EXPLORE LAKE COUNTY

WAYFINDING REFERENCE MANUAL

DRAFT

CORBIN DESIGN

02.01.21

TABLE OF CONTENTS

Prepared for
Lake County Division of Transportation
by Corbin Design.

Project Overview 3

Section 1 – Analysis and Recommendations 4

What is Wayfinding? 5

Creating Partners 6

Community Engagement 7

Goals for the Program 8

Rebrand to Promote Accessibility 9

Section 2 – Test Route 10

Test Route 11

Corbin Design Findings 12

Community Findings 13

Design Improvements 14

Section 3 – Wayfinding Toolkit 15

Sign Array 16

Sign Type Descriptions 18

Sign Programming 21

Sign Placement Guidelines 22

Setback Diagrams 23

Mounting Diagrams 24

Rescue Locator 25

Appendix A - Design Intent and Signs Templates 27

Appendix B - Full Survey Results 27

PROJECT OVERVIEW

Through a collaborative effort between the Lake County Division of Transportation (LCDOT), Lake County Forest Preserve District, local municipal representatives, local bike clubs, wayfinding consultant Corbin Design, and local community members, a comprehensive wayfinding and signage manual has been created for the Lake County Division of Transportation (LCDOT) trail system, Explore Lake County. This manual serves as a toolkit for the continued development of the wayfinding program as it expands across the County, and possibly into municipalities and Forest Preserve trail systems.

This Wayfinding and Signage Standards Manual provides guidance to Lake County personnel in specifying, fabricating and installing trail signage in Lake County. It is designed to guide the use of the Explore Lake County signage design standard and to assure that it is correctly and consistently applied. Note that this is intended to be a general reference manual. For the system to remain effective over time, it is essential that the program standards be understood and followed. This Wayfinding and Signage Standards Manual is designed to help in that effort. It is important that staff members become familiar with the contents, refer to it whenever signage issues arise and support its use by others.

SECTION 1

ANALYSIS AND RECOMMENDATIONS

WHAT IS WAYFINDING?

We define wayfinding as
"direction for people in motion."

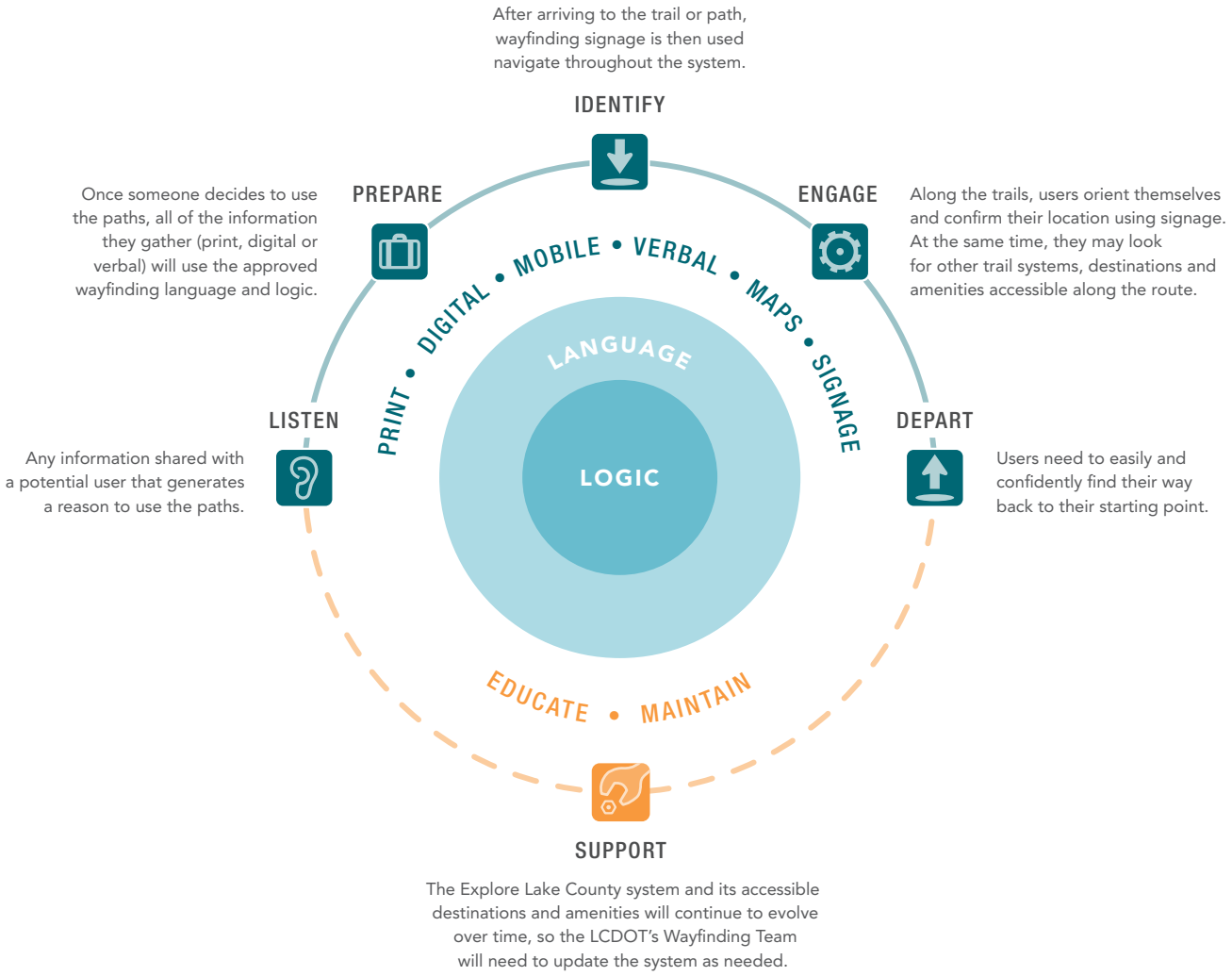
Wayfinding is unique in that it has an opportunity not only to move people along paths but also to carry brand elements and integrate with the character of the LCDOT trail system.

Trail users rely on many different resources to navigate throughout Lake County so it is imperative that the logic and language is expressed consistently across all media.

Web, broadcast, print and signage elements will all speak in the same voice as the user explores the Lake County network of trails.

Through a well-developed wayfinding system, users will feel more confident and capable as they move toward their destination and are made aware of other opportunities as they explore the paths.

The **journey map** below depicts each potential point of contact with a given user.



CREATING PARTNERS

Representatives from local municipalities, Lake County Forest Preserve, local bike clubs and other County departments were invited to participate in this project as stakeholders.

As stakeholders, this team was asked to participate in several meetings to provide input on the impact of the bike paths on their entity. By including such a wide reach of stakeholders, the project could develop into a "conscious coordinated effort."

