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ISBN 978-1-4249-8931-7 (PDF)
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Executive Summary

There is a need to improve the quality and effectiveness of tourism way-finding in Ontario to make tourism destinations, products and assets easier to find, more effectively integrated and consistently represented. Way-finding is becoming a bigger priority for communities that wish to encourage travelers to stop, stay longer and spend discretionary dollars outside their community. This assignment outlines the parameters for a provincial program that would assist regions in improving way-finding in Ontario and would be consistent with other provincial initiatives such as the Tourism-Oriented Directional Signing (TODS/Logo program.

Way-finding and directional signage is a common problem faced by many jurisdictions, and the term “way-finding” has many meanings. Most jurisdictions view way-finding as “the process individuals use to navigate in unfamiliar surroundings”¹ …which involves much more than just directional signage. In addition to signage, way-finding typically includes print and electronic visitor information (printed maps, brochures, internet, etc.), directional streetscape/landscaping features (buildings, landmarks, parks), technology-enabled services such as GPS and handheld devices, and interactive visitor services (kiosks, 1-800 numbers).²

Two general types of way-finding systems were investigated:

- Facility-specific branding and way-finding systems used by single organizations to help people get around their facilities/sites (e.g., attractions, hospitals, airports). Management owns/controls the facility/asset so they can fully implement a system to achieve way-finding benefits.

- Collaborative models where an umbrella organization encourages a coherent way-finding/signage program to help tourists/people to find their way around and promote

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tourism (e.g., New Jersey, Genesee, and London). Typically the program sponsor DOES NOT own/control the facility/asset where signs are located so success depends on voluntary participation by other organizations (e.g., hotels, municipalities, tourism regions, etc.)

Collaborative models are more relevant and applicable to Ontario, but there are best practice lessons to be learned from facility-specific way-finding initiatives.

Technology is dramatically personalizing way-finding and increasingly allowing people to access way-finding information through GPS & mobile devices. Examples include:

- Personalized directions, maps and way-finding information on hand held devices, including “Where am I?” functions on hand held mobile devices.
- Alerts sent to your device about nearby attractions.
- Multimedia, real time travel guides for mobile phones, including services where visitors can take a picture with a mobile phone, email the image, and receive real-time tourism information about the attraction.

Successful way-finding jurisdictions do the following:

- Identify affected stakeholders and involve them early in the process.
- Define and communicate a clear vision for the way-finding system (what it is and what it is not).
- Identify tourism assets, the typical routes to key destinations, and what are the decision points for people travelling the route.
- Categorize assets (primary, secondary) to create a branded hierarchy, with multiple information channels offering progressively more detail as visitors find their way closer to an intended destination. This often includes a central reference or primary location that helps people locate and orient themselves within unknown surroundings.
- Utilize design excellence to support way-finding goals and system elements.
- Foster collaboration and coordination amongst diverse stakeholders.
- Derive momentum from an external body to the government (i.e., local Business Improvement Area (BIA), advocacy group, marketing partnership, etc.).
- Allow for flexibility to reflect broad diversity of program participants and geography.
- Assign clear ownership and accountability of program assets (e.g., signs).
- Harmonize way-finding programs with the safety and system design objectives of transportation service providers (highway/transit providers).
- Lever investment and technology to support way-finding goals.
Based on these best practices, a successful way-finding program will require the Province to assume two provincial roles:

1. **“Leadership role”** in areas where there is clear provincial jurisdiction.
   - Apply way-finding best practices to provincial way-finding/tourism tools such as Travel Information Centres, web sites, printed tourism materials, interactive tourism information and provincial tourist attractions.
   - Develop and distribute way-finding guidelines, manuals and provide access to best practices to support local way-finding efforts.
   - Work with Ministry of Transportation (MTO) to ensure that way-finding initiatives are coordinated and consistent with TODS/Logo.
   - Support innovative technological advancements in way-finding.

2. **“Support role”** where the Province can help and encourage other stakeholders to align and improve their way-finding efforts:

   Funding for local feasibility studies and way-finding strategies, with eligibility targeted to municipalities, counties, registered tourism organizations, etc. to assist regions in improving way-finding in Ontario that is consistent with other provincial initiatives such as the TODS/Logo program.
   - Foster collaboration by allowing only one designated “applicant” per region.
   - Phased approach with pilot programs to demonstrate success/best practices.
   - Build in flexibility to accommodate highly diverse local contexts.

Municipalities would be responsible for capital costs and maintenance.

This combination of leadership and support will ensure that the Province uses targeted investment to enhance prospects for successful and collaborative way-finding initiatives. This will help lead to an improved way-finding system in Ontario by:

- Ensuring that there is an effective visitor way-finding system in place.
- Providing consistent and reinforced way-finding via multiple channels.
- Using best practice design guidelines to guide way-finding program features.
- Ensuring that way-finding initiatives are consistent with TODS/Logo programs.
- Coordinating local, regional and provincial stakeholder way-finding efforts.
- Leveraging private sector and community investment and technology.
Introduction

Background
There is a need to improve the quality and effectiveness of tourism way-finding across the province in terms of making tourism destinations, products and assets easier to find, more effectively integrated and consistently represented. Way-finding is becoming a bigger priority for regions that wish to encourage travelers to stop, stay longer and spend discretionary dollars outside their community.

Signage helps residents and visitors in navigating between neighbourhoods, points and routes of interest, both in downtown centres as well as regional attractions. Different types of signs can sometimes be confusing and ineffective to visitors traveling from one area to another, be it a neighbourhood or city, town, region.

Some municipalities in Ontario (for example, Windsor, Sault Ste. Marie, Bruce County\(^3\)) are considering comprehensive way-finding strategies that would encompass tourism directional signage, billboards, urban and rural way-finding, temporary signage and on-site business signs. This type of initiative usually requires cross-municipality/region collaboration and integration with other programs.

Project Objectives
1. Outline the parameters for a provincial program that would assist tourism partners with undertaking services such as consulting, design and advice on capital requirements in order to improve local directional or way-finding signage.

2. Give attention to the local/regional level or not-for profit groups such as themed tourism areas.

\(^3\) See individual municipal websites for further information on wayfinding programs and research currently underway.
3. Take into account the Tourism-Oriented Directional Signing (TODS) program and Logo program in the program proposal. Any proposed way-finding program would not include provincial highways, but it should be compatible.

4. Include best practices in way-finding initiatives that correspond with the proposed programming approach/specifics that will be recommended by the consultant.

**Approach**

To complete this assignment Oliver Wyman completed the following tasks:

- Conducted interviews with Ministry of Transportation staff.
- Undertook web research of 22 programs in other jurisdictions and complex environments. From this long list we identified a short list of six jurisdictions to profile for further insights.
- Investigated leading edge technologies to support way-finding programs.
- Identified and interviewed “experts” in area of way-finding, signage, tourism destination marketing, etc. (Appendix C).
- Generated a database of applicable practices to help identify service delivery options for Ontario program.
- Undertook a summary review of MTO and MTOUR’s TODS program and MTO’s Logo signing program.
- Identified stakeholders and program outcomes of a desirable way-finding program.
- Articulated a preferred way-finding strategy, including a range of program design options.
- Facilitated working meetings with the project team to highlight results and confirm recommendations.
Highlights of Jurisdictional Research

A jurisdictional review of way-finding programs was conducted based on an initial long list of 22 organizations and facilities that have implemented way-finding programs. The long list and short list of jurisdictions is included in Appendix A to this report. These jurisdictions represented a diverse cross-section of local and international contexts, as well as a wide range of single facilities and complex multi-stakeholder jurisdictions. The results of these investigations are presented in this chapter.

What is Way-finding?

One of the first questions we posed was to find a clear definition of what way-finding meant in other jurisdictions. We found a number of different definitions that are in use today including the following:

- Way-finding is a two-stage process during which people must solve a wide variety of problems in architectural and urban spaces that involve both "decision making" (formulating an action plan) and "decision executing" (implementing the plan)⁴

- The process individuals use to navigate in unfamiliar surroundings.⁵

- Way-finding is a term that many people associate only with signs, but way-finding is an overall design philosophy that aids a diverse population to arrive at a destination with ease and comfort.⁶

- “A Way-finding system incorporates branding, signs, maps and directional devices that tell us where we are, where we want to go, and how to get there. Symbols can contribute simplicity, clarity and personality to a way-finding system.”⁷

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⁶ Universal Symbols In Health Care Workbook.

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Way-finding is much more than signs. It’s a way of looking at an environment and organizing the visual and verbal cues within that environment to help people access the areas they need.\(^8\)

While way-finding systems include customized highway and street directional signage – they are more than signs. It’s examining your area from a visitor’s perspective, understanding why your visitors are there and using this information to design information and clues to help guide your visitors to their destinations. “It should provide a seamless experience for the visitor and say something about the community.”\(^9\)

Clearly there is no single established definition of what way-finding is, however, in all definitions, there is recognition that way-finding is considerably more than simply signage. In all cases way-finding addressed a much more comprehensive and complex topic of which signage was only one component. Namely, how do visitors find their way around unfamiliar locations?

One useful distinction identified by the America’s Byways Resource Center is the difference between way-finding and wayshowing within an overall way-finding system. Wayfinders are the road travelers and potential community visitors, and wayshowers are those who are involved with helping people navigate to and around the community (America’s, 2006).

- **Way-finding:** *So you are trying to find your way?* The mental process that turns a travel goal into decisions, actions and behaviours. Process of determining and following a path or route between an origin and a destination.

- **Wayshowing:** *Here, let me show you...* The communication of information to aid travelers in setting desired goals, making decisions and taking appropriate actions.

One of the reasons for the multitude of way-finding definitions is that in many cases there are multiple and in some cases quite diverse strategic goals and outcomes for way-finding programs. Some of these strategic goals include the following:

- Reduce stress and frustration.
- Influence brand perception.
- Save time.
- Provide functional efficiency.
- Improve visitor accessibility.

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- Contribute to visitor empowerment.
- Stimulate and promote economic growth from cultural tourism.
- Enhance safety and reduce sign proliferation.
- Create a unifying element and amplify a sense of place.
- Make visitors’ experiences more memorable.
- Address the accessibility requirements of people with a disability or language barrier.

Components of a Good Way-finding System

A review of the strategic and operational features of way-finding systems in other jurisdictions revealed a number of “best practices”. These practices included many tips such as ensuring that the tools of good way-finding are components designed to support spatial orientation and cognitive mapping. Also in virtually all cases, progressive disclosure is used to continually orient and feed information to visitors as required. Multi-channel redundancy and overlap of tools are also helpful to assist people with varying cognitive skills. They do so in four ways:

1. Some people are cognitively focused, relying on maps and written directions.
2. Others respond to verbal communication, where one person explains directions to another.
3. Others respond to visual cues such as landmarks, colours and noticeable features.
4. Some gain understanding primarily through personal interaction with people.

Some of the other features evident in successful way-finding programs include the following:

- Leadership awareness and support for the program as ‘brand managers’.
- Integration with current brand standards throughout the community/organization, ensuring that current and proposed brand standards are faithfully translated to signage and way-finding elements.
- Constant, consistent communication throughout the system.
- Single points of contact/approval for application of way-finding standards, involving marketing communications, facilities management and purchasing.
- Comprehensive standards for system design, procurement, maintenance and managing ongoing changes.

There are also a number of work plans and methodologies that are identified in various jurisdictions to help guide local communities as they seek to design more coherent and
effective way-finding programs. For example the following 10 steps are suggested as a logical plan to improve urban way-finding\textsuperscript{10}:

1. Define a mission statement.

2. Ensure your stakeholder group represents all the entities who will be involved (necessary) to make the system possible.

3. Define your destination criteria (what will be included).

4. Consider the larger state/provincial signage agreement already in place (i.e., TODS).

5. Follow the basic rules for design (colour, typeface, logos, etc.).

6. Fabrication of the signs must be suitable for its intended use (size, materials).

7. Installation (safety).

8. Sign routes (the “peeling the onion” approach – a hierarchy of signage).

9. Placement (distance from street, avoid sign conflicts).

10. Maintenance and Management System (sustainable program that includes replacement, changes and expansion).

Another common theme that is found in all way-finding literature is the use of multiple information channels to reinforce a comprehensive way-finding system. This point reinforces the notion that way-finding is considerably more than simply the directional signage used to help visitors find their way to a location. One highly useful illustration can be found in the state of New Jersey's way-finding master plan which illustrates the multitude of way-finding tools that can be used to support a comprehensive way-finding strategy. This concept is illustrated on the following diagram:

Challenges in Creating a Successful Way-finding System

Notwithstanding the literature that identifies critical success factors, it is clear that many jurisdictions have struggled with the challenges of implementing a successful way-finding system:

- Challenges are particularly onerous in larger, diverse communities with multiple stakeholder interests that have diverse and sometimes competing tourist attractions.

- Another common challenge is that all programs must accommodate legitimate safety and highway design objectives of federal/provincial transportation ministries/departments.

- Challenges are particularly difficult with respect to the topic of signage. Everyone has strong views about signs, and way-finding programs must sort through a morass of often-conflicting interests and opinions - maintenance workers want signs that are easy to clean and don't require light bulbs which must be replaced; airport executives want signs that are easy to see and guide passengers quickly to gates; architects want signs that won't ruin their design aesthetic; and lawyers want signs that ward off potential liability.
Ontario Way-finding Research Study

A way-finding system that does not identify what is important in terms of information to potential visitors, along with a failure to create a hierarchy of assistance, thus providing more data than the typical visitor can process typically results in lost visitors to a particular area – both in the sense of physical location and an inability to attract potential tourists at the onset. This translates into a corresponding loss in business, lack of repeat visitation, missed opportunities to maximize visitation, poor customer satisfaction, inefficiency and loss of tourism benefits.

Technology and Way-finding

**Innovative strategies are being developed**

Our research into other jurisdictions identified initiatives that were capitalizing on the increasing presence of handheld mobile phones and other electronic devices. Technology is being used as a way of personalizing way-finding and allowing people to access it through Global Positioning System (GPS), mobile devices, interactive kiosks, etc., as opposed to public, fixed graphic signage.\(^{11}\)

Recent technological advances offer alternatives to traditional way-finding that could not have been imagined 20 years ago. The mobile phone is the key tool for the majority of people to access the living map from wherever they might be. In Tokyo, GPS is used in mobile phones so people never have the challenge of determining where they are once they realize they are lost. GPS in mobiles is likely to become commonplace in the large urban areas around the world.

In addition to the provision of way-finding information to users via their handheld devices, there are also examples of highly interactive signs through technologies, such as RFID (radio frequency identification), Bluetooth and GPS.\(^{12}\) These technologies have a variety of applications, some example have been highlighted below.

- **Royal Botanical Gardens at Kew, London**
  - *Kew Ranger* is a GPS hand-held device that visitors can rent which allows them to choose a preset tour to see themselves on a map when walking around the gardens. It can be set to alert to walk past a tree or plant of particular interest to that visitor. The handset is designed for outdoors with a screen that brightens in sunlight. It also offers games with location-based cues to interest children and more detailed video content for adults.

