Toronto Parks & Trails Wayfinding Strategy (Phase Two)

January 2015 Digital Wayfinding Group Meeting Summary

January 28, 2015
Metro Hall – 55 John St Toronto, ON M5V 3C6
Room 313A, 1:00 – 3:30 pm

Overview

On January 28, 2015, the City of Toronto's Parks, Forestry, and Recreation Division hosted the first Digital Wayfinding Group Meeting for Phase Two of the Toronto Parks & Trails Wayfinding Strategy. The purpose of the meeting was to introduce Phase Two of the Strategy and to discuss participants' different uses of technology, how digital wayfinding could enhance their use of Toronto's parks and trails, and what content and services would benefit the system's different potential users.

Over 15 people attended the meeting, including members of the Parks, Forestry, and Recreation Disability Steering Committee, representatives from Parks, Forestry, and Recreation, Toronto Paramedic Services, and Geo-spatial Competency Centre, as well as members of the consultant team (including Steer Davies Gleave and Swerhun Facilitation).

The meeting consisted of welcoming remarks from Janette Harvey, City of Toronto, an overview presentation delivered by James Brown of Steer Davies Gleave, and a plenary discussion.

Yulia Pak and Ian Malczewski of Swerhun Facilitation wrote this Meeting Summary and shared it with participants for review before finalizing it. The purpose of this Summary is to identify key themes and to collect detailed feedback from the meeting; it is not intended as a verbatim transcript.

Key Messages

These Key Messages reflect common themes that emerged in discussions at the meeting. They should be read in concert with the more detailed summary of feedback below.

Toronto's trails and park facilities need to be given names and addresses. The lack of names for trails and addresses for facilities make using digital wayfinding services challenging, since it is difficult to know where you are or what else is around you.

The Digital Wayfinding system should help its users identify both when they are <u>on track</u> as well as they are <u>off track</u>. It's essential to include trail junctures, entrances and exits, washrooms, rest areas, nearest transit stops, and alternate routes.

The Digital Wayfinding system should consider trip planning. Many people with disabilities plan their whole route before leaving home, including transit, so the Digital Wayfinding needs to take a "whole trip" approach to trip planning.

The Wayfinding System, including the Digital Wayfinding System, should accommodate people without smartphones and people who use technology differently. It isn't possible for everyone to own a smartphone, so the system should work with other platforms, too.

Redundancy in the Wayfinding system is necessary. It is important to have landline stations with coordinates still present at the park to allow those without smart phones or without reception to connect with Emergency Services and identify where they are.

Questions of Clarification

At the beginning of the meeting, participants asked Questions of Clarification:

Question 1: Is the current signage visually consistent?

Janette Harvey and James Brown explained that some signage is consistent, but that there are visual differences between different kinds of signs (such as regulatory signs, park entrances, maps, etc). This inconsistency is one of the challenges the Parks and Trails Wayfinding Strategy aims to address.

Question 2: Why did the City choose September to install and test a pilot? It seems the summer would be a better time to do it, when park use is at its highest.

Janette Harvey said that one reason the City chose this time was to ensure consistency in evaluation. The City conducted its pre-installation evaluation in September, so it wants to conduct the post-installation evaluation at the same time. The original plan was install the signs in fall 2015, but due to the complexity of building the PanAm Path, the City delayed the installation by a year. If necessary, the schedule can adjust again.

Question 3: What digital tools do you expect people to use?

Craig Nelson of Steer Davies Gleave said that the tool could include smartphones, iBeacons, or other app-based approaches. He also said that the purpose of the meetings was to learn what tools participants were using.

Detailed Summary of Feedback

Participants discussed three different topics:

- **Current Use of Technology;**
- **Use of Parks and Trails; and**
- **Needs of Different Users of Parks and Trails.**

Current Use of Technology

Participants discussed the technologies, apps, and services they use right now, what they like about them and how they would improve them (if at all).

Participants named a number of different services, including: smartphones and apps (iPhone); Human Trekker Breeze; Google Map; Foursquare; Rocket Man (and other apps

that use NextBus data); Navigon; GuideDots; and BlindSquare. Participants generally liked that these tools made it easier for them to explore the City's parks and trails, though they noted a few limitations, including:

- **Lack of addresses and trail names.** The lack of trail names or addresses in Toronto's parks and trails make it challenging for users to rely on their GPS or other digital systems. These systems categorize most trails as "unnamed streets," making it difficult to understand where you are or where you are going.

- **Reception.** Sometimes, smartphones can lose reception, especially in valleys. This can be a challenge for Emergency Services and for people who primarily rely on cellular technology for wayfinding.

- **Price.** Currently, the best smartphone for digital wayfinding is the iPhone. However, the iPhone (and its data plan) can be very expensive.

- **Out-of-date or out-of-sync data.** The Human Trekker Breeze uses off-line maps, which it downloads from NavTech. The data is not updated frequently and can be unreliable. Some tools (like Navigon) don't tell you where you are in real time, which makes navigation difficult.