STAKEHOLDER OUTCOMES:

- Create visual commonalities in signage throughout Lake County despite the local jurisdiction or municipality the path resides.
- Create a subtle opportunity to identify individual municipalities to help identify when a user is entering/leaving an area as well as to better identify who is maintaining a particular portion of the trail.
- Local municipalities look forward to the opportunity to adopt some of the sign types to fit in their municipality, particularly in the form of informational kiosks.
- If implementing the system independently, local municipalities would like the option to work directly with the County sign shop or bid to local vendors.
- Design options were shared with the Stakeholder team and revised based on the team's input. Final decisions included sign-face layouts and color palettes.

COMMUNITY ENGAGEMENT

Community engagement was an imperative part of this study. By asking the community at-large to participate in varying levels (open houses, virtual meetings and surveys), the wayfinding program was customized to appeal more specifically to the end-user's needs.

The first opportunity for the community to participate was during the initial kickoff meetings. An Open House,was held in which nearly **50 community members** attended. To make the meeting more inclusive and ensure maximum participation, portions of the meeting were broadcast on social media.

To gain further information from the community, LCDOT conducted a social media push to get more than **624 residents** to complete an online survey aimed at bike path users. An overwhelming majority of participants see the Lake County bike paths as a major community asset and see this project as an opportunity to make it even better. As one community member said, "These trails are a godsend." Common suggestions from survey respondents included: improved trail connections, mile markers signs, better connections to other trail systems and municipalities, and improved maps that appear of the trails.

624

RESPONDENTS

completed the online survey

SURVEY RESPONDENTS

AGE FROM 18 TO 87

50%

of respondents use the trails at least **ONCE A WEEK**

96%

of respondents use the trails for **RECREATION & EXERCISE**

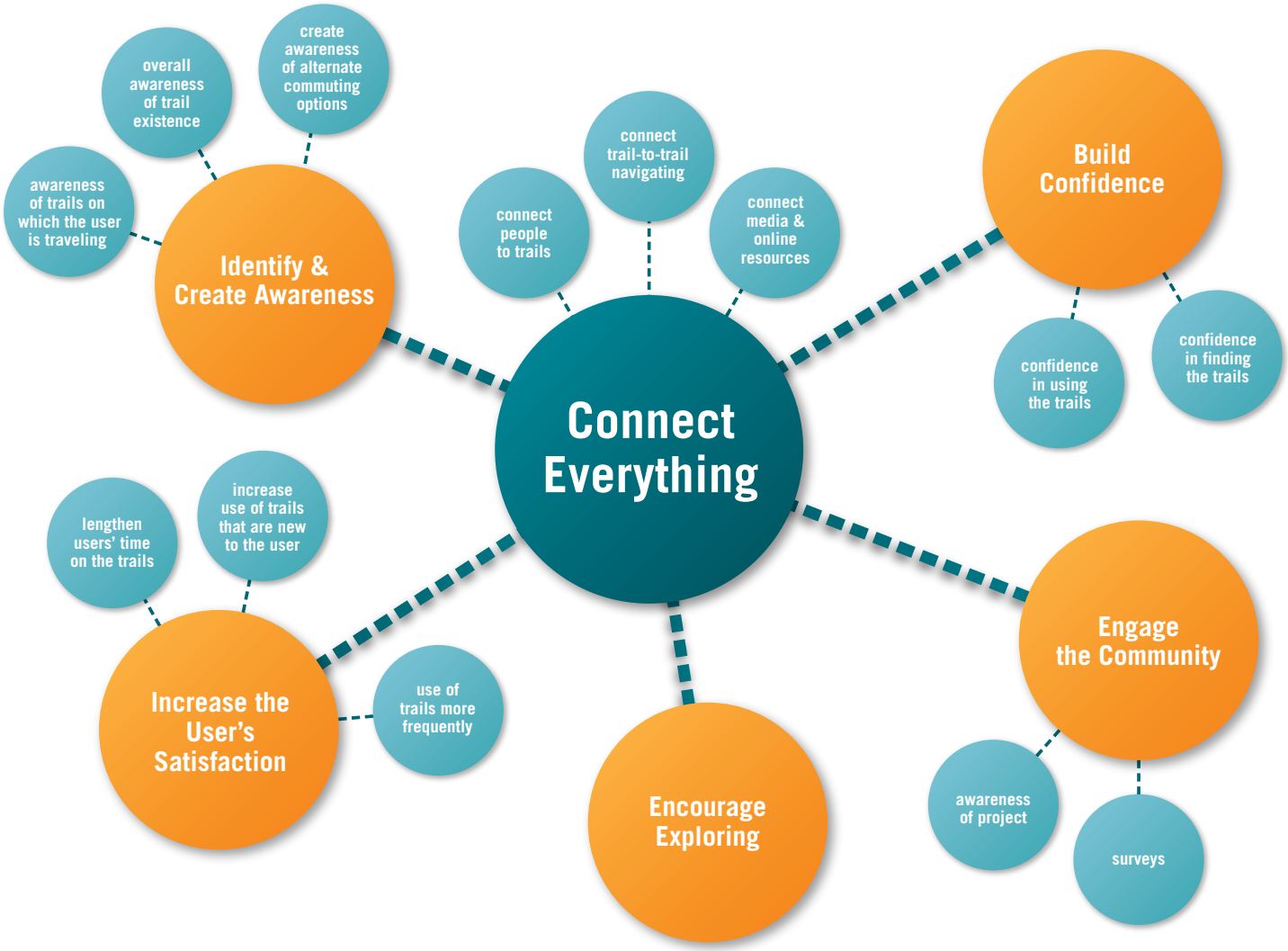
77%

of trail users are **CYCLISTS**

GOALS FOR THE PROGRAM

Based on independent sitework and trail research, Core Team and stakeholder input, and survey results, the following recommendations were made for the LCDOT wayfinding and signage system:

- Develop a consistent signage standard that can be easily maintained and updated by the County Sign Shop and that is adaptable for the use of local municipalities;
- Create a signage system that presents information in a clear and consistent way. Consistent logic and language, fonts, shapes, icons and colors should be used to create a seamless experience throughout Lake County;
- Rebrand the network of trails to be more inclusive of the various users; and
- Identify connections to additional trails, destinations, and amenities along the system
- Create a consistent method to identify ownership and maintenance of specific trail segments that includes contact information; and
- Explore the opportunity to rename trail segments in a consistent, user-friendly manner throughout the County.



REBRAND TO PROMOTE ACCESSIBILITY

Stakeholders and community members indicated that the type of user on the network of trails varies widely. There are serious cyclists and leisure cyclists, walkers and runners, stroller and wheelchair users. To communicate the broad appeal, the bike path network has been rebranded from Bike Lake County to Explore Lake County.