- The tourist site, *iSpot*, available in Copenhagen gives information on everything from cafés, restaurants, cinemas, concerts, theatres, nightlife and shopping to attractions and

\(^{11}\) Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007.

\(^{12}\) Ibid.
sightseeing. Visitors send a text message with the text 'woco' to tel.: +45 2290 4000, and a link will be sent to their mobile.\(^{13}\)

- **Valencia City Guide** provides a service, where one can use a mobile device to find out about all of city’s monuments. Every important monument in the city has the sign: "Valencia Museu Obert" (Valencia Open Museum) along with an ID number. If visitors phone (34) 650 800 200, and select the ID number they will find all the information they need to know about the monument they are looking at.\(^{14}\)

- **New Jersey Points of Interest** (or NJPOI) was created to be an integral part of their way-finding system. When travellers see NJPOI.com promotional messages in the media, it connects them with the roadway signage they encounter as they drive, way-finding information on their wireless appliances, GPS and paper maps, each reinforcing the other and creating a sense of welcome and security as they travel around New Jersey.\(^{15}\)

  - NJPOI.com helps visitors find their way both when they know what they are looking for, and especially when they don’t. Visitors can search the map by town and find all kinds of fun and exciting ways to spend a day, a weekend or a lifetime in the Garden State. Or narrow their search by category and find arts & culture, history, educational activities, outdoor recreation, sports & entertainment, shopping, food, lodging and more – all in one place! NJPOI.com is a one-stop map site to all the best New Jersey has to offer. (from www.NJPOI.com)

Implementing a technology solution for way-finding can have several drawbacks. First and foremost is cost: these systems can be expensive to invest in for a community or region. Secondly, there have been questions around privacy. Some of these systems link with visitors personal PDAs, GPSs or mobiles and store their data on a ‘server’. Questions of privacy and the security of this data are being posed.\(^{16}\)

**Case Example**

**Eye-phone – Novel Mobile Phone Program**

The vendor is Ernst Pechtl, and Hans Geiger, co-owners of the company SuperWise Technologies AG.

**Features/How it Works**

If you see something interesting, you take a photograph with your mobile phone, select the item of interest with the cursor and in real time, pre-processed information on the object

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13 Source: http://www.woco.dk/tourist/about_copenhagen/tourist_information

14 Source: http://www.valencia-cityguide.com/tourist-information/valencia-open-museum.html

15 NJPOI.com is an initiative of Celebrate NJ!, a non-profit organization committed to promoting and preserving the best of New Jersey. NJPOI.com is a component of a state wide Wayfinding Initiative. See www.NJPOI.com for additional information.

selected is sent to your mobile phone. “It could be a building, a mountain, a tree, plant or a special event such as a local festival,” explains Pechtl. “The amount of information you receive depends on you - if you want to know more you just click the 'more' button and you trigger a more detailed search responding to your profile of interest.”

Awards
Regional winner in the European Satellite Navigation Competition.

Future Potential
SuperWise Technologies plans to team up with mobile phone operators who would provide the eye-Phone functionality as an additional function for subscription. It will be partly located on the phone and partly in a central processing system of a cooperating image archives.

Case Study
mobiEXPLORE
mobiEXPLORE is a multimedia travel guide for mobile phones and devices. It features rich content, with map of city, tips for travel and daily updated news (events, weather forecast, etc.) and it is available for free for all users.

The MobiEXPLORE Croatia is the first in a series of multimedia travel guides for mobile phones which Gideon Multimedia is planning to develop for major global tourist destinations. Gideon Multimedia is successfully continuing to develop MobiEXPLORE United Kingdom, but it is still in construction, as well as MobiEXPLORE Italy. MobiEXPLORE is a free application and Gideon does not charge the end-user.

For example: for a visitor to Croatia, a tourist guide appears on the screen of your cell phone and provides information about 160 destinations in Croatia and offers information on various aspects of the tourist offer by way of text, photos and interactive maps of cities and regions: culture, history, points of interest, active vacationing, accommodation, cuisine on offer, entertainment, news, useful tips, a mini dictionary for quick access, local customs, events, etc.

http://www.esa.int/esaCP/SEMK2B3XQEF_index_0.html

http://www.find-croatia.com/blog/croatia-tourist-guide-on-your-mobile-phone
This new technology has been included among the prominent applications on the Nokia web site as an “application that sets entirely new levels of expression, efficiency and interactivity for mobile tourist guides.”

Technology is personalizing and improving way-finding and allowing people to access it through GPS and mobile devices, including:

- Personalized directions and way-finding.
- “Where am I?” functions.
- Alerts sent to your device about nearby attractions.
- Multimedia, real time travel guides for mobile phones.
- If you see something interesting, take a picture with your mobile phone and receive tourism information about the attraction.
- Smart signs and interactive screens.

Two Models of Way-finding Systems

Way-finding/signage is a common problem in many areas, and way-finding has many meanings depending on the problem that is being addressed. Way-finding always involves more than just signage and typically includes a wide range of way-finding tools included within a diverse menu of information channels.

Two types of way-finding systems are most prevalent:

- **Facility-specific branding and way-finding systems** used by single organizations to help people get around their facilities/sites (e.g., Disney, hospitals, airports). Management owns/controls the facility/asset so they can fully implement a system to achieve way-finding benefits.

- **Collaborative models** where an umbrella organization encourages a coherent way-finding/signage program to help tourists/people to find their way around and promote tourism (e.g., New Jersey, Genesee, and London). The program sponsor DOES NOT own/control the facility/asset where signs are located so success depends on voluntary participation by other organizations (e.g., hotels, municipalities, tourism regions, etc.). Further information on collaborative models of way-finding is provided in more detail in the following section.

Collaborative models are more relevant to Ontario, but there are best practice lessons to be learned from facility-specific way-finding initiatives, which are discussed later in this document.
Ideal Features of an Ontario Way-finding Program

Focus on Collaborative, Multi-stakeholder Way-finding Systems

As noted above there are typically two types of way-finding systems - single facility way-finding and collaborative models for larger communities.

Under a collaborative model, an umbrella organization tries to encourage a coherent way-finding/signage program to help tourists/people to find their way around and promote tourism (e.g., New Jersey, Genesee, and London). This model is highly appropriate for Ontario because the key organizational feature of this is that the program sponsor DOES NOT own/control the facility/asset where the signs are located, and success depends on voluntary participation by other organizations (e.g., hotels, municipalities, tourism regions, etc.). Benefits are thinly spread amongst multiple parties, even organizations that do not participate in the program, so ROI calculations are much more complex. The umbrella sponsor may need to provide incentives or a subsidy to encourage participation.

Build On Best Practices

A way-finding program in Ontario should be based on the best practice features of successful way-finding programs in other jurisdictions and in Ontario. These features include the following:

- Identify affected stakeholders and involve them early in the process.

- Define and communicate a clear vision for the way-finding system.

- Identify tourism assets, the typical routes to key destinations, and what the decision points are for people traveling the route.
  - Identify audiences and their needs – are they tourists or local/residents?
  - Categorize assets (primary, secondary) to create a branded hierarchy.
Multiple information channels offering progressively more detail.

Utilize design excellence to support way-finding goals and system elements.

Identify a central or primary location that helps people locate and orient themselves within an unknown environment.

- Foster collaboration and coordination amongst diverse stakeholders.
  - Derive momentum from an external body to the government (i.e., local BIA), advocacy group, marketing partnership, etc.
  - Flexibility to reflect broad diversity of program participants and geography.
  - Assign clear ownership and accountability of program assets (e.g., signs).
  - Harmonize way-finding programs with the safety and system design objectives of transportation service providers (highway/transit providers).

- Lever investment and technology to support way-finding goals.

Clearly Define Program Participants and Their Needs

A critical first step is to define who an Ontario way-finding program would be intended to serve, and what their needs are. Possible stakeholders/program participants could include:

**Way-finders**

- Visitors by origin
  - International
  - Inter-provincial
  - Local
- Visitors by mode/information channel
  - Signs/kiosks
  - Printed materials
  - E-materials
- People with special needs
  - Elderly/disabled
  - Foreign language

**Wayshowers**

- Commercial attractions and destinations
- Local tourism attractions (e.g., museums)
- Upper and lower tier municipalities
- Regional tourism marketing organizations
- BIA:s and Chambers of Commerce
- Key access points and transportation modes
- Province
  - MTO (TODS/Logo programs)
  - Ministry of Tourism (TODS)
  - Ontario Tourism Marketing Partnership Corporation (OTMPC)
- Provincial tourism and cultural agencies
- Federal attractions

A preferred way-finding program for Ontario needs to address the needs of all stakeholders as well as encouraging collaboration and coordination amongst these parties.

Address Critical Service Delivery Questions

An ideal program should support comprehensive way-finding across the province, in addition to addressing a number of critical questions including:
What are current gaps in a comprehensive, coordinated, multi-channel way-finding program in Ontario? Are there larger gaps in some communities than others? What should be provincial, regional, local and private sector roles in closing these gaps? What additional tools are needed to help to close these gaps?

How can a provincial way-finding program ensure that efforts by local, regional and provincial stakeholders, as well as a highly diverse private sector, are coordinated and mutually reinforcing?

Should way-finding goals be pursued via expanded TODS/Logo programs versus a standalone coordinated way-finding program?

Should the Province issue guidelines/advice/tools to encourage more integrated and effective way-finding initiatives of private sector and communities, but not get involved in direct or indirect delivery of way-finding programs?

Should the Province offer funding incentives to program participants or rely on encouraging and leveraging private sector and community investment?

Should the Province lead a technology initiative to support increased web and mobile device-enabled way-finding?

The following chapter presents a recommended provincial way-finding program designed to address these questions and to improve way-finding initiatives in the province.
An Effective Way-finding Program in Ontario

Based on the results of way-finding best practices and with an objective of being consistent with the current TODS/Logo program, this section of the report identifies a number of recommended initiatives to strengthen way-finding in Ontario.

Desirable Visitor Outcomes

Based on the list of affected stakeholders there are a number of fundamental visitor requirements that need to be addressed for a way-finding program to be successful. These include the following:

- Visitors can easily find their way to a desired destination.
- Visitors feel welcome, safe and comfortable in unfamiliar surroundings.
- Visitors are encouraged to do more while at their destination.
- New visitors are attracted to tourist destinations/attractions.
- Reduce barriers to travel in Ontario.

A Five-Point Plan to Improve Way-finding in Ontario

To achieve these target outcomes a five-point way-finding plan that builds on existing provincial programs is recommended. The plan must ensure that there is effective visitor way-finding system in place that: helps visitors to find their way to target destinations; progressively discloses relevant information “when visitors need it”; makes visitors aware of more things to do once they arrive at a known destination; reduces sign proliferation; makes visitors’ experiences more memorable, exciting and worthwhile.
1. **Provide constant, consistent and reinforcing messaging via multiple channels.**
   - Directional signage.
   - Printed materials and advertising.
   - Technology and the web.
   - Built environs and landscapes.
   - Interactive media.

2. **Use best practice design guidelines to guide way-finding program features.**
   - Have symbols that are language neutral and timeless.
   - Is recognizable from a distance without reading words.
   - Encapsulates the power of obvious symbols.
   - Creates a unifying element and amplifies a sense of place.
   - Reflects the environment that the icons must function in.

3. **Coordinate stakeholder way-finding efforts.**
   - Ensure that tourism way-finding efforts by local, regional and provincial stakeholders are coordinated and mutually reinforcing.
   - Reinforce brand identity at local, regional and provincial levels.
   - Encourage closer integration between local way-finding programs and the existing TODS/Logo highway signage programs.
   - Allow adequate flexibility to accommodate diverse local circumstances, while at the same time reinforcing common theme/signage and brand identity.

4. **Use emerging technologies to provide helpful way-finding information.**

5. **Leverage and coordinate private sector and community investment.**

These five points represent system-wide outcomes that should be pursued by all stakeholders, not just the province of Ontario. On the following pages, the various roles and responsibilities that will be needed to effectively pursue this plan are described.
Stakeholders Coordinate and Lever Their Respective Roles to Achieve Desirable and Integrated Way-finding Outcomes

As noted earlier, there are multiple dimensions to a successful way-finding program, including a number of tools that can be organized by communication channel. For each channel, there is currently a different lead responsibility across the province and accordingly, the gaps and issues vary by community and by type of channel. This relationship is illustrated on the exhibit below:

<table>
<thead>
<tr>
<th>Primary Channel</th>
<th>Way-finding Tools</th>
<th>Lead Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Directional Signage</strong></td>
<td>Local signage</td>
<td>Municipalities (upper &amp; lower tier), tourism destination marketing organizations, commercial enterprises, area attractions</td>
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<td></td>
<td>Highway directional signage (i.e., green highway signs)</td>
<td>Province of Ontario (Ministry of Transportation (MTO))</td>
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<tr>
<td></td>
<td>Highway tourism oriented directional signing (TODS)/Logo signage (i.e., blue highway signs)</td>
<td>Province of Ontario (MTO/Ministry of Tourism)</td>
</tr>
<tr>
<td><strong>Print</strong></td>
<td>Brochures &amp; tourism information</td>
<td>Municipalities (upper &amp; lower tier), commercial operators, attractions, tourism destination marketing organizations, Province of Ontario</td>
</tr>
<tr>
<td></td>
<td>Maps &amp; tour guides</td>
<td>Private sector, Municipalities (upper &amp; lower tier), commercial operators, attractions, tourism destination marketing organizations, transportation providers, Province of Ontario</td>
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<td><strong>Built environment and landscaping</strong></td>
<td>Architecture/built form</td>
<td>Municipalities (primarily lower tier via zoning and site plan control regulation), building owners/builders.</td>
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<td>Paths and nodes</td>
<td>Municipalities (primarily lower tier via zoning and site plan control regulation), building owners/builders.</td>
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<td></td>
<td>Landscape/Streetscapes</td>
<td>Municipalities (primarily lower tier via zoning and site plan control regulation), building owners/builders.</td>
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<tr>
<td></td>
<td>Landmarks</td>
<td>Municipalities, building owners/builders, area attractions</td>
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<td></td>
<td>Districts</td>
<td>Municipalities, tourism destination marketing organizations, area attractions</td>
</tr>
<tr>
<td><strong>Technology and Web</strong></td>
<td>On-line maps/brochures, travel websites, point of interest maps, interpretive guides</td>
<td>Private sector (e.g., Google maps), municipalities, commercial operators, attractions, tourism destination marketing organizations, Province of Ontario</td>
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<td>Commercial operators, attractions</td>
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<tr>
<td></td>
<td>Transit websites</td>
<td>Transit providers (e.g., Toronto Transit Commission, GO Transit)</td>
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<td>Primary Channel</td>
<td>Way-finding Tools</td>
<td>Lead Responsibility</td>
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<td>Travel Information Centres</td>
<td>Province of Ontario, some municipalities</td>
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<td></td>
<td>1-800 numbers</td>
<td>Province of Ontario</td>
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**Provincial Roles and Recommended Initiatives**

Stakeholders have different roles and accountabilities so it is critically important for the Province to develop its plan based on the tools at its disposal, while recognizing that within a collaborative model, there is also a need for them to provide support, direction and guidance to various stakeholders who have the primary role in implementing a way-finding system. This combination of leadership and support is illustrated on the following diagram:
Ontario Way-finding Research Study

As demonstrated in the above table, there are three possible roles for the Province to take when looking at a strategic and comprehensive program to support a successful way-finding in Ontario:

1. The Province needs to continue to take further leadership in areas where there is clear provincial jurisdiction.

2. The Province needs to provide support to other stakeholders to align and improve their way-finding efforts.

3. The Province should consider optional enhancements to improve the prospects for success via strategic initiatives to support improved local way-finding and take advantage of technological advancements in way-finding.

