

Digital Discovery and Electronic Explorations: *Promoting Sustainable Tourism in the Niagara Greenbelt*

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ABSTRACT: This paper describes an innovative approach to a) promoting more sustainable modes of tourism and alternative tourism destinations in the Niagara Greenbelt region, and b) developing a dynamic, community-focussed database of interpretive information about the area and its features. Using a suite of web-based tools and portable digital technologies, the project provides logistical and interpretive information about destinations, low-impact tourism activities, and alternative transportation options to reduce auto dependence (including cycling, rail, municipal public transit, and pedestrian travel). Visitors to the Niagara Greenbelt are able to obtain information about individual destinations, trails, features, or other points of interest (POIs), and to construct custom trip itineraries which include location information, digital maps, detailed turn-by-turn directions, GPS coordinates, and both written and audio-based overviews of the selected POIs. The site also features downloadable thematic audio or multimedia tours for use on iPods, smart phones, and other portable digital players. Point of interest information pages are set up in Wiki format to allow the community of users to annotate and edit content, and visitors are able to post reviews of certain destinations and features. Users are also able to submit profiles of their own thematic tours for other visitors to use or modify for their own purposes. Interpretive resources have been developed to allow integration with forthcoming locational multimedia technologies, where GPS coordinates automatically trigger directional and interpretive information on portable digital devices.

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Introduction and Rationale

The Ontario Greenbelt is a 1.8 million hectare permanently protected area of farmland, forests, wetlands, watersheds, and significant natural habitats (1). It was conceived as a broad band of permanently protected land which provides for "...a diverse range of economic and social activities associated with rural communities, agriculture, tourism, recreation and resource uses" (1). The Greenbelt was mandated to provide "...a wide range of publicly accessible built and natural settings for recreation including facilities, parklands, open space areas, trails and water-based/shoreline uses that support hiking, angling and other recreational activities; and...[enable] continued opportunities for sustainable tourism development."

Its creation by act of provincial parliament in 2005 is widely considered to be one of the most significant initiatives in protecting environmentally significant land from development and urban sprawl in Ontario's history (2), and has been described as having the potential to be "...the most successful and most useful Greenbelt in the world." (3). The Greenbelt protects ecosystem process and function, preserves good agricultural and viticultural land, protects parks, green spaces, and recreational areas, and preserves the integrity of historic communities and settlement areas.

However, despite agreement in principle with Greenbelt legislation from sectors such as the agricultural community, building and construction sectors, and land development industries, the legislation has been controversial (4), with opponents citing concerns such as leapfrogging urban development, lowered value of agricultural land, wildlife predation of livestock, trespassing, crop damage, and subsidy of ecological goods and services at the expense of the agricultural and private landowner communities (5).

To offset some of the anticipated negative economic impacts felt by Greenbelt residents and landowners in certain sectors, a number of possibilities for enhanced or alternative economic activity have been proposed. Tourism (with all of its associated consumptive and non-consumptive economic activities) is one such possibility, and the promotion of sustainable tourism in Greenbelt areas has become a priority.

The northern edge of the Niagara Peninsula is traversed by the Niagara Escarpment, and many of the adjacent specialty farmlands, environmentally sensitive natural areas, and historically significant communities have been incorporated into the Ontario Greenbelt. The subset of Greenbelt lands included in the Regional Municipality of Niagara is referred to as the Niagara Greenbelt (Figure 1).

Figure 1: Map of the Niagara Greenbelt region

(extracted from http://www.ourgreenbelt.ca/sites/ourgreenbelt.ca/files/images/maps/map_large.png)