- **Disconnected trip planning.** Trip planning is very important, especially to people with visual, auditory, or other challenges. Using multiple complex trip planning apps in combination with numerous data gaps, makes it hard to program in a trip from home to a bus stop to places of interest in a park or trail.

- **Limitations of the technology.** Emergency Services can only pinpoint a smartphone user's location within about 100 metres. Currently EMS cannot identify geo-tagged photographs sent from a GPS-enabled smartphone.

Participants offered several considerations for the team to keep in mind in developing the Digital Wayfinding Strategy, including:

- **Consider using GPS devices instead of smartphones as a primary means for digital wayfinding.** GPS devices have a broader range of prices and are more affordable. Everyone uses smart phones differently: for example, a person who is hard of hearing uses a smartphone differently from a blind person or a senior.

- **The digital wayfinding service should be de-cluttered, simple, and well integrated with public transit services.** Having an app that integrates parks and trails wayfinding with public transit and other city-provided services would allow users to plan the route before leaving a house. An app needs to be de-cluttered, simple and compact with essential information on one page.

- **The Digital Wayfinding Service should be based on consistent and up-to-date mapping.** There should be one continuously updated mapping system with trail names and park facility addresses for all city services, including Toronto Paramedic Services. Some participants suggested using Google maps as a basis.

Others noted that consistency in data collection is a challenge for Google and that licensing Google maps is expensive.

- **It takes time to get used to a new technology.** Give people enough time during the pilot to learn how to use whatever the digital tool is.

- **Consider using Toronto Islands as a pilot site.** The Digital Wayfinding service could point out different facilities, like picnic areas, water fountains (both for humans and dogs), creeks, streams, rest areas, amenities, junctures, transit, distances, playgrounds, municipal addresses for places in parks (or unique identifiers, geotags), beach fronts, and fishing spots.

Use of Parks and Trails

Participants discussed how they currently use parks and trails and shared thoughts on how a Digital Wayfinding Service could improve their experience. Activities participants associated with parks and trails included hiking with kids, going for picnics, or looking for patients (in the case of Emergency Services). Comments on how a Digital Wayfinding Service could improve parks & trails included:

- **Point out different parks and trails facilities.** Participants identified a number of facilities that could be included in the system, including picnic areas, water fountains (both for humans and dogs), creeks, streams, rest areas, washrooms, amenities, junctures, transit, distances, playgrounds, municipal addresses, beach fronts, and fishing spots (on the island).

- **Identify and help navigate around obstacles**, such as trail junctures, exit and entrance points, barriers between the user and entrance/exit points (like a parking lot), transit stops, and alternative routes out of the park.

- **Develop a game that would encourage exploration, where people could get rewards for visiting different places.** Some participants liked this idea and suggested the game could group activities by age since different age groups prefer different activities. Others were concerned that an exploration game could encourage people to go far off track and get lost or hurt.

Participants also offered advice on the physical signage, including:

- **Make sure physical signage is consistent for easy recognition and uses signs understandable to all users**, including people hard of hearing, people with cognitive disabilities, and new Canadians.

- **Make sure the signs are location aware**, using NFC, iBeacon, Wi-Fi, or some other technology.

- **Keep landline stations and to maintain redundancy in the system.** Landlines enable those without smartphones or without reception to connect with the Emergency Services and identify where they are.

- **Trash should be in the same place at entrances and in the same order.** For example, garbage could always be on the left, recycling could always be on the right at a park entrance.

Needs of Different Users of Parks and Trails

The consultant team asked participants to discuss potential needs of four different personas. Participants offered the following suggestions

Anne (visually-impaired and taking her children for a picnic) and Chris (walking the dog):

Participants felt Anne would need to know where family-friendly amenities were, including: park entrances and exits, the locations of washrooms, picnic locations, sunny and shady places, quiet places, cooking spots, BBQs, splash-pads, playgrounds, and bake ovens. They also felt she would need information to help her use a stroller, such as whether terrain was going uphill or downhill, gradients, and the locations of steps.

Finally, they thought Anne and Chris needed to know the location of parking lots, which parks have staff, fenced off-leash dog areas, and the locations of life-saving stations. A few participants noted that Anne's children would likely be her best wayfinding tools.

Fiona (a lover of parks in a wheelchair):

Participants felt that Fiona would want to know the location of accessible bus tops, how to get from a park entrance or exit to a bus stop, whether there were bump ups to get on to bridges, where there are boardwalks (since these are painful for people with spinal injuries), where are there power stations, and where there are street crossings.

Katy (A runner who is colour blind):

Participants said Katy would need good contrast in signage, consistent placement of signage, names for bridges and overpasses, and lighting. The project team responded that lighting could be a challenge since some parks have no hydro. The project team also said that many park users prefer parks to be dark.

Other users:

Participants identified other users whose needs the Digital Wayfinding Strategy should meet, including senior citizens, deaf people, and people with varied cognitive abilities.

Next Steps

The City of Toronto and Study Team thanked attendees for their participation, and Ian Malczewski committed to sharing a Draft Meeting Summary with participants for review in the coming weeks.