This approach will ensure that the province can be effective in areas for which it has clear jurisdiction and control, while at the same time encouraging stakeholders to participate in a comprehensive and integrated way-finding program. This strategy also presents strategic options for the province to enhance the success of way-finding by pursuing a number of supplemental programs in the areas of regional/local signage that are consistent with provincial initiatives, including printed media and technology-based way-finding solutions.
Implementation & Service Delivery Issues

Summary of Key Recommendations
Based on these best practices, a successful way-finding program will require the Province to assume two provincial roles:

1. “Leadership role” in areas where there is clear provincial jurisdiction:
   - Apply way-finding best practices to provincial way-finding/tourism tools such as Travel Information Centres, web sites, printed tourism materials, interactive tourism information and provincial tourist attractions.
   - Develop and distribute way-finding guidelines, manuals and provide access to best practices to support local way-finding efforts.
   - Continue to work with MTO to ensure that way-finding initiatives are consistent with TODS/Logo.
   - Support innovative technological advancements in way-finding.

2. “Support role” where the Province can help and encourage other stakeholders to align and improve their way-finding efforts:
   - Funding for local feasibility studies and way-finding strategies, with eligibility targeted to local (e.g. region, municipalities, counties) and tourism organizations, etc.
   - Foster collaboration by allowing only one designated “applicant” per region.
   - Phased approach with pilot programs to demonstrate success/best practices.
   - Build in flexibility to accommodate highly diverse local contexts.
   - Municipalities to be responsible for capital costs and maintenance.
Required Program Investments
A detailed costing of programs and their options is beyond the scope of this assignment. However, it is clear that the level of provincial investment varies, depending on enhancements.

- “Leadership” role requires organization and coherence of existing Provincial programs rather than large new investment in capital.

- “Support” roles require soft costs such as guidelines, tools, manuals, templates and training (i.e., not program capital costs).

- “Enhancement” roles could require program investments:
  - Financial incentives to encourage local signage/districts/info centres to be more effective and coordinated. Any such financial incentives to support local signage should be positioned as "incentives" rather than a right capital acquisition of signage and way-finding assets. These assets are ideally financed, owned and maintained by the organizations that derive the primary benefit from this way-finding infrastructure. The purpose of any financial incentive would be to incent participants to align their efforts and coordinate themes, rather than simply pay for the assets.
  - GPS/mobile way-finding initiatives can lever private sector investment. Most of the mobile way-finding initiatives investigated during this assignment are commercially driven and presumably commercially viable private sector initiatives. Accordingly, if the Province decides to pursue this option, the Province should investigate the opportunity to lever private sector investment rather than directly investing in these technologies as an owner. For example, it may be possible for the Province to lend its tourism marketing logos and materials to a private sector service provider who would then be faced with a more viable and attractive service to tourists.

Encouraging Collaboration
A key ingredient for success is the need for participation and collaboration amongst all affected stakeholders. The Province can foster this collaboration in a number of ways:

- Support for umbrella organizations that can:
  - Champion a rational and widely-supported way-finding vision.
  - Foster a unified and coordinated local way-finding program.
  - Mobilize community/local initiative and innovation.

- Build in flexibility to accommodate highly diverse local contexts.

- If the Province decides to proceed with optional enhancements to support improved local way-finding, it will be important to “require” collaboration by allowing only one designated “applicant” per region.
Integration with TODS/Logo signage programs

In all successful jurisdictions, there was an effective collaboration between the legitimate safety and highway design objectives for limited-access highways and the maximization of the tourism benefits of directional signage and local way-finding.

The provincial TODS program provides signage for commercial tourism operators on provincial highways in Ontario. MTO’s Logo program provides signage for motorist services near the 400-series highways. The scope of this project did not involve a detailed review of this work. However, a brief review of these programs suggests that any provincial way-finding program will need to take into account and be consistent with these two important provincial signage programs.

Accordingly, there is a need to work closely with MTO to establish an effective system of highway directional signage that integrates with and supports local way-finding initiatives, while at the same time respecting safety and highway design objectives. The Ministry of Tourism also needs to continue to consult with and work collaboratively with MTO to ensure that way-finding initiatives are coordinated with and reinforce TODS/Logo signing programs.
Research Appendix A – Highlights of Research from Other Jurisdictions

Long List of 22 Way-finding Systems/Programs Examined

Separate technical appendix presents detailed findings for this analysis:

- Disney Wayfinding
- Potomac Hospital - Woodbridge, Virginia Wayfinding
- Charles de Gaulle Airport
- Wayfinding System for New York and New Jersey Airports
- Lester B. Pearson International Airport, Toronto
- Los Angeles Metro
- Texas Medical Center Wayfinding System
- Zeche Zollverein, in Essen Germany
- Vancouver Olympics 2010
- “Direction Philadelphia” Wayfinding System
- Downtown Los Angeles Way-finding Program – Downtown LA Walks“
- Copenhagen, Denmark (iSpot)
- Fox Cities of Wisconsin Wayfinding Program
- City Of Woodinville, Washington Wayfinding Sign Program
- Atlanta, Georgia - A Wayfinding and Signage System
- Legible London – Wayfinding System
- Massachusetts Agricultural Directional Signage Program
- Pocono Mountains Wayfinding Signing Program
- State of New Jersey: Wayfinding Master Plan
- Genesee/Finger Lakes Wayfinding System
- Tourism Research Innovation Project – British Columbia (Ministry of Tourism)
- Queensland, Australia, Wayfinding Design Guidelines

Highlights of Selected Jurisdictions

**State of New Jersey**

- Wayfinding Master Plan: Create a simple and memorable map pattern that is absent of political, official or functional boundaries.
- Expand TODS program and re-focus so it can better meet the needs of tourists and of the large number of tourist oriented attractions in NJ.
- Recommended a two-tier system of eligible locations, giving priority to tourist-oriented attractions.
- Link County and local signage with TODS (highway) signage.
- Wayfinding legislation in conjunction with Celebrate NJ! utilizing core elements of the Wayfinding Master Plan document to assure cooperation and coordination among state agencies, counties, and municipalities by providing a process, a set of guidelines, and legal authority regarding jurisdictions to implement wayfinding throughout the State.
- Funding to be borne by regulated organizations ($100K to $1M), coordinated to maximize synergies, scale economies and existing grant availability.
- Leverage wide-spread access to GPS systems, cell phones, and the Internet, with a comprehensive Wayfinding system using words, colors, and symbols (icons) that integrates road signage, public transit, paper maps and electronic medium.

*Additional information included in Technical Research Appendix.*
Genesee/Finger Lakes*

- A standardized regional tourism signage system.
- The main objective is to provide visitors to with easy and understandable access to tourism-related destinations.
- Umbrella, multi-stakeholder-driven Program designed around six principles:
  - **Safety**: signs may not pose a safety hazard and an impediment to smooth traffic flow.
  - **Standardization**: of sign size, location, color, and content in compliance with federal and state highway regulations.
  - **Trail-blazing**: throughout the entire regional road network (including local, county and state roads) from the freeway exit into the area of recreational and cultural interest and to the individual attraction or business.
  - **Accessibility**: the signage system should guarantee equal access for any attraction or business that meets predetermined eligibility criteria.
  - **Maintenance**: each attraction or business is responsible for the maintenance of signs and surrounding vegetation.
  - **Self-finance**: each attraction or business assumes the cost for sign erection and maintenance.

*Additional information included in Appendix
**Legible London “Living Map”**

Legible London will give Londoners and visitors more confidence to travel around the Capital on foot. Based on the concept of “mental mapping” or that walkers instinctively build a mental map of the city as they travel:

- ‘Progressive disclosure’ of information (telling people what they need to know when they need to know it).

- Develop a living map that can be applied across many media – street signage, mobile phones, PDAs, internet or traditional pocket maps.

Coordinating information across the boroughs, the different transport modes, and the media (signage, maps, fingerposts, etc.) people use to find their way around:

- Maps for media and city-wide signs.

- Digital management tools for use by bodies responsible for advertising destinations.

*Additional information included in Appendix

**Pocono Mountains Wayfinding Signing Program**

- Wayfinding Signing is an alternative to Tourist Oriented Destination Signs (TODS).

- Regional Signing Program to provide a systematic network of directional signs to guide the traveling public from major highway gateways to key civic, cultural, regional and commercial destinations using the minimum number of signs. It is designed to coincide with and reinforce regional tourism marketing.

- Creation of “Signing Regions” to coordinate local and regional signage:
  
  - **Outside of a Signing Region** - Continue under the current TODS highway Department policy with the following modification: All new agreements for TODS should include a provision that the TODS may be removed when a Signing Region is established.
Inside of a Signing Region - No new TODS installations should be approved upon the establishment of a Signing Region:

- Existing TODS of Attractions that participate in the Regional Signing Program should be removed.
- Existing TODS that conflict with the installation of a Regional Sign installation shall be relocated to an alternate location. In the case that an alternate location cannot be identified, the Regional Trust should work with the business to find a mutually acceptable resolution.
- Existing TODS that serve as trailblazer signs in the PA Logo Signing Program should be replaced with signs that conform to the Regional Signing Program design. The TODS replacements shall be coordinated with the Administrator of the PA Logo Signing Program.

Copenhagen, Denmark (iSpot)

- Wonderful Copenhagen deals with all aspects of Copenhagen as a tourist and travel destination such as marketing, promotion, product development, strategic planning, information, PR, brochures, statistics, analyses etc.
- Tourist info “when you need them the most - when you are in the city”. The tourist site, iSpot, available at Copenhagen Right Now, hotels and visitor mobile phone, provides info on everything from cafés, restaurants, cinemas, concerts, theatres, nightlife and shopping to attractions and sightseeing.
- Tourist information on your mobile phone:
  - Send a text message with the text 'woco' to telephone: 2290 4000, and a link will be sent to your mobile.
  - You can also use the address mobil.woco.dk, which will connect you directly to the guide.
  - The service itself is free. All tourists pay, is the ordinary mobile rate.

Atlanta, Georgia - A Wayfinding and Signage System

- Improve the access and connectivity within the Atlanta area, including both pedestrian and vehicular signage.
- Structure tourism and directional information hierarchically starting with geographic AREA names that are already in use (such as “Midtown” and “King Historic District”).
- Moving next to the names of specific DESTINATIONS.
- Ultimately calling out PARKING related to each.
Prioritize the public DESTINATIONS.

**Tourism Research Innovation Project – British Columbia (Ministry of Tourism)**

- Umbrella program to support coordinated regional way-finding programs. Series of steps that a community can utilize to begin assessing the potential for a new or enhanced signage program.

- Improve access to a community by attracting and directing motorists to destinations, enhancing the visitor experience and attracting more tourist spending.
Research Appendix B – TODS/Logo Signage Programs

The Logo Sign System
The Logo Sign System is a provincial program being offered through Canadian TODS (C-TODS). This program permits key motorist services to place their logo on a sign structure along designated Freeways and Staged Freeways.

The Logo Sign System provides business identification and directional information to motorists in the Province of Ontario, and replaces the generic motorist icons with brand-specific corporate symbols for fuel, food, and accommodation services.

Tourism-Oriented Directional Signing Program (TODS)
C TODS Limited administers the Province’s Tourism-Oriented Directional Signing Program under the supervision of the Ministry of Transportation and Ministry of Tourism. TODS ensures that tourist-oriented signage on the Province’s roads is reliable and consistent in location, form and design. The signs are intended to be directional rather than advertising; they are to ensure the motoring public can rely on the signs to lead them to tourism operations and destinations.

The signs are standardized (e.g., size, colour and message) depending on the nature of the attraction and location, and coordinated to ensure that they do not interfere with other MTO traffic signage, or cause unnecessary motorist distraction.

The program allows signs for area profile themes (e.g., Dufferin Highlands) developed by eligible groups and approved tourist routes (e.g., scenic drive ahead).
TODS Program

The signs are for tourism-oriented operations whose primary reason for being is to provide specified tourism activities or facilities to motoring tourists. This includes many accommodation properties, tourist attractions (commercial or non-profit, public or private sector), area profile themes developed by eligible groups and approved permanent tourist routes.

Municipalities also control signage through by-laws enacted under the Municipal Act. The purpose of these bylaws is, in part, to encourage signs that are compatible with the heritage and visual characteristics of the community, and also to apply a common standard to signs to avoid a mishmash of advertising throughout a municipality.
Research Appendix C– List of Interview Respondents

**External**
- Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games (VANOC)
- Celebrate New Jersey, Wayfinding Initiative
- City of Windsor
- Ontario Business Improvement Area Association (OBIAA)
- Legible London

**Internal**
- Ministry of Transportation
- Ministry of Municipal Affairs and Housing
Contents

- What is Wayfinding?
- Wayfinding Benefits
- Characteristics of a Successful Wayfinding Program
- Challenges in Creating a Wayfinding System
- Wayfinding System: Measures
- Organization of Wayfinding Program
- Wayfinding Stakeholders
- Technology’s Role in Wayfinding Systems
- SEGD Wayfinding Award Winners
- Wayfinding Systems/Programs: Case Examples
What is Wayfinding?
Definitions from Literature

- Wayfinding is a two-stage process during which people must solve a wide variety of problems in architectural and urban spaces that involve both "decision making" (formulating an action plan) and "decision executing" (implementing the plan).  
- "A Wayfinding system incorporates branding, signs, maps and directional devices that tell us where we are, where we want to go, and how to get there. Symbols can contribute simplicity, clarity and personality to a wayfinding system."  
- Wayfinding is much more than signs. It's a way of looking at an environment and organizing the visual and verbal cues within that environment to help people access the areas they need.  
- Wayfinding is a term that many people associate only with signs, but wayfinding is an overall design philosophy that aids a diverse population to arrive at a destination with ease and comfort.  
- While wayfinding systems include customized highway and street directional signage – they are more than signs. It’s examining your area from a visitor’s perspective, understanding why your visitors are there and using this information to design information and clues to help guide your visitors to their destinations. “It should provide a seamless experience for the visitor and say something about the community.”  
- The process individuals use to navigate in unfamiliar surroundings.

