Best Practice Research for Cycle Tourism Wayfinding

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Best Practice Research for Cycle Tourism Wayfinding

Introduction

The development and implementation of successful cycle tourism wayfinding initiatives require a consistent and identifiable network of signage across the designated region.

Implementing a successful wayfinding infrastructure not only functions as a navigational tool, it also creates an opportunity for branding and marketing use as it offers an opportunity for people to learn about new trails.

The purpose of this research is not to determine specific guidelines or technical specifications on a bicycle wayfinding and signage policy for Ontario, as there are already national, provincial and regional documents that guide these considerations (e.g. *Bikeway Traffic Control Guidelines for Canada or Ontario Traffic Manual – Book 18, Niagara Region Transportation Master Plan - Bikeway Identification and Destination Wayfinding Signage for Cyclists, etc*).

Rather this research highlights the best practices for cycle tourism wayfinding to identify past and ongoing wayfinding projects and trail networks used by cycle tourists; provincially, nationally and internationally. Its aim is to provide Ontario tourism and cycling stakeholders with a snapshot of successful initiatives and recommendations that incorporate these best practice concepts to help future decision-making as it relates to the implementation cycle tourism wayfinding projects.

To draw adequate solutions, a number of different existing wayfinding programs have been analyzed from which the four best ones are used to give guidance for a successful implementation. The following components were reviewed to help structure the findings:

1. Goals and objectives
2. Planning and formatting
3. Installation and Implementation

'Signage offers an opportunity to brand and a sense of place'

Overview of Cycle Tourism Wayfinding
Signage Types & Usage

Trailhead Signs or Kiosk - Orientation Maps – Interpretation Signs
This signs should be part of an informational
network that incorporates consistent branding.
Content for the display may include the following:
- Trail maps with names/numbers, level of difficulty
- Commercial amenities (gas, road / services etc.)
- Promotion of local business areas
- Things to know about the trail and surrounding areas
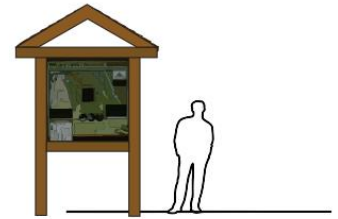
Source: www.ci.oakridge.or.us

Directional Sign
- Signage should be placed in advance of all turns (near side of the intersection) or decision points along the bicycle route.
- Directional signs should include destinations, directional arrows, and distance. Number of kilometers or travel time required to reach the destination provides bicyclists with additional information and may also be included.
- Place the closest destination to each sign in the top slot.
- A cycling speed should be predetermined to allow for consistent travel time calculations across the bicycle route.
- Turn signs should be placed on the near-side of the intersection to indicate where the bike route turns.

Source: www.ci.oakridge.or.us

Confirmation Signs
It is desirable for confirmation signs to be located following decision signs on the far-side of intersections at the first convenient installation location. Confirmation signs create confidence for cyclists letting them know they are the right route.

Source: www.ontariobybike.ca

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The Essence of Cycle Tourism Wayfinding
Benefits, Challenges & Considerations

Benefits
- Encouragement – Give cyclist confidence and incentivises them to return to the destination.
- Economic Investment – Successful wayfinding can drive economic growth into business districts.
- Providing information about destinations, direction, and distance.
- Enhancing users' ability to navigate and find key attractions.
- Reinforcing brand identity of trail and region - A uniform wayfinding program creates identity and feeling of cohesion.
- Promoting community awareness of trails and routes – Increase the use of trails not only for tourists but also local residents.

Challenges
- Continuity and uniformity between local and provincial parties.
- Accessibility – Determine key locations for signs and make them accessible for cyclists.
- Durability – Choosing the right material and ensure maintenance can be challenging and costly.
- Visibility – Changing seasonal conditions and weather can impact the visibility of signs.
- Funding and costs – Installation and maintenance of a wayfinding program can require a significant budget. Initial funding and ongoing costs need to be evaluated and secured in order to successfully implement a new signage program.