Bike Lake County was too limiting in name. The trails are for more than cyclists and the name needed to convey that message. The new brand intentionally builds upon individual symbols that visually showcase the inclusivity of different user groups. The word "explore" communicates that there is a network of different opportunities for users. It indicates that the trails are for everyone.

Though the signage will carry the new brand identity, it will be important for Lake County to ensure that this rebrand is marketed properly so that users understand the new name. A community survey of test route users found that only 41 percent of trail users **did not** understand that the system had been rebranded. Although it is good to see that 59 percent of trail users understood the rebrand, these numbers could be further improved if the County celebrated and promoted the rebrand via communication methods beyond signs.

There was a tremendous amount of community engagement on social media throughout this project. The County should continue to use social media to communicate trail updates and changes to the community. Some survey respondents also requested monthly informational emails that highlight different routes and connections.

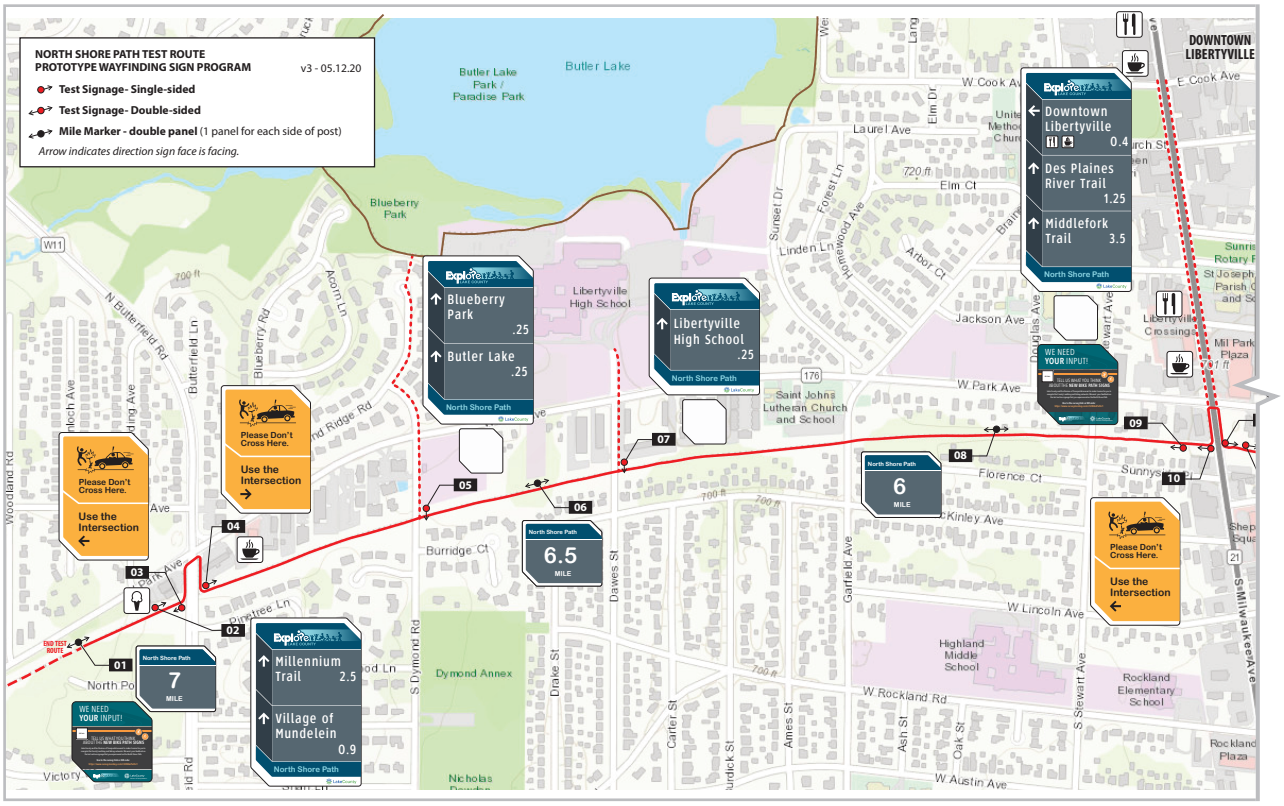
of respondents did not understand that the trail system had been rebranded as "Explore Lake County."