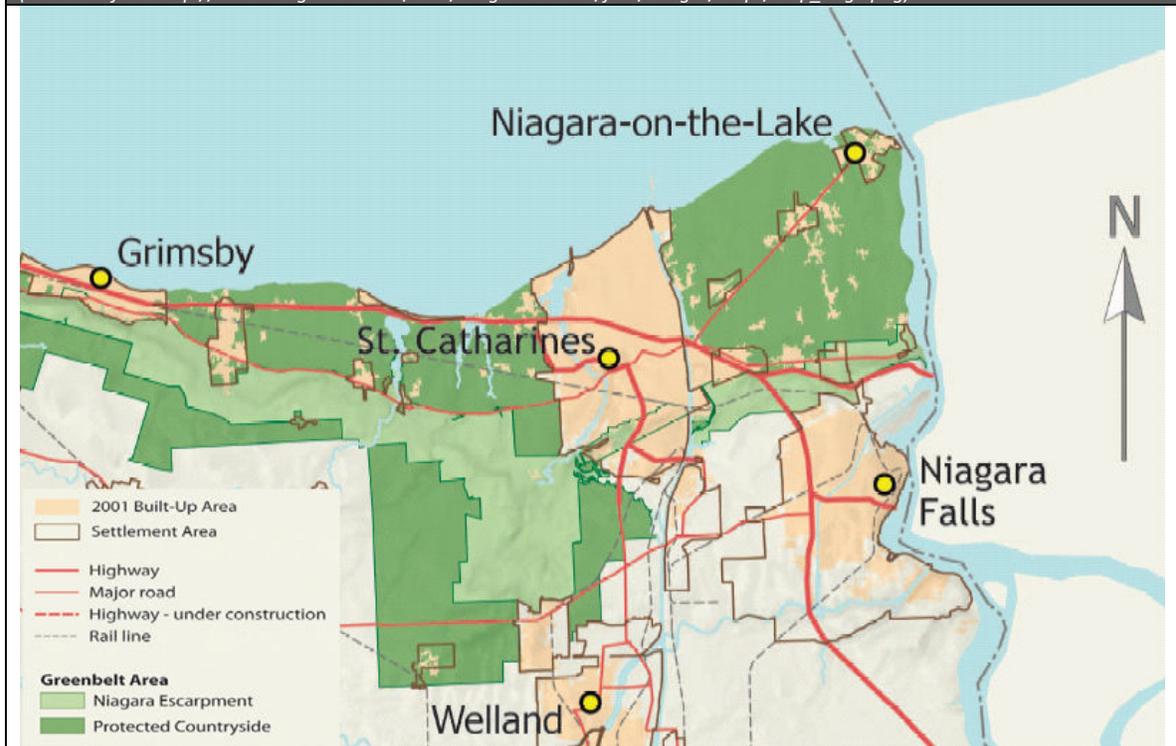


Table 1: Partners involved in the Niagara Greenbelt Routes and Discovery Centres grant application to the Friends of the Ontario Greenbelt Foundation

Lead Agencies: Tourism Niagara (Niagara Economic Development Corporation)
Department of Tourism and Environment, Brock University

Partner Agencies: Regional Municipality of Niagara
Ontario Ministry of Tourism and Recreation
City of St. Catharines
Niagara-on-the-Lake Chamber of Commerce
Grimsby Chamber of Commerce
Twenty Valley Tourism Association
Niagara Culinary Steering Committee
Wine Council of Ontario

Promoting and Sustaining the Niagara Greenbelt

The Niagara region is of course a popular tourism destination, primarily due to the globally significant mass tourism attraction of Niagara Falls. Tourism Niagara reported that more than 12 million tourists visit the Region every year (6). Recreational activities (such as exploring Niagara's ecological and geological features along the many hiking and biking trails), cultural events (such as the Shaw Festival, which features theatrical performances in Niagara-on-the-Lake), and agritourism attractions (such as wine tours, fresh fruit markets and festivals) all bring tourists to the Region. Theatre, wineries, historical integrity and distinctive heritage architecture have made nearby Niagara-on-the-Lake another significant tourism venue for more than 2 million visitors per year, and there is some inevitable economic spill-over from these primary tourism destinations into adjacent communities.