Considerations
- Material – The use of local and sustainable materials can help reducing the ecological impact.
- Following regulations set by specific jurisdictions.
- Scale – The size of signs needs to be adapted to fit the needs of cyclists and ensure appropriate legibility.
- Uniformity – In order to avoid confusion for cyclists. A specific design for signs needs to be determined in advance.
- Installation & spacing - locations and frequency of signs should be determined in an action plan.

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Existing Cycle Tourism Wayfinding Frameworks

National Regulations

- The Transportation Association of Canada (TAC) provides guidelines for biking signage in the Bikeway Traffic Control Guidelines for Canada (BTCGC).

An Ontario Context

- Ontario Traffic Manual Book 18 – Cycling Facilities

- Tourism Oriented Directional Signage (TODS) Program

- Province-wide Cycling Network

- Ontario Trails of Distinction Branding

- Existing signage Programs in Ontario

There are a number of existing cycling routes throughout Ontario with different types of signage that have been installed and used to communicate a variety of messages. Signage can be a valuable tool; however, if there are too many signs installed or conflicting information is presented, it can cause confusion.

'Avoid signage confusion and clutter'

Existing Cycle Tourism Wayfinding Frameworks
An Ontario Context

Existing signage programs in Ontario:

- The Great Trail / Trans Canada Trail
- Great Lakes Waterfront Trail
- Voyageur Cycling Route
- Greenbelt Route
- HamBur Loop
- Peterborough & the Kawarthas
- Niagara Region
- Northumberland County
- Bruce Grey Simcoe (RTO7)
- Haldimand County

Source: www.cbc.ca/news

Source: www.aptbopeddler.ca

'There are a number of different signage programs for cyclists across Ontario'

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Cycling Route Case Studies

In order to evaluate best practices, a variety of different signage programs, both national and international have been analyzed to determine specific criteria for a comprehensive implementation of a successful wayfinding system.

National

Ontario
- Great Lakes Waterfront Trail

Nova Scotia
- Blue Route

International

USA
- Oakridge & Westfir, Oregon

Europe
- EuroVelo

Source: www.waterfronttrail.org/

Source: www.bicycle.ns.ca
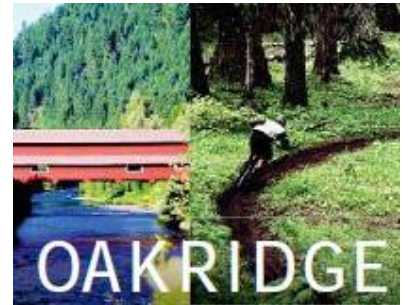
Source: www.ci.oakridge.or.us/community

Ontario Great Lake Waterfront Trail

Location: Great Lakes, Ontario (Canada)
Website: www.waterfronttrail.org

Trail Overview: The Great Lakes Waterfront Trail (GLWT) is a project of the Waterfront Regeneration Trust. This cycling route is 3000km long cycling following the shores of the Great Lakes in Canada and connects over 140 communities and First Nations. The Trail stretches along Lake Ontario, Lake Erie, Lake Huron, multiple parks, beaches, and wine regions. In total about 30% of the trail is off-road.

Goals and Objectives

The objectives of implementing a uniform signage system along the trail both aims to function as a navigational tool as well as assist with identification and branding. By providing a concise and economical signage package, GLWT and the communities are creating an identifiable wayfinding system that spreads across multiple municipalities and regions. The flexible use of the signs allows for a realignment in case of changes within trail sections.

Planning and Formats

To create a consistent network of signage, a variety of different types of signs have been developed, sharing the same attributes. Local communities who already have developed their own signage system shall incorporate the Great Lakes Waterfront Trail logos; regulatory signage falls under the jurisdiction of the trail authority and municipality in which each particular section of the Great Lakes Waterfront Trail is located.

