Toronto 360°
Wayfinding Strategy
Final report

Wayfinding system Strategy (Phase One) for the City of Toronto

The City of Toronto has embarked on a planning process to develop a unified and coherent Wayfinding System. This report documents the processes and outcomes of the strategy phase of the study and will serve to inform the City's decision on whether to carry the project forward into implementation.

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Introduction

A goal of Toronto's Walking Strategy was the development of a consistent, multi-modal wayfinding system. The need for one has been highlighted in other city and regional studies and is timely in anticipation of the 2015 Pan-Am Games.

The City of Toronto's Walking Strategy (2009), amongst other initiatives, sets out a vision for a more liveable, prosperous and sustainable city. It is a plan to create high quality pedestrian environments and foster a culture of walking in all of Toronto's neighbourhoods.

The creation of a multi-modal wayfinding system is a goal of the City's Walking Strategy which "aims to create an environment where walking is an appealing, convenient, safe and stimulating experience for residents and visitors". The development of a wayfinding system is also timely, as the 2015 Pan-Am Games will attract significant media attention and visitors to Toronto.

The City's long-term goal, to develop and implement a coherent wayfinding system in Toronto, extends across transportation modes and includes state of the art technologies. This goal, of a unified, multi-modal wayfinding system, is shared by city businesses, cultural and sports institutions, residents, commuters and tourists.

The Public Realm Section of the Transportation Services Division commissioned a team of consultants, Steer Davies Gleave and Dialog, to assist the City to

develop Phase One of the Wayfinding System Strategy. This phase of the project developed a multi-modal wayfinding framework for Toronto, including design principles, implementation strategy, outline business case, funding sources, and the parameters for a pilot implementation.

If approved, Phase Two will include design development, product prototyping and an evaluated pilot implementation which will further inform the business case, refine funding opportunities and form the basis of a suite of design guidelines for a city-wide roll out.

Phase Three covers the full implementation of the wayfinding strategy across the city.

About this Report

This report summarizes the outcomes of the Wayfinding System Strategy (Phase One) study, which began in September 2011. The study aimed to establish robust foundations for the development and delivery of a high-quality wayfinding system for Toronto.

The report is structured into 3 sections plus an introduction.

- The introduction describes the study objectives and the policy context.
- Section 1 “Understanding” summarizes the findings from on-site observations, including gaps and opportunities; it incorporates an overview of the challenges of consistent naming, a brief review of international best practices, and the results of stakeholder outreach activities.
- Section 2 “Wayfinding Strategy” describes the design framework, system components, and their possible application to interim pilot areas.
- Section 3 “Delivery” section describes a high-level project plan, budget implications, a summary of the Outline Business Case, and future funding options and opportunities for the City.

Further information on the project process, expanded reports, presentations on existing conditions and a summary of international best practices and stakeholder outreach is included in the Toronto 360 Wayfinding Strategy report appendices.

Please visit our website (http://www.toronto.ca/transportation/walking/wayfinding.htm) if you would like access to further information.

What is wayfinding?

A wayfinding system enables people to orient themselves in physical space and navigate from place to place.

City wayfinding relates to the built and the natural environment and makes streets, neighbourhoods, and the city more “legible”, helping people to find their

way. Wayfinding is more than signs—it includes names, maps, new media, and elements of the public realm such as lighting, street furniture and public art.

Many cities such as London, New York, Bogota and Vancouver have recently developed wayfinding strategies in response to significant transportation challenges and/or major events such as the Olympics. The successful implementation of a unified wayfinding system will deliver significant, proven benefits to residents, businesses, and tourists.

Kevin Lynch is widely regarded as the originator of the term wayfinding. His book The Image of the City (MIT Press 1960), established the core principles of legibility for an urban context. He argued that, as people navigate places, they understand their surroundings in consistent and predictable ways, forming "mental maps" with five elements: paths, edges, districts, nodes and landmarks. Contemporary wayfinding systems have built on the principles set out in Lynch's book to develop information hierarchies that support the creation of mental mapping and legible places.

Why Now?

Toronto's BIAs (Business Improvement Areas), cultural institutions, sports venues and tourism community have long advocated the need for a city-wide wayfinding system. The need for wayfinding is also highlighted in the City's Walking Strategy and a recent review of the PATH system (underground walking/shopping path system). The growth in visitor numbers, and the 2015 PanAm Games make this a timely opportunity to take the initial steps towards delivery of this goal.

A System for Toronto

Toronto faces many of the challenges of other metropolitan cities, balancing the need to provide efficient multi-modal transportation choice with the requirements for a liveable city, with public space that residents and visitors can enjoy.
The tourism experience can be enhanced if visitors can easily find their way to key destinations or are able to join local residents in exploring Toronto's unique neighbourhoods. A unified wayfinding system adds to the vibrancy of the city's streetscape and also helps build and foster the city's unique identity.

Multiple formal and informal attempts to provide wayfinding information can be found around the city, in particular around downtown and tourist attractions, yet a consistent and comprehensive system remains a far-reaching aspiration.
The Toronto Wayfinding System Strategy vision was to develop common wayfinding principles that would encourage walking in Toronto, taking account of the needs of Toronto's stakeholders, and to support the future implementation of a family of wayfinding components. The system should spiral outwards to enable project partners to adopt these principles for their own schemes—utilizing naming, hierarchies, colour coding, look & feel and other conventions to make the system theirs.

The long-term vision is to provide the city with a consistent wayfinding system but also to influence the city's urban design to support intuitive wayfinding and facilitate natural movement.

Objectives

Wayfinding is more than connecting A to B, it encompasses all urban behaviour, from orientation to identification to exploration to discovery. Its benefits are wide reaching for visitors, residents and businesses covering public health, economy and the street environment.

Identify and Connect Places

While it is relatively easy to know where you are in Toronto, the challenge lies in understanding how the city's places connect—conceptually, at first and then by foot, cycling, public transportation or car.

Reduce reliance on the car/ public transport

Reducing reliance on a single mode of transportation not only encourages better use of networks but also gives people the opportunity to react to disruptions and re-plan the journey.

Stimulate economic growth

More people walking means more local business. More people on the streets makes neighbourhoods safer, more vibrant and attractive.

Encourage exploration, wandering & discovery

It's not only visitors who benefit from wayfinding. Locals are also provided with tools to rediscover the city and to 'get lost' in the knowledge that they will find their way back.
Physical and psychological barriers and a frequent overestimation of walk distances/times have been identified as some of the main deterrents for walking.

Build confidence and trust to walk

Toronto Walking Strategy is an overarching policy that envisions a walkable Toronto, where streets, parks and neighbourhoods are accessible, secure, vibrant and enjoyable, encouraging people to walk more often.

Directional policy & related projects

The need for a unified wayfinding system for Toronto has been highlighted in various studies and related projects. The solution needs to adhere to existing policy, in particular those related to walking and street furniture.

A policy review identified the objectives and strategies that underpin current wayfinding-related initiatives in Toronto.

Around a dozen policy and planning documents were reviewed and can be aggregated into a hierarchy of two categories:

Directional policy: provides guiding policy direction for wayfinding and includes:
- Walking Strategy
- City of Toronto Accessibility Design Guidelines (2004)
- Identification and Directional Road Signage Policy
- City of Toronto Official Plan

Related Projects: includes relevant projects, studies, and policy with specific wayfinding and signage strategies. The review included:
- Cultural Institutions in the Public Realm
- PATH Master Plan (2011)
- INFOTOGO Pillars
- Metrolinx (GO Transit) Static Signage Catalogue

City of Toronto Accessibility Design Guidelines (2004) is an overarching policy that envisions a walkable Toronto, where streets, parks and neighbourhoods are accessible.

Identification and Directional Road Signage Policy establishes identification signage (neighbourhoods and communities) and directional destination signage (major attractions).

City of Toronto Official Plan
Streets will be designed to perform their diverse roles, balancing the spatial needs of existing and future users within the right-of-way. This includes pedestrians, people with mobility aids, transit, bicycles, automobiles, utilities and landscaping.

There is also a wealth of related bylaws and guidelines that determine the placement of street furnishing elements such as TTC Technical Guidelines for Placement of Transit Stops, the Streetscape Manual, and related zoning by-laws.

Toronto walking strategy
Toronto Walking Strategy is an overarching policy that envisions a walkable Toronto, where streets, parks and neighbourhoods are accessible, secure, vibrant and enjoyable, encouraging people to walk more often.

The Walking Strategy is supported by a number of other policies such as the Official Plan, the Toronto Pedestrian Charter, International Charter for Walking, and other guidelines and programs, such as the Vibrant Streets policy.
The walkable Toronto concept builds on a number of policies and documents that support walkable communities and the creation of urban environments that support increased pedestrian activity.

Objectives of the Walking Strategy of particular relevance to the development of the Wayfinding Strategy include:

- To support and nurture a culture of walking throughout the city;
- For all city sidewalks and walkways to be clear, accessible and easy to navigate;
- For public and private city building projects to provide opportunities to create a high-quality walking environment;
- To make walking easy and enjoyable through provision of tools for navigating the city on foot, such as signage and maps;
- To coordinate pedestrian-focused projects and initiatives across city divisions and agencies;
- To transform areas poorly designed for walking, neighbourhood-by-neighbourhood, into places where people want to walk.

Vibrant streets

Vibrant Streets: Toronto's Coordinated Street Furniture Program (2010) is Toronto's coordinated street furniture design and policy guideline. One of the main objectives of the Vibrant Streets Policy is to harmonize the design, form, scale, materials and placement of street furniture to contribute to accessibility, safety, and beauty of public spaces in Toronto.

The Vibrant Streets program focuses on harmonizing the design and placement of street amenities to reduce clutter, beautify city streets and give Toronto an identifiable streetscape, and to work concurrently with improvements to other elements in the public right-of-way, such as tree planting, decorative paving, pedestrian clearways, parking, and street signs.