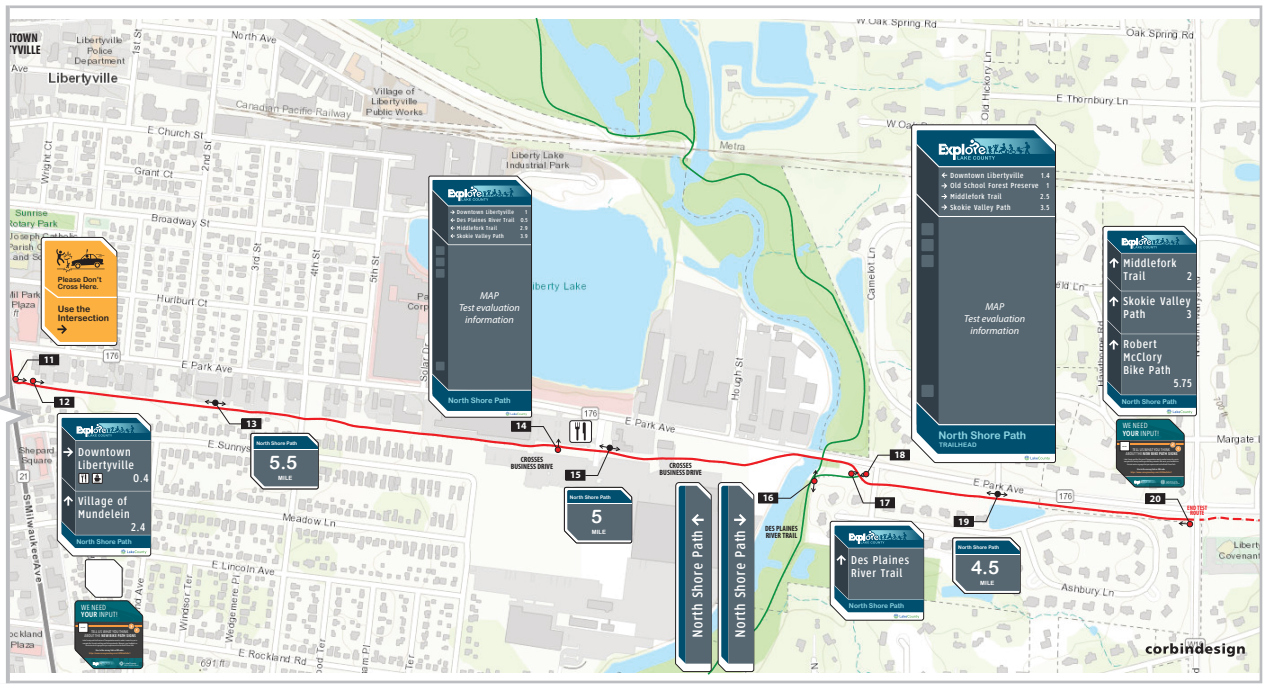
Explore LAKE COUNTY

Explore LAKE COUNTY

SECTION 2

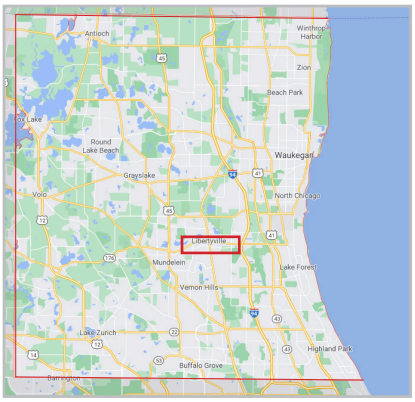
TEST ROUTE





TEST ROUTE

In order to test the recommendations and designs, a pilot route along the North Shore Path was programmed and implemented between Butterfield Road and Saint Mary's Road. This 1.1 mile test section included 37 signs from the proposed design array that were fabricated and installed by the County Sign Shop.



Map Kiosks were located along the test route. The sign and its information seemed undersized and difficult to read at a glance.

When using the trail, mile markers are undersized relative to the environment and screws holes overwhelm the sign face.

Medallions inviting users to participate in a survey were temporary in nature and should be removed. However, this sign template should remain available for use by the LCDOT for future promotions.

The pilot program used high intensity reflective vinyl. This made the signs more difficult to read, and negatively affected the color palette. This material is unnecessary on dedicated, non-roadway trails.

The back of signs were left unfinished during the pilot program making them difficult to differentiate from standard regulatory signs.

The size of individual information panels (below the guide) are disproportionate to the directional sign. Additionally, the jurisdiction logo overpowers the LCDOT logo.

of respondents felt the distance to destinations was **EASY** to understand

of respondents found it **EASY** or **VERY EASY** to identify the name of the trail they were using

8/10 **LEGIBILITY RATING**

8/10 **SIGN SIZE RATING**

7.9/10 **OVERALL DESIGN RATING**

of respondents felt that the mile markers appeared at an appropriate frequency (at 1/2 mile increments)

7.9/10 **COLOR SCHEME RATING**

7.7/10 **USABILITY RATING**

7.9/10 **INFORMATION SIZE RATING**

of respondents found it **EASY** or **VERY EASY** to find the new signage along the Test Route

of respondents were satisfied with the information provided on the signs to find destinations along the test route

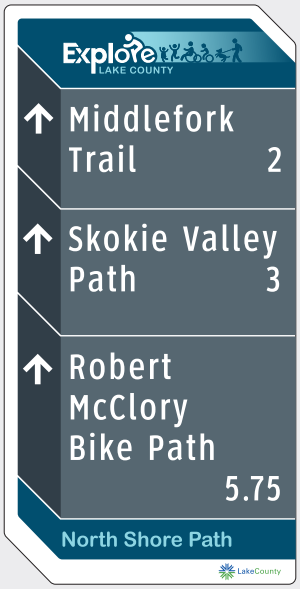
COMMUNITY FINDINGS

Because of the overwhelming amount of participation during the first round of community engagement, the Core Team decided the community at-large needed to have more opportunities to share their opinions and comments on the proposed wayfinding system.

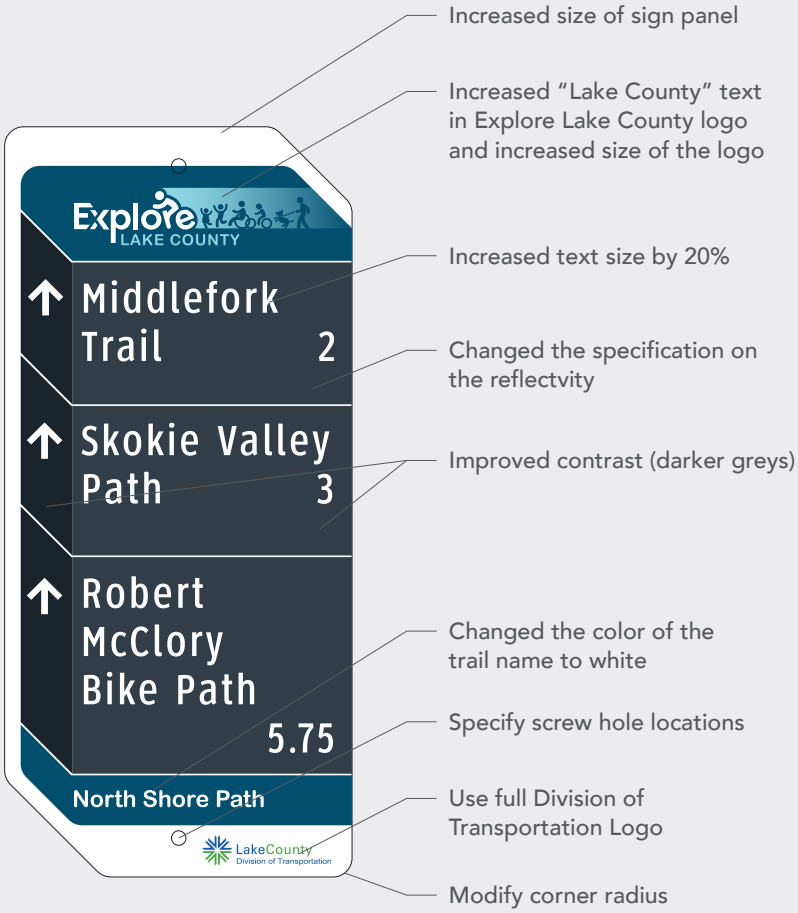
The next step in involving the community was to set-up another community open house to introduce the Core Team approved designs. However, due to COVID-19 related shutdowns, the open house had to be reinvented. With the help of the LCDOT communications team, a virtual open house was hosted on Zoom and then live-streamed on Facebook. Community members were given the opportunity to tune in to and ask questions and provide feedback in real time. For those who were unable to attend the live event, the video was made available on LCDOT's Facebook page where it was viewed more than **2,700** times

After the virtual open house, the county sign shop built and installed the pilot route signage. Included in the rollout was a medallion sign type that directed trail users to a survey. Survey data influenced modifications to the final design recommendations.