Types of signs:

- Directional Signs - To provide direction
- Designation Signs - To provide confidence
- Single Info Signs – Indicate distance to one destination
- Double Info Tab Signs – Indicate distance to two destinations
- Bi-directional Designation Signs – Used at T-junctions
- Trailhead Signs – Double sided map
- Trail Flashings - Where low-impact signage is appropriate

Source: www.waterfronttrail.org/

Installation and Implementation

- Eye level for cyclists approximately 2 meters above ground.

- Located on the right side of the trail or road.

- Visible and not blocked by shrubbery and trees.

- Designation signs are located every 2 kilometers. Directional.
  signs are placed 15-30 metres ahead of designated turn or intersection.

The Blue Route

Location: Nova Scotia (Canada)
Website: www.blueroute.ca

Trail Overview: The Blue Route is Nova Scotia's provincial wide route network of bicycle infrastructure. It consists of connected bike routes with an easy to navigate way-finding system. Once completed, The Blue Route comprise a 3000km long network of signed bicycle routes, connecting riders with communities across the province

Goals and Objectives The objective of the Blue Route is to improve transportation options and foster ecotourism to support healthy communities. The implementation of a consistent wayfinding system is a critical part in creating a uniform identity for the blue route.

Planning and Formats

Nova Scotia Transportation and Infrastructure Renewal (TIR) is developing and creating a signage program based on the cycling signage standards provided by Bikeway Traffic Control Guidelines for Canada from the Transportation Association of Canada. The funding and maintenance of the Blue Route is done by TIR in collaboration with a number of appropriate partners. The Blue Route network system uses clear and consistent standards across provincial and municipal roads and off road trail systems. The province wide signage policy for cycling has been used to develop a set of standard signs followed by all jurisdictions across Nova Scotia involved in the process.

The size and format of the signs is based on pre determined standards specified in Bikeway Traffic Control Guidelines for Canada (BTCGC).

Installation and Implementation

- On shared roads the signs are placed in positions where they won't confuse motorists.

- Route markers are placed 20 to 30 meters in advance of any decision point.

- A Blue Route marker sign has to be placed at each entrance to the route and at each decision point where a cyclist must turn to remain on the route.

- Guide signs are used to inform cyclists of close by services and attractions. Those Signs used for advertising private businesses have to be paid for by the owner of the business. The income is reinvested in the development of the Blue Route Cycling network.

Source: www.bicycle.ns.ca

Source: www.bicycle.ns.ca

Oakridge & Westfir, Oregon

Location: Oakridge & Westfir, Oregon (USA)
Website: www.ci.oakridge.or.us

Trail Overview: The towns of Oakridge and Westfir are located 150 miles south of Portland and offer an extensive network of mountain bike and cycling trails. The trail network consists of about 500 miles of interlinked trails within the region.

Goals and Objectives

Oakridge's wayfinding program is used to create a unified signage system to connect visitors with amenities in the municipalities of Oakridge, Westfir, and the surrounding forest trail system. Furthermore, it interlinks the two towns and drives visitors into their commercial districts, attractions, and parks. A holistic trail system and signage program helps to connect key areas and with the creation of a uniform destination identity integrating different marketing initiatives.

Planning and Formats To fit within the history of the area local materials are used reflecting the identity of the place. Authenticity plays an important role. The signs incorporate forms coloration and methods of construction that are connected to the place. The planning of the wayfinding program was completed with funding from the Oakridge Westfir Tourism Alliance and Travel Oregon (through the Rural Tourism Studio Program) and included input from the Towns of Oakridge and Westfir, Lane County, ODOT, Willamette National Forest, UBRA, the Chamber of Commerce, GOATS, IMBA, Oregon Travel Experience, and Travel Lane County.

Types of Signs:

- Town and district identity signs – To create identity for the municipalities and the districts.

- Trail marker signs – Used to create a consistent way of identifying trails and give directions.

- Large and small directional signs – Provide directional connectivity with short and clear messages.