The policies relevant to the Toronto Wayfinding Strategy filter down from three main aspirations described in the Vibrant Streets vision:

- A cohesive and exceptional design quality;
- Function in terms of safety, accessibility and placement; and
- Aesthetically appealing, functional, safe, and an accessible public realm.

City of Toronto Accessibility Design Guidelines (2004) is an overarching policy that envisions a walkable Toronto, where streets, parks and neighbourhoods are accessible.

Identification and Directional Road Signage Policy establishes identification signage (neighbourhoods and communities) and directional destination signage (major attractions).

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Streets will be designed to perform their diverse roles, balancing the spatial needs of existing and future users within the right-of-way. This includes pedestrians, people with mobility aids, transit, bicycles, automobiles, utilities and landscaping.

To achieve these aspirations, the overarching and more supportive policies reported seven key-themes that are largely consistent throughout the directional policies. These were to:

- Implement a family of beautiful, functional, technologically flexible, durable and coordinated furniture for the streets of Toronto;
- Promote ease of pedestrian movement and accessibility through the placement and design of furniture;
- Generate a fiscally responsible street furniture program;
- Establish a program for ongoing maintenance and renewal;
- Achieve attractive streetscapes through a high standard of civic design;
- Enhance the safety of city streets; and
- Promote and enhance Toronto's identity.

These themes were cross-checked with the main policies to inform the vision and principles of the Toronto Wayfinding System. There were four main themes that emerged from the review process:

- Functionality and coordinated street furniture;

- Ease of pedestrian movement and accessibility;
- Attractive design; and
- Safety and security.

The Toronto Wayfinding System Strategy should seek adherence with these strategies and tailor objectives to city, district, and site level.

1. Understanding

1.1 Building a mental map of the city

Many things make Toronto special. The city has many distinctive features that not only engage people's attention but also help with orientation and navigation. These features form the basis for the development of a mental map of the city.

Mental maps: We all build maps in our heads to navigate city streets, how we do so depends on a host of factors.
The more we travel a particular route, the clearer it becomes in our mind's eye. A successful pedestrian wayfinding system should recognize this and find ways to help everyone build a stronger, more coherent mental map.

Lake Ontario lakeshore / waterfront
As with many coastal cities, Lake Ontario provides a clearly defined limit to one edge of the city.

Downtown highrises
The concentration of downtown highrises are visible from many parts of the city and provide an intuitive wayfinding point of reference.

CN Tower
The CN Tower dominates the city skyline and acts as a visual reference point visible from afar. The CN Tower is Toronto's most recognizable landmark and is a cornerstone of the city's image for residents and visitors.

City of neighbourhoods
Many of the city's neighbourhoods have strong cultural identities adding diversity to the urban landscape. Identity is expressed through a combination of retail signing, street names, architecture, and institutional or informal graphics.
cultural institutions
Many of Toronto's cultural institutions have statement/flagship buildings that act as local or citywide landmarks.

Civic buildings

City Hall's architecture stands out as one of Toronto's most recognizable features although it is not visible from a distance. Nathan Phillips Square, in front of City Hall is a civic space and a popular recreational destination for residents.
understanding

1.2 Understanding Toronto

A city is not only understood through the urban landscape but also through words. Official names often juxtapose with common, learned or historical ones. Building agreement on naming requires a clear city-wide policy that forms the basis for engagement and debate at a local level.

There are many factors that have an impact on the naming of a city's areas and places, including urban form, parks, natural systems and paths, administrative and neighbourhood boundaries, business improvement areas, historic districts, destination areas, existing signage systems, and transportation systems.
To build an understanding of Toronto's naming conventions the project team compiled and plotted multiple geographic datasests in a Geographical Information System (GIS). Map data was supplied by the City of Toronto (open map), Metrolinx and Tourism Toronto. The baseline data collated included:

- Parks and open spaces
- Administrative/neighbourhoods
- Business Improvement Areas
- Heritage Conservation Districts
- Destinations and Attractions
- Commuter Rail
- Built form
- Transit stops and railroads

The following images show some of the naming conventions embedded in the different databases and their geographic distribution. In general, districts get smaller as they get closer to the downtown area and vice versa.
The definition and relevance to users of names and boundaries at a local level requires detailed engagement with local communities.

Lakeshore, Highways and Water Features

The lakeshore edge, highways 401, 404 (DVP) and the Gardiner Expressway frame a distinct, high level organization of the city. Water features, such as rivers and creeks, are less distinct on the city map but provide clearly defined edges on the ground.

Former Municipalities

Pre-amalgamation municipality names contribute to the complex mix of heritage naming across the city.
Some of these names, such as Etobicoke, remain in common usage while others have faded into obscurity.

Transit and Railroads
Commuter transit links spread across Toronto, the GTA and beyond, and are often represented on area maps.
At ground level, transit infrastructure and lines often create barriers to movement with few permeable pedestrian links.
understanding

Wards
Ward boundaries form a significant part of much of the City's cartography. However, from a wayfinding perspective, these boundaries have limited meaning on the ground.

Neighbourhood
Although Toronto is known by its variety of neighbourhoods, some being clearly noticeable in the urban landscape, their exact boundaries remain a matter for discussion. The image shows neighbourhood limits included in the City's open database.

People's neighbourhoods
The Toronto Star activity demonstrated that people conceive of a neighbourhood as a place to live with neighbourhoods often being defined on-street by important roads that act as natural edges. Mapping neighbourhoods, as seen by the community, is a project led by the Toronto Star that highlights the overlap between official and common names. It also demonstrates an opportunity to match boundaries and names via active public participation.
Adoption of consistent naming is one of the cornerstones of a successful wayfinding system.

BIAs
The exact boundaries of Business Improvement Areas change according to their active members. BIA brands are increasingly visible on-street and on marketing materials. While strong branding helps raise BIA visibility, it can also serve to diminish the profile of surrounding, non-BIA areas.

Attractions
Current databases list a broad mix of private and public places of interest. These are often organized in categories with attractions mainly concentrated in the downtown area and along major corridors and highways.

Street and park names
Street names are the most unequivocal way to name and find a specific point. Databases adhere to an established hierarchy—from major arterials to local roads. Park names also provide a useful naming resource, although with a less well defined hierarchy.

The map sample displays a hierarchical ordering of the city's areas, corridors, neighbourhoods, main streets and places of interest. This ordering includes less formalized names, such as those used by BIAs and other groups. A BIA name could, for instance, represent both a main street and the neighbourhood.
A consolidated GIS map base will become an important study asset and the data will form the basis of a citywide Toronto map in Phase Two of the project.

1.3 Case study areas

Five case study areas were selected for detailed observation and urban analysis. The areas exhibit many of the city's typical characteristics that define the quality of legibility and movement.

The case studies identified a diverse range of Toronto's wayfinding challenges and opportunities. The data collected was used to support development and testing of the wayfinding strategy.

The areas demonstrated many typical characteristics of the city—including barriers, edges, connections, and destinations—to highlight the legibility and walkability of the public realm.

The areas also had to be significant for tourists, transit users, and residents, and to include a concentration of amenities, destinations and activities.
Areas were all of a walkable scale (approx 1.5 km radius). Locations are shown below.

A. East downtown

The Esplanade has a dual role, both as a leisure walk and as a key pedestrian and cycle link from St Lawrence Market to the Distillery District.
Internal and external areas around St Lawrence Market create pleasant spaces that invite people to wander and shop.
High levels of activity to/from on-street and municipal parking was observed around the Distillery District area.
Perceived barriers:
Gardiner Expressway, Lakeshore Drive and railroad underpasses as barriers to the Waterfront.
Construction sites and uninviting sidewalks around development sites.

B. Downtown centre

Pedestrian activity is generated by employees, business visitors, service people and other office-related activities—particularly around the Financial District.
Commuters from Union Station combine with passengers from other transit modes in central downtown resulting in the city's greatest concentration of transit-related activity.
Retail and leisure activities generate consistently high levels of pedestrian movements on Yonge Street, Dundas Square and the main shopping centres.
Perceived barriers:

Lack of active frontages in the financial centre, with activities and convenience retail happening below grade (PATH).
Connection to waterfront: intimidating underpasses and sidewalks.

C. Queen/Spadina
Retail activity dominates in Queen Street with a concentration of active frontages and high number of pedestrians. Strong pedestrian activity was also observed in Chinatown.
The Kensington Market and Chinatown areas encourage leisurely strolling around the sometimes narrow sidewalks and stalls.
The area has many individual theatres and cultural institutions that act as destinations generating one-off or infrequent trips from visitors and residents.
Perceived barriers:
Negotiating residential areas(mostly for visitors).
On-street obstacles related to retail/street market activities.

D. Liberty Village
Pedestrian activity around Exhibition Place is limited to special events and sports venues—otherwise activity is almost exclusively car dominated. The area is a destination, not a link, so it feels abandoned when not in use.
Commuting activity was observed to/from GO Exhibition Stop and from the Liberty Village area.
The area has continuous, if not intense, pedestrian traffic generated by local retail. (weekday observation)
Perceived barriers:
The railroad separates Liberty Village from West Queen West.
Long walk distances between areas of interest.

E. Morningside/Military trail
Pedestrian activity around the residential area is mainly practical trips to/from main streets, bus stops, and local destinations such as schools.
Students generate much of the walking activity to/from/around the campus. This includes movements from local parking lots and bus stops.
Leisure walking and dog walking were observed in residential areas and local parks.
Perceived barriers:
Non-existent sidewalks.
Long walking distances.
It was intended that one or more of these areas would become Pilot Area(s) for Phase Two of this project. See pages 42-43 for more detail on the selected interim Pilot Areas (East Downtown and Morningside).

Where am i ?
where am i ?
where is _____?

how do i get there?

1.4 Wayfinding opportunities

The nature of the city's street layout, together with the many urban and natural characteristics that are particular to Toronto, provide a generous resource to explore and incorporate in a formal wayfinding system.

