and not on regular cyclists (unless they are using the route for the first time).

FONT

The chosen font is Clearview. It was chosen for its excellent long distance legibility and for consistency with existing road signage in Toronto. Clearview is the traffic sign font of choice in most of Canada and the US.

The cap height is around 40mm (further details for the different sign types can be found in Appendix A). All of these heights are within the acceptable industry recommendations and were chosen based on legibility requirements. The recommended font sizes allow for easy legibility either when moving (at cycling speed), or when stationary.

SIGN SIZES

Sign sizes are compatible with the City's in-house print shop to facilitate easy and cost effective production. Sizes for different signs are detailed in the next section. Signs shall be mounted on standard height poles.

NUMBERED ROUTES

Toronto's numbered cycling routes will not be immediately removed, however they will not be included in the new system and will eventually be phased out.

Sign family

The wayfinding strategy is built around a core family of on-street cycle signage. The following illustrative products and content are proposed.

Signage

Advance decision

In advance of key decision points (recommended 40-50m, minimum 35m). Content to include:

Route name with bike icon at the top

Primary/secondary destinations (nearest first)

Directional arrows

Max. number of destinations: 6 (prioritized by hierarchy)

Size: 600 x 750mm

Turning

On approach to turning points, typically 5-10m prior to the intersection. Alternatively across the road (e.g. at T and Y junctions). Content to include:

Bike icon

Secondary/tertiary destinations (nearest first)

Directional arrows

Distance

Max. number of destinations: 2 - 3 (prioritized by hierarchy)

Size: 750 x 300mm

Confirmation

20-30m after change point, then again after approx. 400m as repeater signs (or sooner if required). Content to include:

Route name with bike icon at the top

Primary/secondary

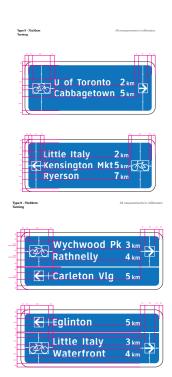
destinations (nearest first)

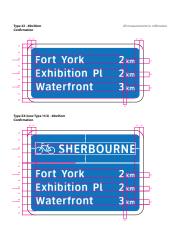
Distance

Max. number of destinations: 3 (prioritized by hierarchy)

Size: 600 x 300 (or 450)mm







Sign family (continued)

Signage

Cycle route confirmation

On long, continuous routes without intermediate signs (for turns etc.). Content to include:

Bike icon

Directional arrow (if applicable)

Street name plate

On the street signs for designated cycling routes.
Retrofitted on existing name plate signs. Content to include:

Bike icon

■ New street name plate

On the street signs for designated cycling routes.
Retrofitted on existing name plate signs. Content to include:

Bike icon

Type 30 - 20 x 30cm Cycle route information















Sign family (continued)

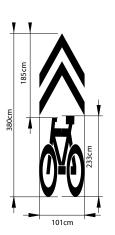
Pavement markers

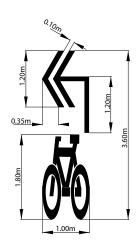
Sharrow markers

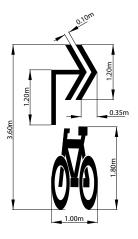
Share Lane Markings, or "Sharrows", are road markings used to indicate a shared environment for bicycles and motor vehicles, and are composed of a bicycle icon and two white chevrons (as stated on the City of Toronto website).

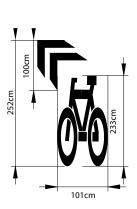
For further details, please refer to the City's Sharrow guidelines.











Sign positioning

Every effort must be made to adequately position signs in advance of turning points to ensure easy-to-read information and to facilitate safe manoeuvres.

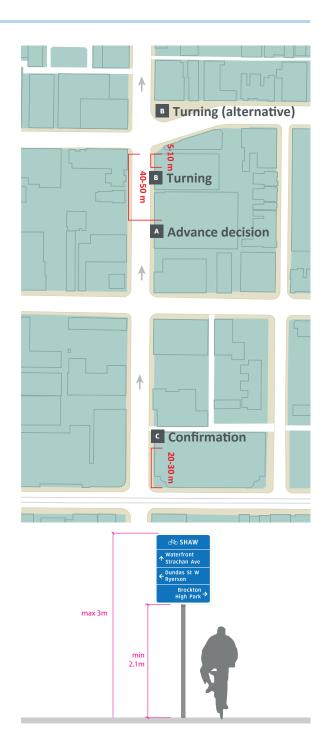
This sign positioning guidance provides for some flexibility while aiming to maximize the impact of the signs and minimize conflicts with other signage and city infrastructure.

