Second Edition

Produced by a partnership between the Lake Champlain Basin Program, the Lake Champlain Byways Partnership, and the Chittenden County Regional Planning Commission.

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Download all completed exhibits and this manual on-line at:

The Lake Champlain Basin Program provides assistance with planning, interpretive writing, and designing wayside exhibits. Contact us!

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Cover images clockwise from upper left: Detail of “The Battle of Lake Champlain,” by J.O. Davidson, 1884, courtesy of the Battle of Plattsburgh Association; photograph by Jeff Nadler; photograph by Paul Boisvert; and “Village Tavern,” by John Lewis Krimmel, 1813, oil on canvas, courtesy of the Toledo Museum of Art.
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Overview

In 2000, a group of planners, tourism representatives, historians, and natural/cultural resource managers identified a need for unified standards and guidelines for interpretive signs in the Champlain region of Vermont, New York, and Québec. In response, the Lake Champlain Basin Program (LCBP) convened these stakeholders to develop and design an outdoor wayside exhibit template for use by organizations and municipalities in the Lake Champlain Basin.

Using this information, the LCBP published the Lake Champlain Wayside Exhibit Manual in 2001. The LCBP has provided in-kind design services grants to organizations using this template for projects that address priorities in the management plan Opportunities of Action. This successful program has generated more than 100 new wayside exhibits in the Lake Champlain Basin.

A unified approach to wayside interpretation helps local communities place their unique stories in a broader context. A readily recognizable interpretive sign encourages visitors to stop and learn about another piece of the Champlain Valley’s story. The result is a richer sense of history, nature, and culture, and a stronger regional identity among residents and visitors.

Encouraging linkages with the Richelieu Valley of Québec, the LCBP supports bilingual exhibits and provides support for translation services. Applicants for design services grants should contact the LCBP.

QUESTIONS TO CONSIDER

To ensure a smooth and efficient process of developing effective exhibits, there are a few questions you should consider from the start:

1) What are your interpretive objectives for the specific site or sites? What is the essence of the message or story that you want to convey?

2) Who will be working on the project and what is everyone’s specific role? How do you reach consensus to satisfy both local and international audiences?

3) What visitors do you expect? Are there any special considerations that should be made for children, families, international visitors, and those with disabilities? To what extent should the exhibit address Americans with Disabilities Act accessibility guidelines?

4) What other information exists about your story, including publications, audiovisual shows, films, and audio cassettes? How will your exhibit relate to other media?

5) Do you need any sign permits?

6) What are your budget constraints?

7) What is your timetable? When do you want to break ground?
Project Steps: From Planning to Installation

Below are the specific steps to successfully complete a wayside exhibit project. These serve as guidelines and can be adapted to meet individual needs. Detailed explanation is provided in the pages to follow.

Project steps adapted from *Wayside Exhibit Guidelines: The ABCs of Planning, Design, and Fabrication*, United States Department of Interior, National Park Service, National Center for Recreation and Conservation and the Harpers Ferry Center.
Introduction

Wayside exhibits are excellent tools for informing visitors. They can interpret a specific location and relate individual sites to an overall theme or story. Their message reaches a large number of people. They are relatively inexpensive to maintain or replace. Wayside exhibits are initially more expensive to produce than brochures, but do not require costly reproductions.

However, wayside exhibits are only effective if developed, designed, and located correctly. Unfortunately, too many wayside exhibits present long, complicated messages that do not get read. Others are located in areas that have little relation to their topic. Some are poorly designed, making the message difficult to understand. The goal of this manual is to provide a basic framework for planning and creating effective and successful interpretive wayside exhibits.

Project Organization

A strong organizational structure is an essential part of developing quality interpretive signs. Ideal wayside exhibit projects are structured as follows.

Wayside Exhibit Team: A Wayside Exhibit Team is comprised of representatives from the project’s sponsors, stakeholders, property managers, and interested individuals. The team provides advice and personal insight to the Project Coordinator.

Project Coordinator: The success of the project is the responsibility of the Project Coordinator. He works with the Wayside Exhibit Team to determine interpretive themes, exhibit locations, and site topics. The coordinator edits and approves interpretive text and graphics. Together with the LCBP, he contacts fabricators, negotiates contracts, and facilitates the completion of the final products. The Project Coordinator might also serve as the Exhibit Planner.

Exhibit Planner(s): Ideally, each interpretive wayside exhibit has a champion, often a volunteer. Exhibit Planners are responsible for the historical research, text, and graphics selection.

