Toronto Wayfinding Strategy - Valuing the Benefits

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UNDERSTANDING WAYFINDING

What is wayfinding?

A wayfinding system makes streets, neighbourhoods and the city more “legible”, helping people find their way. Wayfinding is more than signs and comprises:

• Signs
• Names
• Maps
• Lighting
• Street furniture
• Urban realm
• Public art
• New technology (mobile/ websites)
UNDERSTANDING WAYFINDING

Objectives of city wayfinding & signing:

- Identify and connect places
- Build confidence and trust to walk
- Reduce reliance on the car/public transport
- Stimulate economic growth
- Reassure and encourage exploration/wandering/discovery
The proposed Toronto 360° Wayfinding Strategy themes and principles emerged from the project’s three main activities:

**STRATEGY INPUTS**

- **OBSERVATION**
  - General audits
  - Case study areas
  - Existing wayfinding
  - Streescape

- **CONSULTATION**
  - Interviews
  - Meetings
  - Workshop
  - Open House (due)

- **RESEARCH**
  - Policy and guidelines
  - Best practice review
  - International experiences
OBSERVATION › OPPORTUNITIES

**ORIENTATION**
CN Tower and the downtown high rises are conveniently situated at the southern edge of the city and provide intuitive wayfinding references.

**LANDMARKS**
Toronto has many civic and cultural buildings with bold and recognizable architectural features.

**STREET GRID**
Toronto is fortunate to be based on a grid that is almost exactly aligned N.S.E.W. Streets are generally well labelled.

**NEIGHBOURHOODS**
The cultural heritage of neighbourhoods and formal BIA initiatives have also shaped the urban fabric, making many places in Toronto instantly recognizable.
CONTINUITY
Multi-modal Wayfinding in Toronto, other than street names, is sporadic and fragmented – it does not operate as a system or a network.

CONSISTENCY
Material, appearance, content and location of signage lacks consistency. Existing structures in the right-of-way do not harmonize with their surroundings.

CONNECTIVITY
Most systems provide point specific information, and fail to include context information related to the immediate surroundings.

ACCESSIBILITY
A combination of location, height, reading angle and material often compromise legibility.
The Toronto 360° Wayfinding Strategy final 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.

The study aimed to establish robust foundations for the development and delivery of a high-quality wayfinding system for Toronto.
WAYFINDING STRATEGY › THEMES

**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 ability to adapt 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

**BEING LOCAL**

Celebrating and promoting the city and its districts. Empowering community participation and input.

- Landmarks
- Local character
- Historic names
- Placemaking
**SYSTEM COMPONENTS**

**SUMMARY**

**Signage**

- **Gateway Totem**
  - At gateways such as transit exits
- **Context Totem**
  - At or near major places of interest (Tier 3)
  - At significant areas of each district
- **Narrow Map Totem**
  - At or near significant places of interest of each district
  - At transit exits
- **Main St/BIA Pillars**
  - Along retail clusters and main streets (not at decision points)
  - At or near significant places of interest of each district
- **Directional**
  - At intersections of key pedestrian routes and decision points
  - At shared pedestrian/cycling routes
- **Interpretative**
  - At significant historic and heritage buildings and sites

**Digital**

- **Mobile Apps**
  - On internet-enabled mobile devices
  - Enhanced by features such as compass and location-based services
  - Multi-platform

**Printed**

- **Local Area Maps**
  - At mode transition points: Bus/Streetcar shelters, Transit stations, PATH, Bixi, Parking lots and others
- **Pockets Maps**
  - At visitor welcome and entry points to the city (e.g. airports, hotel concierge, convention centres)

**Traffic Signs**

- **Current Policy**
  - Ontario Traffic Manual (OTM)
  - City of Toronto: Identification and Directional Road Signage Policy (IDRSP)

**Urban Design**

- Improve connections, create new legible routes, improve quality of place, and encourage walking and exploring the city
NEXT STEPS › PHASE TWO (PILOT) AND THREE

Phase Two moves the strategy into implementation and is designed to be in place in advance of the 2015 Pan /ParaPan Am Games.

The **DOWNTOWN CORE** is the suggested area for the proposed Phase Two pilot implementation project.

Phase Two evaluation results will verify and update the OBC and more accurately convey the costs and benefits to potential funders of Phase Three - city wide roll-out which is expected to commence by 2016.
NEXT STEPS › INDICATIVE IMPLEMENTATION PLAN

**PHASE ONE**
- Strategy development
- Report to City Council

**City Council approval**

**PHASE TWO**
- Detailed Graphic/Product design
- PA Evaluation (pre/post)
- Design testing and prototype
- Stakeholder consultation (PA and global)
- PA Sign manufacture and installation
- Map asset platform (back office)
- Highway signage strategy

**Map back-office**

**Pre/Post Evaluations**

**PHASE THREE**
- System design guidelines
- Stakeholder consultation (local area)
- Artwork output and management platform
- Manufacture and installation begin

**Digital Strategy**

**Highway Strategy**

**Web/mobile App (generic)**

**App evaluation**

**Highway/Traffic sign design**

**Pilot, Ev., Roll**
The Outline Business Case (OBC) report 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 subsequent full roll-out of the strategy.
The role of the business case in each project phase