The adjacent diagram shows typical locations for different sign types. Additional criteria to select the definitive location of signs includes:

- Avoid clutter: most signs are expected to be placed on existing poles to reduce clutter and avoid the need for additional posts
- Reduce obstructions: avoid installing signage on narrow sidewalks where it may obstruct pedestrians
- Ensure clear sightlines: avoid areas close to eye-level vegetation or locations that may be obscured by temporary advertising (such as banners or sandwich boards)
- Avoid parking and bus stops: avoid areas of herringbone and/or single line parking and transit stops locations (as a general rule no sign should be placed within 10 metres of a transit stop)
- Reduce information overload: a minimum distance of 5 metres should be kept between cycling wayfinding signs and any other type of road sign

SIGN HEIGHT

The minimum sign height clearance is 2.1m and the maximum overall sign height is 3m (see diagram on the right).



Pilot implementation plan

A pilot implementation is essential to test the functionality of the wayfinding system in situ.

CYCLE AUDITS

Cycle audits were carried out on three trial routes (Shaw Street, Edwin Avenue, Dixon/Sarah Ashbridge) and photographic documentation was compiled. This process aided understanding of the challenges and needs of these different route types and was critical to the creation of a pilot implementation plan. Further detail for each of the trial routes is provided below and on the following pages.



Shaw Street

The key challenge of this route is to create an understanding of the connections it provides, both to east-west cycling corridors as well as to the waterfront. Connections to/ from Adelaide and Richmond are not obvious and may

be challenging for unfamiliar users.

Edwin Street

The key challenge of this route is to enable cyclists to understand that it can be used to access the West Toronto Railpath from Dupont St.



Dixon/Sarah Ashbridge

of this route is to enable cyclists to understand and negotiate along the length of the route connecting Dundas St East and the Waterfront Trail.



SHAW STREET

The pilot area is on Shaw Street from Queen Street West to Davenport Road. This part of Shaw Street has sharrows at the lower end, and then sharrows as well as a contra-flow lane for the remainder of the segment. It provides a useful north-south route which crosses key east-west cycle connections on Davenport Road, Hallam Street-Lappin Avenue, Barton Avenue, Harbord Street and College Street. Once suitable links are provided, it will be an invaluable connection to the waterfront via Strachan Avenue.

Based on the initial review the required number of signs is listed below. These also include signs on connecting streets with cycle infrastructure to announce the new route.

Shaw Street

A Advance decision	•8
B Turning	3 6
Confirmation	• /ı





EDWIN STREET

Edwin Street is a short street that provides a link to the West Toronto Railpath, which cannot be accessed directly from Dupont Street (which has cycle lanes).

The number of signs listed below is based on the initial review. These include signs on Dupont and the West Toronto Railpath to announce the proposed new connection.

Edwin Street

A Advance decision	2
B Turning	•8



- --- Suggested on-street routes (Quiet residential streets)

DIXON/SARAH ASHBRIDGE

The Dixon/Sarah Ashbridge link provides a much needed connection between Dundas Street East and the waterfront. Dixon Avenue is a one-way street but has a contra-flow cycle path. The next link, Lockwood Avenue, has sharrows, as does Sarah Ashbridge Avenue, Boardwalk Drive and Joseph Duggan Road. At the moment the route is not very legible as multiple turns are needed. Also, the link to cross Lake Shore Boulevard East from Joseph Duggan is especially unclear for cyclists.

The number of signs listed below is based on the initial review. These include signs on Dundas Street East and the waterfront path to announce the proposed new connection.

Dixon/Sarah Ashbridge

A Advance decision	• 4
B Turning	1 3
c Confirmation	• 3



Signed route

On-street bike lanes (Cycle tracks, bike lanes, contra-flow, sharrows)

Off-street (Multi-use pathways)

--- Suggested on-street routes (Quiet residential streets)

Integration with other City wayfinding initiatives

Concurrent wayfinding system projects sponsored by the City provide opportunities for synergies, increasing benefits for cyclists as well as users of all systems.

CYCLING AND TORONTO TO360 PROJECT

The Toronto TO360 wayfinding system is by definition a multi-modal system, focusing on walking as the connecting mode. Transit users, drivers and bicyclists are at some in their journey also pedestrians. Conversely the case for walking is further supported when pedestrians are enabled to access multi-modal transportation options, widening their ability to carry out journeys in the most convenient way.

The Toronto TO360 system consists of two types of components: physical (i.e. on-street pedestrian wayfinding signage) and non-physical, including a mapping and content database that underpins the delivery of TO360 mapping through third-party systems, both printed and online.