Exhibit Designer: The Exhibit Designer is responsible for the design and layout of the exhibit panel. The LCBP will provide design services, as resources permit, to organizations in the Champlain region for projects that meet eligibility criteria, including the goals of the LCBP’s management plan, Opportunities for Action. Once a project proposal has been accepted, graphic designers on the LCBP’s staff will work with the text and graphics provided by the Wayside Exhibit Team to create a presentation that is harmonious and pleasing to the eye. (Note: The template may be used by other designers for interpretive work.)

Project Budget

The total fabrication cost for a standard 24”x36” horizontal wayside exhibit is approximately $900. In addition to the standard 24”x36” panel, other dimensions are available, as shown on page 11. Estimated costs for various sized exhibits are shown on page 12. There are other costs to consider when planning a budget. For each exhibit, plan on investing approximately $300 for coordination and $300 for research and development. Volunteers can reduce a project’s coordination and development costs. Remember, costs will decrease as the number of exhibits increase.

Interpretation: Telling the Story

Principles of Successful Interpretation:

1) Interpretation is provocation, not just information. Illustrate with analogies, quotes, metaphors, and examples. Use text that encourages visitor interaction:

   • “Look for the…”
   • “Can you hear the…?”
   • “Imagine the…”
   • “Smell the…”

2) The best interpretation is succinct. Use short sentences. Concentrate on one subject. Don’t worry about including all of the details. Visitors usually ignore long, complex messages. Avoid creating a “textbook on a stick.”

3) Individual exhibits should complement each other by presenting a unified theme. This helps advance a project’s organizational structure and provides visitors with a better understanding of the site’s significance.

*Interpretation is an information service, a guiding service, an educational service... an inspirational service. Interpretation aims at giving people new understanding, new insights, new enthusiasm, and new interests.*

- Yorke Edwards
4) Help visitors relate the exhibit’s topic to their own lives. Use familiar terms and personal language. Use everyday objects and events to illustrate the past, such as: “In 1889, horses were as common as automobiles are today.”

5) Use photos, maps, and images to illustrate your point. Use stimulating and revealing graphics—avoid duplicating what can be seen.

6) Reveal message conclusions through unique or unusual viewpoints.

7) Accuracy is essential. Make sure your facts are correct—mistakes on interpretive exhibits live for a very long time!

8) Have fun. Be creative. Learn a little.

Site Planning: Location, Location, Location

The Wayside Exhibit Team should brainstorm exhibit locations and topics at a project’s beginning. The group should list as many topics and locations as possible. Listing potential exhibits helps determine the project’s overall theme and allows for more flexibility in siting exhibits.

The Project Coordinator should visit proposed exhibit sites with the locale’s property manager. This on-the-ground visit is essential. A property manager’s working knowledge of the landscape can help: eliminate weak sites; avoid safety hazards and vandalism; locate exhibits in accessible locations; and choose sites with vistas of the exhibit’s topic.

Copy, Photos, and Design

There is a wealth of information out there. Local historians and experts, university libraries, and town, regional, and state historical societies are excellent sources of folklore, facts, and photographs.

Effective wayside exhibits contain less than 300 words and feature no more than four graphic images. The Exhibit Planner should provide the Project Coordinator and the LCBP with exhibit copy along with a selection of photographs or graphics for scanning. Once copy is approved and graphics selected, the LCBP will design a layout for review before digital files are sent to a panel fabricator. Original graphics—photographs, artwork, and maps—reproduce much better than duplicates.

Visitors Remember

• 10% of what they hear;
• 30% of what they read;
• 50% of what they see;
• 90% of what they do—if an exhibit encourages interaction and stimulates thought, it fulfills its purpose by reaching almost all site visitors.

Sample Wayside Exhibit Copy

Trail Name
Burlington Heritage Trail

Title
Steamboats and Shortcuts

Sub Heading
King Street Dock

Main Text
Imagine the scene here in 1825. The dock is crowded with saddle horses, ox carts, fancy horse buggies, pigs, goats, cows, chickens, piles of freight, and people. There are farmers, soldiers, merchants, and sailors. It’s noisy. Workmen are yelling, whistles are blowing, and horses are neighing. The smell of barnyard animals, wood smoke from the ferry’s smokestack, and food cooking fills the air. Even though the scene is very different today, the Lake Champlain Transportation Company’s mission is the same—to safely deliver passengers across Lake Champlain.