However, though the rest of the Niagara Greenbelt is also richly endowed with destinations potentially attractive to tourists, comprehensive knowledge of Niagara Greenbelt features, attributes, resources and attractions is generally quite poor amongst area residents and potential visitors alike. Yet the Niagara Greenbelt boasts an abundance of tender fruitlands; vineyards and wineries; picturesque towns and villages; pastoral landscapes and scenic vistas; abundant trails, greenways, and recreational pathways; many attractive streams, rivers, canals, and waterways; a wide array of historically significant areas, and interesting residential, civic and industrial heritage architecture. Certain recreational user communities (e.g., cyclists, hikers, equestrians) have done a good job of identifying areas where their constituents can pursue their preferred recreational activities, and some of these groups have adopted an explicit geographical or regional focus (e.g., the Bruce Trail Conservancy's development and mapping of hiking trails along the Niagara Escarpment (7), or the Regional Niagara Bicycling Committee's cataloguing of scenic cycling routes in Niagara (8). Certain established tourism destinations located within the Greenbelt may also be well known to the general public (e.g., the towns of Jordan Village and Niagara on the Lake). However, unlike the geological boundaries of the Niagara Escarpment or the marked municipal boundaries of tourist towns, the boundaries of the Ontario Greenbelt are not as obvious or evident. A well-entrenched 'Greenbelt gestalt' is therefore a bit more elusive, and a comprehensive and integrated understanding of what the Greenbelt has to offer is not widespread amongst visitors or nearby residents.

In 2007, the Friends of the Ontario Greenbelt Foundation granted a group of partners led by Tourism Niagara and Brock University's Department of Tourism and Environment (Table 1) funding for an initiative entitled "The Niagara Greenbelt Routes and Discovery Centres Project", a multifaceted partnership initiative designed to strengthen Niagara's leadership role in developing greenbelt awareness programs that are not only aligned with public policy but create excitement, enhance knowledge and foster discovery through participation in greenbelt projects, activities and events.

The Greenbelt represents a rich and diverse assemblage of resources and opportunities for interpretation, education, and discovery, as well as providing a multitude of thematic tourism opportunities which may contribute to economic development. However, promoting and sustaining the Greenbelt as a beneficial, valuable and permanent feature of the province requires informing and exposing residents and visitors to these resources and opportunities in an accessible, engaging, informative, understandable, and sustainable way, and in allowing residents (particularly rural and agricultural sectors) to define the ways that their communities and attributes are explored.

Objectives of this initiative are to:

- introduce visitors and residents to Greenbelt points of interest
- take focus off of traditional mass tourism destinations
- emphasize Greenbelt principles
- promote sustainable tourism practices
- provide high-quality, freely accessible, educational interpretive materials to promote Greenbelt values and principles
- create a true community resource of useful information on Niagara Greenbelt and its attributes.

Materials, Methods and Mechanisms

Traditional interpretive tools (brochures, guidebooks, printed maps), though still a cornerstone of interpretive tourism, are inherently limited in scope and potential. They are also expensive to produce and update, consume material resources, and have a very limited functional life before they are discarded. This project relies primarily on Internet resources and utilities (e.g., Google Maps, integrated itinerary planner, multimedia resources) housed under the domain www.niagaragreenbelt.com, officially launched 26 November 2008 and known as the **Niagara Greenbelt Gateway Website**. It also exploits the attributes of widely available personal portable digital multimedia devices and navigation tools (GPS, iPods, Blackberries, smartphones and other wireless technology) to engage local residents and tourists alike with the features, opportunities and attributes of the Greenbelt, and to provide and distribute interpretive information in digital format. Work is being undertaken with an eye to embracing emerging technologies, building for the future through modular design and adaptable content.

POI Inventory Pages

A key component of this initiative is the creation of an inventory of Niagara Greenbelt attributes, features, and resources, in the form of a series of internet-based point of interest (POI) web pages. These searchable POI pages are arranged within categories and subcategories (see Appendix), and include Google Maps integration to show the

Table 2: Sample POI (Point of Interest) web page (from www.niagaragreenbelt.com)

Internet Explorer browser window showing the Niagara Green Belt website page for Bonnybank Bed and Breakfast.