At the current stage (Summer 2015), the signage components of TO360 are moving from prototype to pilot stage. Once finished, the City will conduct evaluations to determine user understanding and acceptance of the scheme as well as the economic case for the system's expansion.

The following cycling information elements have been incorporated into the TO₃60 pilot scheme local area maps:

- Inclusion of directional arrows on all one-way streets
- Inclusion of bicycle symbols on all streets with protected cycle lanes (cycle track, cycle lane and contraflow)
- Inclusion of all Toronto Bike Share locations
- Inclusion of multi-bike parking locations (with 16 spaces or more)

Other cycling information elements such as the inclusion of cycle lanes in context maps and the inclusion of directional information for cyclists on pedestrian signs were considered but ultimately discarded at this stage due to usability constraints.

The mapping and content database elements provide further opportunities for cross-pollination. The mapping database has the potential to integrate up-to-date cycle lane, trail and suggested cycling street information as well as cycling-relevant information, such as Bike Share locations, major cycle storage, cycle hire shops and workshops. Should a fully formed GIS database be built, it could further incorporate analytical elements such as cycle flows, accident spots, etc.

CYCLING AND TORONTO PARKS & TRAIL WAYFINDING

Toronto Parks, Forestry and Recreation initiated a comprehensive review of wayfinding signage in Toronto's parks and trails in 2014. This project is currently moving from strategy to detailed design, leading to a pilot project due in 2016.

Various overlaps exist between the Cycling Wayfinding Strategy and wayfinding in parks and trails since on-street and off-street cycle paths constitute part of the same network.

As the project develops it is expected that definitions and guidelines from this document will inform the organisation and presentation of cycling information on the off-street network, notably on multi-use pathways running through parks and ravines.

Integration with other City wayfinding initiatives

(continued)

Relevant principles and design guidelines to consider include:

- Destination hierarchy: use of the primary, secondary and tertiary destination breakdown consistent with this strategy is encouraged to allow for continuous route signing on both the on-street and off-street cycling network
- **Distance:** if distance is decided to be included on trail signs, units in kilometres should be used
- **Colour and icons**: consistent use of the colour blue and the cycle icon is encouraged to allow for easy recognition of information relevant for cyclists in a park environment
- Numbered routes: as Toronto's numbered cycling routes will not be included in the new Cycling Wayfinding Strategy, these should also eventually be phased out of multi-use pathways

Next steps

Following pilot area implementation, the strategy should be evaluated, revised if necessary and then implemented in other areas.

TRIAL PILOT AREAS

Once the pilot area signs have been manufactured and installed, they should be in place for several weeks to enable cyclists to use them and test their usefulness.

EVALUATE PILOT AREAS

Following the trial period, feedback should be collected from cyclists on the system's functionality, the number of signs, their legibility and overall usefulness. This feedback could be gathered from a survey and/or a stakeholder consultation session(s) with cyclists.

REVISE AS NECESSARY

The user feedback should be evaluated and any necessary amendments made to the wayfinding strategy.

COMPLETE TORONTO'S CYCLING WAYFINDING DESIGN STANDARDS

Final guidelines should include the final family of signs (including any changes as result of the pilot implementation), full graphic and product specification, detailed planning and location methodology, content selection criteria and guidelines for integration with other systems.

The final output is envisaged as an easy to use document that will enable planners and sign manufacturers to plan and autonomously implement the system across the city and to provide the City with a control tool to ensure standards are maintained.

IMPLEMENT ROLL OUT IN OTHER AREAS

After revision/update of the wayfinding strategy, it can be implemented across the city, bearing in mind the need for continuity rather than sporadic interventions.

MONITOR, UPKEEP AND MAINTENANCE

A signage (asset) management system is required to keep track of wayfinding signage locations and content across the city and to support monitoring and upkeep. This will inform any required sign content or location updates and expedite production of replacement signs.

Asset management solutions range from a static database including sign code, content, type and location, to a map-based solution where sign locations can be georeferenced and linked to a content management database.

With regards to upkeep, it is recommended that regular maintenance occur to ensure satisfactory visibility of the sign content. Any required replacements or updates should be carried out according to the material manufacturer specification.