Photo Caption
The Roosevelt—the last wooden-hulled ferry on Lake Champlain—served for 36 years. The president of the Lake Champlain Transportation Company himself sank the boat by chopping holes in its hull when it had outlived its usefulness in 1959. Today, the Roosevelt rests at the bottom of the broad lake before you.

“Through interpretation, understanding; through understanding, appreciation; through appreciation, protection.”
– Freeman Tilden
Design and Development

From Sketches to Comprehensive Layouts

Once copy is written and images and graphics collected, the LCBP carefully reviews materials for content in preparation for the design phase. A designer is visually oriented and examines copy and images from that perspective. With physical site considerations in mind, the designer assists in selecting photographs and illustrations that best tell the story. Because graphic images are the most important element of an exhibit—a picture is worth a thousand words—clarity and quality of image are paramount. Originals are preferred whenever possible.

The designer organizes material in layers of importance based on the copy’s underlying message. One image is chosen to be the primary image, around which all other elements are designed. As a first step, the designer sketches alternative layouts for consideration. Once a conceptual direction is chosen, the designer precisely lays out the panel. Headings, main text blocks, captions, and graphics are carefully sized and positioned on a grid system.
The Grid System

The LCBP wayside exhibit template is similar to the National Park Service and the NYS Canal Corporation wayside exhibit grid systems. The grid organizes text and graphics in an orderly fashion, making it easy for visitors to understand the information presented. It also lays the foundation for a consistent and unified look, linking wayside exhibits at different locations around the lake. The title bar, lake column, colors, and typography are standard elements found on each exhibit, creating a recognizable identity throughout the region.

Although all exhibits adhere to these standards, each is carefully designed for individual expression according to site considerations, message, and graphics composition.

The standard LCBP template includes two variations based on this grid. These are shown on the next two pages.
See the Adirondack Mountains across the lake? Try to find the peaks shown in this watercolor. These ancient mountains—made up of rocks over 1 billion years old—grow to their present height 120 million years ago. Today, occasional earthquakes remind us that the Adirondack Mountains are still active!

You can also locate several islands in Lake Champlain. Rock Dunder, located between Shelburne Point and Juniper Island, is sacred to Native Americans. According to Abenaki legend, the deity Ojihozo ventured into the lake, but he could not bear his creation forever. The islands are made of shale, which was originally deposited as mud in a small sea between the Adirondacks and the newly forming Green Mountains more than 400 million years ago.

The World Turned Upside Down

500 million years ago, North Beach was located along the western edge of an ancient ocean. Over 400 million years ago, even before tectonic plates came together to form the North American continent, this land was covered by warm, shallow tropical seas. Marine organisms lived on the ocean floor, and the bottom of the sea changed only slowly. This marine environment has left a record of life forms in rocks now seen in the Adirondack Mountains and Lake Champlain. The most common fossils in the rocks are the shells of marine snails. The shells of the snails were added to the rocks as mud in a small sea between the Adirondacks and the newly forming Green Mountains more than 400 million years ago.

Take a Dip

Imagine yourself here 15,000 years ago. You would need diving equipment! Glaciers from the Ice Age were melting, and a lake filled the valley. At its deepest, it was 650 feet deep and covered all of Burlington. (Photograph courtesy of the University of Vermont Special Collections.)

A Whale of a Tale

How did this beluga whale skeleton get into the Champlain Valley? It turns out that the water here turned salty 13,300 years ago. The Adirondacks were then connected to the North Atlantic Ocean. Over 11,500 years ago, the sea level was higher than today and even covered Burlington. This is the same sea level that the North Atlantic Ocean covered over 13,300 years ago. Beluga whales live off the coast of Greenland. They are found in small groups, hunting for fish in cold, shallow waters. (Drawing courtesy of Ian Hodgdon, Perkins Geology Museum, University of Vermont.)

Lake Champlain Wayside Exhibit Manual
Option B: The Block
This option utilizes a primary image with type and secondary images generally placed outside the primary image in a colored block.

The template includes three standard colors: blue, black, and beige.

Color
- Blue is used exclusively for the lake graphic; beige is used for type, image frames, and the aluminum frame around the panel; and black is used for text and as background color on the title bar and the lake column.

For the background color of the block template, there are four colors from which to choose, as shown below.