Orientation
The CN Tower and downtown highrises provide intuitive wayfinding reference points from much of central Toronto. Definition of the city's southern edge by Lake Ontario along with unobstructed views to the downtown combine to aid pedestrian orientation and understanding of walk distances. The outer highrises pin-point more remote areas for walkers with greater local knowledge— particularly along the Yonge corridor comprising Deer Park/St Clair, Eglinton Ave/Uptown Yonge, North York/Willowdale.
The highrises and flat/clear views offset Toronto's lack of distinctive natural features such as numerous hills.

Clear boundaries
The Lake Ontario shore limits the city's southern edge and defines its layout. Toronto's street grid acknowledges this feature and is laid-out mostly parallel and perpendicular to it resulting in a street grid that is almost exactly aligned N.S.E.W.
Elevated highways—such Gardiner Expressway and Macdonald-Cartier Freeway (401)— are clearly visible and act as distinctive landmarks aiding mental mapping.
Natural features, such as the Humber and Don valleys, run mostly north to south and delimit central Toronto. Boundaries with the wider GTA are less obvious. A downside of these strong edges is that they can form perceptual barriers to movement.

Statement buildings
Toronto has many civic and cultural buildings with bold architectural features that make them recognizable city-wide and as local reference points. Recognizable landmarks are an important asset for the construction of a wayfinding strategy and help users to build their mental map of the city.

Street names / corridors
Many streets in Toronto, not only Yonge "the longest street in the world", run for miles in the same general direction and—more importantly— retain the same names. On-street, roads are generally well labelled and form links for short pedestrian trips as well as longer car/transit/streetcar journeys.

Neighbourhoods / BIAs

Neighbourhood and BIA names and logos are incorporated across street name plates, signs and banners, as well as less obvious street furniture such as litter bins and newspaper dispensers, making it relatively easy to know the names of places when walking in central Toronto.
The cultural heritage of neighbourhoods and formal BIA initiatives have also shaped the urban landscape, making many places in Toronto instantly recognizable.
Institutional districts are also well labelled and contribute to a network of recognizable, named areas. There would appear to be minimal conflict between historical, BIAs and “new” names.

1.5 Streetscape & Wayfinding

Toronto has a profusion of formal and informal signage and information systems. From humble road signs to interactive booths, all of these contribute to people’s understanding of the city with varying levels of success.

Road Signs:
Blue street name plates are consistently positioned at intersections.
Road signs that direct people to destinations are hard to find.
Street names provide drivers and pedestrian with predictable locational information.
The few observed copy the colour scheme but without adhering to a standard layout.
Cycle routes form part of a numbered route system and are signified by blue plates.

Traditional Street Names Plates:
A standardization process is gradually replacing older name plates, including traditional “acorns”.
Acorn signs were traditionally personalized to reflect the identities of neighbourhoods and BIAs.
Forming part of a coordinated strategy to break district into smaller quarters in In Old Town Toronto.

New Street Names Plates:
A new design is being implemented across the city. It shares some characteristics with the coordinated street furniture program and also reflects the City’s visual identity.
The new design retains opportunities to personalize the plates.

Banners:
Banners on lighting columns are common, serving both wayfinding and advertising.

Cultural and educational institutions use banners in their immediate surroundings.
Banners are also used to advertise events or simply as advertising.

Coordinated street furniture program
Reshaping the city's image through the installation of contemporary urban furniture.
The street furniture products share a common material and colour palette creating a consistent feel and coordinated appearance.

info to go (prototype)
The design proven impractical.
The original design was abandoned and a revised design has recently been launched.
A street map of central Toronto and a list of key destinations was installed on the unit.

info pillar
The new info pillar incorporates two advertising panels with a map case facing the sidewalk.
The information function is advertised by a yellow circle with an "i" that acts as a beacon.

discovery walk(s)
Discovery Walk boards include a map showing designated routes around a given area.
The boards are reinforced on-street by directional discs and markers.
Although visually related to the boards, these signs may be misinterpreted as road signs.

Institutional
An example of good practice, the University of Toronto wayfinding system is delivered across a range of signing structures combining permanent and semi-permanent strategies.
Many health institutions provide distinctive wayfinding for their customers.

Images provided of the following:
BIAs (examples of signage other than street name plates)
retail complexes
Ontario / toronto heritage
parks
legacy - parks and recreation
statutory
TTC subway
TTC stops
BIXI

1.6 Existing systems - gaps

Extensive site visits and observation of user behaviours identified four important gaps in Toronto's current wayfinding—above all, that current systems are sporadic and fragmented, lacking integration and coherence.

Continuity

Wayfinding in Toronto, other than street names, is sporadic and fragmented—it does not operate as a system or a network.
Systems overlap haphazardly without any obvious coherence. While some systems cover a definable area (PATH, TTC, Parks), others lack a clear extension or boundary.
Central Downtown has a profusion of wayfinding systems with no underlying strategy.

Consistency

The use of material, location, finish and general appearance of signs is varied and lacks consistency.
Wayfinding structures located in right-of-ways may comply with City policy yet often fail to harmonize with their surrounding built environment.
The Coordinated Street Furniture program provides a consistent approach to location, material and look & feel for the various products installed on-street. Such an approach is financially and aesthetically efficient.
Unfortunately the program's wayfinding component (INFOTOGO) does not fully address local wayfinding needs.

Connectivity

Most of Toronto's wayfinding systems are self referential, rarely connecting with non-proprietary systems or adjacent areas.
The majority of the systems deliver point specific information (you are here, this area/place is...), but fail to provide the context for a given location in relation to the city or its immediate surroundings.
Some systems that utilize maps do incorporate contextual information on the immediate surroundings; however, their geographic extent is limited and it is very rare to find directions or directional signs for pedestrians.

Accessibility

Most information systems have considerable room for improvement when it comes to physical and cognitive accessibility.
Location, height, reading angle and material often combine to compromise the ability of the signs to be read—let alone touched.
Information is predominantly visual and is largely unavailable in alternative media.

1.7 What users look for?

Previous experience of city and transit wayfinding systems demonstrates that user needs exceed the limitations of static signage and that gaps are commonly satisfied by a mix of information delivered across multiple touch points.
User needs and requests need to be “translated” into places in order to be direction-able. Not all information needs are locational, on most occasions we know what we want but not where to find it.
Toronto has numerous communication channels that provide information to residents and visitors. Wayfinding terminology (naming) must be consistent across all these channels.
Information can be more, or less, appropriate on different wayfinding structures. What may be redundant in one place, may be a landmark in another.
Information that is likely to change frequently should be channelled through less permanent media.

key user profiles
For the wayfinding system to work, it must be able to support the movement needs of all—including visitors.
Understanding how different groups navigate and what type of information they need forms a fundamental part of the wayfinding strategy. Three constituency groups (tourists, residents and transit users) were identified and referenced through the study.

1. commuters & Infrequent travellers
2. local, regional, national & international tourists
3. neighbours (residents/ workers) and visitors

1.8 Best Practice Review

A review of international wayfinding systems covering wayfinding strategies, signage elements, content, system identity, funding, delivery and evaluation models was undertaken to identify considerations that were relevant to Toronto.

New York, USA
The New York City Department of Transportation (DOT) is working on a project to deliver a comprehensive pedestrian information system to sidewalks in key New York neighbourhoods. The initiative is seen as a critical first step in making New York City’s world-class streets easier to navigate and even more accessible for New Yorkers and visitors.
Images of:
Lower Manhattan existing system
Lower Manhattan wayfinding map
Lower Manhattan directional post
Illustrative concept for new wayfinding system Image: NYC-DOT

Bogotá, Colombia

Bogota's Tourism Signing Plan is a pedestrian and vehicular wayfinding system to enhance the experience of national and international tourists in the city.
Waymarker
Images of:
Base material options
Illustrative placement

Legible Bristol, UK
The first part of the Bristol Legible City initiative was a pedestrian wayfinding system in Bristol City Centre. This was the most comprehensive system in Europe at the time of implementation and was designed specifically to encourage walking and to aid wayfinding in a complex city centre environment.
Images of:
Combined totem and fingerpost Image: Bristol Legible City
Context and local area maps

Walk!Philadelphia, USA
Conceived as part of a $26 million Streetscape Improvement Project, Walk!Philadelphia is the largest comprehensive pedestrian sign system in North America. It consists of two major components: diskmaps and directionals. The design strategy reflects a "district approach" where the downtown area is organized as 5 colour-coded districts. This approach is favoured by many cities in the US.
Images of:
Diskmap Image: Walk!Philadelphia
Directional

City of London (local), UK.
A review of the City's wayfinding led to the development of a new wayfinding strategy based on a high-quality bespoke signs that reached the £1 million mark (CAD $1,6 million).
Images of:
Gateway Map
Fingerpost Image: Woodhouse

Islington (local), London, UK.
This local authority-funded wayfinding pilot showcased the quality of the products and generated financial support from local businesses and other privates.
Images of:
Corridor map detail
Garden entrances sign Image: Wood & Wood
Interpretative sign

Legible London (citywide) - UK
Legible London was designed to provide predictable and consistent on-street pedestrian signing across all of London's boroughs to encourage more people to walk.
An evaluation at various stages of Legible London's implementation demonstrates broad support for the system.
Images of:
Narrow map totem
Map on underground exits
Wide map totem Images: Legible London / TfL

1.9 Consultation

A number of outreach activities and events were held with stakeholders and the general public to gain local insight and build support for the project.
A full stakeholder consultation list (workshop, interview, and open house attendants) can be found in the appendix at the end of this document.

Stakeholder interviews

Interviews were undertaken with a broad range of stakeholders from the community including: residents, associations, agencies, businesses, BIAs, and cultural institutions.* The objective was for early identification of issues, opportunities, and challenges across a range of the city's stakeholders.
The interviews also provided an opportunity to build a dialogue with stakeholders related to wayfinding in Toronto aimed to generate interest and support for the project.