- Information Kiosks – Include trail maps and create awareness of the business districts and amenities. Describe the visitor experience and identify amenities such as restrooms, lodging, restaurants, museums.

Installation and Implementation A sign locations plan has been created to determine the locations for the different signs that are used. Most signs are post and panel construction requiring simple concrete pier foundations. These signs require the most maintenance.

Source: www.ci.oakridge.or.us/community

EuroVelo Trailsystem

Location: Europe
Website: www.eurovelo.com/en

Trail Overview: EuroVelo is a project of the European Cyclists' Federation (ECF) to develop a network of high-quality cycle routes connecting the different countries in Europe. The trail system can be used by long-distance cycle tourists, as well as by locals focusing on daily journeys.

Goals and Objectives

The aim of the EuroVelo cycling trail project is to create a system that can be understood by international and national users, in order to ensure the safe conduct of cycling in traffic. To achieve this goal, the European Cyclists' Federation (ECF) in cooperation with The United Nations Economic Commission for Europe have created guidelines and recommendations for a Europe wide wayfinding program.

Planning and Formats

To easily identify EuroVelo routes, the use of an recognizable EuroVelo route information panel is integrated into the already existing signage system. The EuroVelo signs feature the following attributes, some of which are optional and can be in the local language.

- Background (colour, Council of Europe blue) displays a European aspect.

- Route number (colour, white) are essential for quick route identification.

- Council of Europe stars (colour, yellow) displays a European aspect (optional).

- EuroVelo route name, eg Rivers route (optional, name can be in the local language).

- Wording: EuroVelo (optional, confirmation of EuroVelo route status).

Installation and Implementation

Instead of creating a complete new signage program, the Eurovelo signs are added to the existing signage system of the different countries. It is not necessary to change the country-specific design of cycle signage (colour, shape, etc.) for the incorporation of the EuroVelo panel.

Source: www.eurovelo.org/wp-content

Best Practices Solutions for Ontario Cycle Tourism – Key Findings

The following suggestions are based on the analyzed signage reports earlier in this document. The outlined key findings give an overview on how successful wayfinding programs in Ontario or elsewhere, could be implemented. While those conclusions are not definitive, they can be used as a resource and planning tool for future projects and help to create an understanding about wayfinding principles.

- To ensure a successful wayfinding program, pre-determine signage standards in cooperation with all the involved parties and ensure there is appropriate funding and strategic planning in place.

- Future signage programs should incorporate cycling signage standards provided by Bikeway Traffic Control Guidelines for Canada from the Transportation Association of Canada and Ontario Traffic Manual Book 18.

- Trails passing through different regions and municipalities should use the same signage formats and attributes to be consistent.

- The frequent use of directional signs helps to increase the confidence of cyclists that they are on the correct route.

- Directional signs have to be placed in appropriate distances in advance of turns. A distance of 20 to 30 metres has been determined as ideal.

- For best visibility, signs should be located on appropriate heights and distance across the trail to ensure to be seen without cyclists having to slow down.

- Create a sign location plan to determine the appropriate position and signage type that should be used.

- Use kiosk signs with maps and information about local attractions and businesses to drive cyclists into key areas and help to increase touristic impact and economic growth within the area.

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Best Practices for Ontario Cycle Tourism Wayfinding – Key Findings

- Only key attractions, industries and destinations should be accommodated.

- Wayfinding is meant to provide direction not advertisement for business. Yet successful wayfinding can drive more customers towards local businesses.

- All signage leading to a business will use international signage. The last sign directing to the actual business can have the business name.

- Define future objectives for wayfinding and monitor the project to adjust necessary changes.

- Consistent messaging – international symbols (MOTI designated).

- Gateway signage in major corridors in conjunction with wayfinding (where appropriate and where ROW may be provided for safe use).

- Consideration of design and materials - low maintenance preferred as well as ecologically and sustainable.