Sources:
3. Universal Symbols In Health Care Workbook
What is Wayfinding?
According to Passini and Arthur (Wayfinding pioneers)

- Passini and Arthur (1992) describe wayfinding as a spatial problem-solving process with three specific but interrelated processes:
  1. Decision making and the development of a plan of action (i.e., “I need to locate patient room 224”)
  2. Decision execution, which transforms the plan into appropriate behavior at the right place in space (i.e., “I need to find the elevators to the second floor and locate room 224”)
  3. Information processing understood in its generic sense as comprising environmental perception and cognition, which in turn, are responsible for the information basis of the two decision-related processes (i.e., “I recognize the elevators, exit on the second floor, and locate room 224”)

- To accomplish the problem-solving process, the wayfinder relies on five wayfinding factors:
  1. Knowing where he or she is (i.e., “I have just arrived at the front door of the surgery center”).
  2. Knowing his or her destination (i.e., “My instructions from the physician’s office indicate that I need to check in and register with the information desk”).
  3. Knowing which route gets him or her to the destination (i.e., “The information receptionist told me to follow the signs to the elevator and take the elevator to the third-floor surgery waiting room and check-in desk”).
  4. The ability to follow that route (i.e., “I need to locate and interpret appropriate signs that lead me to the elevators, exit the elevator on the third floor, and locate the surgery waiting room”).
  5. Knowing when he or she has reached the destination (i.e., “This appears to be the surgical waiting room, and the desk is most likely for registration”).

Components of a Good Wayfinding System

Tools of good wayfinding are components designed to support spatial orientation and cognitive mapping. Redundancy and overlap of these tools are also helpful to assist people with varying cognitive skills. They do so in four ways:

1. Some people are cognitively focused, relying on maps and written directions
2. Others respond to verbal communication, where one person explains directions to another
3. Others respond to visual cues such as landmarks, colors, and noticeable features
4. Some gain understanding primarily through personal interaction with people

Wayfinding Tools

Signage is not the only tool available to aid a person in their ability to find their way. Wayfinding tools include information found on the intranet, kiosks, and print materials as well as signage and the physical environment.

Four Essential Wayfinding Elements

1. **Effective Architectural Clues**
   - Clearly identify arrival points
   - Provide convenient parking and accessible walkways located adjacent to each public entry
   - Locate information desks within each public entry visible from the front door
   - Place elevator lobbies so they can be seen upon entering the building.
   - Use consistent lighting, floor coverings and architectural finishes in primary public corridor systems
   - Situate memorable landmarks along corridors and at key decision points
   - Design public waiting areas that are visually open to corridors.
   - Distinguish public from non-public corridors by using varied finishes, colors and lighting
   - Harmonize floor numbers between connecting buildings.
   - Graphic communication

2. **Effective Graphic Communication**

- Standardize names for all buildings, services and destinations, and display them consistently on all graphics applications
- Use easily understood "plain" language
- Size messages and signs appropriately for viewing distances
- Select letterforms and color combinations that comply with Americans with Disabilities Act (ADA) Accessibility Guidelines
- Furnish generous spacing between letters, words and message lines
- Provide standardized "you are here" maps of the project that include an overall map of the complex and more detailed maps of specific areas
- Train attendants to mark individualized paths on hand-held maps for lost or disoriented visitors
- Place maps at all parking exits, building entrances and major interior decision points.
- Orient maps with building layouts, such as denoting on maps that "up is ahead."
- Establish consistency in sign placements and graphics layouts
- Code areas by using color and memorable graphics
- Use established pictographs with words to facilitate comprehension of written messages
- Establish a floor numbering system that relates to a building's main entry and indicate on directories which floors are above and below grade

4. Effective Audible Communication

- Install audible sounds at signaled intersections to indicate safe times to cross the street
- At all public entries and information desks, provide attendants trained as professional greeters who are thoroughly familiar with the facility
- Furnish self-help telephones at all information desks
- Provide patient-transport personnel whose purpose is to guide visitors to their destinations
- Standardize names for all buildings, services and destinations, and use them consistently in verbal communication
- Equip elevators with audible chimes
- Position audible landmarks, such as water fountains, at waiting areas
- Employ audible signs to help locate information desks, elevators, rest rooms and other key destinations

Four Essential Wayfinding Elements (cont’d)

4. Effective Tactile Communication
   – Establish "shorelines" and "trails" between major destinations and information areas using materials having differing resiliency's, such as concrete and carpet
   – Install "rumble strips" at the landings of stairs and escalators
   – Furnish knurled door knobs at all non-public doors
   – Provide a raised star symbol on elevator control panels to indicated the ground floor
   – Supply raised letters and Grade 2 Braille at elevators and on signs identifying permanent destinations
   – Install interactive audio-tactile maps at public entrance lobbies
   – Provide consistent clues

Elements of Wayfinding Design

- **Distinct architectural features**
  - Can help in creating orientation points in a cognitive map (e.g., remembering to take a left at the large, columned archway)

- **Destination zones**
  - Useful in designating areas for meeting another person, for orienting to a specific location or retracing a path, and for sheltering in place during emergencies

- **Spatial overview opportunities**
  - Help build a better cognitive map, allowing people to learn quickly about various parts of a building, including exits and corridors that lead to exits, as well as paths that lead to destination zones and/or places of shelter within a building. Spatial overview opportunities not only permit greater and more rapid knowledge of building layout information but also allow for greater ease in understanding exiting locations, thus reducing the possibility of errors during building evacuation.

Landmarks

- Distinct in shape, color, and appropriately illuminated are memorable, serve to orient people in the space, and provide directional egress information
  - Paired with appropriate signage to convey important information and guide evacuation decisions
    - Reinforcing the location of a landmark by combining it with additional sensory input such as sound or smell can be effective in creating a stronger cognitive map
    - Example: popcorn kiosk that emanates the smell of popcorn in a mall or the sound of a fountain or waterfall

Maps

- Maps that are less cluttered and employ anchor points seem to be more accessible
- “You are here” markings are helpful
- Noting the floor on the map that the reader is on is also critical when a building has more than one floor
- Place maps pertaining to a specific floor on that floor, particularly in large, multistoried buildings
- Clearly key map information to directories for facilities such as public restrooms, strollers, restaurants, telephones, emergency shelters, first aid stations, and information kiosks. Make the graphic large enough and easy to understand. Use color as a reinforcer for this information, not as a primary cue
- Use lighting that does not produce glare on the map surface and yet lights up the information so that it is readable for those with low vision

Elements of Wayfinding Design (cont’d)

Signage
- Placement of building signage, including signage to destination zones, restrooms, and exiting information, should be placed perpendicular to the path of travel, above eye level, and appropriately illuminated, taking care to avoid veiling reflections (glare) that impede readability.
- It is also important to place signage at regular intervals, particularly at decision points, serving to reinforce the traveler.
- Readability of the information is critical to any wayfinding task
  - All information signage should be readily legible, under many conditions, including adverse ones. The text of the sign should be large, easily readable, and have a high contrast with the background. The signage should be carefully illuminated to prevent any glare that causes the sign to be unreadable. The text should be paired with a graphic image that is clearly understood—a feature that is useful to non-readers.
  - For emergency exiting signage, in addition to signage that is mandated by code, exiting signage should be placed on the wall low enough so that a person in a wheel chair can reach it, and it should contain raised images, text, and Braille that is incorporated into the signage in a consistent manner. This additional exiting signage should be placed in consistent locations.
- Color in signage should be used only as a reinforcing cue and related to the environment.
  - For example, if there is more than one destination zone, use signage that is paired with a graphic and reinforced with a color such as orange. The orange color should be obviously repeated in the destination zone as well as the accompanying exit.

Wayfinding System
Progressive Disclosure: Airport Model

- As large complex facilities with a wide variety of services and destinations, airports face challenges that are similar to hospitals
- Successful airport wayfinding relies on the process called progressive disclosure, which provides only enough information necessary to get the visitor to the next decision-making point
  - For example, as travelers approach the airport on the highway, airport wayfinding provides them only with information regarding the appropriate exit
  - Then, once the travelers have exited, the signs provide information concerning parking locations and drop-off areas
  - Airports do not provide parking information on the highway signs
- Hospitals rarely employ this model, and provide too much information at inappropriate locations
  - Signs should direct hospital visitors with the same ease as travelers to and through airports. While signs frequently identify hospitals from highways, airport-like signs should continue to direct people after exiting the highway
- The progressive-disclosure method should direct people to correct buildings, hospital parking, and patient drop-off areas
- Once in the buildings, the method should direct wayfinders to the next decision-making intersection
- Each sign should offer no more than three possible directional options

Wayfinding Benefits

- Reduces stress and frustration
- Influences brand perception
- Saves time
- Provides functional efficiency
- Improves visitor accessibility
- Contributes to visitor empowerment
- Stimulates and promotes economic growth from cultural tourism
- Enhances safety and reduces sign proliferation
- Creates a unifying element and amplifies a sense of place
- Makes visitors’ experiences more memorable
Characteristics of a Successful Wayfinding Program

Successful wayfinding programs include:

- CEO-level awareness and support as the top “brand manager”
- Integration with current brand standards throughout the organization, ensuring that current and proposed brand standards are faithfully translated to signage and wayfinding elements
- Constant, consistent communication throughout the system, including changes to locations or room functions, changes to public entrances, changes to preferred routes through the facility and changes in nomenclature, such as elevator cores or significant new additions
- Single points of contact/approval for application of wayfinding standards, involving marketing communications, facilities management and purchasing
- Comprehensive standards for system design, procurement, maintenance, and managing ongoing changes

Characteristics of a Successful Wayfinding Program
Case Example: State of New Jersey

- Enhances safety and reduces sign proliferation
- Has symbols that are language independent
- Reflects the environment the icons must function in
- Accurately interprets the message
- Is recognizable from a distance without reading words
- Encapsulates the power of obvious symbols
- Creates a unifying element and amplifies a sense of place
- Uses symbols that are timeless
- Interfaces easily with GPS in cars and cell phones
A Checklist for Developing a Good Wayfinding System in a Hospital Setting

- Identify all parking, buildings, and entrances
- Use consistent graphics, color, and logos
- Create a user-friendly handheld map, and repeat that map in lobby directories
- Develop an appropriate wayfinding system that is specific to your facility
- Incorporate environmental cues such as landscapes
- Include windows in corridors for outdoor orientation
- Design main entrance drop-off areas
- Offer valet parking
- Provide easy and well-identified parking
- Clearly delineate handicap parking and access routes
- Establish clear routes to primary destinations
- Train all staff in giving directions—the same way to the same place
- Have a highly visible visitor-information center
- Develop a sensible room-numbering system
- Identify all destinations in the same vocabulary
- Use symbols and icons to bridge language barriers
- Provide clear, concise, and consistent signs that have strong contrast and visibility
- Clearly light all signs
- Use lighting to feature landmarks
- Provide easy access to patient education
- Offer learning centers with extended hours, high visibility, and a friendly staff
- Differentiate public elevators from staff and clinical elevators
- Display clocks in primary waiting areas
- Provide telephones in emergency areas, waiting areas, entrances, and dining areas
- Clearly identify restaurant and toilet facilities. • Provide guides and wheelchair transportation for visitors in need. • Avoid convoluted corridors
- Remove clutter from corridors
- Post estimated journey times

Wayfinding System’s Potential Rewards in a Hospital Setting

- Increased patient satisfaction
  - More empowered customer
  - Less stressed customer
- Feeling of support by a seamless flow of information at all points in the customers journey
- In the event of an emergency, the kiosks can incorporate an “override” feature that provides instant instructions for evacuation or other safety-related information
- Easy access to detailed physician, marketing, patient registration, billing information
- Feeling that visitors’ needs have been anticipated and that up-to-date information is available which leads to greater confidence and trust in the hospital as a whole

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007
Challenges in Creating a Wayfinding System

- Everyone has strong views about signs, and wayfinding consultants must sort through a morass of often-conflicting interests and opinions
  - Maintenance workers want signs that are easy to clean and don't require light bulbs, which must be replaced
  - Airport executives want signs that are easy to see and guide passengers quickly to gates
  - Architects want signs that won't ruin their design aesthetic
  - Lawyers want signs that ward off potential liability

- Hazards of Bad Wayfinding
  - Doesn't identify what’s important
  - Doesn’t create a hierarchy of assistance
  - Provides more than customer can process
    - Results:
      - Lost business
      - No customer satisfaction
      - Inefficiency
      - Accidents/Death

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007
Wayfinding System Measures

- There has not been a lot of information on assessing a Wayfinding system in the literature
  - Some suggest that the effectiveness of the system is purely subjective
  - Others rely on customer survey data
    - J.D. Power and Associates survey of the new system at LaGuardia Central Terminal confirmed "significantly improved consumer satisfaction" when compared with the prior system
Organization of Wayfinding Program
Case Example: State of New Jersey

- Wayfinding Advisory Committee of 70 was formed
- Forty-seven individuals representing a wide, cross-section of stakeholders organized themselves into the following work teams:
  - Funding
  - Pilot Project
  - TODS Criteria
  - Public Relations
Wayfinding Stakeholders

- Urban wayfinding system must be developed by a stakeholder group representing all the entities that will be involved in making the system possible.
- Most large cities develop their systems with federal, state, and local input while including even the smallest local institutions.
- The stakeholder group should be two levels:
  - Small working group of critical institutions actively overseeing development of the system.
  - Larger constituency receiving project information.

Source: Craig M Berger, Adrienne Eiss. Principles of urban wayfinding systems. Institute of Transportation Engineers. ITE Journal; Apr 2002; 72, 4
List of Wayfinding Stakeholders
Case Example: State of New Jersey

- NJDOT
- The NJ Heritage Tourism Task Force
- NJ DEP
- New Jersey History Advocates
- The state Chamber of Commerce
- Crossroads of the American Revolution Association
- ArtPride
- The Municipal Land Use Center
- The Community Foundation of New Jersey
- Representatives of many statewide groups including:
  - NJ Office of Travel & Tourism
  - NJ Historical Commission
  - NJ State Council on the Arts
  - NJ Audubon
  - NJ Hotel/Motel Association
  - League of Municipalities
  - NJ Restaurant Association
  - NJ Association of Counties
  - NJBIA
  - NJ Campground Association
  - NJ History Advocates
  - NJ Parks & Recreation Association
  - NJ Transit
Technology’s Role in Wayfinding Systems
Technology and Wayfinding

- Increased personalised wayfinding, as opposed to public, fixed graphic signage
  - Personalized directions retrieved on an electronic device
  - Talking signs and video signs
- Highly interactive signs through technologies, such as RFID (radio frequency identification), Bluetooth and GPS (global positioning system, the satellite technology behind satnav)
  - Drawbacks
    - Significant cost
    - Privacy issues of stored commuter data being a target of hijacks
- Digital plastic signage allowing the whole sign to become a touch screen

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007
Technology and Wayfinding
Case Example: Royal Botanic Gardens at Kew, London

- Kew Ranger, GPS hand-held device
  - Allows to choose a preset tour to see themselves on a map when walking around the gardens
  - Can be set to alert to walk past a tree or plant of particular interest
  - Robust handset is designed for outdoors with a screen that brightens in sunlight
  - Offers games with location-based cues to interest children and more detailed video content for adults

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007
Technology Trends in Wayfinding

- **Interactive Digital Signage**
  - Use of electronic kiosks and flat-panel screens that display instantly updated information of a user’s choice
  - For example, in a hospital setting patients and visitors are able to search for frequently changing information about staff and department locations
  - Factors to consider before implementing:
    - Capability of the facility’s IT department to support the kiosk
    - Technological comfort level of its patient population

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. *FacilityCare Magazine*. Volume 12, Number 5, August 2007
Technology Trends in Wayfinding
Case Example

- Clarian North Medical Center in Carmel, Indiana, installed a system of touch-screen kiosks that works in concert with the more traditional sign-based interior and exterior wayfinding system in three hospital lobbies

- Kiosk screens display:
  - A graphic map of the facility along with a directory of major destinations
  - The floors they are on and the recommended elevators to use to conveniently reach them
  - One button allows users to convert the map listings and directory information to Spanish, while another button displays a list of physicians at the facility, along with their office locations

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007
Factors To Consider When Deciding Whether To Include A Digital Signage Component In A Wayfinding System in a Hospital Setting

- **The audience**
  - In order to determine whether an interactive kiosk will improve patient satisfaction, facility managers need to understand their audience and the audience’s comfort level with the technology.
  - In general, older patients and visitors:
    - Will be more comfortable addressing a person at an information desk rather than interacting with a touch screen.
    - Have difficulty understanding some interface designs.
  - If users are allowed to print from a kiosk, the resulting map may be potentially disorienting to an individual not adept at reading maps.