INITIAL TEST ROUTE SIGN DESIGN



FINAL SIGN DESIGN



DESIGN IMPROVEMENTS

Based on the input received from users as well as an inspection conducted by Corbin Design, modifications were made to the design to improve legibility and usability. (Specific design details like size, color and materials can be found in Appendix A.)

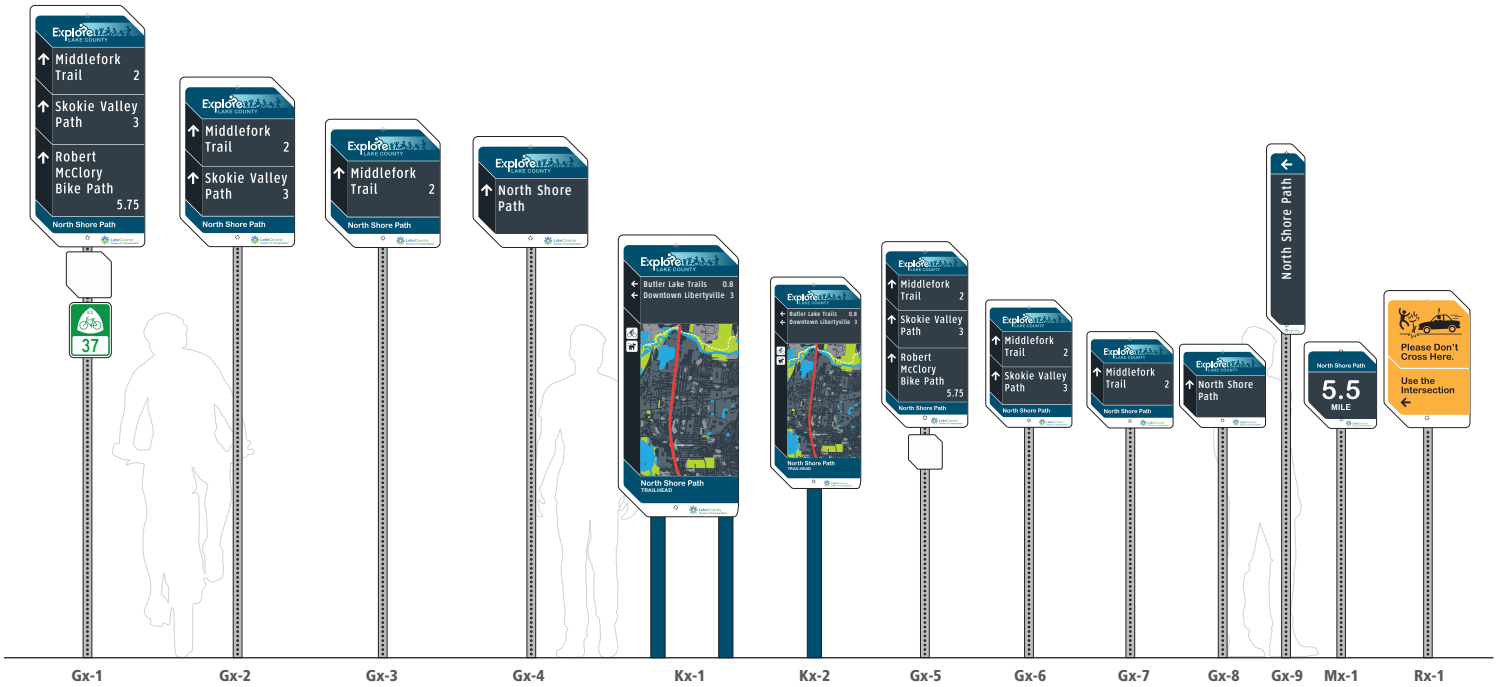
SECTION 3

WAYFINDING TOOLKIT

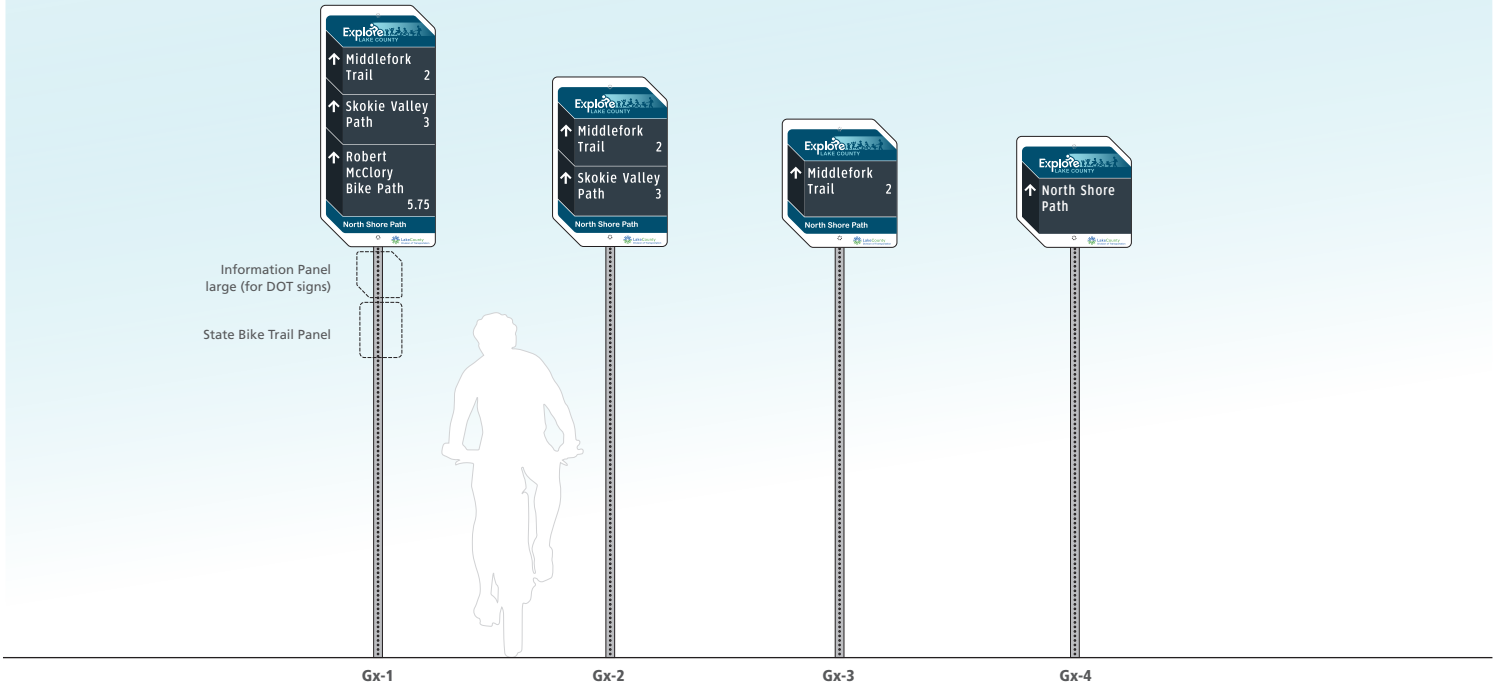
This section of the document is intended to introduce users to the design standards and provide guidance as to which sign types to use, how to program the messaging, and best practices for installation.