- Pantone 301 C
- Pantone 4685 C
- Pantone 222 C
- Pantone 302 C
- Pantone 4685 C
- Pantone 3165 C

Note: Swatches may vary slightly from actual pantone colors. Please refer to a coated Pantone Color Formula Guide, an accurate method for the selection, specification, communication, reproduction, matching and control of Pantone Matching System colors, the international printing, publishing and packaging color language.

The LaChute Riverwalk, Town of Ticonderoga, NY.
Bilingual Exhibits

The LCBP recognizes our bilingual region and opportunities for cross-border promotion, and encourages the use of bilingual exhibits. This manual offers a template specifically designed to accommodate translated text in both English and French.

Bilingual exhibits are approximately 16 percent wider than a standard exhibit. The LCBP can make arrangements for text translations in a project’s design and development phase.

Lake Champlain Wayside Exhibit Manual
Cedar Apple Rust

Lake Champlain Basin Program

Design and Development

de USFWS, photo: Robert C. Fields.
de USFWS, photo: J.&K. Hollingsworth.
Gracieuset
Betty Vallee.

Red-tailed Hawks live here year-round. La Buse de Rod et de
é
ve sa couv
è
l
dœ
il d’œ

Snowy Owls winter here. Le Harfang des neiges

Red-tailed Hawks and Great Horned Owls are among the many birds that can be observed on a Lake Champlain Birding Trail. Some birds that summer in the far north, the Champlain Valley provides a balmy winter home. Wintertime is your chance to see Bohemian Waxwings, Snow Buntings, Common Redpolls, Snowy Owls, Rough-legged Hawks, and Bald Eagles.

You are Here

Burlington is the city that wants to be bicycle-friendly, and encourages reduction in vehicular

Leave pets at home or keep them on leash.

Some birds

Hanging Spore Threads After Spring Rain

A. 24” x 36”

Pirates and Campers on the Gold Coast

Low-Profile Panel

B. 24” x 42”

What are all these birds doing here? / Que font tous ces oiseaux?

Bilingual Low-Profile Panel

C. 18” x 24”

Opening the Reboleau: A Welcome to Vermont’s Lakeshore

Low-Profile Panel

D. 12” x 17”

12 Mile Apple Farm

Site Marker

E. 36” x 48”

Cycle the City

Upright Panel

Panel Sizes and Orientation

The LCBP wayside exhibit design comes in a variety of sizes depending on the message being conveyed. Low-profile horizontal panels (A, B, C, & D) often tell a story or interpret a specific site or feature. Site markers (D) are designed to be part of a series of displays along a thematic trail, such as a nature walk. Upright panels (E) provide practical travel information, safety tips, and illustrations of special destinations.

Panel A is the most commonly used size for interpretive panels. Panel B is specifically designed for a bilingual presentation. Panels A, C, D, & E are designed for one language, however panel E could be adapted to be bilingual. A range of estimated prices is included on page 12.
Panel Fabrication

Working with a contractor, wayside exhibits are fabricated through full-color ink-jet digital imaging onto a high-pressure laminate material made for exterior use. Specially developed printing papers are digitally imaged, then impregnated with melamine resins and a UV resistant over-laminate, and finally pressed with extreme heat and pressure. The LCBP generally orders exhibit panels at 1/8 inch thickness for framed exhibits or 1/2 inch if a frame is not preferred.

Considering cost, new advancements in digital technology, quality of product, and ease of production, the digital print is the clear choice for most. In vandalism tests, high pressured laminates scored well for scratch and cigarette resistance and spray paint and magic marker removal. Most carry a ten-year guarantee.

The LCBP will assist organizations seeking to select a fabricator that best suits their needs by sharing our current information about product lines and costs. A range of products is noted in the adjacent table. The LCBP is willing to work with a fabricator of an organization’s choice, provided the product meets certain quality standards.

The LCBP recommends obtaining exhibit lab tests prior to final product development to ensure color match and layout accuracy.

Base and Frame Fabrication

The base and frame product the LCBP uses is a proven durable cast aluminum, widely used by the National Park Service. It generally consists of: 1) legs and a backing plate; or 2) legs with a backing plate that frames the panel with a 3/4 inch lip.

Using the frame option, the exhibit panel slides directly into the frame and its backing plate, making it easy to assemble and replace. This frame is attached to one or two legs, depending on the size of the exhibit. The legs are set in concrete.