"the system must be sustainable, accessible, and inclusive"
"we need a map that everybody can recognize... and build upon"
"wayfinding should work for all... use pictograms"
"wayfinding should motivate people to walk... to discover the city... parks, events, museums... the neighbourhoods"
"there should be opportunities for others to contribute to the wayfinding system... BIAs, PanAM,... and to have a legacy"
"the system should consider all modes of transportation"
"we need to enhance both: a city identity and a neighbourhood identity"
"Embrace technology...
QR codes... digital markers... apps"

Stakeholder workshop

A stakeholder workshop was held half-way through the study process to identify and agree on key objectives and principles to guide the development of the wayfinding system strategy.
Participants were divided into 5 groups, corresponding to 5 case study areas:

- Downtown East (Old Town, St Lawrence, East Bayfront, Distillery District)
- Central Downtown (Union Station, Financial District, Yonge St, Queen St)

- Kings/Spadina (Chinatown, Fashion District, Queen St West , Entertainment District)
- West Downtown (Liberty Village, Art and Design District, Exhibition Place)
- Morningside (Military Trail, University of Toronto Scarborough Campus)

Localized wayfinding issues and opportunities were discussed for each case study area. These were then extrapolated to identify wayfinding strategies and principles that could be applied city-wide.

Key Themes

Following the interviews and stakeholder workshop, a cross analysis distilled the principles into five key themes that represented the interests and aspirations of the stakeholder group related to the wayfinding system. The five themes (summarized below) informed the direction and definition of the design framework which is expanded on in Section 2 of this report.

Individual strategies and ideas from these activities were incorporated into the strategy framework where relevant.

Accessibility

Easy to understand for all / balance between implicit versus explicit wayfinding / new AODA legislation

Modal Transition

Logical connections for different users and various modes of transportation / legible transitions between modes

Information Hierarchy

Consistent long-term place naming / logical intersection of provincial, municipal and local wayfinding

Connectivity

Enhance connections between neighbourhoods and destinations throughout the city

Leverage Partnerships

Leverage partnership opportunities by integrating the Toronto Wayfinding System with third party interfaces

Public Open House

A public open house drop-in event was held in the Metrohall Rotunda on March 28, 2012. The objective was to provide the general public and guests with a background to the study and an outline of the draft wayfinding strategy and framework (themes and principles).

The event was facilitated by members of the consultant team and consisted of a keynote presentation, a question and answer period and interaction around

various printed panels. Feedback was extremely positive and supportive of the proposals.
Life size mock-ups of two of the proposed signage elements were also displayed to collect early feedback for future design proposals.

Open House panel comments:
Urban environment: include cycling routes; pedestrian friendly lighting
Landmarks: include former buildings; intersections; more landmarks; lists of local places of interest should be defined locally
System components: include building addresses; cycling information; use existing City data
Strategy: include multiuser pathway painted lanes; reduce ad-based pillars
Consistency: ensure signs are serviced regularly, multi-lingual, ensure obstructions are removed
Inclusivity: ensure that information is compatible with other platforms, use tactile/textured surfaces
Sustainability: remove items before implementing new elements; remove Info Pillars, provide more open data and ensure regular updates
Transition: visible address numbers, ensure routes are clear, high map contrast
Local Identity: include underground landmarks like the PATH

2. Wayfinding Strategy

2.1 Design Framework

The design framework is organized around five themes: consistency, inclusivity, sustainability, transition and local identity. Each theme is broken into three or four design principles.
The design framework is a summary of those elements that need to be considered through the detailed design and implementation process to ensure system delivery is consistent with the strategy vision.
The framework aims to act as a design brief for Phase Two promoting rather than precluding creativity in the development of a detailed design solution.
The framework themes were directly informed by stakeholder consultation activities and complemented by best practice tailored to Toronto's current conditions and policies.
The principles under each theme comprise wide-ranging guidance—from specific standards to project aspirations and user needs.
Some guidance may result in conflicts or be unachievable due to design or budget constraints. In such cases, the intent behind the principles should be followed.

Consistency
Consistency of content and presentation is fundamental for effective wayfinding.
Hierarchy
Conventions
Positioning

Structures

Inclusivity
The system should cater to the needs of all user types.
Physical access
Contrast
Accessibility
Technology

Sustainability
Consideration of full life cycle costing and adaptability to change.
Reduce clutter
Flexibility
Extendability
Future proof

Transition
Connecting places and facilitating third party input to enable people to move seamlessly from one mode, system or area to another.
Multi-modal
Reciprocity
Route legibility
Fill the gaps

Local Identity
Celebrating and promoting the city and its districts. Empowering community participation and input.
Landmarks
Local character
Historic names
Placemaking

2.2 Consistency

Consistency of content and presentation is fundamental for effective wayfinding.

1. Conventions

Use universally legible and accessible map conventions

Display distances
Walking distances should be displayed in metres (up to 900m) with a walking time catchment of 5-10 min/400-800 m.
Pictograms
Standardized icons for approved generic facilities and destinations should be adopted for all system components.
Heads up mapping

All maps on fixed signage should be heads-up. Printed maps should be north-up (tilted 15° to achieve compass point angles).
Digital maps could use built-in (mobile) compass to aid orientation.
Colour coding
Colour coding should represent information categories rather than identify districts or cardinal points.
Colours should be applied consistently across system components, platforms, and media.

2. Positioning
A strategy for locating and positioning signs throughout the city
Policy and guidelines
Signage family positions shall comply with city policies and guidelines.
Repeater signs
Mark walking routes with repeater signs.
Anticipation
Signage should be positioned such that users can anticipate further sign locations.
Do not obstruct
Signs should avoid physical obstructions within open space or public right-of-ways.

3. Hierarchy
The proposed approach is to rationalize a hierarchical order to name areas, corridors, neighbourhood, main streets and places of interest across the city. This includes less formal naming adopted by BIAs and other groups. A BIA name could, for instance, represent both a main street and the neighbourhood.
As shown in the diagram below, when people navigate they may leapfrog some steps, hence even where progressive disclosure from the general to the detailed is desired, consideration to information shortcuts should also be given.
Places of interest should be organized in four tiers, and with their representation on wayfinding system signs and maps reflecting this hierarchy. At a local level, the definition of names and places of interest applied to these tiers will require local stakeholder engagement and historic/planning research.
Selection of places of interest for inclusion on highway signage will require the development and application of additional criteria as detailed in § 2.14 of this report.

Tier 1
City-wide landmarks
The CN Tower, landmark museums, landmark parks, landmark sport venues, landmark retail
Tier 2
District attractions

Major cultural, educational, leisure, historic, heritage, principal retail clusters, character areas, hotels
Tier 3
Generic
Washrooms, transit stops, local libraries, local schools, places of worship, local retail clusters
Tier 4
Detailed
Shop-to-shop index, restaurants, shops, venues

2.3 Inclusivity

The wayfinding system should cater to the needs of all user types.

1. Access

All signage should be located such that it can be accessed by someone who is standing or using a wheelchair. All essential information should be located between 90cm and 140cm from the finished ground level.
All essential information should be located between 90cm and 140cm from the finished ground level.
Higher or lower elements should consider the use of proportionately larger type size to improve legibility.

2. Contrast

All sign content should ensure contrast against the background to guarantee legibility. Materials should be specified to avoid glare and reflection.
Signage design should include highlight elements to contrast against surroundings.
Content design should have a minimum contrast between the background and key information of 80%.

3. Accessibility

Consider alternative media/materials for a range of groups such as the elderly, visually impaired and non-English speakers.
Walking routes should be well lit and include tactile and dropped curbs; all signed routes should be accessible.

4. Technology

Mobile applications should consider the use of accessibility features. Signage structures should include QR codes, RFI tags, wi-fi, or other technologies in support of location based services.

2.4 Sustainability

Consideration of full life cycle costing and ability to adapt to change.

1. Reduce clutter

Obsolete structures in the public right-of-way should be removed and physical and or visual obstructions avoided. Where appropriate, re-use or adapt existing urban furniture elements to incorporate wayfinding information.

2. Flexibility
Permanent content should not include information likely to change, and should be cost-effective to update in the short-term. Volatile information (Tier 4) should only be included in short-run or digital media.

3. Extendability
Design principles should allow for the inclusion of wayfinding information within existing information products and third-party systems, supported by a clear set of design rules and conventions.

4. Future proof
Signage design should be low maintenance and durable, and have a lifespan of 25 years (2-3 years for printed insets).

Modular components facilitate replacement and keep maintenance cost low. Tamper proof fixings should be used throughout.

2.5 Transition

Connect places and enable people to move seamlessly from one mode, system or area to another.

1. Multi-modal
Include relevant information about other modes of transportation. Where possible, identify entry points to destinations (e.g. subway stations). Apply consistent naming conventions to pedestrian wayfinding, public transportation and highway signage.

2. Reciprocity
Provide for the integration of wayfinding elements within third party multi-modal signage and wayfinding systems.

3. Route legibility
Support intuitive wayfinding through the implementation of lighting, sidewalk treatments and other urban design features.

4.Fill the gaps
Reconnect places and deconstruct artificial boundaries through public realm improvements. Provide information about how to negotiate unclear connections, and avoid creating perceptual boundaries in the city.

2.6 Local identity

Celebrate and promote the city and its districts to empower community participation and input.

1. Historic names
Adopt existing and use historical names wherever possible. Engage with local stakeholders to define Tier 1 (city-wide landmarks), Tier 2 (district attractions), to validate local area names.

2. Placemaking
Enhance outdoor spaces with public art or community interventions within the in-between places to aid orientation and wayfinding across the city.

3. Landmarks
Celebrate and promote distinctive buildings and public places as landmarks of the city.
Mapping should present the visual and architectural features of landmarks. Each area should have sufficient local landmarks identified to aid in orientation and navigation throughout the city.

4. Local character
Enhance sense of place by allowing local community and businesses to participate in the design of the system.
Allow signage components to be customized, while maintaining consistency throughout the city.

2.7 Wayfinding elements

Informed by national and international best practices, site visits and stakeholder consultation, a preliminary set of potential wayfinding components were short listed as desirable for Toronto.

finger posts
you are here mark
smart phone apps
street name plates
map totem poles
pocket maps
illustrations
map totems
large gateway maps
temporary banners
highway signs
illuminated panels
disk maps
pictograms and symbols
public art / placemaking
walking times on maps

shelters and furniture
waymarker disks
digital maps

2.8 Wayfinding system components

The wayfinding strategy is built around a core family of on-street signage. The following illustrative products and content are proposed for Toronto. Detailed graphic and product design will be developed and tested in Phase Two.