SIGN ARRAY

FULL SIGN TYPE ARRAY



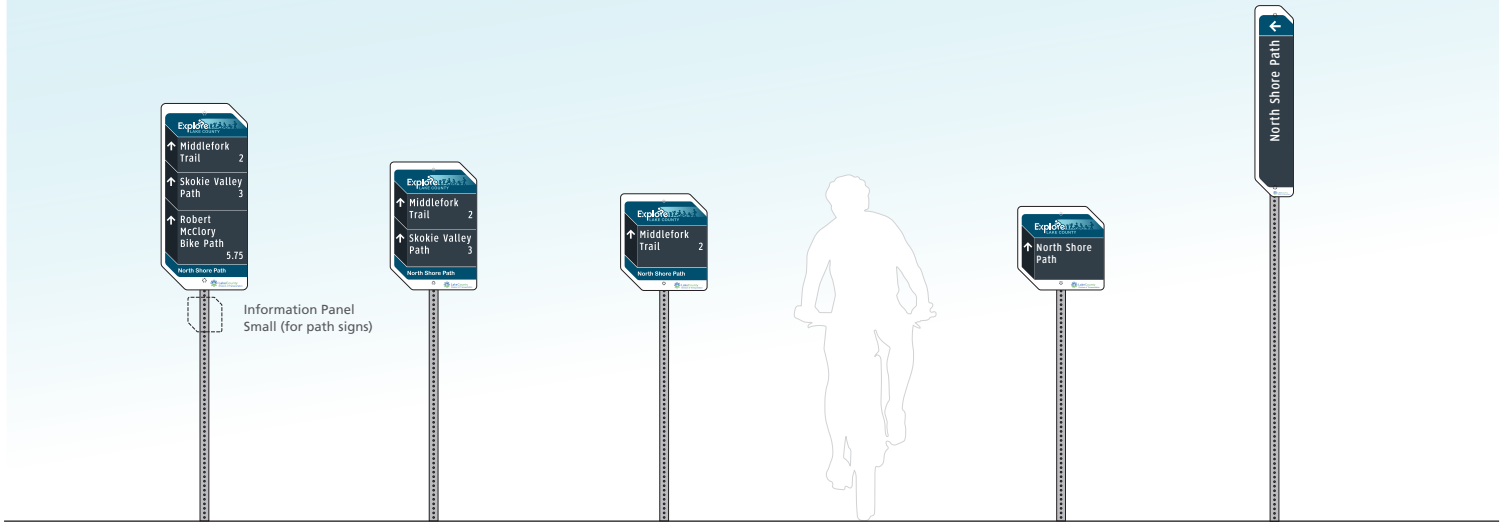
ON ROAD SIGNS



SIGN ARRAY

TRAIL SIGNS

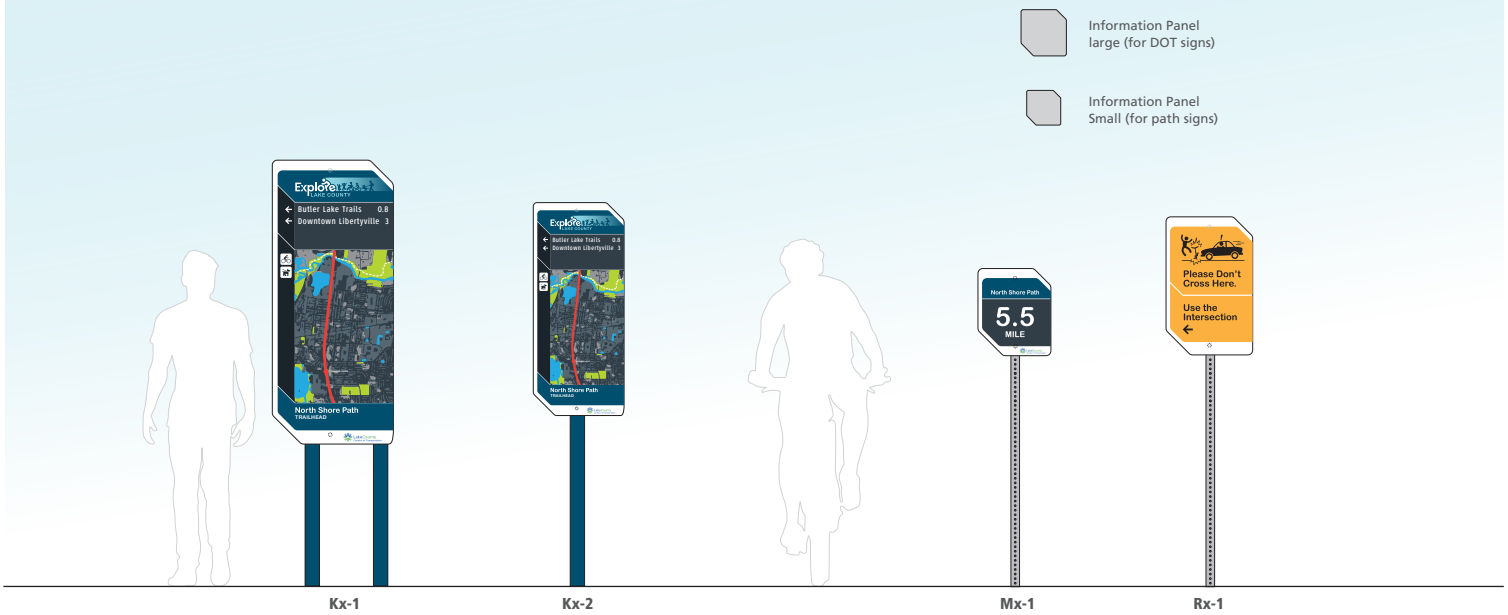
TRAILBLAZERS



Gx-5 Gx-6 Gx-7 Gx-8 Gx-9

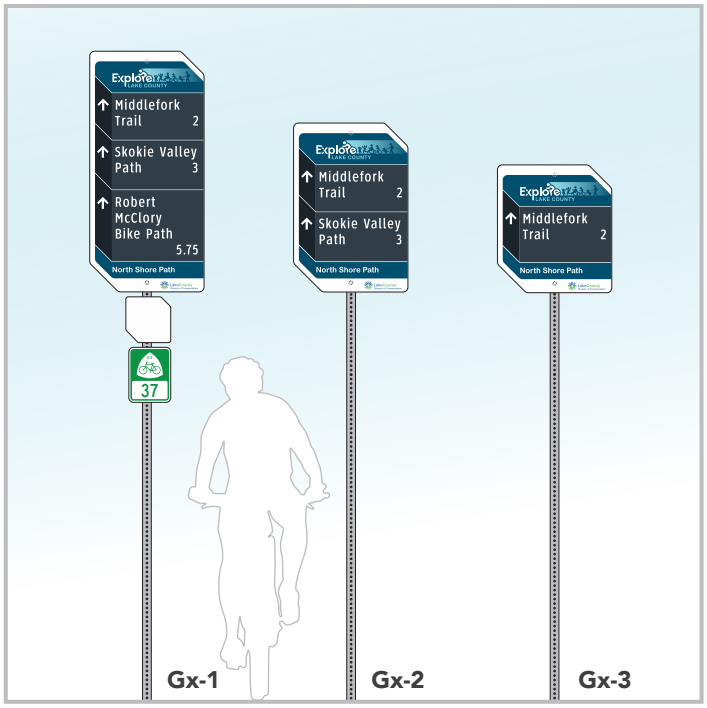
TRAILHEAD KIOSKS

MILE MARKER, REGULATORY



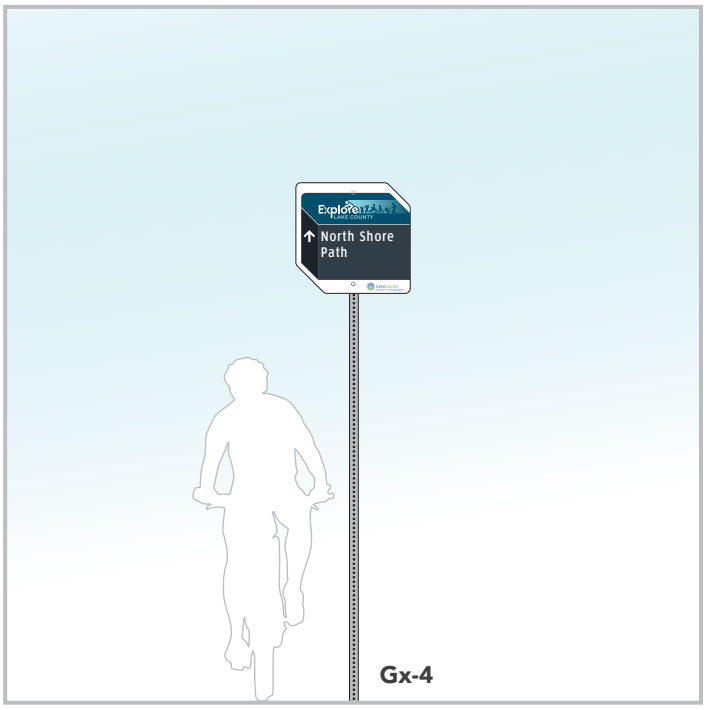
Kx-1 Kx-2 Mx-1 Rx-1

SIGN TYPE DESCRIPTIONS

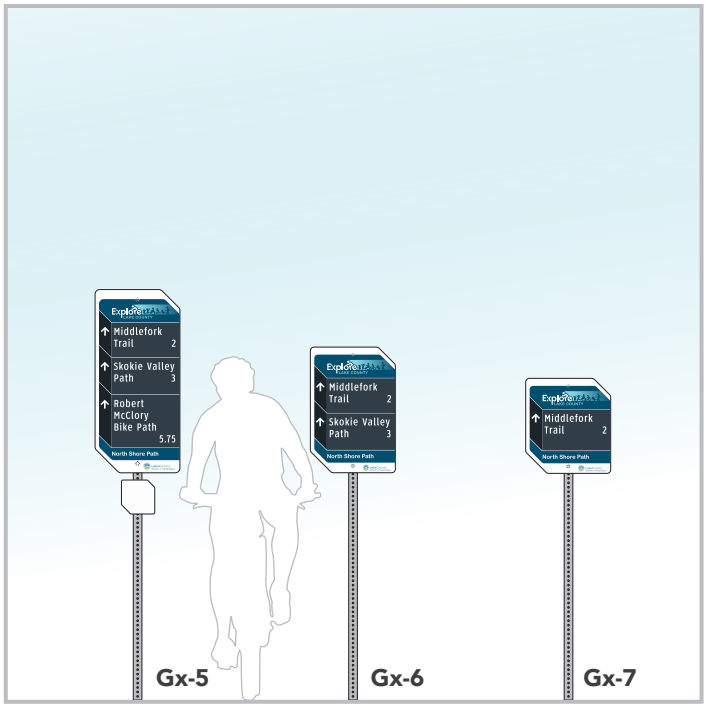


Guide, DOT (Gx-1, Gx-2, Gx-3)
These Department of Transportation (DOT)-compliant directional signs are intended for bicycle traffic along roadways. The text height of the messages is 2" as required by the Manual on Uniform Traffic Control Devices (MUTCD). The header and footer of this sign are designed to identify the system name, trail name and owner, the Lake County Department of Transportation. Because of its location along roadways, this sign should be fabricated using full-face reflective sheeting and be installed perpendicular to traffic. The sign panels are mounted with seven feet of overhead clearance and could be mounted to new breakaway posts or attached to existing poles.

Trailblazer, DOT (Gx-4)
This DOT-compliant trailblazer sign is similar to the DOT Guides. It's primary function is to direct users to separate trail systems and should not be located along a formal path or trail. Sign panels could be mounted to new breakaway posts or attached to existing poles.