- **The scope of interactivity**
  - If a static map directory will serve the purpose just as well for a given facility’s audience, then an electronic kiosk may be overkill. If the goal is to provide guests with more complete, searchable information, those needs should be analyzed and detailed functional expectations discussed with a wayfinding consultant.

- **Cost**
  - Up-front costs of programming and hardware, software licenses, staff training, maintenance and support.
  - A cost of wayfinding consultant that will work closely with the programmer to ensure consistency with the larger program, and in-house staff that will be called on to provide technical and content support in an ongoing effort to keep the content up to date.
  - The cost of negative guest perceptions if the kiosks contain old information or if they malfunction.

- **Location**
  - Kiosks are often incorporated with other communications media, such as brochure racks and tele-health information, to serve as a single location for a variety of information sources. They should always be located in high-traffic areas, such as building entrances, near information desk locations and pedestrian exits from parking structures.
  - Is there physical space to accommodate a freestanding kiosk? If not, kiosks come in a variety of shapes, sizes and orientations. They can be surface-mounted; incorporated into an existing hardware platform, such as an Internet workstation; or even projected onto a specialized translucent surface for a sleek, high-tech approach.
  - The map elements of an electronic kiosk must be properly oriented to the environment from the viewer’s perspective.
    - For example, the top of the map should correspond to the direction that the viewer is facing. Also, the kiosk should be facing the entrance so that a user does not have to turn before viewing it, which can cause visitors to lose their bearings.

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. *FacilityCare Magazine*. Volume 12, Number 5, August 2007
Technical Considerations for Digital Signage in a Wayfinding Program

- Once the decision has been made to make electronic kiosks part of a wayfinding program, several questions must be answered concerning the hospital’s technical capabilities and the types of information that the kiosks should convey. The answers to these questions will help determine what people see when they use the kiosks:
  - Will the application running the kiosks be supported and maintained on the hospital’s own servers or via a stand-alone remote server?
  - Are internal databases able to connect with the proposed software?
  - Do other sources of Web-based information need to be fed into the kiosks?
  - Should guests be able to access this information from their personal digital assistants (PDAs) or from home computers via a public Web site? If so, how should the information be formatted to address these media and their different screen sizes and resolutions?
  - Should staff be able to access the information from the hospital’s intranet or physician extranets?
  - Will the kiosks be hardwired to the hospital network or will they be connected wirelessly?
  - If wirelessly, is the system robust enough to update these kiosks at regular intervals?

- While not technical, the answer to this last question is crucial to ensuring that the kiosks are used effectively on an ongoing basis:
  - How will existing staff be trained to use and maintain these tools? Front-line desk staff and volunteers will likely be tasked with showing guests how the kiosks work, so they need to be well-versed in their capabilities.

Source: Mark VanderKlipp. A High-Tech Solution To Wayfinding. FacilityCare Magazine. Volume 12, Number 5, August 2007
Technology and Wayfinding
Case Example: NJPOI.com

- **About NJpoi.com**
  - NJPOI.com is an initiative of Celebrate NJ! (www.CelebrateNJ.org), a non-profit organization committed to promoting and preserving the best of New Jersey. Through educational initiatives and innovative projects, we seek to illuminate and elevate what we love about New Jersey and as a result, build pride in our great Garden State.

- **A Statewide Wayfinding Initiative**
  - NJPOI.com is a component of a statewide Wayfinding Initiative. Celebrate NJ! accepted a request of the New Jersey History Advocates group to champion a seamless, systematic, statewide wayfinding system.

- **What is NJPOI.com?**
  - NJPOI.com is a community map site created to promote New Jersey’s “points of interest”. It combines Google API with Mappler™ technology to create an information-rich map site showcasing thousands of locations of interest to New Jersey’s visitors. Community mapping offers member locations control over their online content and greater exposure as part of a focused community promotional campaign.

- **Why does NJ need NJPOI.com?**
  - New Jersey has so much to offer potential visitors, yet finding their way to many of these locations is challenging. A current absence of coordinated signage and the prohibitive cost of promotion for many smaller history, arts and recreation locations often keep visitors from enjoying the activities offered by these groups. NJPOI.com was created to provide a one-stop online map site to help promote and direct visitors to thousands of New Jersey’s points of interest as one community effort.
  - In times of rising fuel prices, travelers are often looking for more than one reason to visit an area. By linking up to mass transit and promoting a multitude of attractions on one map, potential visitors can plan to stay longer spending critical tourism dollars in your area.

Source: NJPOI.com
Technology and Wayfinding
Case Example: NJPOI.com

How is NJPOI.com different from other web search tools?
- NJPOI.com is one more tool in your marketing toolbox. It is not intended to replace or compete with current search and travel planning sites, but rather to enhance each attraction’s exposure on the web by creating a map site by and for New Jersey’s wide variety of points of interest.
- NJPOI.com can help a visitor discover new and interesting things to do and see in all parts of New Jersey. NJPOI.com will showcase thousands of points of interest, from unique historic buildings to quaint shops to outdoor adventures, making premiere as well as lesser known locations visible to potential visitors to NJ.
- NJPOI.com provides visitors a treasure trove of NJ’s best all in one place. By just searching a town or geographic area of the state, visitors will find a host of things to do and see beyond what they may have originally been looking for.

Who’s behind NJPOI.com?
- Celebrate NJ! a non-profit organization, whose mission is to promote and preserve the best of New Jersey, is administering the NJPOI.com site and coordinating the promotional activities of the project.
- Celebrate NJ! has a successful track record of innovative initiatives that help elevate and illuminate the best of New Jersey.

How will NJPOI.com be successful in marketing NJ to visitors?
- We’ll use a number of strategies to reach potential visitors:
  - Through our member organizations, access an online network of millions of visitors
  - Link NJPOI.com to all major New Jersey search sites
  - Produce radio and cable TV spots promoting NJPOI.com
  - Create a media campaign with twice monthly press releases about our member groups
  - Invest member dollars to create a statewide advertising campaign

Source: NJPOI.com
Technology and Wayfinding (cont’d)
Case Example: NJPOI.com

Membership Criteria

- **“Full” Membership**
  - All New Jersey "Points of Interest" that meet the NJPOI criteria may apply to become a member on the NJPOI.com site. Organizations with more than one POI location may apply under one application, membership pricing will apply to EACH location. Applicants may expect to hear of their acceptance within 10 days of their application. Once payment of the annual membership fee and a signed Membership Agreement are received, we will email each member their log-on information and instructions for creating their member page. Cost of full membership is $250/year, and members who sign up before December 31, 2008, save $100 for each full membership location.

- **Your Own Member Page and you control it 24/7!**
  - Full Members gain the ability to create and manage a detailed a member page on NJPOI.com including text, photos, links and a video about their member location. The information on member pages may be updated at any time by you using your member user id and password. This easy-to-use tool enables a member to update the page as often as needed to launch a new exhibit or showcase a promotion. Include photos, links to your main website or others, add links to PDF files and more. Uploading a video about your location as easy as using YouTube.

- **“Link-Only” Membership**
  - Sites may opt to add a link only to the main site information balloon on the map. For $25 per year, we will add one URL address that will be an active link to a location provided by the member. No member page is provided with Link-Only Membership.

- **Combined Membership**
  - Groups who administer more than one NJPOI location may choose to combine Full and Link-Only Memberships, where one or more sites takes advantage of a map page while others list only a link. All combinations are acceptable.

- **NJPOI Member Criteria**
  - Your NJPOI location may apply to become a member of NJPOI.com if your location is of interest to visitors and fits into one or more of the following categories:
    - Arts and Culture, History, Educational Activity, Outdoor Activity, Shopping Food and Lodging*, Sports and Entertainment Visitor Information
  - *NJPOI will give priority to unique food and lodging locations as Full Members. Due to space constraints during the initial start up phase, chain and franchise locations may apply as Link-Only Members at this time.

Source: NJPOI.com
Technology and Wayfinding (cont’d)

Case Example: NJPOI.com

Membership Criteria (cont’d)

- **“Full Member” Agreement**
  - NJPOI.com is a community map developed to benefit all NJPOI locations as one community. Promotion of the site is the joint responsibility of all members. To that end, all Members agree:
  - To post and maintain accurate and timely information on their member page as per guidelines provided at the time of membership.
  - That Celebrate NJ! (Administrator) will review member content periodically to ensure quality of member postings.
  - That in the event of user complaints regarding inaccurate information, Celebrate NJ! will contact member to request an update and/or change of the posted information. Failure to maintain member page may result in the cancellation or non-renewal of membership.

- **All Members agree to help Promote NJPOI.com**
  - As NJPOI.com is a community map developed to benefit all NJPOI locations as one community, promotion of the site is the joint responsibility of all members. To that end, all Members agree:
  - To promote NJPOI.com to all of their online constituents.
  - Use the NJPOI logo that will be provided to members to create a link on the member website to NJPOI.com.
  - To participate in future joint marketing campaigns to the fullest of the members’ ability.

- **How is Membership money used?**
  - NJPOI.com membership fees support the administration and marketing of NJPOI.com. In addition, a portion of all fees will fund a grant program to help groups take advantage of the TODS (Tourist Orientated Destination Signage) program offered by NJDOT. For more information about the TODS Grant Program, contact us at NJPOI@CelebrateNJ.org.

Source: NJPOI.com
Technology and Wayfinding (cont’d)
Case Example: NJPOI.com

- NJPOI is an integral part of a seamless Wayfinding system
- While signage is important once you’re on the road, NJPOI.com provides travelers a comprehensive planning tool with information about what there is to see and do in every zone of New Jersey before they leave the house. The NJPOI map uses the same graphic icon design as the rest of NJ’s Wayfinding program and creates a seamless look and feel to all aspects of our Wayfinding System
- When travelers see NJPOI.com promotional messages in the media, it connects them with the roadway signage they encounter as they drive, wayfinding information on their wireless appliances, GPS and paper maps, each reinforcing the other and creating a sense of welcome and security as they travel around New Jersey

Source: NJPOI.com
Technology and Wayfinding (cont’d)
Case Example: NJPOI.com

Partner Groups

NJ Dept. of Transportation (www.state.nj.us/transportation/)
NJ Heritage Tourism Task Force (www.state.nj.us/dca/njht/publ/njhttf.html)
NJ Office of the Secretary of State (www.state.nj.us/state/)
NJ Division of Travel & Tourism (www.state.nj.us/state/)
NJ Dept. of Environmental Protection (www.state.nj.us/dep/)
NJ Dept. of Agriculture (www.state.nj.us/agriculture/)
New Jersey History Advocates (www.njhistoryadvocates.org/)
NJ State Chamber of Commerce (www.njchamber.com/)
NJ Historical Commission (www.state.nj.us/state/history/)
NJ State Council on the Arts (www.njartsncouncil.org/)
NJ Audubon Society (www.njaudubon.org/)
NJ Hotel and Lodging Association (www.njhlia.com/)
NJ State League of Municipalities (www.njsiom.org/)
NJ Restaurant Association (www.njra.org/)
NJ Association of Counties (www.njac.org/)
NJ Business and Industry Association (www.njbia.org/)
NJ Campground Association (www.newjerseycampgrounds.com/)
NJ Association of Museums (http://www.museumsusa.org/assocs/info/20296)
NJ Parks & Recreation Association (www.state.nj.us/dep/parksandforests/)
NJ Transit (www.njtransit.com/)
Crossroads of the American Revolution Association (www.revolutionarynj.org/)
ArtPride NJ (www.artpridenj.com/)
Municipal Land Use Center at TCNJ (www.tcnj.edu/~mluc/)
Community Foundation of NJ (www.cfnj.org/)
Morris County Visitors Center (http://www.morristourism.org/)
South Jersey Tourism Corporation (http://www.visitsouthjersey.com/)

Source: NJPOI.com
Technology and Wayfinding
Case Example: mobiEXPLORE Cell Phone for Croatian Tourism

- **Vendor**
  - Split-based IT company Gideon Multimedia

- **Features**
  - A tourist guide on the screen of your cell phone provides about 160 destinations in Croatia and offers information on various aspects of the tourist offer by way of text, photos and interactive maps of cities and regions: culture, history, points of interest, active vacationing, accommodation, cuisine on offer, entertainment, news, useful tips, a mini dictionary for quick access, local customs, events, etc.

- **Customers**
  - Over three hundred thousand tourists
  - Local users looking for information of daily culture and entertainment events, and the hospitality and recreation offers

- **Cost**
  - The project is unique on the global market
  - Entirely free of charge to users and is also available at the Internet address www.mobiexplore.com

- **Awards**
  - Won the gold medal at the ARCA2007 international innovation exhibition
  - Has been included among the prominent applications on the Nokia web site as an “application that sets entirely new levels of expression, efficiency and interactivity for mobile tourist guides.”