Page Header: Niagara Green Belt: Single View Page - Windows Internet Explorer
 http://www.niagaragreenbelt.com/Single-View-Page.28.0.html?&no_cache=1&tx_stwgreenbelt_pi1[uid]=511

Navigation: Home About Us Contact Us News Site Map

Left Sidebar:

- EXPLORE THE NIAGARA GREENBELT!**
 - All Listings
 - Prepared Itineraries
 - Destinations
 - Events & Activities
 - Services
 - Tours, Trails & Routes
- Your Transportation in Niagara**
 - Car
 - Are you interested in specific point of interest?
 - Choose a category of interest
 - Select
 - Add another category
 - Search for a specific Greenbelt destination
 - Select
 - Add another location
 - submit

Main Content Area:

Bonnybank Bed And Breakfast - Accommodations - Add to Itinerary

Large Image: Bonnybank B&B - room detail Bonnybank B&B - spring garden Bonnybank B&B - 20 Mile Creek view

GENERAL INFORMATION:
 Escape to a lovely 1919 stone Tudor Revival home nestled within The Owl Foundation's 18 acres of Carolinian woodland, on the banks of the Twenty Mile Creek ANSI (Area of Natural and Scientific Interest). Enjoy woodland trails, cross-country skiing, skating, stone fireplace, ponds, organic gardens, kayaks and a campfire site.

ADDRESS AND CONTACT INFORMATION:
 R. R. #1
 Vineland Station, Ontario
 L0R 2E0

Directions upon booking.

HOURS OF OPERATION:
 Open Year Round

FACILITIES:
 Ask for air-conditioning, TV. Pets in home; pets welcome. Children welcome. Private wine, garden and nature tours and natural history hikes. Packages available.

ADMISSION:
 \$95.00 - \$125.00 per night

IMAGE FILES
 Click to open image gallery

Map: Google Map showing location of Bonnybank Bed and Breakfast. Directions: To here - From here

GPS COORDINATES
 Click to hide
 Trail Head (Latitude): 43.16353
 Trail Head (Longitude): -79.373013

ADMINISTRATION:
 Carla Carlson
 Address:
 RR #1
 Vineland Station, Ontario
 L0R 2E0
 Phone: (905) 562-3746
 Email: info(at)niagaranaturetours.ca

Right Sidebar:

YOUR ITINERARY

DOWNLOAD ITINERARY
 A zip file will be downloaded to your desktop

View Itinerary
 Clear Itinerary
 Pre Defined Itinerary
 Download Itinerary

Directions, route map, destination descriptions, and multimedia tours will be downloaded to your desktop

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Browser Status: Error on page. Internet | Protected Mode: Off | 100%

location of individual POI sites and provide navigational information for pedestrians, cyclists and motorists. POI pages profile public and private sector destinations, parks, trails, natural areas, agritourism and wine tourism destinations, landscape features, cultural and artistic attractions, and a wide array of other attributes consistent with Greenbelt objectives. POI pages are part of an information commons, posted and accessed free of charge. To date, approximately 500 POI sites have been identified and catalogued (see http://www.niagaragreenbelt.com/All-Listings.27.0.html?&no_cache=1 for a current listing).

POI pages include a range of information about the feature or attribute (see sample in Table 2), and include descriptions, key features, location information, an interactive map, direction-finding capabilities, GPS coordinates, and multiple digital photos of the POI. POI pages are also designed to fulfill a role as accessible public reference resources as well as interpretive tools. To date, a relatively small group of project employees and stakeholders have contributed baseline information and digital media content to establish these POIs, producing a reasonably comprehensive overview of Niagara Greenbelt features and attributes. However, the enhancement and maintenance of a database of such potentially encyclopaedic proportions on an ongoing basis is prohibitively labour-intensive and time-consuming for any single agency or organization to undertake with its own employees. Additionally, regardless of the energy levels, aptitude, and enthusiasm of project employees, nothing can match the range of collective expertise and experience about Niagara Greenbelt features that is found disseminated throughout the community.

To tap into this enormous pool of public expertise, POI pages will eventually include community-based WIKI functionality, allowing knowledgeable contributors to submit, edit, and append information about individual POIs, as well as providing opportunities to submit media content like photos and video clips. Submitted content will undergo review by a group of knowledgeable editors to provide a measure of quality control before it is posted, in the manner of Wikipedia (9).

The site will eventually also contain the capacity for submission of user reviews of certain attractions and destinations, providing useful information on both their attributes and their quality.