- Safety consideration in placement of signage. Signs should be well visible and in locations where they are not considered as an obstacle for cyclists.

- Engaging and training local volunteers and cycling advocate groups on signage plan guidelines to assist with signage plans and scouting.

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Best Practices Solutions for Ontario Cycle Tourism Wayfinding – A Way Forward

Considerations should also be made to:

- Align with national, provincial and regional wayfinding strategies.

- Create uniform wayfinding sign designs and guidelines.

- Route Visibility - Use wayfinding signage to make bicycle routes more visible.

- Local Economy - Support the local economy by providing residents and tourists with directional and distance information to destinations, commercial districts, businesses, attractions, etc.

- Destination Hierarchy – Agreed upon guidelines on distance from route that destinations will be promoted. The destinations can be organized into a hierarchy of three categories.

  I. Primary destinations are downtown areas and adjoining jurisdictions and are signed at distances of up to 8km away.
  II. Secondary destinations are transit stations and communities and are signed at distances of up to 4km away.
  III. Tertiary destinations include parks, landmarks, colleges, hospitals, and high schools. They are generally signed at distances up to 2km away.

- Organizational hierarchy – A clear organizational structure is necessary to ensure the successful implementation of any new wayfinding programs. To start:
  I. Consider forming a regional tourist signing committee that includes local tourism operators.
  II. Identify key tasks and assign the tasks to the appropriate member of the project.
  III. Determine how often, when and how key signing people should communicate.
  IV. Ask visitors for feedback about their information needs and navigation patterns.

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Best Practices Solutions for Ontario Cycle Tourism Wayfinding – A Way Forward

In addition to best practice solutions, there are recommendations outlined in the Province-wide Cycling Network Study initiated by Ontario's Ministry of Transportation (MTO) in partnership with the Ministry of Tourism, Culture and Sport (MTCS).

- As select linkages are implemented, the presence of existing wayfinding and signage should be investigated and documented.

- A province-wide wayfinding and signage concept should be prepared for the province-wide Cycling Network based on engagement with key audiences and local authorities.

- Application of the wayfinding and signage concept should be determined based on a more detailed strategy.

- Define and agree upon operational standards and design principles through engaging and soliciting feedback from key cycling, transportation and tourism stakeholders.

- Local wayfinding programs should align with the design and implementation regulations based on provincial guidelines to ensure consistency and clear branding.

- Embrace Technology - Incorporate technology, and be accessible via GPS and online map tools as well.

Source: www.studiobinocular.com

Source: www.behance.net/

Appendix:
References

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References:

- Develop a Visitor Navigation Strategy - http://bit.ly/2N6e7Wn
- Discovery Routes Trails Organization – Trail Signage Program Guidelines - http://bit.ly/2VTKKXr
- Ontario Traffic Manual - Book 18 - http://bit.ly/31RjSKJ
- Touring routes criteria | National Tourism Signing Reference Group - http://bit.ly/2J1XrKq
- Transportation Association of Canada. (2012, February 26). *Bikeway Traffic Control Guidelines for Canada (Second Edition).* https://www.tac-atc.ca/en/publications/ptm-bikegd2-e

Provincial Resources Reviewed:
- Niagara Region – Wayfinding Guidelines - http://bit.ly/2RyahUI
- Waterfront Regeneration Trust – Great Lakes Waterfront Trail Signage Guidelines http://bit.ly/2DeRNm8

National Resources Reviewed:
- Blue Route - Bikeways Signage for Nova Scotia - http://bit.ly/2RwzDSG
- Okanagan Rail Trail Impact Assessment - http://bit.ly/2UlEKEX
- Thompson Okanagan Tourism Association - Rail Trail Strategy - http://bit.ly/2v9lb8I

International Resources Reviewed:
- Oakridge Westfir Signage and Wayfinding - http://bit.ly/2LbLB2Z
- Signing of EuroVelo Cycle Routes - http://bit.ly/2XsALMB

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