Panels without frames are directly screwed to a backing plate which is then attached to the legs. The choice is primarily an aesthetic preference, however the frame does make the exhibit a little more durable and difficult to vandalize. While the difference in initial cost is not significant, a 1/2 inch panel will cost more to replace if choosing the option without a frame. Another choice is a railing mount, which requires no legs. In this case the frame and/or a backing plate is attached directly to a railing.

### Panel Fabrication Costs

<table>
<thead>
<tr>
<th>Panel Size</th>
<th>1/8 inch</th>
<th>1/2 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>12x17 inches</td>
<td>$70 - $160</td>
<td>$90 - $180</td>
</tr>
<tr>
<td>18x22</td>
<td>$130 - $250</td>
<td>$180 - $290</td>
</tr>
<tr>
<td>24x36</td>
<td>$250 - $400</td>
<td>$340 - $470</td>
</tr>
<tr>
<td>24x42</td>
<td>$310 - $450</td>
<td>$420 - $530</td>
</tr>
<tr>
<td>36x48</td>
<td>$490 - $660</td>
<td>$670 - $810</td>
</tr>
</tbody>
</table>

Prices may vary. Costs do not include packaging, shipping, and a lab sample. Plan on adding $50-$100 per exhibit for these additional services, depending on size of order. Lead-time: 30-45 days.

### Base and Frame Fabrication Costs

<table>
<thead>
<tr>
<th>Panel Size</th>
<th>Base w/o frame</th>
<th>Base w/ frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>12x17 inches</td>
<td>$150 - $385</td>
<td>$190 - $470</td>
</tr>
<tr>
<td>24x36</td>
<td>$170 - $385</td>
<td>$350 - $470</td>
</tr>
<tr>
<td>24x42</td>
<td>$310 - $530</td>
<td>$460 - $620</td>
</tr>
<tr>
<td>36x48 Upright</td>
<td>N/A</td>
<td>$490 - $730</td>
</tr>
<tr>
<td>36x48 Double Upright</td>
<td>$910 - $1,450</td>
<td></td>
</tr>
<tr>
<td>36x48 Triangular Upright</td>
<td>$1,190 - $2,170</td>
<td></td>
</tr>
<tr>
<td>36x48 Triple Upright</td>
<td>N/A</td>
<td>$1,240 - $2,170</td>
</tr>
</tbody>
</table>

Prices may vary. Shipping may be included, depending on the company. Lead time: 40-45 days. Note: 1/8 inch panels can be used with bases using frames, while bases not using frames require a 1/2 inch panel. View the table for more information.
Installation and Maintenance

Installation

The site manager is generally responsible for installing wayside exhibits. However, a wayside exhibit team may need to rely on volunteers to accomplish this task.

The LCBP does not install exhibits, although we will guide an organization with technical assistance. Exact locations and positions must be well planned. The project coordinator should visit the site with the site manager to determine the best location and orientation.

Integrate exhibits into the landscape as much as possible. In remote areas, install with as little disturbance to the surface as possible. In not-so-remote areas, wayside exhibits can draw many people. In such cases, locate exhibits on level, hard-surfaced pads to minimize the impact.

Base systems are relatively easy to install. Specific instructions can be obtained from the LCBP or the manufacturer.

Maintenance

After all your hard work, please do not neglect your wayside exhibit. A little maintenance can go a long way to improve the appearance and increase the exhibit’s life. Periodic maintenance using the following cleaning tips greatly improves how visitors will view and remember your message and presentation.

Cleaning Tips

- Use a popsicle stick and water (a hose if possible), to clean the weep, or drainage holes, at the bottom of the panel frame so that debris does not collect.
- For simple cleaning, mild soap and water is best. Rinse with clean water after washing. Avoid using abrasive cleaners or acids.
- Graffiti (paint, crayon, felt tip markers) can be removed using an organic solvent, such as Simple Green, or similar non-abrasive citrus-based cleaners.
- Very stubborn graffiti may require something stronger, such as mineral spirits. Do not use lacquer thinner or acetone, as they can damage the surface of your panel. Always rinse with clean water.
- Minor blemishes, nicks, marks, or burnishes and very light scratches can be concealed using a polymer based car wax.
- Persistent stains can be removed with a two minute exposure to household bleach. Always rinse with clean water after this procedure.

Getting Started

Contact the LCBP for help in starting the process of developing your wayside exhibit. We are happy to discuss your ideas and to answer any questions that you may have. We look forward to hearing from you soon!