Integrating the Information: The Niagara Greenbelt Itinerary Planner

In order to engage in substantive regional tourism activities, visitors and local residents require easy access to an inventory of greenbelt resources and attractions. More importantly, however, they must be able to *integrate* these diverse attractions into itineraries that are meaningful to them. Traditional itinerary planning requires substantial independent research to locate and integrate destinations, accommodations, and services. Many travellers are unwilling or ill-equipped to undertake this task, and therefore either delegate it to expert travel agents, embark on pre-planned packaged tours to mass destinations, or approach regional tourism in a more haphazard manner, potentially missing many desirable destinations on the way.

To address these issues and increase the likelihood that visitors will stay longer in the Niagara Greenbelt and return more frequently, we developed a web-based Niagara Greenbelt Itinerary Planner. This utility allows users to choose any POI sites from the inventory and join them together into a custom tour. POI sites can be added, deleted, or rearranged at will. When finished, the completed itinerary, route map, directions, POI data sheets, and media content can be downloaded to user's computer desktop to be saved for personal use, or to be named, thematically classified, and shared on the website with other users.

A POI locator will be incorporated into the Itinerary Planner, which will allow users to find the nearest POI in any given category based on proximity to a given POI already incorporated in the itinerary. This feature will assist in the development of custom tour routes, and in the incorporation of public transit and non-motorized transportation options into the itinerary (see below).

Promoting Alternatives to Motorized Transportation

To promote more sustainable modes of transportation, the Niagara Greenbelt Gateway Website includes all public transit routes, bus and train stations, intermunicipal bus, train, and bike train schedules, cycling and watercraft rental locations, on- and off-road cycling routes, and trail and greenway infrastructure in the area. These features are entered into the database as POI pages.

All of these routes and locations featuring alternative modes of transportation can be integrated into custom trip planning using the Itinerary Builder, and several prepared tours will feature non-motorized modes of travel. In addition, many of the scenic bicycle routes developed by the Niagara Freewheelers cycling club and the Regional Niagara Bicycling Committee (8) can be adapted as thematic tours to specific points of interest.

Realistically, however, many visitors to the Niagara Greenbelt will still travel using personal automobiles. To partially mitigate for these impacts, the website will eventually include a link to a carbon offset calculator and service, which will travellers to automatically calculate the greenhouse gas emissions associated with their travels and pay fees to offset the impacts created by their tourism activities. A proposal has been advanced to develop a Niagara-based joint venture with one of the several credible and audited Canadian carbon offsetting companies, channelling proceeds into offsetting projects that are physically based in Niagara and which contribute positively to maintaining or enhancing the ecological integrity of the region.

Accessibility

To accommodate travellers with constraints on mobility, all POIs will be categorized with regard to accessibility. Certain tours will be developed which are aimed at this important and under-serviced demographic group. It is also hoped that prominently profiling accessibility information on the web will serve as an incentive to non-accessible destinations to improve their accessibility.

Trails, Tours and Routes

For casual visitors or tourists who do not wish to go through the process of building a custom itinerary, predefined thematic tours are also available. These tours provide a complete set of directions, interpretive information, maps, and other information which allows users to simply choose an appealing tour option, click, download, and go.

Tour themes promote Greenbelt priority areas of agricultural, rural, and ecological integrity, and specifically recognize and emphasize the needs of rural and agricultural stakeholders. Emphasis will be on sustainable, low-impact tourism activities such as interpretive hikes, cycling tours, and walking tours at destinations accessible through public transit, but vehicle-based tours will also be featured to provide access to rural and farm communities, remote locations, and wider-ranging activities.

In a thematically consistent manner, tours incorporate and interpret general landscape features, public amenities (parks, trails, beaches, municipal infrastructure), notable attractions (e.g., lookoffs, views and vistas, mountains, waterfalls, etc.), agricultural activities and practices, geological and natural history, distinctive architectural attributes, and cultural heritage elements. To facilitate commercial activity consistent with the Ontario Greenbelt's economic development and sustainable tourism objectives, Greenbelt-relevant private sector attractions and services (e.g., farm gate sales, local produce providers, Farmer's Markets, wineries, dairies and cheese makers, regional restaurants, bike rental shops, etc.) are also featured on tours.