- **Future Potential**
  - The success of the first mobiEXPLORE Croatia project is confirmation of the feasibility of the announcement of an entire series of cell phone tourist guides for all of the key destinations in Europe that the Gideon Company has already started in collaboration with its strategic foreign partners

Source: http://www.find-croatia.com/blog/croatia-tourist-guide-on-your-mobile-phone/
Technology and Wayfinding (cont’d)
Case Example: iSpot – Copenhagen, Denmark

- The tourist site, iSpot, available in Copenhagen gives information on everything from cafés, restaurants, cinemas, concerts, theatres, nightlife and shopping to attractions and sightseeing

- **Instructions**
  - *Send a text message with the text 'woco' to tel.: +45 2290 4000, and a link will be sent to your mobile*
  - *You can also use the address mobil.woco.dk, which will connect you directly to the guide*

- **Cost**
  - The service itself is free
  - Ordinary mobile rates apply

Source: http://www.woco.dk/tourist/about_copenhagen/tourist_information
Technology and Wayfinding (cont’d)
Case Example: Valencia City Guide

- **Valencia City Guide** provides a service, where one can use a mobile device to find out about all of city’s monuments
  - *Every important monument in the city has the sign: "Valencia Museu Obert" (Valencia Open Museum) along with an ID number.*
  - *If you phone (34) 650 800 200, after selecting the ID number you will find all the information you need to know about the monument you are looking at*

Source: http://www.valencia-cityguide.com/tourist-information/valencia-open-museum.html
Technology and Wayfinding (cont’d)
Case Example: iWalks series Podcasts

- Dublin Tourism provides **iWalks series of free podcast audio guides** tell the many stories of Dublin
  - There are **twelve themes** covering many aspects of the region
  - Each iWalk comes with a free full color brochure featuring maps and illustrations that can be downloaded from visitdublin.com site

Future Technology and Wayfinding
Case Example: Eye-phone – Novel Mobile Phone Program

- **Vendor**
  - Ernst Pechtl, and Hans Geiger, co-owners of the company SuperWise Technologies AG

- **Features/How it Works**
  - If you see something interesting, you take a photograph with your mobile phone, select the item of interest with the cursor and in real time preprocessed information on the object selected is sent to your mobile phone.
  - “*It could be a building, a mountain, a tree, plant or a special event such as a local festival,*” explain Pechtl. “*The amount of information you receive depends on you, if you want to know more you just click the 'more button' and you trigger a more detailed search responding to your profile of interest.*”

- **Awards**
  - Regional winner in the European Satellite Navigation Competition

- **Future Potential**
  - SuperWise Technologies plans to team up with mobile phone operators who would provide the eye-Phone functionality as an additional function for subscription. It will be partly located on the phone and partly in a central processing system of a cooperating image archives

Source: http://www.esa.int/esaCP/SEMk2B3XQEF_index_0.html
What is SEGD?

- Society for Environmental Graphic Design is an international non-profit educational organization providing resources for design specialists in the field of environmental graphic design, architecture, and landscape, interior, and industrial design.
- Environmental Graphic Design embraces many design disciplines including graphic, architectural, interior, landscape, and industrial design, all concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some common examples of work by EGD practitioners include wayfinding systems, architectural graphics, signage, exhibit design, identity graphics, civic design, pictogram design, retail and store design, mapping and themed environments.
- In pursuit of their mission, the SEGD aspires to:
  - promote public awareness of our community and its role in shaping experience
  - nurture demand for design excellence within the built environment
  - serve as a source of education and inspiration for the community
  - continue to define and refine their standards of practice
  - foster relevant, well-informed research to enhance their knowledge base
  - sponsor peer recognition programs that inspire excellence
  - promote collaboration across multiple design disciplines
  - strengthen ties with educational programs that provide the academic underpinnings of their field

Zeche Zollverein
2008 SEGD Wayfinding Award Winner

- **Background**
  - Abandoned coal mine in Essen, Germany, in the Ruhrgebiet, once the country’s industrial heartland
  - Shut down in 1986, it was added to UNESCO's list of World Heritage Sites in 2001 due to its significance as a coal-mining operation as well as its design features, including several 20th century buildings of architectural significance
  - Following a 2002 master plan by OMA/Rem Koolhaus, the area is developing into an important center for culture and design
  - Essen has been chosen as the Cultural Capital of Europe for 2010, and Zollverein will be the main event location
  - The 100-hectare complex (the size of 140 soccer fields) accommodates:
    - museums, more than 100 companies, several event locations, and a design school built in 2007.
  - Since a Europe-wide design competition in 2005, the Zollverein Park project has been designed and implemented by a team of communication designers, landscape architects, lighting designers, and artists.

Zeche Zollverein
2008 SEGD Wayfinding Award Winner (cont’d)

- **Challenge**
  - Meet the needs of 500,000 visitors each year while working within stringent regulations for monument conservation.
  - Identify buildings and features in two languages (German and English) and include both historic and new building names

- **Wayfinding Strategy**
  - The system uses a wide variety of tools to aid wayfinding, from human beings to sign panels, cast-iron miniature models, maps, ground markings, lighted panels, and printed media
  - The team first cleared the area of all existing signs, posts, and panels. They divided the park into three subdistricts: Shaft XII, Shaft 1/2/8, and the Coking Plant
  - A parking guidance system leads visitors to their relevant entrance, where the wayfinding system takes over
  - First, a series of tenant panels at the periphery of the park identify locations of interest, list tenants, and provide takeaway materials. Pavilions at the park’s entrances house 3D, 1:715-scale steel models of the entire area, providing topographical reference. Printed maps and ground markings lead visitors to specific buildings or sites, where more miniature models provide building and site details
  - To make the wayfinding communications internationally understood, the team added Roman letter designations corresponding to the three subdistricts (A, B, and C) and Arabic numbers to existing historical names of the districts and buildings.
  - Building “house numbers” are small LED-lit signs that provide the building name in German along with the subdistrict letter and building number. Doorbell panels on each building incorporate maps, and banners on the building provide information about temporary events.

Jury Comment

- “This project captures it all for me in one word: zeitgeist. It is the zeitgeist of the 2008 awards. ‘The spirit of the time; the spirit characteristic of an age or generation.’ This project speaks to me from the past and into the future.”

- “Appropriate in its totality, its essence in Essen is the flavor, feel, spirit, smell, feeling, look, tone—the general atmosphere of a place or situation and the effect that it has on people. I will include this in my top 100 places to see in the world.”
Texas Medical Center Wayfinding System
2008 SEGD Wayfinding Award Winner (cont’d)

- Background
  - World’s largest medical center
  - More than 40 member institutions located on a densely developed 800-acre site
  - More than 12 miles of streets and roadways
  - Approximately 43,000 parking spaces in dozens of parking garages and surface lots

Texas Medical Center Wayfinding System
2008 SEGD Wayfinding Award Winner (cont’d)

Wayfinding Strategy
- Fd2s, wayfinding strategy firm, developed a comprehensive wayfinding strategy and master plan
- Coordinated and implemented the five-year, $10 million implementation of this strategy
- Implementation activities included:
  - design development for all wayfinding components
  - construction documentation
  - supervision of all fabrication and installation
  - development of printed and interactive wayfinding tools
- fd2s worked closely with TMC staff, as well as with members of the TMC Ad Hoc Committee on Wayfinding
- Members of this committee were briefed regularly on the status of the project, and also participated in numerous work sessions.
- fd2s met directly with high-level representatives of TMC member institutions, gathering information about their immediate needs and future expansion projects, and generally working to build a consensus for the concepts being developed and smoothing later efforts toward full stakeholder buy-in
- The underlying logic of the wayfinding system ties particular destinations to landmarks, which take the form of large, numbered entrance monuments
- Directional elements on roadways leading to the Medical Center guide users to these landmarks, and from there more specific wayfinding signage takes them to the appropriate institution entrance.
- While this wayfinding logic is effective and makes the system very easy to update and maintain, it does require that the user know which landmark is associated with their destination before they begin their journey to the Medical Center. For example, in order to find the UT Dental Clinics, the user needs to know that they will use “Holcombe Boulevard Entrance Number Two.” This prior-to-departure information is made available through a wayfinding website (accessible from computer or PDA), scripted telephone information, and a printed visitor guide.
- The project scope also included addressing the Medical Center’s brand-building goals
- fd2s created a new TMC positioning line, “A Community of Caring,” and developed the approach of using human faces on printed materials and planned campus identification elements to convey this message
- fd2s has recently begun work on a new assignment for TMC, updating the mapping system on the TMC website to utilize Google Maps as a base. This will offer additional functionality (such as point-to-point directions and locations of nearby amenities), while also improving accuracy and reducing the need for static hand-drawn maps

Texas Medical Center Wayfinding System
2008 SEGD Wayfinding Award Winner (cont’d)

- Jury Comment
  - “The sheer magnitude of the undertaking alone deserves an award for perseverance and dedication. The designers have managed to attain—and retain—a high level of 3D detail and visual consistency across an immense program. Projects of this nature are the backbone of the profession. The program involves not only the signage and wayfinding elements but deals with the entire process of check-in, information dissemination, and print and web materials.”

Los Angeles Metro
SEGD 2007 Wayfinding Award Winner

- Background
  - After spending decades and billions of dollars developing a commuter bus and light rail system for the sprawling Los Angeles region, the Metropolitan Transit Authority needed to create a comprehensive identity system for it
  - Metro assembled an in-house design team to brand the system and develop:
    - signage and wayfinding guidelines
    - identification for rail and bus stations
    - fleet graphics
    - image advertising
    - web site
    - timetables and maps
    - bus passes and brochures
    - merchandising and other materials

Wayfinding Strategy

- Signage ranges from grand pylons identifying Metro rail stations to blades for 18,000 bus stops
- New station markers are modern stainless steel wedges with push-through lettering, topped by the distinctive Metro logo
- Designers maximized the signs' visibility by using innovative materials, including perforated vinyl and plexiglass panels that allow customers to see a positive (black) logo by day and a negative (white) logo by night.
- Metro's bold new fleet design (which The New York Times calls “sleek-with curb [and sex] appeal”) was developed to increase visibility on the street
- The system's former paint scheme was a generic white with costly custom decals, and difficult for customers to distinguish from a distance. Vibrant new colors were chosen to denote service: “California poppy” for Metro Local service; “rapid red” for Metro Rapid service, “business blue” for Metro Express commuter service; and “stylish silver” for Metro Rail and Metro Liner service
- Metro's first comprehensive Signage Standards Manual was developed to integrate both bus and rail signage and wayfinding concepts. The standards address including accessibility and the existing architecture of the Metro system. The standards include a plan for the re-vitalization of existing environments and address future construction and extensions of the transit system
- Placemaking has also been part of the Metro design team's work. The Metro Wilshire Customer Center, which spans the high-visibility corner at Wilshire and La Brea, was transformed from an institutional gray “bunker” into a visual landmark. Artist Jim Isermann’s eye-popping façade is inspired by the architectural vernacular of Southern California sun screens used to cosmetically “modernize” architecture in the 1950s and 60s. To add night-time presence, Metro Creative Services designed and incorporated neon signage into the façade.
- To conceal a construction site for a facility linking two key lines of the Metro system, the team designed a unique mural that combines a typographic map of the San Fernando Valley with text describing the origins of street and neighborhood names and historical images of transit in the area. The 5,500-sq.-ft. mural works visually at both a distance as well as at a pedestrian level
- Other projects included station identifiers and a banner system promoting the Metro's new fast-track Orange Line. Bold, colorful banners with engaging text were installed along the new line during the months leading up to and following its opening. The banners encouraged ridership and enhanced safety awareness for vehicles not accustomed to the street-level intersections

Jury Comment

“The scope of the graphic design and sign program is huge, and the jury unanimously commended the MTA for its ability to create a strong graphic brand and a world-class sign system. Every graphic element—color, typography, and color placement—was considered for its ability to communicate information concisely and consistently. All the hardware is durable and elegant. Local artists were commissioned to enhance MTA auxiliary buildings, and even temporary signs and construction fences carry the established color and typographic language in an engaging way. The result of this effort has inspired confidence in the minds of Los Angeles residents who, it is hoped, will continue to use rapid transit in greater numbers and leave their cars behind.”

Background
- Terminal One at Lester B. Pearson International Airport in Toronto is a major hub for international travel between the U.S. and Canadian borders and one of the busiest airports in the world
- Signage system has to accommodate the Canadian Language Act, which mandates all public signage appear in both English and French

Wayfinding Strategy
- The designers created two different signage elements:
  - tall information pylons made of aluminum
  - overhead directional signage
- All signage was designed for maximum visibility across the terminal's interior spaces and is internally illuminated with long-life lighting elements for minimal maintenance
- A traveler can intuitively follow his or her way through the terminal using a color-coded system for information regarding gates, ground transportation, customs, and amenities

Jury Comment
- "This wayfinding system is simple and functional in execution and its readability from considerable distances supports quick association with destination for the traveler. In an already harried environment like an airport, the designers give a simple gift to the user by not making them work hard to interpret the symbols. I love the clean color palette of black, silver, and white punctuated with yellow. The masculine design imparts a solid, no-nonsense feel to the signage. The messaging has a simple a-b-c approach that is comforting and respectful to the traveler."

Wayfinding System for New York and New Jersey Airports
SEGD 2003 Wayfinding Award Winner (cont’d)

- **Background**
  - The three airports of John F. Kennedy, Newark Liberty, and LaGuardia operate separately, as do all individual terminals
  - Over the years, this has resulted in a vast variety of signage styles and types with inconsistent – sometimes even conflicting – information, all displayed in an already highly complex environment

- **Challenge**
  - To develop one master system that can be applied to all airport terminals, roadways, and parking facilities, and which has the sophistication to direct passengers from all over the world within an environment of hundreds of possible destination

- **Wayfinding Strategy**
  - Initial programming and implementation were developed by Chermayeff & Geismar and applied to Terminal 4, along with Bureau Mijksenaar's graphic standards, resulting in a "full information system" that provides all information necessary to travel smoothly through the airport – from curb to plane and back
  - In addition, color-coding should increase visibility and information comprehensibility, allowing passengers to follow only signs that are relevant to them at a given moment
  - J.D. Power and Associates survey of the new system at LaGuardia Central Terminal confirmed "significantly improved consumer satisfaction" when compared with the prior system

- **Jury Comments**
  - "The need for airport wayfinding to function clearly, simply, and directly has been successfully achieved in this application."
  - "Back to the basics here. Airports are extremely demanding environments for the user. Often wayfinding is lost in the character of the architectural environment. For the New York and New Jersey airports, it is all about the visitor and the simplicity and hierarchy of color systems and typography. Information is organized based on decision-making and location. The signage system is all about the message sign structures. This system ties the entire network of roadway, parking lots, and terminals into one format of communication."

Charles de Gaulle Airport
SEGD 2002 Wayfinding Award Winner

- **Background**
  - Aeroports de Paris-France contacted Coco Raynes to create a Universally Accessible Wayfinding and Information System for Roissy Charles de Gaulle Airport, one of the largest international airports in the world
  - The system was to be implemented into new and existing built environments

- **Wayfinding Strategy**
  - This concept was selected because the proposed components of the information system could be integrated into the architectural design of the new constructions or easily retrofitted into the existing facilities
  - The visual, tactile, and audio information was designed to be universally understood and conveyed in three languages: French, English, and Spanish
  - At Terminal 2C, the challenge was to direct passengers with reduced mobility (PMR) from the point of arrival on the sidewalk to the PMR reception area within the terminal. The components of the information system include an information table with a tactile map blasted on a slab of laminated glass introducing the floor plan of the overall Terminal and orienting the passenger toward the PMR reception area
  - A handrail segment in stainless steel with Braille and audio information is installed at the edge of the table to protect the glass and further inform travelers
  - Handrail segments are installed at four key locations along the path. Each rail presents sequential information, facilitating navigation through difficult areas such as the revolving door entrance. Slightly raised dots mounted on the floor delineate the path already indicated on the tactile map. The dots are bright yellow and make a sound when tapped with a cane

- **Jury Comments**
  - "This project elevates accessibility through wayfinding to a new level – touching upon the senses, without obstacles to the end, creating a truly barrier-free environment."
  - "Perhaps this idea, that the visually impaired need a complete wayfinding program – not just gratuitous Braille dots in hard-to-find spots – will help ADA administrators to think more universally about access."