<table>
<thead>
<tr>
<th>PROJECT PHASE</th>
<th>FOCUS OF BUSINESS CASE</th>
<th>TECHNICAL APPROACH</th>
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<tr>
<td><strong>PHASE ONE</strong></td>
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| Wayfinding strategy development and conceptual design | • Evidence to inform the City’s decision to take the Wayfinding project to Phase Two  
• Consideration of potential funding sources | • High level analysis based on international experience, professional judgement |
| **PHASE TWO** |                        |                    |
| Detailed design, pilot implementation and pilot evaluation | • Evidence to confirm (or update) the performance of the pilot against objectives  
• Support a more targeted approach towards negotiating potential funding sources | • 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 | • Evidence to confirm the performance of the pilot against objectives  
• Support future expansion of the wayfinding system | • Interviews with users and investors to identify lessons learnt as the roll-out takes place in stages |
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.
- Increase confidence to walk, reduce walk times, promote multi-modal transit and reduce auto use.
- Improve urban realm, sense of community, pedestrian safety, health and environment.
Evaluation framework

- Using Metrolinx Benefits Case Analysis “Accounts” with project specific measures
- Mix of qualitative and quantitative assessments

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<thead>
<tr>
<th>Transportation</th>
<th>Accessibility</th>
<th>Social Community</th>
<th>Financial</th>
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<td></td>
<td>Safety</td>
<td>Community identity</td>
<td>Capital costs</td>
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<td>Journey time savings</td>
<td>Health</td>
<td>Maintenance and renewal costs</td>
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<td>Tourism</td>
<td>Benefit cost ratio</td>
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<td>Environment</td>
<td>Emissions</td>
<td>Economic Development</td>
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<td>Urban Design</td>
<td>Wayfinding design</td>
<td>Financial</td>
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<td>Urban realm</td>
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Journey time savings

- High-Level assumptions for pedestrians
- Evidence based: e.g. Legible London surveys
  - 58% AGREED that the signs encouraged them to explore the area on foot
  - Between 17 AND 40 PEOPLE PER HOUR stopped to use Legible London signs over a 12 hour period
  - “Perceived” walk journey times WAS REDUCED BY 0.46 MINUTES per user on average
  - Proportion of users feeling lost was REDUCED BY 17%
- Further benefits from cycling, highway and digital strategies are additional
### Outline MAE Results

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<thead>
<tr>
<th>Account</th>
<th>Measure</th>
<th>Assessment</th>
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<td>Transportation</td>
<td>Accessibility</td>
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<td></td>
<td>Safety</td>
<td>☑️ ☑️</td>
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<tr>
<td></td>
<td>Journey time savings</td>
<td>$11m - $33m (present values)</td>
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<td></td>
<td>Auto journey time savings</td>
<td>$6m - $13m (present values)</td>
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<tr>
<td>Urban Design</td>
<td>Wayfinding design</td>
<td>☑️ ☑️ ☑️</td>
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<td>Urban realm</td>
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<td>Social Community</td>
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<td>Health benefits</td>
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<td>Economic Development</td>
<td>Tourism</td>
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<td></td>
<td>Business trade</td>
<td>☑️ ☑️ ☑️</td>
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<tr>
<td>Financial</td>
<td>Capital costs</td>
<td>$8m (2012 real prices)</td>
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<td></td>
<td>Maintenance and renewal costs</td>
<td>$830,000 p.a.</td>
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<td></td>
<td>Benefit cost ratio</td>
<td>Between 0.9:1 and 2.4:1</td>
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Assumes 25 year project life cycle. Monetary values in 2012 prices, 5% p.a. discount rate
For every dollar invested the City can expect between 90 cents and $2.40 of transportation benefits in return.

The wayfinding project is expected to deliver significant non-transportation benefits—such as to tourism trade, employment, environment, health and overall quality of life, with all these benefits being over and above those quantified in the BCR.

If one adds these wider benefits to the transport case it suggests that the investment is likely to repay itself through transportation benefits alone.
The full roll-out of the wayfinding system is estimated at $7.2 million, giving a total capital cost of approximately $8M.

A wayfinding pilot strategy has been developed for two pilot areas and is expected to cost around $0.8M including consultation, implementation and evaluation.

An annual allowance of 10 TO 15% of the ongoing capital investment is recommended to maintain and renew the wayfinding system, excluding any potential additional City staff costs.
Digital & highway signage benefits

The MAE excludes the costs/benefits of the digital and highway elements of the strategy

» Implementation of the **DIGITAL STRATEGY** is expected to be funded through private sector partnership

» A **HIGHWAY STRATEGY** would enable a complete and continuous wayfinding experience for all modes, including users of automobile

It is recommended that digital and highway strategies are implemented to maximize the opportunities and benefits of the wayfinding strategy
Further evaluation work

- It is expected that, as part of Phase 2 of the project, a pre/post pilot implementation evaluation would be undertaken.

- Stated Preference (SP) research techniques could be used to quantify how much the public would be, in theory, prepared to pay for improvements.

- Pedestrian surveys can be used to identify any changes in travel behaviour associated with improved wayfinding.

- The business case will be updated with local-specific information.
QUESTIONS?