Signage

A. Gateway Totem
At gateways, such as major transit exits. Content may include:
Mode / system identification
District and place name
Strategic and local area directions
Local area map
- You are here (YAH)
- 400-800m radius
- Streets and sidewalks
- Tier 1, 2, 3

Context map
Alternative media

A. Context Totem
At or near major places of interest (Tier 1) and remarkable/significant areas of each district. Content may include:
System identification
District and place name
Strategic directions towards adjacent districts and specific points within the local area
Local area map
- You are here (YAH)
- 400-800m radius
- Streets and sidewalks
- Tier 1, 2, 3

Context map
Alternative media

B. Narrow Map Totem
At or near significant places of interest of each district and transit exits. Content may include:
System identification
District and place name
Strategic and local area directions
Local area map

- 400-800m radius
- Streets and sidewalks
- Tier 1, 2, 3
Context map
Alternative media

C. Main St/BIA Pillars
Along retail clusters and main streets (not at decision points). At or near significant places of interest of each district. Content may include:
System identification
District and retail cluster name
Retail cluster map
- 1-2km long
- 400-800m wide
- Streets and sidewalks
- Tier 1, 2, 3
- Potential Tier 4 (managed by BIAs)
Context map
Alternative media

D. Directional
At intersections of key pedestrian routes and decision points where totems are not an option due to narrow sidewalks. At shared pedestrian/cycling routes or routes through parks and open spaces. Content may include:
System identification
District name
Directions to adjacent districts, and:
Tier 1 and/or 2 destinations
- Name, distance/time
- Activity cluster type
Tier 3 destinations
- Exceptionally (i.e. low density areas)

E. Interpretative
At relevant historic and heritage buildings and sites without other suitable forms of interpretative signage. At places of interest that lack confirmation on arrival, (e.g. non-municipal parks). Content may include:
System identification
District name
Place of interest name, description, opening hours, sponsors, other
Supporting graphics, maps or images
Alternative media

Places of interest are organized in four tiers to create a hierarchy of destinations.
Tier 1 - City-wide landmarks: The CN Tower, landmark museums, landmark parks, landmark sport venues, landmark retail

Tier 2 - District attractions: Major cultural, educational, leisure, historic, heritage, principal retail clusters, character areas, hotels
Tier 3 - Generic: Washrooms, transit stops, local libraries, local schools, places of worship, local retail clusters
Tier 4 - Detailed: Shop-to-shop index, restaurants, shops, venues
Please refer to pages 30-31 for more information on hierarchy and conventions.

2.9 Other system components

There is more to wayfinding than signs—a truly coordinated strategy will permeate across media and touch points. The following components and contents provide a basis for the expansion of the wayfinding system beyond physical signage.

Digital

Mobile apps

On internet-enabled mobile devices. Enhanced by features such as compass and location-based services. Multi-platform: iOS (iPhone, iPad), Android (HTC, Samsung), Windows Mobile (Nokia) and Blackberry OS. Content may include:
System identification
Map-based navigation and multi-modal journey planning
Find / search functions
Customizable:
- User profile
- Mode
- District
- Events (white labelling)

Up to Tier 4 shop-to-shop locator
Partners and sponsors
Information made available in alternative media

Printed

Local Area Maps

At mode transition points: Bus/streetcar shelters, transit stations, PATH, BIXI, parking lots and others. At trip generator points: civic & social, cultural, health, etc. Content may include:
System identification
District and place name
Local area map
- 400-800m radius
- Streets and sidewalks
- Tier 1, 2, 3

Context map
Partners and sponsors
Information regarding alternative media

Pockets Maps
At visitor welcome and entry points to the city (e.g. airports, hotel concierge, convention centres). To be made available in places related to or distributed directly to the intended audience (mode, activity or area). Content may include:
System identification
Mode identification
Context map
Citywide (thematic) or area map
Activity or mode-relevant information (i.e. cycle lanes)
Potential Tier 4 (managed by BIAs)
Partners and sponsors
Information regarding alternative media

Urban Level
Traffic Signs
A consistent and continuous approach to highway directional signs that direct drivers to consistently-named areas will reduce sign clutter, minimize driver distraction and allow drivers to reach their final destinations as efficiently as possible.
Achieving consistency requires the development of high-level area naming conventions to be applied across both pedestrian wayfinding and traffic signage systems.
An updated and consolidated identification and directional road signage policy, including selection criteria for commercial and tourist destinations, and sign design standards is also required.

Urban Design
To improve connections between places, to create new routes and improve the quality/welcome/comfort levels of existing ones.
> In character areas, neighbourhoods and main streets (e.g. Chinatown).
> In the vicinity of Tier 1 and 2 destinations (e.g. access to Union Station).
Measures may include:
Lighting
Sidewalks
Landscaping
Other street furnishings
Movement areas and open views
Built form and open space
Placemaking: public art and community interventions

Intuitive Wayfinding. A number of urban design and placemaking interventions exist that provide opportunities for intuitive wayfinding throughout Toronto.
1. Use consistent paving along the defined routes.
2. Ensure adequate lighting along major pedestrian routes.

3. Use landscaping or other features along edges of pedestrian routes to create visual identity.
4. Encourage pedestrian movement towards prominent views and vistas.
5. Create sense of place through public art, built form, open space, and street furniture.

2.10 Interim pilot areas

East Downtown was selected from the initial case study areas as the central Toronto interim pilot area used to test and validate the emerging wayfinding design principles. The map below summarizes the proposed interventions.
Morningside / Military Trail was selected as the suburban interim pilot area used to test and validate the emerging wayfinding design principles. The map below summarizes the proposed interventions.

Main
East Downtown
Broadly representative of objectives, issues, and concerns identified in relation to urban locations.
Relevant across all three project constituencies. Contains a BIA and a number of high profile, city-wide destinations.
Includes opportunities to increase walking distances and to integrate with third party products and environments.
Has a critical mass of activity throughout the day/year.
Includes a number of consolidated neighbourhoods, redevelopment areas and major destinations including St. Lawrence Market, the Waterfront, The Distillery District, and The PanAm Games Village.
Areas around King St and the markets provide pleasant spaces that invite people to wander. The Esplanade has a dual role acting both as a leisure walk and a pedestrian link. High levels of activity to/from parking lots.

Estimated number of signs
a
Context Totem: 2
Gateway Totem: 1
b
Narrow Map Totem: 8
c
Main St/BIA Pillar (InfoPillar): 3
(non-Ad InfoPillar): 3
(new): 3
d
Directional (self-post): 2
(blade x 4): 12
e
Interpretative (totem): 1
(wall-mounted): 5

Others (bus shelters/BIXI): 15

Satellite
Morningside / Military Trail
Broadly representative of the objectives, issues, and concerns identified in relation to suburban locations.
Predominantly residential yet attracts a significant number of visitors (UTSC, PanAm).
Includes opportunities to increase walking distances and to improve and enhance awareness of the area.
Gateway to Morningside Park and the ravine trails.
The area is made up of the Highland Creek and Morningside neighbourhoods, which are predominantly auto-oriented residential areas. UTSC, Morningside Park and PanAm Games venues (will) attract visitors.
Pedestrian activity around the residential area is mainly day-to-day trips to/from main streets and local destinations. UTSC students generate much of the walking activity to/from/around the campus.

traffic signs
Improve highway signing at Morningside Ave. exit from Highway 401
Improve local traffic signing at key intersections

local area maps
Incorporate wayfinding maps in UTSC totems
Incorporate wayfinding maps in bus shelters

Estimated number of signs
b
Narrow Map Totem: 1
d
Directional (blade x 4): 4
e
Interpretative (totem): 1
Others (bus shelters): 10

2.11 System look & feel

The illustrative designs reflects key features that require further development in Phase Two.
The example shows a narrow map totem located outside St Lawrence Market. At this point, users approaching from the downtown core are likely to continue their trip by exploring around the Distillery District, Old Town Toronto or the Waterfront (East Bayfront). Users approaching from opposite directions are likely to be after information on nearest subway/streetcar stops and links to Union Station, the Financial District, St James Park or Yonge St.

This type of sign is intended to be placed perpendicular to the pedestrian flows but not to obstruct movement. This also prevents users who may be looking at the map from becoming obstructions for passing pedestrians.
The example shows the west-face of the totem, where the heads-up maps are oriented with east on top and north to the left. The design is illustrative, meaning that it is not intended to represent the final design solution—which is to be developed and evaluated in Phase Two— but to demonstrate the key information features contained within the strategy.

District and place name
Provides confirmation of location name.

Local area map
The local area map displays the immediate surroundings on a detailed cartographic base identifying walk-related details such as sidewalks, paths through green areas, and features that may influence accessibility such as steps and/or ramps. It includes city and local landmarks, destinations, and transit stops.

QR codes and/or RFID tags
The inclusion of visible and non-visible information devices can enhance the user experience. QR codes could link smart phones to expanded site-related content. RFID tags and other technology such as Wi-Fi or NFC, can enable locational based services to aid accessibility for the visually impaired and deliver user-specific content (i.e. multi-lingual)

System identification
Make the totem visible from a distance and identifiable as part of the information system.

Strategic and local area directions Provide directions to few key nearby attractions and districts. Incorporates walking distances in metres and average walking times.

Context map
Displays a simplified street grid and landmarks in the wider area to provide context orientation. It improves user understanding of the wider area and supports the creation of mental mapping.

BIA/City customization A modular panel provides an opportunity for City or BIA branding. The location is not suitable for detailed information. Customization of the product through the use of materials and finishes could also be considered to tailor the signs to different types of local environments.

2.12 Traffic signs

Consistent application of the core wayfinding principles to highway information and directional signage is essential to enable a seamless transition from car to pedestrian.