Seasonal variants of tours can be developed (e.g., spring blossom tours and summer fruit tours in tender fruit areas). Multilingual versions of interpretive tours are also possible, to meet the needs of Canada's diverse multicultural communities and international tourists, and cross-cultural tours can be developed which highlight the cultural heritage, values, traditions, culinary and produce preferences, and other attributes of the Greenbelt's diverse multicultural communities to visitors from other cultural backgrounds.

Site users will be able to develop, save, and post thematic tours of their own creation to the Niagara Greenbelt website. Such functionality will provide a very adaptable and customizable resource to meet the needs of specialized tourism constituencies (e.g., off-road cyclists, equestrians, birders, architecture aficionados, history buffs, and so on) – groups which have both an avid specialty interest and a pool of specialized knowledge

to communicate relevant and rewarding tourism activities in the Niagara Greenbelt to their peers and colleagues worldwide.

Many of the tours will feature audio, video, or GPS tour content, and simpler “Mini Tours” (consisting of a string of thematically related POIs and associated interpretive information) are also available (including the best of the custom itineraries saved and shared by other users).

TripClips

As mentioned earlier, traditional printed interpretive information is inherently limited. Many travellers are not interested in reading extensive amounts of literature, and many forms of travel (e.g., cycling) make frequent consultation of written text cumbersome and unappealing.

To address this need, we have developed a range of audio, still image, and video multimedia content in downloadable formats (mp3, mp4), playable on a wide range of personal digital devices such as iPods, mp3 players, smartphones, and car stereos. Some content is in the form of linear scripted tours with specific routing, stops, and timelines, but other content is provided in a modular format so that it can be downloaded and incorporated into a custom tour itinerary. For example, many POI web pages will have not only the full listing of POI information, but will also feature downloadable modular interpretive audio or video clips which can be saved and incorporated into a playlist for manual playback in the field when travelling to or visiting the destinations.

The goal is to thematically integrate a wide range of Greenbelt amenities into flexible and enjoyable self-guided tours for individuals, families, or larger groups, tours which emphasize and promote the activities which preserve and enhance the Greenbelt’s agricultural, rural and ecological integrity and which encourage the adoption of sustainable tourism practices. Tours are designed to provide information, guidance, context, thematic links, and inspiration to the users, but will be constructed to encourage and facilitate active engagement with Greenbelt attributes, resources, and communities, making the Greenbelt feature themselves the focus of the tours, not the multimedia content.

GPS Integration and Locational Multimedia Possibilities

At present, most accessible and affordable portable digital media devices allow for either playback of audiovisual information (e.g., audio, video, still images on media players), or navigation (e.g., portable GPS units), but seldom integrate the two. On the individual POI pages and the Itinerary Builder, the Niagara Greenbelt Gateway Site provides full GPS coordinate information for Greenbelt features in generic latitude / longitude format, for import and use with portable GPS units. Conversion of these coordinates (individual points, tour routes with multiple POIs, or linear / loop routes) into several proprietary formats used by different manufacturers will also be facilitated.

However, the true potential of the GPS integration will be manifest when we see widespread commercial availability of GPS-enabled portable multimedia players and smartphones. These devices, currently available in high-end proprietary form (Audioconexus - 10), in custom-constructed rental contexts (GypsyGuide - 11, CityShow NYC - 12), in prototype commercial development (Mind Factory - 13), and as adaptations of a limited range of conventional retail GPS devices (Intellitours - 14), use GPS coordinates to trigger location-relevant interpretive multimedia content automatically. Once these devices hit the mass market (which is surely imminent, based on the rapid expansion of companies like Intellitours), users will be able to simply walk, cycle or drive to points of interest as instructed by directions provided by GPS unit, and upon arrival at specific locations or points of interest, interpretive multimedia information will begin to play automatically.

The modular TripClip data and geo-referencing of our POI locations should facilitate an easy transition to this important and transformative new technology.

Greenbelt Interpretation using Cell Phones and VoIP Technology

A planned but not yet implemented variant on locational multimedia technology for Greenbelt interpretation uses conventional cell phones to deliver interpretive audio information to visitors, a promising way to deliver content in real time to someone who is in the field but who is otherwise unprepared for an interpretive experience - save for carrying a cell phone (now more than 60% of Canadians own one).