Wayfinding Systems/Programs Case Examples
Objectives

- The main objective of a standardized regional tourism signage system is to provide visitors to our region easy and understandable access to tourism-related destinations. A uniform region-wide system of tourism signs, instead of a multitude of local systems in addition to the dominant NYS DOT signage system, would make navigation for visitors easier.

- As shown above, there are several different signage systems in our region that are intended to guide tourists through our region. But because of the uncoordinated nature of the existing tourism signage systems, visitors might be easily confused about what the potential destinations are and how to reach them.

- There is a direct correlation between the effectiveness of a signage system and the satisfaction of individual tourists and groups traveling throughout the region.

- Only an effective signage system will guarantee that more visitors can enjoy the natural and cultural resources that our region offers. In return, an increase in visitors will also boost regional tourism-related revenues.

- To ensure the effectiveness of a regional signage system, the counties in our region should define areas of recreational and cultural interest to be included in the signage system. This will help to guide tourists from major highways into areas of interests to final destinations and avoid a confusing and wasteful trailblazing system.

Genesee/Finger Lakes Regional Council (cont’d)

Principles

- Safety: signs may not pose a safety hazard and an impediment to smooth traffic flow
- Standardization: of sign size, location, color, and content in compliance with federal and state highway regulations
- Trail-blazing: throughout the entire regional road network (including local, county and state roads) from the freeway exit into the area of recreational and cultural interest and to the individual attraction or business
- Accessibility: the signage system should guarantee equal access for any attraction or business that meets predetermined eligibility criteria
- Maintenance: each attraction or business is responsible for the maintenance of signs and surrounding vegetation
- Self-finance: each attraction or business assumes the cost for sign erection and maintenance

Destinations
The regional tourism signage system includes both public and privately owned/for-profit destinations:
- cultural/institutional (museums, libraries, art galleries, theaters, colleges, government
- buildings, public markets, civic and convention centers, botanical gardens, zoos, etc.)
- historic (historic sites and districts, landmarks, etc.)
- recreational (trails, parks, stadiums, skiing areas, golf course, public beaches, rafting, windsurfing, marinas, bicycle rental, boat cruises, riding centers, theme park, etc.)
- transportation-related (transportation centers, railroad and bus stations, etc.)
- tourism-related (visitors and interpretation centers, hotels, campgrounds, bed and breakfasts, arts and crafts shops, etc.)
- agriculture-related (orchards, vineyards, farm markets, fish hatcheries, etc.)

**Genesee/Finger Lakes Regional Council (cont’d)**

**Linkage to Federal/State Highway Signage Rules**

- **Design**
  - There exist a variety of different systems of tourism-related signs. In addition to the NYS DOT with its destination and service signs, other state, regional, and local sign systems also help to guide motorists to find tourism-related destinations.
  - The design for a regional tourism signage system should follow the federal provisions in the Manual on Uniform Traffic Control Devices (MUTCD). The NYS DOT has to comply with federal standards outlined in the new 2000 MUTCD.
  - Chapter 2H of the federal MUTCD introduces the category of “Recreational and Cultural Interest Area Signs.” A new regional tourism signage system should use the destinations included in this category to the fullest extent. The category covers most destinations listed under 3), uses white-on-brown signs, and allows for directional auxiliary signs (arrows). The signs are similar to those used for the NYS DOT Historic Site, the NYS Heritage Area, and the NYS Scenic Byway programs, as well as to those used for the National Historical Park, the National Forest, and the National Wildlife Refuge programs.
  - In conjunction with the white-on-brown recreational and cultural interest area signs, existing white-on-blue tourist oriented business signs (TOD) could be used as part of the trail-blazing system to guide motorists from highways in the immediate vicinity of the tourism-oriented business to the final destination. Existing white-on-green destination signs could also be included in the system to direct visitors and residents to such transportation-related destinations as bus and railroad stations and airports.
  - As it is important to create an effective regional tourism signage system, it is equally important to retain those signs that are recognized by the public at large, such as directional signs for libraries, hospitals, or airports or such service signs as tourist-oriented business signs.
  - International symbols are usually not explicitly tourism-oriented, but rather of a more general nature. To a large extent, international signs for hotels, airports, or rest rooms are similar to those used in NYS or other states. Also, the available types of international signs might not be sufficient for creating a comprehensive regional tourism signage system that includes destinations ranging from art galleries to apple orchards. International signs may also not be suitable for conveying a regional identity.

Implementation

- Define areas of recreational and cultural interest in the region/each county
  - regional county tourism agencies cooperate with relevant tourism groups, business organizations, and NYS DOT
- Hire consulting firm that is familiar with legal framework and traffic standards
  - contracted firm needs to know federal and state regulations concerning eligibility criteria for tourism-related destinations, attractions, and businesses and state engineering standards regarding sign design and location
- Apply to NYS DOT
- Hire highway sign company
- Implement standardized regional tourism signage system

State of NJ: Wayfinding Master Plan

Vision
- “To make New Jersey a more welcoming, livable, friendly place by helping us find our way with ease and by making all our many points of interest and areas of natural beauty more accessible”

Rationale for a Wayfinding Program
- Reduces the frustration of traveling in unfamiliar neighborhoods
- Enhances pride in our sense of place by reminding us of the sites which give character to our surroundings
- Tourism is a $35 billion industry in New Jersey. Neighboring states have already begun to enhance Wayfinding to support their own tourism. New Jersey needs to keep pace and be competitive.

Challenge
- Most densely populated and most culturally diverse state in the nation with more roadways per square mile than any other state
- 566 municipalities, 21 counties and a number of state authorities over the roads
- Lack of coordination between municipalities and counties

Opportunity
- In October, 2006, Celebrate NJ!, a New Jersey non-profit organization, accepted the request of the New Jersey History Advocates to champion a seamless, systematic, statewide wayfinding system
- Wayfinding Symposium brought 100 representatives of statewide organizations together, working closely with NJ DOT, Celebrate NJ! began the process of coordinating four task teams (TODS, Pilot Project, Funding, and Public Relations), funding raising, and hiring a team of Wayfinding experts: John Bosio (MERJE Wayfinding designer), Lance Wyman (an internationally recognized Wayfinding iconographer), and Wansoo Im (an extraordinary GPS mapping expert)

Proposed Plan
- Celebrate NJ! proposes to accelerate the process by facilitating the involvement of a wide spectrum of stakeholders, encouraging public/private collaboration, coordinating meetings to develop a process of consensus building, and forging a common vision. No one person or group singly can do what all of us can do easily together. This is not an impossible challenge, but an opportunity for creativity, imagination, and commitment

State of NJ: Wayfinding Master Plan (cont’d)

Approach To Establishing Six Wayfinding Zones Within The State

- Create a simple and memorable map pattern that is absent of political, official or functional boundaries
- The zones are intended to reflect the context of the State while the naming of the zones remain consistent with cultural and historical references
- Icons were developed for each zone to clearly and simply establish each area and provide an single element that can be used on signs, maps and promotional materials
- The six zones identified are:
  - Skylands
  - North Jersey
  - Capital
  - Shore
  - South Jersey
  - South Shore

State of NJ: Wayfinding Master Plan (cont’d)

- **Cost**
  - Small boroughs or main street programs could expect to spend anywhere from $25,000–$50,000 on planning and design fees plus $50,000–$75,000 on implementation of a system depending on the project’s scope.
  - Mid-size city may spend $85,000–$120,000 on planning and design plus $350,000–$500,000 on implementation
  - Comprehensive city/regional program costs could be upwards of $150,000–$225,000 for soft costs plus $750,000–$1.2 million for hard costs

- **Funding**
  - This statewide wayfinding system will seek to maximize available federal, state, and county funding through coordination, uniformity, and economies of design and fabrication costs as well as attract private funding

- **Legislation**
  - Both houses of the New Jersey legislature will be drafting wayfinding legislation in conjunction with Celebrate NJ! utilizing core elements of the Wayfinding Master Plan document
  - This will assure cooperation and coordination among state agencies, counties, and municipalities by providing a process, a set of guidelines, and legal authority regarding jurisdictions to implement wayfinding throughout the State

TODS Program
As part of the overall analysis for wayfinding throughout the State of New Jersey, all wayfinding signage must be considered.
A key component of that is the NJ TODS (Tourist Oriented Directional Sign) program. As a part of this comprehensive master plan our main objective is to include recommendations regarding the participation criteria and linkage between the TODS signage and the larger wayfinding program throughout the State.

Existing NJ TODS program
NJ TODS signs are found on state highways, whereas NJ Logos signs are found on interstate highways. The existing NJ TODS signage provides direction to tourist oriented businesses and activities. These businesses and activities are defined as “any licensed commercial, recreational, cultural, historical or educational activity whose major portion of visitors are derived from motorists not residing in the immediate area of the business or activity.” At present, participation in the TODS program is represented by food and fuel entities (73 percent), lodging (10 percent), commercial/retail (9 percent), and the remaining seven percent is comprised of amusement, tourism, cultural, historical, camping, entertainment and wineries.

Businesses and Activities must meet some general requirements that are applicable to all participants and then specific requirements depending on the nature of the business. General requirements include being located on the crossroad where the sign would be placed, having licensing by all appropriate authorities and possessing valid permits from all appropriate health departments.

In addition:
Fuel facilities are currently expected to have gas, fuel, and oil for cars, trucks and other vehicles and be located within one mile of the highway. They must have free public rest rooms, a public telephone and provide drinking water. Continuous operation must occur for at least 16 hours each day, even days each week throughout the year.
Food facilities must be in continuous operation at least 12 hours each day, six days each week throughout the year and are within three miles of the highway. They must also have free public rest rooms, a public telephone and provide drinking water.
Lodging facilities should have a minimum of 10 units, each with a private bath and off-street parking. They must have a public telephone, be located within three miles of the highway, and operate continuously seven days each week throughout the year.
Camping Facilities should be located within seven miles of the highway and have public rest rooms and showers, a public telephone, and provide drinking water.
Any other applicable attractions and businesses should be located within three miles of the highway and have public rest rooms and showers, a public telephone, and provide drinking water.
The current design criteria for TODS signs limits each sign to four messages per sign structure with a maximum of 2 sign structures per approach of an intersection. Each listing receives its own message panel measuring 6-feet wide by 2-feet high. Entities are currently permitted to include a logo/symbol as part of their message.

Participation Guidelines

- The current TODS system is heavily focused on tourist oriented services such as food, fuel, lodging, and a handful of other applicable businesses rather than tourism oriented attractions.
- By having the TODS program expand and re-focus so that it can better meet the needs of tourists and of the large number of tourist oriented attractions in NJ, the wayfinding effort is greatly enhanced across the State of New Jersey.
- In order to expand and re-focus the program we are recommending a two-tier system of eligible locations, giving priority to tourist oriented attractions. This would move over 80% of the current listings TODS into Tier 2* category. In this expanded program Tier I attractions would include cultural, recreational and educational attractions and retail-tourism businesses. Tier II would then focus on the tourist oriented services such as food, fuel and lodging. Certain commercial, governmental, medical and religious businesses would be excluded from participation in the NJ Tourist-Oriented Directed Signage program. This exclusion would only relate to a business’s qualification under only these specific categories.
- These facilities may participate if they qualify under another acceptable category.

Organizing a Steering Committee should be the first item of business when establishing a signing region. Members of the steering committee may include representatives from the State, County(s), City(s), Department of Transportation, Public Transportation Agency, Special Improvement District or Tourism and Visitors Bureau. City departments such as Public Works, Planning and Economic Development, and Travel and Tourism are also valuable team members. In addition, major destinations such as performing arts centers, museums, universities and other visitor attractions should be represented.

After the steering committee has been organized a Project Director should be assigned. The project director will organize stakeholder and community meetings, research and secure funding, act as a liaison between the local government officials, stakeholders and consultants as well as obtain information for the design professionals. It is very helpful if the project director is politically savvy and understands community issues. Familiarity with local municipalities’ approval processes and key decision makers is also a positive attribute.

The steering committee should outline a list of possible projects, which could include; vehicular and pedestrian sign programs, historical markers, information kiosks, interpretive signage, banners or a shuttle bus system. Keep in mind that although the committee may feel all of these programs may be necessary, each one is a major project in itself, both in design and planning efforts as well as funding. Your group should be realistic in setting goals and establishing a scope. Once the scope of the project is defined, the steering committee then must determine the boundaries of the project area, including; highways, districts, gateways and other potential signing areas, such as underground or skywalk systems.

The Steering Committee establishes a list of potential stakeholders and develops a preliminary criteria for inclusion in the system. Guidelines for developing inclusion criteria are outlined in the next section of this master plan.

Possible funding sources for regional signing programs could include grants from the State DOT, County, Stakeholder contributions, Council of Governments, TIF programs or Special Improvement Districts.
Pocono Mountains Wayfinding Signing Program in PA

Goals

– To improve the level of service provided to the traveling public
– We are in the initial stages of exploring the creation of a Signing Region, in cooperation with the Pennsylvania Tourism and Lodging Association and PENNDOT. The Pennsylvania Department of Transportation has been working to standardize directional tourism signing in the state and has been disseminating information to its Engineering District Offices as the various regions in the Commonwealth undertake efforts to become Signing Regions
– To assist the Region with this project, HRG Consultants of Harrisburg has been retained as the technical consultant for this project. HRG has excellent experience in Wayfinding Sign Systems. In addition, Delta Development Group, Inc., of Mechanicsburg will provide guidance in securing community input for this project. The Pocono Mountain Vacation Bureau, working with the consultants, formed a Steering Committee of individuals whom represent the many interests in the region. The Committee has been meeting on a monthly basis with the consultants in the development of a comprehensive wayfinding program

Wayfinding

– Wayfinding Signing is an alternative to Tourist Oriented Destination Signs (TODS). Its purpose is to provide a systematic network of directional signs to guide the traveling public from major highway gateways to key civic, cultural, regional and commercial destinations using the minimum number of signs. It is designed to coincide with regional tourism marketing

Source: http://www.poconowayfinding.org/
The Need for Wayfinding

The challenges to current resource signing include: lack of uniformity; message overload; sign redundancy; poor image for state tourists; lack of effectiveness/prioritization; lack of program documentation; lack of program maintenance. These challenges have been recognized in the Governor’s Strategic Tourism Master Plan – Goal # 9: “Install tourist-friendly signage.”