The primary focus of the Toronto Wayfinding Strategy is on pedestrians. However, as all car drivers are pedestrians at some stage of their journey, it is essential that consistency is achieved across traffic and pedestrian signage systems – particularly in relation to the naming of areas and major destinations. Current traffic signage in Toronto, and especially signage for vistor attractions is often fragmented and inconsistent. Continuity of signage from the initial appearance of a destination on a sign to arrival at the destination is rarely achieved. The lack of general area signing in the city combined with an outdated directional road signage policy frequently results in information overload or gaps. To address the above issues, the project team undertook a fundamental review of Toronto's visitor destination traffic signage policy and on-street implementation.
Recommendations on areas of improvement are included at the end of this short section.

Background
Within the city of Toronto's boundaries, roads are governed either by the City or by Ontario's Ministry of Transportation. The latter owns the entire 400-series highways, including highways 400, 401, 404, 427 and Queen Elizabeth Way. There are five other expressways* that are maintained by the City of Toronto via Toronto Transportation Services. These are: Allen Road, Don Valley Parkway, Gardiner Expressway, Ontario Highway 27 and Ontario Highway 2A.

* One of the following five classifications has been assigned to every City owned street:
- Local road
- Collector road
- Minor arterial road
- Major arterial road
- Expressway

For the purposes of this report, the terms "expressway" and "highway" refer to the highest-grade road type intended for high-speed traffic with access ramps and lane dividers.

Current policies
At a municipal level, the City of Toronto regulates the implementation of identification and directional signs for communities, commercial and tourist destinations through the Identification and Directional Road Signage Policy (2003), which covers five types of signs:
- Identification Signing for neighbourhoods and communities;
- Neighbourhood/Community Signing ("Welcome To Our Neighbourhood");

- Service Group Signing for non-profit organizations (community centres, local sports and recreation);
- Directional Destination Signs for commercial establishments with a desire to have signs strategically located on the road network; and
- Commercial Identification and Directional Signs for a variety of venues (hotels, large restaurants, games/recreation facilities, etc.).

Toronto's current policy limits directional signage on road rights-of-way –either at exit ramps from expressways or on arterial roads– to venues that are government owned or sponsored, are unique to the City of Toronto and have a minimum annual attendance of 40,000 persons.
At a provincial level, two policies are of interest:

- The Ontario Traffic Manual (OTM) provides sign design and location guidance for signs on the provincial road network, it is also acknowledged as a design reference for the implementation of municipal signing.
- Tourism Oriented Destination Signage (TODS) is a private operated program that gives tourist operators an opportunity to apply for directional signs on the 400 series highways. TODS are not applicable within the boundaries of Toronto, irrespective of road ownership.

Existing conditions
Drivers who are unfamiliar with the city are unlikely to know whether they are on a provincial- or municipal-owned road. The OTM standard directional signage is consistently applied to both networks.
Directions on expressways are predominantly corridor names related to exits. Adjacent road names (with no exit) are also displayed as points of reference. Directions to other cities (e.g. Hamilton, Vaughan) inform on general direction of travel. Toronto's area or neighbourhood names are largely absent on directional signs. Only a handful of destinations, such Pearson Airport and Niagara Falls, are fully trail-blazed.
Directions to a limited number of visitor attractions appear on expressways and arterials, although these are not integrated within the main road signing. The following pages discuss some of the observed issues in more detail.

Image: Road Ownership in Toronto

2.13 Existing conditions

Current traffic signage delivers at a graphic and content level for users with a good knowledge of the city. Challenges occur where directions to specific tourist or commercial destinations or areas/neighbourhoods are required.

The Ontario Traffic Manual signage principles and standards are largely applied to highways across the Toronto area regardless of ownership. Directional signs often refer only to street names.

Directional signs for specific destinations often incorporate logos or symbols. Size, location and layout are inconsistent. Destinations are occasionally grouped on cluster signs at a single exit.

Neighbourhood identification signs range from customized signs on poles, to landscaped signing and less formal urban interventions. Generally located at access points.

Street names plates are predictably located at intersections. The City's new street name plates cater to drivers and pedestrians. Trailblazer signs help drivers locate highway ramps.

Off-road public parking the P symbol provides an opportunity to standardize parking signing in a clear and simple manner and could be incorporated within directional highway signs.

Route analysis
An analysis of a route from Pearson Airport to the Art Gallery of Ontario (AGO) illustrates some recurrent directional traffic signage issues.

Hwy 427 heading South: Advance exit sign for Gardiner Expwy
1. General directions to toronto downtown - Heading south on Hwy 427, drivers need to follow directions to the Gardiner Expwy. Knowing that the Gardiner Expwy is the gateway to downtown Toronto is not obvious for unfamiliar drivers.

Hwy 427 heading South: Exit sign for Gardiner Expwy / Toronto
2. Route markers / redundancy of sign - On the Hwy 427 exit sign, the word 'Toronto' is incorporated but the Gardiner Expwy route marker is not included. It is worth noting that the small pole sign on the right repeats the QEW Hamilton exit information.

Gardiner Expwy: No confirmation signs after joining (12km to Spadina Ave)
3. Confirmation of h'way names and direction of travel - No confirmation is provided on joining the Gardiner. Long stretches of road with no major decision points may provide an opportunity to communicate advance information on key city destinations/exits.

Gardiner/Park Lawn Rd: Confirmation for Gardiner, no directions (8km to Spadina Ave)
4. Exit information context - Successive turn-off signs for Lake Shore Blvd can be found, often with no supporting geographic reference to help drivers understand where on Lake Shore Blvd the exit is, or where such an exit leads.

Gardiner Expwy heading East/Jameson Ave: Advance info. for Spadina Ave (3 km)

5. Advance information context - Advance information is provided as corridor names only. This advance information sign is of limited value to visitors unaware that Spadina Ave. is the exit for AGO/other destinations to the west of the city centre.

Chinatown exit sign (Spadina Ave exit)
ROM and AGO exit sign (Spadina Ave exit)
6. Attraction turn-off signs - Sign and font size are smaller than other signs on the Gardiner, nonetheless these signs provide key information for people looking for specific destinations. The signs do not name the exit but imply that it is the next exit on the right.

Gardiner Expwy heading East: Exit sign for Spadina Ave
7. Understanding exits - Two signs are installed at the exit –advance information on subsequent downtown exits and the exit sign for Spadina Ave. It is not obvious how these signs relate to the blue directional signs that appear before.

Off-ramp left turn for Spadina Ave North (no confirmation or street name signs)
8. Continuity - There is an obligatory left turn at the foot of the exit ramp from the Gardiner but no confirmation that this turn will take drivers onto/towards Spadina Ave; a blue sign intended for drivers arriving from Lake Shore Blvd is visible, generating a confusing message.

2.14 Hierarchy and criteria

The Wayfinding Strategy proposes the development and application of a consistent naming hierarchy that will require further refinement for application to traffic signs.

Pedestrian signs can communicate multiple layers of information simultaneously without the loss of clarity – including the use of maps and interpretative content – while highway signs only allow for a limited number of words and messages. Information priorities for drivers are also different from pedestrians, as are issues related to reading time and safety.

However, a fundamental need remains for names to be used consistently regardless of mode to support interpretation and to aid the creation of peoples' mental maps.

Toronto's current road signs include city, corridor and main street names, but area and neighbourhood names are largely absent. Places of interest are also included on road signs; however, the selection and application of these destinations to signs are inconsistent resulting in signs, particularly in the downtown core, often being overloaded with information.

Given the density of places of interest across the city, a more appropriate set of selection criteria is required to distinguish what destinations should feature on which road signs.

The Wayfinding Strategy naming hierarchy works on two levels: strategically from city, area, corridor to neighbourhoods and streets, and secondly for places of interest that are divided across four tiers.

Wayfinding Strategy Naming Hierarchy
City
Areas
Corridors
Neighbourhoods
Main streets
tier 1: city-wide landmarks
tier 2: district attractions
tier 3: generic
tier 4: detailed

Highway Signage
The density of information (words) per sign is restricted due to safety and reading time constraints
Sign design is governed by national and provincial policy –new solutions require consistency with existing regulations
The use of conventions such as colour, units and icons is regulated and forms part of an official code for national and international drivers
A limited number of route options underpins the delivery of information as a predictable sequence (advance, turn-off, identification/confirmation)

Pedestrian Wayfinding
A single sign structure can contain multiple layers of information (e.g. totems may incorporate place names, directions and maps)
Flexibility in sign product design as it is not prescribed by policy
Opportunity to create localized conventions to meet with specific walking needs (e.g. distances shown in meters/minutes)
Unpredictable start/end points and an unlimited number of route options requires repeat information at regular intervals

Potential eligibility
International best practice typically recommends two broad groups of destinations for potential inclusion on highway signs: non-commercial destinations and commercial destinations.
In London UK (on Transport for London's highway network), a non-commercial destination is defined as "a permanently established attraction or facility which attracts, or is used by, visitors to an area and is open to the public without prior booking during its normal opening hours for at least 120 days per annum".

Commercial destinations may include large retail centres, sports stadia and other commercial destinations that play a major role in the city.

Potential selection criteria

Potentially eligible destinations then have to comply with additional criteria for inclusion on highway signs.

Toronto's current policy along with reviewed international examples, largely base this selection on visitor numbers per annum. In Toronto the figure is fixed for all types of roads/venues at 40,000 visitors per annum and gives no consideration to the density of visitor attractions. In cities like London UK, the number varies by road and destination type (commercial destinations are treated separately as most of them will easily exceed the minimum annual visitor numbers) and further eligibility criteria apply where there is a high density of destinations in any given area.

Signing criteria for commercial and non-commercial destinations in London also consider destination type, number of off-road parking spaces available, other signs in the area, Public Transport Accessibility Levels (PTAL), one-off or new visitor figures, marketing & information evidence, specialist attraction quality, among other considerations.

In Toronto, the current policy limits directional signing on road rights-of-way to venues that are government owned or sponsored, and are unique to the City of Toronto.