The concept of using cell phone to deliver locational interpretive information was successfully pioneered in Toronto by the [[murmur]] oral history project, which recorded and delivered first-person reminiscences and stories about significant landmarks and features in Toronto (and now worldwide) over a VoIP cell phone server, with landmarks identified in the field by a distinctive ear-shaped sign bearing a phone number and extension (14).

Using Voice over Internet Protocol (VoIP) technology and relatively inexpensive, standalone, computer-based, multi-extension phone servers with one main number but a multitude of extensions, people in the field could get immediate interpretive information about Greenbelt POIs by simply dialling the common local number and then entering the extension which corresponds to the POI they wish to know about. The extensions would actually be voice mailboxes (a theoretically infinite number) containing brief but informative pre-recorded interpretive audio content pertaining to the POI. The main number and relevant extension number would either be accessed through an alphanumeric telephone menu, or be available in other ways (e.g., inscribed on signs or plaques for prominent permanent landmarks, posted on road signs or trail markers, included on printed materials like maps or tour brochures, published on the internet, etc.). The Niagara Greenbelt website will include interpretive clips for many of its 500+ POIs, and much of this digital content will be easily transferable to VoIP / cell phone delivery.

In theory, a visitor could walk up to the Comfort Maple, dial the Niagara Greenbelt interpretive phone number, enter the appropriate extension (or find it through an alphanumeric directory), and access an interpretive audio clip explaining the history and attributes of the province's smallest Conservation Area. Alternatively, they could get a description of an architecturally significant building in downtown St. Catharines by entering the address, or access tips about best places to go birding along the Niagara River from a birding database, or locate a directory of bike mechanics when their bicycle breaks down while back country touring.

Profiling and Promoting the Niagara Greenbelt Gateway Website

To raise awareness in the travelling public and to spread the word about Niagara Greenbelt destinations, a series of ten promotional video clips emphasizing Greenbelt principles and sustainable tourism activities has been commissioned. These video clips will run continuously on dedicated large-format digital displays in each of the four identified Niagara Greenbelt Gateway locations: the Gateway Niagara Information Centre, Town of Grimsby; the Twenty Valley Tourism Association Visitor Centre, Town of Lincoln; the Welland Canals Centre at Lock 3, City of St. Catharines, and the Chamber of Commerce Tourism Office, Town of Niagara on the Lake. Tourism counsellors at these sites will be briefed on Greenbelt tourism opportunities, and will promote Greenbelt destinations and travel philosophies to visitors and residents. The promotional Niagara Greenbelt video clips will also run on demand on the Niagara Greenbelt website, and be downloadable in high-resolution format to computers or digital multimedia players.

A series of print advertisements (see example, Figure 2) will be launched in targeted publications to promote the website, and site visitors will be encouraged to contribute to the POI pages, tour profiles, and digital media archives associated with the Niagara Greenbelt.

Figure 2: Sample print ad for the Niagara Greenbelt gateway website (*Escarpment View* magazine, Autumn 2008, p. 10)



Conclusions

In a competitive economic environment, promoting the Niagara Greenbelt's rich and diverse assemblage of resources and opportunities for interpretation, education, discovery, and thematic tourism opportunities in a sustainable and responsible fashion requires innovative approaches. The Niagara Greenbelt Gateway Website and associated promotional materials are being developed to inform and expose residents and visitors to Greenbelt resources and opportunities in an accessible, engaging, informative, and understandable way, and to allow residents (particularly in the rural and agricultural sectors) to define the ways that their communities are explored. This initiative is inherently cross-cutting, linking public and private sectors, rural, suburban, and urban residents, agricultural producers, NGOs, educators, small and large businesses, and other stakeholders. Easily accessible, infinitely replicable, downloadable digital resources have far-reaching potential for promotion and interpretation of the Greenbelt and its features, as well as providing myriad opportunities for innovative and sustainable economic development.