Purpose: To improve state’s signage system and related mapping to make signs more customer-friendly since the vast majority of Pennsylvania’s tourists arrive by car

Mission: To improve quality of and apply uniform standards to the state signage system and related mapping

Key Elements: Signage partnership; new statewide signage system

Source: http://www.poconowayfinding.org/
Pocono Mountains Wayfinding Signing Program (cont’d)

Wayfinding Process

1. Identify major travel routes in region
2. Identify “guideways” (Examples: Mountain Recreation Route, Technology Corridor)
3. Identify major resources (Example: Lighthouses)
4. Identify resource groupings
5. Identify signing for individual resources

Key Program Elements
- PENNDOT
  - Administration and maintenance performed by statewide non-profit Signing Trust
  - No new TODs installed once region is approved by PENNDOT
  - Existing TODs signs removed after 5 years
  - Must follow PENNDOT’s “toolbox” process to become region
  - Establishment of a local steering committee
  - General organization template
  - Planning meeting/consensus building
  - Preliminary plan process
  - Regional Requirements
  - Final Plan Process
  - Final Report

Program Fee Structure
- Initial Participation Fees
- Annual Fee

Source: http://www.poconowayfinding.org/
Pocono Mountains Wayfinding Signing Program (cont’d)

Steering Committee

- Members of the Steering Committee include individuals whom represent the many interests that should be represented in discussions that will take place on this very important issue. The purpose of the Steering Committee is to:
  - Assist HRG and Delta Development Group
  - Identification and Consensus on Resources
  - Design Standards
  - Preliminary and Final Plan Process
  - Budget and Pro-Forma Review
  - Project Implementation

Role of the Stakeholders in the Pocono Region

- The consultant team has suggested a communications process that will entail a set of meetings in each of the four counties to explain the Wayfinding Signage program and collect data from Stakeholders on resources and to hear what is or has been done, and by whom, in the way of signage. When the team has completed this work, it will meet with the Steering Committee and review its findings
  - Monroe County
  - Carbon County
  - Pike County
  - Wayne County
  - Stakeholders represent tourism and resource interests
  - Assist in the identification of resources

Source: http://www.poconowayfinding.org/
## Coordination with Other Sign Systems:

**Treatment of Existing TODS Outside of a Signing Region**
- The TODS program should continue under the current Department policy with the following modification. All new agreements for TODS should include a provision that the TODS may be removed when a Signing Region is established, that includes the location of the TODS installation regardless of whether the Attraction participates in the Regional Signing Program.

**Treatment of Existing TODS Inside of a Signing Region**
- No new TODS installations should be approved upon the establishment of a Signing Region.
- Existing TODS of Attractions that participate in the Regional Signing Program should be removed.
- Existing TODS that conflict with the installation of a Regional Sign installation shall be relocated to an alternate location. In the case that an alternate location cannot be identified the Regional Trust should work with the business to find a mutually acceptable resolution.
- Existing TODS that serve as trailblazer signs in the PA Logo Signing Program should be replaced with signs that conform to the Regional Signing Program design. The TODS replacements shall be coordinated with the Administrator of the PA Logo Signing Program.

Source: http://www.poconowayfinding.org/
Massachusetts Agricultural Directional Signage Program

What is an Agricultural Directional Sign?

- An agricultural directional sign is a special highway sign that directs motorists to farms that are open to the public, but not located on state highways. These blue signs feature the “Massachusetts grown…and fresher!” logo, several icons for products the farm produces, a directional arrow and the name of the farm. *If your farm is not in a high visibility location, an agricultural directional sign can help increase business*
Who is eligible to get an Agricultural Directional Sign?
– Only farm operations that grow on-site a majority of the products they sell are eligible for the agricultural signage program. Farms must be primarily engaged in agriculture as a business and have regular hours of operation, either seasonally or year-round. Only on farm farm stands are eligible.

Where can the signs be erected?
– Directional signs are allowed only on non-limited access state roadways. In other words, these signs are not allowed on major highways with limited exit and entrance ramps. They are also not allowed on town roadways. Please read the Criteria sheet for more details. Your Mass. Highway Department District Office will determine final approval for a specific location.

Who pays for the sign and how much does it cost?
– The entire cost of the sign is paid by the farmer. The Mass. Highway Department charges a $250 fee per sign. The cost of fabricating the sign will vary but may cost between $500 - $800 per sign.

How do I get an Agricultural Directional Sign?
– First please read the Agricultural Directional Sign Criteria carefully to determine if you might be eligible for the program. Also read the General Information on Tourist Oriented Directional Signs. Once we receive your application, the Department of Food and Agriculture will certify whether you are eligible to use the product icons and the “Massachusetts grown…and fresher!” logo. We will then forward your application to the Mass. Highway Department. When you receive a letter of approval from the highway department for the location, you may have the signs fabricated.
Legible London – Wayfinding
(System in Beginning Stages of Implementation)

- **What is Legible London**
  - A wayfinding project designed to provide better information throughout the Capital for people who want to walk
  - A study conducted two years ago on behalf of Transport for London found that the present multitude of pedestrian sign systems in central London are ineffective and often confusing, and that there was a consequent over-reliance on the Tube map to help people navigate above ground
  - By coordinating information across the boroughs, the different transport modes, and the media (signage, maps, fingerposts, etc.) people use to find their way around, Legible London will give Londoners and visitors alike more confidence to travel around the Capital on foot

- **Measurement of the Program**
  - **Q. How are you evaluating the impacts/benefits of the prototype, ie. how will you know if it’s successful?**
    - A. There will be extensive evaluation before and after on a range of issues including: general impression, views of local retailers and residents, measurable and quantifiable benefits

- **Technology**
  - **Q. Why are you using such old-fashioned technology as street signs? Won’t everybody have Tom-Tom on their mobiles before long, making this redundant?**
    - A. The system is designed to use various information channels, not just street signs. It is hoped that some ideas for hand held / mobile technology will be tested early enough to be part of the prototype

Source: http://www.legiblelondon.info/wp01/?p=38
Legible London – Wayfinding Organization

Programme Board

Stakeholder Manager

Programme Manager

Design Manager

Pilot Delivery

Research & Development

Local Scheme Designers

Opportunities/integration

Task Force Groups

Technical Inputs

Source: http://www.legiblelondon.info/wp01/?p=38
Task Force Groups

- Product Specification
  - Focus on the design and evaluation of the street furniture
- Scheme Implementation Guidelines
  - Detailed scheme design and organizational issues associated with a scheme implementation
- Visual Identity and Information
  - Content Focus on the mapping content and look of the system
- Living Map
  - Establishing who are stakeholders in this technology and who needs to be consulted in the requirements specification
- Steering Group
  - Coordination and leadership

Source: http://www.legiblelondon.info/wp01/?p=38
Legible London – Wayfinding Measurement

Currently there are several surveys trying to gage the program’s effectiveness

- **Questions Posed**
  - How do street users respond to the new system?
  - What is the impact on the quality of the urban realm?
  - Is there a measurable impact on people’s journeys?

- **Fieldwork:**
  - Questionnaire survey (sample 1,200)
  - Mystery shopper survey
  - Pedestrian tracking survey (sample 300)
  - Full area-wide signag audit
  - PERS audits
  - Handel House
  - Museum surveys

Source: Legible London Bond Street prototype: Evaluation framework. Presentation. www.cbuchanan.co.uk
System Design

The system will be designed to improve the access and connectivity within the Atlanta area (as defined approximately from the I-75/I-85 split north of Midtown to Turner Field to the south, the Carter Center to the east and the Atlanta University Center to the west). The system will also be designed to direct pedestrians effectively within a select group of districts or areas (Downtown, Midtown, Fairlie-Poplar, and Sweet Auburn, for example). The project will include both pedestrian and vehicular signage.
Project Goals

– Provide wayfinding which considers primarily the first-time visitor to Atlanta;
– Improve access, identification and connectivity to the six AREAS in Downtown and Midtown and the destinations within them
– Further enhance Atlanta’s public image through distinctive, helpful graphics, to make Downtown and Midtown Atlanta more “user friendly”
– Reflect Atlanta’s structure and vision
– Improve vehicular, pedestrian and cycling safety by better informing visitors;
– Create a memorable experience
– Provide the information people need to comfortably access area businesses, attractions, parks, historic buildings and meeting venues
– Provide better and timelier information and reduce misdirected travel
– Increase the number of people who visit/use Downtown and Midtown Atlanta;
– Provide pedestrian signage in various areas to increase pedestrian traffic
– Help drivers locate and identify parking convenient to their destination
– Improve the connection between MARTA and destinations in a defined area
– Address ADA legibility guidelines in the design of the program
– Serve as a potential model for wayfinding throughout the Atlanta Region and State

Wayfinding Difficulties in Atlanta:

- The apparent lack of a consistent street grid
- Interstate highways that meander through the City, disorienting the visitor’s reference to the cardinal directions
- Many of the city streets themselves meander and are often misaligned at intersections, or take off at slightly different angles.
- The vast majority of parking venues in the study area are privately owned
- Recognizing that Atlanta is positioning itself as the “Gateway to the Americas,” considerations should be made in the program for those whose first language is other than English

FUNDING

There are two phases of funding for this program: implementation and operational costs. These are described along with the funding sources.

a. **Implementation** - This is the initial startup cost and includes the Gateway, Directional, Secondary, Destination and Point of Interest Signs (POI) signs funding shall be as follows:

   - Gateway, Directional, and Secondary signs – shall be funded using $5,000 Lodging Tax and the balance using General funds or other funds as designated by the City Council.

   - Destination Signs:
     - Point of Interest Signs (non-site specific) – the City shall fund 100% of the POI that designate a direction to an area and do not include a specific site.
     - Point of Interest Signs (site specific) – these original signs shall be purchased by private interest and shall have not City funding. The price paid for the sign will be an “installed” price.

b. **Operating Costs** – All services performed for the maintenance and operation of the Way Finding sign program including repairs, cleaning, and replacement of the Gateway, Directional, Secondary, and Point of Interest (non-site specific) signs shall be 100% funded by the Lodging Tax unless the City Council determines to fund it from general funds of the City during the annual budget process. All services performed for the maintenance and operation of the site specific signs shall be 100% funded by the Lodging Tax.

PURCHASING

The City will purchase and/or approve all signs. Businesses seeking designation signs will be able to purchase signs through the City or through a City-approved vendor selected by way of a public purchasing process. Any business seeking to display a destination sign pursuant to this policy shall first execute an agreement with the City in a form substantially similar to the template contract contained in Exhibit C, attached hereto and incorporated herein by this reference as if set forth in full. The City shall approve all signs prior to placement within the City’s corporate boundaries to ensure consistency in design, color, and placement.

No sign shall be posted pursuant to this policy without prior City approval.

INSTALLATION

The City will install all signs with the exception of those destination signs located outside the city limits. The City of Woodinville is not responsible for securing permits or permission from other agencies to place these signs.

Source: City Of Woodinville, Washington. Wayfinding Sign Program And Its Funding
Downtown Los Angeles Way-finding Program – "Downtown LA Walks"

- **Purpose**
  - To help pedestrians and motorists more easily navigate through the greater Downtown Los Angeles area

- **Details**
  - Nation's largest
  - Consists of more than 1,300 signs
  - Signs serve to highlight and unify Downtown's thirteen districts as well as encourage walking and public transportation

- **The Downtown LA Walks program was the culmination of an effort driven by:**
  - the Confederation of Downtown Associations, group of nine Downtown area business improvement districts
  - with additional oversight provided by:
    - the Los Angeles Department of Transportation (LADOT),
    - Los Angeles County Metropolitan Transportation Authority (Metro)
    - Community Redevelopment Agency.

- **Cost**
  - More than $2 million
  - The majority of the funding, nearly 70 percent, was contributed by Metro
  - The remaining amount was funded by the individual members of the Confederation and LADOT

Wayfinding outcomes:

- New numbering system that linked phone numbers with room numbers
- New user-friendly consistent names of destinations that all could understand
- Valet services and shuttle bus linking the campus destinations
- Site amenities that provided better pathways to desired buildings and entrances
- Architectural and interior design features that provided intuitive pathways
- Strong integrated art program that became landmarks and meaningful sense of place
- Comprehensive new signage system linking clear communication, wayfinding information, easy-to-read graphics, and hospital branding
- Clear and simple map program that consistently linked directories with hand-held maps, landmarks, and signage

The following data was collected during the May 2006 kickoff meeting of stakeholders from the Fox Cities communities.

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Disney

- Considered the needs of all of their customers – “Walk In the shoes of the guest” by:
  - Attaching Braille cues to maps and signs for visually impaired and those needing extra guidance
  - Laying out maps in the same fashion as the park
- Created signage that includes four elements: a color, a shape, a word, and a number at all of their attractions
- Created functional, pocket-sized, maps which eliminated waste for the park’s custodial workers and became a keepsake after it’s use
- Created signs that evoked strong emotional connection towards the destination
- Created pathways in places where they were originally blocked by such design obstacles as flowerbeds, etc.

“Direction Philadelphia” Wayfinding System

- The fabrication and installation of wayfinding signs was financed by a combination of stakeholder, city, state and federal monies
- More than 700 such signs are now located throughout Philadelphia
- Since 1992 maintenance of the signs has been funded by the organizations listed on the signs
- Each stakeholder is assessed a yearly fee of $140 per listing
- These funds help defer the costs of annual survey work and routine repairs and cleaning. The city’s Streets Department provides funds to replace badly damaged signs and capital dollars for new sign projects
- In late 2002 the Center City District assumed responsibility for the Direction Philadelphia program

Appendix
List of Wayfinding Systems/Programs

- Disney Wayfinding
- Potomac Hospital - Woodbridge, Virginia Wayfinding
- Charles de Gaulle Airport
- Wayfinding System for New York and New Jersey Airports
- Lester B. Pearson International Airport, Toronto
- Los Angeles Metro
- Texas Medical Center Wayfinding System
- Zeche Zollverein, in Essen Germany
- “Direction Philadelphia” Wayfinding System
- Downtown Los Angeles Way-finding Program – "Downtown LA Walks"
- Fox Cities of Wisconsin Wayfinding Program
- City Of Woodinville, Washington Wayfinding Sign Program
- Atlanta, Georgia - A Wayfinding and Signage System
- Legible London – Wayfinding System
- Massachusetts Agricultural Directional Signage Program
- Pocono Mountains Wayfinding Signing Program
- State of New Jersey: Wayfinding Master Plan
- Genesee/Finger Lakes Wayfinding System
Tourism Directional Signage

Purpose
- York Region's many attractions and visitor services are an important part of the Region's economy. Tourism directional signage direct visitors to attractions and increase the visibility of the attractions to all travellers.

Eligible Operations
- These signs are for operations whose primary purpose is to provide tourism activities or facilities to tourists. Eligible operation types are:

Basic Eligibility Requirements
- The tourism attraction must meet the basic eligibility requirements as well as additional requirements based on the type of tourist attraction it is. The Basic Eligibility Requirements are:
  - Serve Transient Customers
  - Comply with all applicable legislation
  - Accessible to a road open to traffic
  - Open to the public at least 12 consecutive weeks per year
  - Open at least five days/week during its open season, on advertised set days/times
  - Have a reception structure – controlled gate, staffed reception and orientation point, or permanent interpretation panels or displays
  - Meet the specific criteria that applies to the tourism type
In addition to erecting its own signs for the purpose of directing traffic the MOT controls the siting, size, maintenance, wording and type of private signage within 400 metres (1312 feet) of the right of way of a Provincial highway including temporary signs.

Different standards apply in urban (i.e., built-up) and rural areas and to various types of signs.

The objective is to prevent the introduction of structures on or near the highway right of way, minimize distractions to ensure traffic safety and to a lesser degree prevent the proliferation of signs on the landscape.

Esthetic matters are not a direct objective of the Ministry’s commercial signing policy.

Outside of built-up areas billboard and field advertising must be spaced on both sides of the highway at least 300 metres (1000 feet) apart and not within 90 metres (300 feet) of an intersecting road or railway.

Advertising is prohibited on sharp curves.