While the Wayfinding Strategy's Places of Interest hierarchy (Tiers 1 to 4) will inform eligibility for inclusion on highway signs, development of further criteria will be required that take account of the considerations detailed above.

The diagram below illustrates a multi-level selection process for the inclusion of places of interest on different types of roads.

Places of interest Hierarchy

Tier 1: City-wide landmarks: The CN Tower, landmark museums, parks, sport venues, retail signage eligibility: Expressways. Selection criteria for major arterial roads

Tier 2: District attractions: Major cultural, educational, leisure, historic, heritage, character areas, hotels signage eligibility: major arterial roads, minor arterial roads. Selection criteria for expressways.

Tier 3: Generic: Public parking, washrooms, transit stops, local libraries, schools, places of worship signage eligibility: minor arterial roads, collector roads, local roads. Selection criteria for major arterial roads.

Tier 4: Detailed: Shop-to-shop index, restaurants, shops, venues signage eligibility: local roads. Selection criteria for collector roads.

Use of other communication channels

Commercial and non-commercial destinations should not rely solely on road signs to direct people to the venue: use of other communication channels such as websites, and printed literature should form a core element of trip planning.

Many of Toronto's major attractions already provide driving directions and parking information alongside public transportation options via digital maps and downloadable guides on their websites.
Where visitor directional highway signage is required, it should typically only be necessary towards the end of a journey with drivers being advised to use general strategic signage for the majority of their trip.

2.15 Design strategies

Traffic sign design is governed by national and provincial policy. New design strategies, as illustrated in the examples below, will require consistentcy with existing regulations.

Area naming

High level naming strategy for city areas in relation to exits and general area destinations.
Advance information signs to include selected destinations under same area name, reducing signage overload at turn-off/exit points, which are critical for safe maneuver.

Numbered exits

Define and include numbers for exit approach and turn-off signs. These can be easily referenced elsewhere and identified by a distinctive colour.

Destination colour

Apply a single distinctive colour for attractions to be applied as patches to existing signs.

2.16 Recommendations

Stakeholder engagement and development of an updated Traffic Signage Policy document will be required to translate the recommendations into an agreed and implementable design solution.

Recommendations

- Develop an area naming strategy for city districts that is consistent with the pedestrian wayfinding strategy but tailored to a highway scale;
- Develop selection criteria for destinations based on road hierarchy/ destination hierarchy/ visitor numbers etc. to remove subjectivity and provide a more appropriate, consistent and balanced selection of signed destinations across the city's roads;
- Ensure guidance on placement/ route continuity etc. is applied consistently in practice. Destination continuity should be maintained from the point where the first sign appears until the visitor reaches the destination;
- Consider the use of variable messaging signs to provide information about exceptional temporary events, parking, disruptions, and emergencies; and

- Retain current restrictions related to the implementation of Ontario's TODS program in Toronto.

Recommendations on policy document update

The current identification and directional road signage policies are fragmented, and the level of guidance they contain is inconsistent across different types of visitor attractions.

It is recommended that the updated identification and directional road signage policies be consolidated into a single and easy-to-use reference document that sets out Toronto's strategic approach to traffic signage for the city's key areas and destinations including:

- A fully updated Directional Road Signage Policy to provide clear policy guidance on the use of directional traffic signs for tourist and commercial visitor destinations including eligibility criteria;
- A fully updated Identification Road Signage Policy for neighbourhoods and communities that includes eligibility criteria; and
- Sign Design Standards that deal with design and locational requirements for all sign types covered by the policies above, incorporating updated guidance on sign location and impact on the public realm.

3. Delivery

City-wide delivery of the wayfinding system requires long-term commitment from the City, a coordinated multi-agency effort and over $8M in capital raised from funders and partners. For every dollar invested, the City can expect between 90 cents and $2.40 of transportation benefits in return.

3.1 Implementation plan

The delivery of the wayfinding system is organized as three phases: strategy, pilot and city roll-out. Only a continuous injection of funding alongside political and stakeholder support will allow these phases to seamlessly overlap.

Phase One (strategy)

Phase One, described in this document, consisted of the preparation of a strategy, definition of design parameters and awareness raising of the program among stakeholders. It included activities such as desktop research, on-site observation and stakeholder engagement leading to the proposed Toronto Wayfinding 360 Strategy framework. This report, alongside the full Outline Business Case document and a Staff Report with recommendations is due to be presented to the City Council in fall 2012.

Phase Two (Pilot)

Phase Two will include the preparation, delivery and evaluation of a fully implemented wayfinding solution in (tentatively) two Pilot Areas (PA). Cost assumptions included within the Outline Business Case are based on two case study areas, East Downtown and Morningside.

The pilot implementation will allow for a comprehensive evaluation, including PERS*, such that the evaluation parameters listed in the Outline Business Case can be verified or updated, resulting in a more robust business case for potential funders. Pre- and post-implementation on-site surveys in normal conditions (tentatively two consecutive Septembers, 2013 and 2014), form part of this evaluation.
Signs are proposed to be implemented before summer 2014 to allow residents and visitors to become familiar with the system in anticipation of the post-implementation surveys. Additional pilot areas may be implemented in parallel, however these are not expected to become part of the evaluation.
Design activities leading to pilot implementation include detailed graphic design, detailed product design, cartography, and user tests and prototyping. Post-implementation lessons will inform the final system guidelines that are recommended to incorporate graphic and product specifications, alongside process delivery toolkits.
A back-office map asset platform will be developed at an early stage so that the graphical database can be made available as an asset for the City to use on the wayfinding strategy and other initiatives. This will also mean that the digital strategy can be implemented at the earliest possible opportunity.

Phase Three (city roll-out)
Phase Three involves the city wide roll-out of the wayfinding system infrastructure, expected to commence by 2016. This includes the development of wayfinding system design guidelines to be provided to potential partners ensuring a systematic and consistent approach is adopted with minimal input required from the City.
Phase Three includes an allowance for localized consultation prior to the wayfinding structures being installed. There is no allowance for further PERS assessments in this phase.

Digital Strategy
While the Digital Strategy does not form a costed component of the wayfinding strategy, it is assumed that partnership with the private sector for its delivery component would mean that mobile applications and internet platforms can be rolled out at minimal additional cost, with potential revenue streams contributing back the project. The City would allow access to the back-office map asset* in return for digital wayfinding apps (front-end). An evaluation of digital platforms would ensure that digital wayfinding systems meet with the overall project objectives and are in keeping with the system philosophy.

Highway Strategy
Highway signing should form an integral part of any fully integrated wayfinding strategy for Toronto. The current study reviewed Toronto’s identification and directional road signage and recommends that consistent terminology for the city’s areas and places of interest should be included on traffic signs to simplify navigation from highways to destinations and thereby integrate with future on-

street pedestrian signage. However, the upgrade of these signs is not costed for within the Outline Business Case.
It is further recommended that the commercial and non-commercial visitor destination selection criteria and policy documentation is revised as part of Phase Two. The aim of this will be to update highway signage policy (including hierarchy and contents of signs) in consultation with relevant City and Provincial stakeholders and to identify additional opportunities for an improved integration of traffic signage with the pedestrian wayfinding system.

* Pedestrian Environment Review System (PERS) is a software application to assess the quality of any pedestrian environment developed by Transport for London and Transport Research Laboratory (TRL).
PERS can assist in the identification of opportunities to improve pedestrian walking routes and public spaces, while supporting the effective targeting of resources.
A street audit process such as PERS could be used as part of the Phase Two pilot area implementation evaluation.
delivery

* It is recommended that the City merges the various map data streams into a single back-office map platform. Asset data should be compiled in a GIS over a highly-detailed cartographic base, with polygon, line and point elements, depicting curb lines, building rooftops, paths across parks and other detail relevant at pedestrian level. Information on places of interest, attractions and features should be organized by tiers (see page 30).
Operational information could also to be stored in address point format to feed into digital apps. All information in the dataset should be dynamic and flexible to accommodate new information and updates.
Community inputs and open source data could also be incorporated and should be managed appropriately to ensure reliability.

3.2 Outline business case

The outline business case sets out the costs and benefits of a city-wide wayfinding system, providing relevant information to inform the City's decision on whether to proceed with a pilot implementation and a subsequent full roll-out of the strategy.

The Wayfinding System Strategy builds on The City's Walking Strategy published in 2009, which aimed to unify multi-modal wayfinding systems requested by city businesses, cultural and sports institutions, residents, commuters and tourists. The project is also timely as the 2015 Pan-American Games will attract significant media attention and visitors to Toronto.

An outline business case sets out the costs and benefits of a city-wide wayfinding system, providing the City with relevant information to inform their decision on

whether to proceed with the pilot implementation and a subsequent full roll-out of the strategy.

A wayfinding pilot strategy has been developed for two areas and is expected to cost around $0.8m including consultation, implementation and evaluation costs. The full roll-out of the wayfinding system is estimated at $7.2 million, giving a total capital cost of approximately $8m. It is recommended that an annual allowance of 10-15% of the ongoing capital investment is required to maintain and renew the wayfinding system, excluding any potential additional City staff costs.

An improved wayfinding system is expected to deliver the following key benefits:

- Increase visitors at key attractions, spending in the Greater Toronto Area, boost the local economy and enhance the overall image of Toronto as a destination;
- Reduce walk times, increase confidence to walk, promote multi-modal transit and reduce reliance on private auto; and
- Improve urban realm, sense of community, pedestrian safety, public health and environment.

The multiple account evaluation (MAE) documented in the Outline Business Case report (see Wayfinding Outline Business Case, Final Report, May 2012) shows that the wayfinding system has the potential to deliver wide-ranging benefits across the transportation, environment, economic development, urban realm and social community accounts.

There is limited evidence to support the quantification of wayfinding benefits, however, informed by findings from the Legible London* post-pilot survey, high level analysis showed that, over a 25 year evaluation period, the transportation benefits (through shorter perceived journey times) alone are expected to outweigh the costs, with a benefit-cost ratio estimated to be in the range of 0.9:1 and 2.4:1.