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Appendix: Niagara Greenbelt Point of Interest (POI) Categories and Subcategories

DESTINATIONS

Main categories:

Possible subcategories:

AGRITOURISM

**Agricultural/ Gardening Workshops, Seminars
Alpaca, Fibre & Fleece Farms
Christmas Tree Farms
Farm Meat
Farmers' Markets
Florists, Garden Centres, Nurseries
Fruit and Vegetable Farms
Herb Farms
Honey
Juice
Maple Syrup
Organic Fruit and Vegetable Farms
Pick Your Own Fruit and Vegetable Farms
Roadside Stands**

ANTIQUES AND FLEA MARKETS

**Antique shops - general
Antique furniture
Flea markets**

ART STUDIOS

**Aboriginal
Art Galleries
Folk Arts
Local Artists
Photographers
Sculptors**

ARTS & CRAFTS STUDIOS

**Apparel
Candles
Custom Furniture
Eclectica
Glass
Ironwork, Smithies and Forges
Jewelry
Pottery and Ceramics
Quilting
Stained Glass
Woodworking**

EQUESTRIAN

**Equestrian trails
Horseback riding
Pony rides
Carriage Rides
Hay Rides & Sleigh Rides**

DESTINATIONS (continued)

Main categories:

Possible subcategories:

CULINARY

Bakeries
Candy & Confectionery
Cheese
Culinary Schools
Dairy / Ice Cream
Delicatessens
Dinner Theatre
Casual Dining and Cafes
Fine Dining
Jams, Jellies and Preserves
Specialty Foods
Tea Rooms
Winery Restaurants

HISTORIC & HERITAGE SITES

Aboriginal
Bridges
Canals
Cemeteries
Churches
Forts
Heritage Districts
Historic Houses
Historic Sites
Hydroelectric Stations
Industrial Heritage
Lighthouses
Mills
Local Heritage
Monuments
Murals
Post Offices
Railways

MUSEUMS & INTERPRETIVE CENTRES

Interpretive Centres
Museums

NATURAL HABITATS AND FEATURES

Animal Habitats
Beaches and Shorelines
Bird Habitats
Forest & Plant Habitats
Geological Features
Naturalized / Restored Areas
Scenic Lookouts
Waterfalls, Creeks, Lakes & Rivers
Wetlands

DESTINATIONS (continued)

Main categories:

Possible subcategories:

PARKS, GARDENS AND CONSERVATION AREAS

Niagara Parks Commission Destinations
Niagara Peninsula Conservation Areas
Parks Canada
Municipal Parks
Provincial Parks

LIVE ENTERTAINMENT

Aboriginal
Concerts
Clubs and Nightlife
Dance
Dinner Theatre
Multicultural
Outdoor Concerts
Outdoor Theatre
Theatre

WINERIES & BREWERIES

Brewery
Distilleries
Wineries
Winery Restaurants

TOURS, TRAILS AND ROUTES

TOURS

Agricultural Tours
Architectural Tours
Autumn Colours Tours
Air Tours
Bicycle Tours
Bird Watching Tours
Canal Tours
Craft Tours
Culinary Tours
Garden Tours
Gallery Tours
Ghost Tours
History Tours
Industrial Heritage Tours
Mural Tours
Nature Tours
Scenic Lookout Tours
Sightseeing Tours
Underground Railway Tours
Walking Tours
Winery Tours

TOURS, TRAILS AND ROUTES (continued)

Main categories:

Possible subcategories:

TRAILS

Biking trails
Horseback Riding
Hiking / Walking
Rollerblading

BICYCLING ROUTES

Cross-Country Touring Routes
Family Cycling Routes
Mountain Biking Routes
Off-Road Cycling Routes

EVENTS AND ACTIVITIES

EVENTS, FAIRS, FESTIVALS & PARADES

Events
Fairs
Festivals
Parades

ACTIVITIES

Bird Watching
Boating, Canoeing, Kayaking, Sailing
Cross Country Skiing
Diving
Family Activities
Fishing
Geocaching
Skating Rinks
Snowshoeing
Swimming
Tobogganing

SERVICES

ACCOMMODATIONS

Bed & Breakfasts
Campgrounds
Hotels & Inns
Marinas
Motels

GENERAL SERVICES

Accessibility
Entertainers
Private, Corporate Special Events, Gifts & Planning
Information Services
Kennels
Money Exchange & Tourism Info
Municipal Community Recreation Services
Spas

TRANSPORTATION SERVICES

Tourism Visitor Centres
Bicycle rentals
Boat rentals
Bus stations
Marinas
Taxis
Train stations