Appendix A

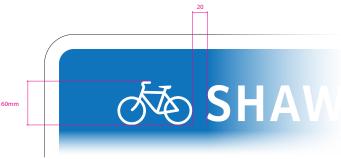
Sign Family Graphic Specification

TORONTO CYCLING WAYFINDING STRATEGY

MARCH 2015

Advance decision





Turning

Type 9 - 75x30cm Turning

All measurements in millimeters





Turning - continued

Type 9 - 75x30cm Turning

All measurements in millimeters





Confirmation

Type 22 - 60x30cm Confirmation

All measurements in millimeters

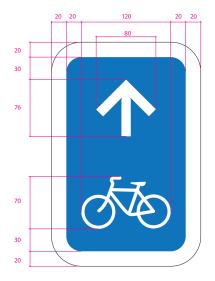


Type XX (new Type 11/2) - 60x45cm Confirmation



Cycle route confirmation

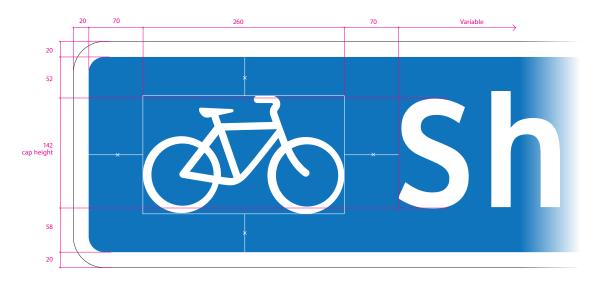
Type 30 - 20 x 30cm Cycle route information



Street name plate

Type XX - Variable Street signs

All measurements in millimeters



Shaw St

Harbord St

New street name plate



Appendix B

Pilot implementation plan: Detailed sign location and content schedule

TORONTO CYCLING WAYFINDING STRATEGY

MARCH 2015

Sign content

ABBREVIATIONS

District = Dist

Market = Mkt

Park = Pk

Road = Rd

Street = St

University of Toronto = U of Toronto

Village = Vlg

CORRIDORS (FOR ADVANCE DECISION SIGNS)