This means that for every dollar invested, the City can expect between 90 cents and $2.40 of transportation benefits in return.

Furthermore, to illustrate the possible affect on tourism and the economy, a 0.5% increase in visitors through lengthened/overnight stays or repeated visits in the GTA could result in around $50m per annum in tax revenues.
The MAE has excluded the costs and benefits of a digital strategy implementation, which is expected to be funded through private sector partnership; and a highway strategy, which would enable a complete and continuous wayfinding experience for all modes, including automobile users. It is strongly recommended that a digital and a highway strategy are implemented to maximize the opportunities and benefits of the wayfinding strategy.

Funding of the wayfinding system has yet to be agreed on and a range of funders and partners has been identified. The nature of the benefits are such that the wayfinding strategy should appeal to many organizations, particularly transit agencies, tourism agencies, 2015 Pan-American Games, Business Improvement Associations, cultural and heritage institutes, developers, development agencies. There is also a significant opportunity for the City to roll-out the wayfinding system through influencing other ongoing or planned construction works, utilizing existing infrastructure or potentially changing existing wayfinding requirements for developers.

Post-implementation evaluation of the pilot areas should be used to confirm the benefits and costs of the wayfinding strategy and to strengthen discussions with potential funders and partners.

* Legible London is a pedestrian wayfinding system that's helping people walk around London, UK. Based on extensive research, the easy-to-use system presents information in a range of ways, including on maps and signs, to help people find their way. The impacts of the system were comprehensively measured for a number of pilot areas.
delivery

Phase One
Wayfinding strategy development and conceptual design
Focus of Business Case
- Evidence to inform the City's decision to take the Wayfinding project to
- Consider potential funding sources

Technical Approach
- High level analysis based on international experience, professional judgement

Phase Two
Detailed design, pilot implementation and pilot evaluation
Focus of Business Case
- Evidence to confirm (or update) the performance of the pilot against objectives
- Support a more targeted approach towards negotiating potential funding sources

Technical Approach
- Detailed cost estimates based on actual costs of pilot area
- Surveys with users to evaluate the impacts of the pilot areas
- Interviews with potential investors

Phase Three
Full implementation/roll-out
Focus of Business Case

- Evidence to confirm the performance of the pilot against objectives
- Support future expansion of the wayfinding system

Technical Approach

- Interviews with users and investors to identify lessons learnt as the roll-out takes place in stages

3.3 Funding options

This section of the report covers funding and delivery considerations for the wayfinding strategy going forward beyond Phase One, which is currently funded by the City of Toronto.

Funding for Phases Two and Three of the project has yet to be identified. Therefore, the focus of the wayfinding strategy Outline Business Case (OBC) is to realistically assess the costs and benefits of the project going forward to enable the City to make an informed decision on whether to proceed with Phase Two and identify where funding opportunities exist.

Possible Funding Models

At this stage, the primary purpose of the OBC is to identify potential funders. No discussions with potential funders has taken place as part of this work, but as the pilot areas are evaluated and the OBC is updated, one or more business cases for fully implementing the wayfinding strategy across Toronto will need to be targeted towards specific potential funders.

Some of the common funding models include:

- Self-funding (via local authority/ other government agencies);
- Funding through advertising contracts implemented on other city (non-wayfinding) sites (i.e. highways, transit environments);
- Delivery partnerships with BIAs and other business associations;
- Delivery partnerships with transportation agencies; and
- Developer contributions.

It is recommended that the City should either directly or indirectly manage the delivery of the wayfinding. This means liaising and negotiating with funders and partners to achieve the goals and objectives of the wayfinding strategy.
It is also important for the credibility of the system to the public and businesses that it is seen as impartial.

Recommended Funding Strategy

If the City decides, in principle, to proceed with the wayfinding project, funding will need to be sought for Phases Two and Three. The estimated capital costs of approximately $8m do not reflect potential ways of cost sharing through partnerships or any cost savings opportunities.

An important component of the strategy is to understand the benefits specific funders would expect to gain from wayfinding and pitching those benefits to them accordingly. The figure below illustrates how this could be done.

Image of chart

Potential Funders and Partners

There are three main ways that organizations can get involved in the project:

- Organizations that solely provide financial support to the project (Funders);
- Organizations that provide financial support as well as becoming partners (Primary Partners); and
- Organizations that allow wayfinding infrastructure to be placed on their property (Secondary Partners).

At this point it is only possible to speculate on who may be interested in becoming funders and/or partners for the wayfinding project's implementation. The approach adopted in the OBC involves understanding the benefits of wayfinding and mapping these to a long list of potential funders who are likely to focus on specific benefits of the project.

Potential Funders

Funders are those who generally provide financial grants to projects that meet the objectives of their organization but typically do not take part in the delivery aspects of the project.

Potential funders may include: Metrolinx; Government of Ontario; and P3 Canada Fund.

Potential Partners

Partners of the project can be primary/active or secondary/passive in nature. A primary partner could provide financial contribution for the infrastructure. They would typically provide property access. A secondary partner may only agree in-principle property access but will not provide any financial support.
Partners are likely to be the largest group of potential funders as the wayfinding project directly affects their business or residents.

Funding of Wayfinding Elements

It is recommended that the various wayfinding infrastructure elements are funded by those who would gain from them most. This can improve transparency and foster ownership of the system at a local level and have some influence over where the infrastructure is placed while being compliant with the wayfinding strategy.

The table below sets out how various infrastructure elements could be linked to potential funders. While this suggests that funders would support elements most

relevant to them, in reality this will be more fluid and some cross-subsidy would be expected given that the totality of the wayfinding system is more valuable than the sum of all individual parts.

List of Infrastructure Elements and Potential Funders/Partners
Context totem(area and gateway):Tourism agencies, transit agencies, other agencies
Narrow map totem: Tourism agencies, other agencies
Corridor/area Pillars (retrofitting existing InfoPillars and new pillars):BIAs, major attractions, major land owners, 2015 Pan Am Games, Planning Act Section 37 agreements
Directional (Self-post/blade): City of Toronto, transit agencies, Planning Act Section 37 agreements
Destination/interpretative (Totem/wall mounted): Heritage and cultural institutions, Planning Act Section 37 agreements
Bus shelter panels: Transit agencies

Potential partners may include:
Tourism Toronto (Toronto Convention & Visitors Association);
Business Improvement Area (BIA) associations/TABIA;
Greater Toronto Hotel Association;
Transit agencies, including TTC and BIXI;
PATH - Toronto's downtown walkway;
Toronto 2015 Pan Am Games ;
Federal Economic Development Agency for Southern Ontario (FedDev Ontario)/SODA;
Private sector partnership through Section 37 of the Planning Act;
Toronto Parking Authority;
Major commercial and leisure owners/destinations;
Communications giant (sponsoring cloud technology);
Cultural and heritage institutions;
Neighbourhood Associations; and
Development associations, e.g. Build Toronto, Invest Toronto.

3.4 Opportunities for the City

There are a number of ways in which the City can contribute towards the implementation of a predictable and consistent wayfinding system across Toronto.

The City currently has a budget for maintaining signage. Part of this budget could be reallocated towards certain components of the strategy, for example the self-post and blade directional wayfinding elements.

Should the City decide to update their traffic sign policies to provide stricter criteria and better integration with the wayfinding strategy as described/recommended in Section 2.16, this should be undertaken in

consultation with City and Provincial stakeholders and be informed by the wayfinding guideline document to be produced as part of Phase Two.

The City could also use existing powers to leverage infrastructure enhancements from private developers. For example, the Section 37 by-law could be exercised under the Planning Act to require large developers to contribute funding for wayfinding within the area of the development and/or access to their property for wayfinding. Part of the contribution could potentially be retained to support longer-term wayfinding maintenance and renewals.

The City could additionally work with major public sector organizations (such as hospitals, schools, leisure centres) to form partnerships that encourage compliance with the wayfinding strategy requirements and support a gradual, phased implementation. The organizations would have more control over signage content and location while remaining consistent with the wider city strategy.

While the City is not considering advertisement as a component of the wayfinding infrastructure, they may consider opportunities for cross-funding through provision of advertising space at strategic locations on City-owned property where it would not impact negatively on the urban environment. This approach could provide a valuable revenue stream to contribute towards the ongoing maintenance of wayfinding structures.

Finally, if the project does gain approval, the City will have a crucial role in building support across the broad stakeholder community and in particular, with those partners or agencies who may have an interest or role in implementing the strategy.

Appendix

Stakeholder Consultation: Workshop, Interview, and Open House Attendants

Canadian Automobile Association (CAA)
Canadian Opera
Chinatown BIA
City of Toronto (BIA Office; Economic Development; Transportation; City Planning)
CivicAction
CNIB
Downtown Yonge BIA
Dundas West BIA
Emerging Leaders Network
Entertainment District BIA
Financial District BIA

Gardiner Museum
Go Transit
Greek Town BIA
Kensington Market BIA
Liberty Village BIA
Maple Leaf Sports and Entertainment (MLSE)
Metrolinx
Ministry of Tourism & Culture - Regional Tourism Unit
Ministry of Tourism & Culture–Tourism Policy & Research Branch
National Ballet of Canada
Ontario Science Centre
Ontario Walks/Toronto Walks
Pan/Parapan Am Games Secretariat –Province
PanAm Games 2015
Parkdale Village BIA
Queen Street West BIA
Registered Graphic Designers of Ontario
Rogers Centre
ROM
Ryerson University
Sense Lab
Spacing Magazine
St Lawrence Market BIA
St. Lawrence Neighbourhood Association
Toronto Association of Business Improvement Areas (TABIA)
Toronto Centre for Active Transportation (TCAT)
Toronto International Film Festival (TIFF)
Toronto and Region Conservation Authority (TRCA)
Toronto Bruce Trail Association
Toronto Community Foundation
Toronto Cyclist Union
Toronto Parking Authority
Toronto Port Authority
Toronto Seniors Forum
Toronto Transit Commission (TTC)
Toronto Youth Cabinet
TorontoPedia
Tourism Toronto
University of Toronto

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