SHAW STREET

Barton Avenue

College Street

Davenport Road

Hallam Street - Lappin Avenue

Harbord Street

Shaw Street

Strachan Avenue

EDWIN STREET

Dupont Street

West Toronto Railpath

DIXON/SARAH ASHBRIDGE STREET

Dundas Street East

Waterfront Trail

Joseph Duggan Street

DESTINATIONS

SHAW STREET

Beaconsfield Village

Cabbagetown

Carleton Village

Christie Pits

Dovercourt Village

Eglinton

Exhibition Place

Fashion District

Financial District

Fort York

Humewood

Little Italy

Kensington Market

Parkdale Village

Rathnelly

Roncesvalles

Ryerson

The Annex

The Junction

Trinity Bellwoods

Waterfront

Wychwood Park

DESTINATIONS

EDWIN STREET

Baby Point

Carleton Village

Dundas West

Junction Triangle

Roncesvalles

The Junction

Waterfront

DESTINATIONS

DIXON/SARAH ASHBRIDGE

Downtown

Dundas East

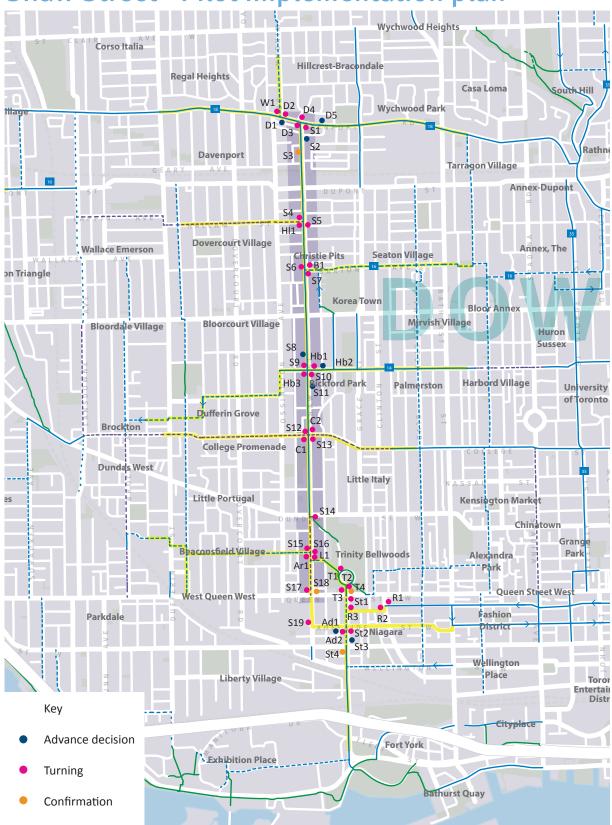
The Beach

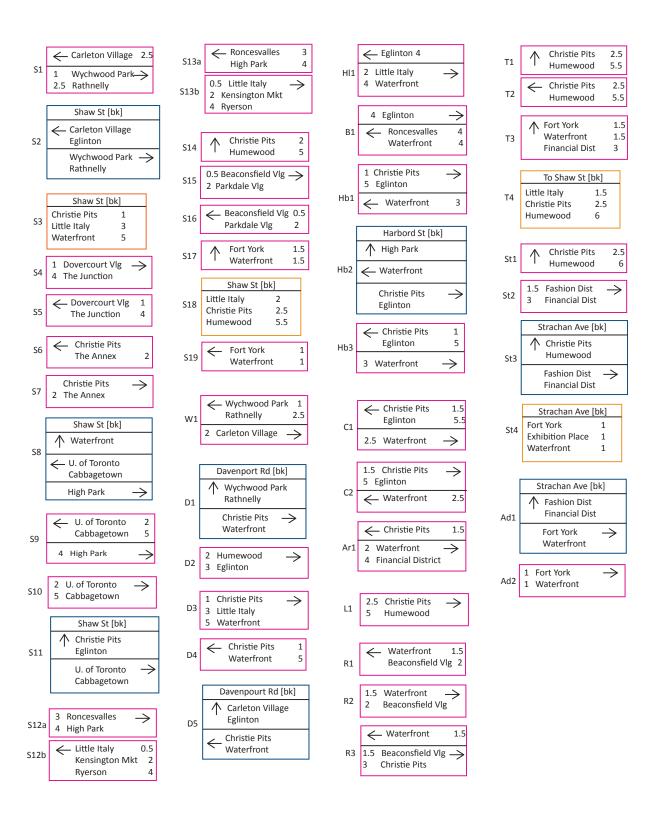
Upper Beach

Waterfront Trail

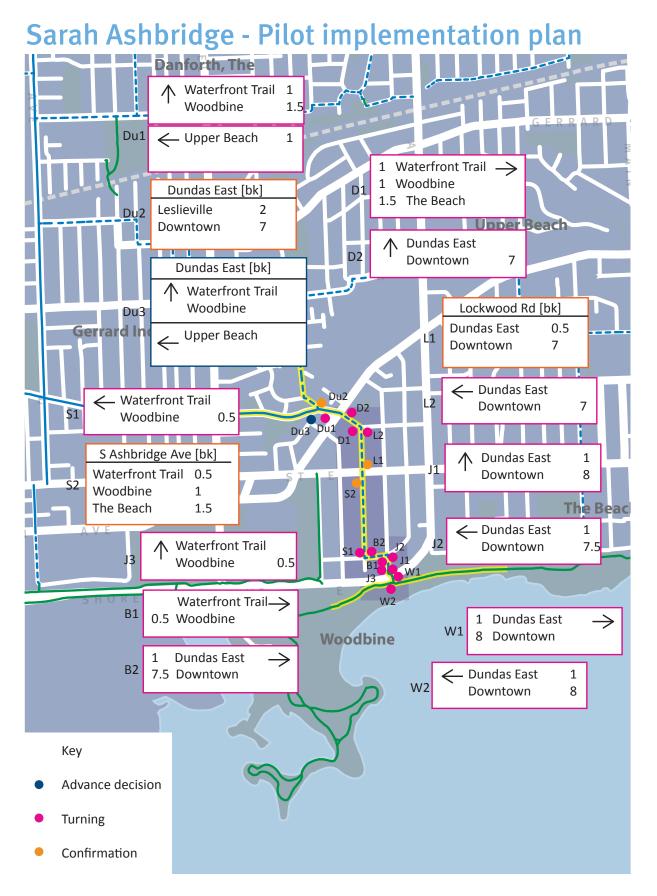
Woodbine

Shaw Street - Pilot implementation plan





Edwin Street - Pilot implementation plan Corso Dupont St [bk] Davenport D1 **Dundas West** Waterfront carleton **Dundas West** D₂ Waterfront ← The Junction 1.5 **Junction Garde** Dundas West 3 E1 Babypoint Waterfront 4 2.5 Dundas West Waterfront E3 The Junction 1 3.5 Babypoint E1 2.5 Davenport Davenport W2 W2 1.5 The Junction Dundas West 2.5 unction Triangle Waterfront West Toronto Railpath [bk] W3 ↑ Carleton Village 1 Carleton Village → W1 Davenport \rightarrow Bloor By The Park Bloord ← Davenport The Junction 3 W4 The Junction 1.5 Key Advance decision **Turning** Confirmation



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