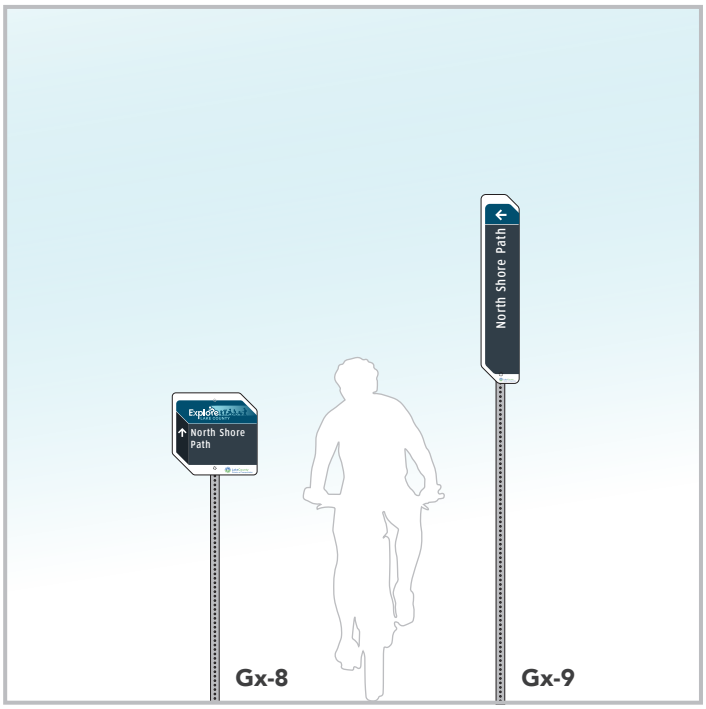


SIGN TYPE DESCRIPTIONS

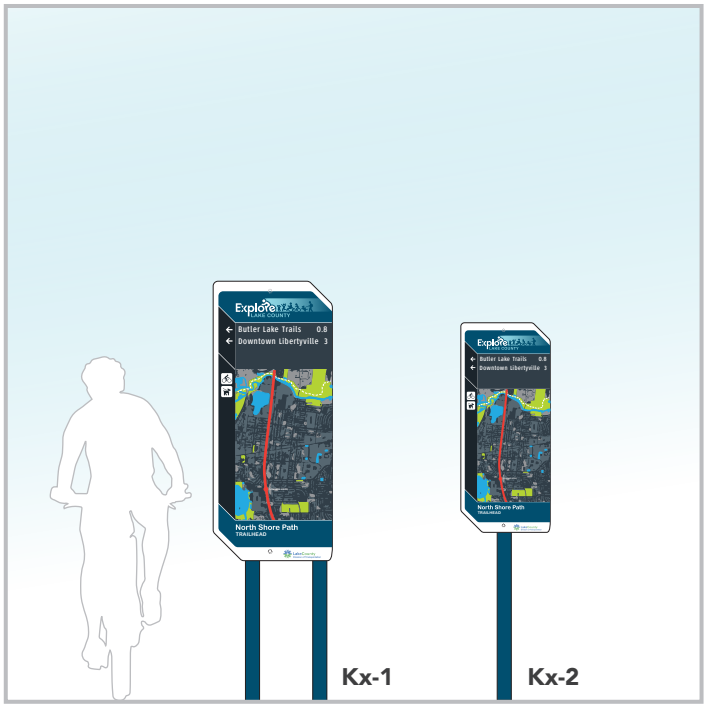


Guide, Path (Gx-5, Gx-6, Gx-7)
These directional signs are intended to direct users on non-roadway trails. Because these signs are to be located along dedicated paths, there is more flexibility with their size and construction. The text height of the guide information is 1 1/2" tall. The headers and footers of these signs are designed to identify the system name, trail name and owner, the LCDOT. These signs are installed at key decision points along the path to direct users to trail amenities and destinations. They are mounted or installed off the path and in the direct line of sight for bike riders.

Trailblazer, Path (Gx -8, Gx-9)
These directional signs are intended to direct users off of unsupported or unnamed trails to the supported Explore Lake County system. Because these signs are to be located along dedicated paths, there is more flexibility with their size and construction. The text height of the message is 1 1/2" to 2" tall. The footers of these signs are designed to identify the system owner but not the trail name because this sign type should not be located along a formal path or trial. The Gx-9 was designed to accommodate areas where vertical and horizontal clearance is a concern.



SIGN TYPE DESCRIPTIONS

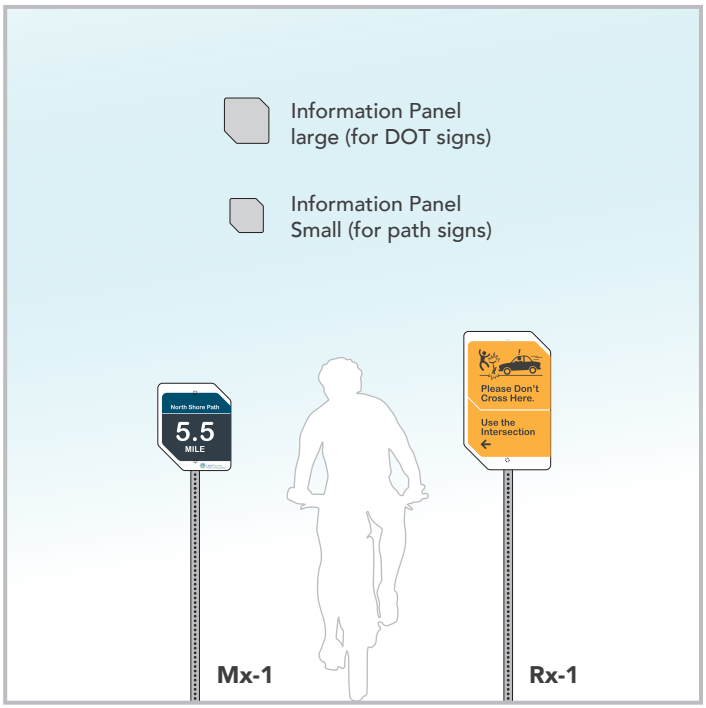


Kiosk (Kx-1, Kx-2)
The trail kiosks contain a trail map and directional information. Where possible, the map should be located so that it is easily accessible for users. The map should be oriented properly with how the user will experience the path. In order to ensure the sign is wheelchair accessible the sign should be oriented parallel to the path. If the sign is not accessible from the path, an ADA-compliant path and pad should be installed in front of the sign.

Information Panels
This category of signs includes two sizes of support information panels. The shape coordinates with the overall design and can be used to display the local jurisdiction, trail ownership or maintenance contact information.

Mile Marker (Mx-1)
This sign carries mileage information. It should be located at .25, .5 or 1 mile frequencies, depending on the density of traffic along individual segments.

Regulatory Information (Rx-1)
This sign type carries cautionary or safety information but is not intended to replace standard traffic caution signs such as stop or yield signs. These are supplemental signs to help in particular situations. This sign type can also be used to provide additional information regarding trail etiquette and amenity information. It should be located perpendicular to trail traffic.



SIGN PROGRAMMING

A wayfinding program is only as good as the information it contains. Therefore, it is important to have a well thought out plan when programming the messaging that will appear on each sign.

STEP 1:

It is important to consider destination names that are included on wayfinding signage for consistency, clarity and fit.

In addition, when determining which destinations to include, consider the following criteria:

Destinations must:

- Be relevant for trail users - Consider amenities like restrooms, picnic areas, bike repair stations, etc.
- Be open year-round
- Be a public or not-for-profit destination
  - However, general terms and universal symbols can be used to direct to private destinations. For examples restaurants in Downtown Libertyville can be identified in one of two ways:

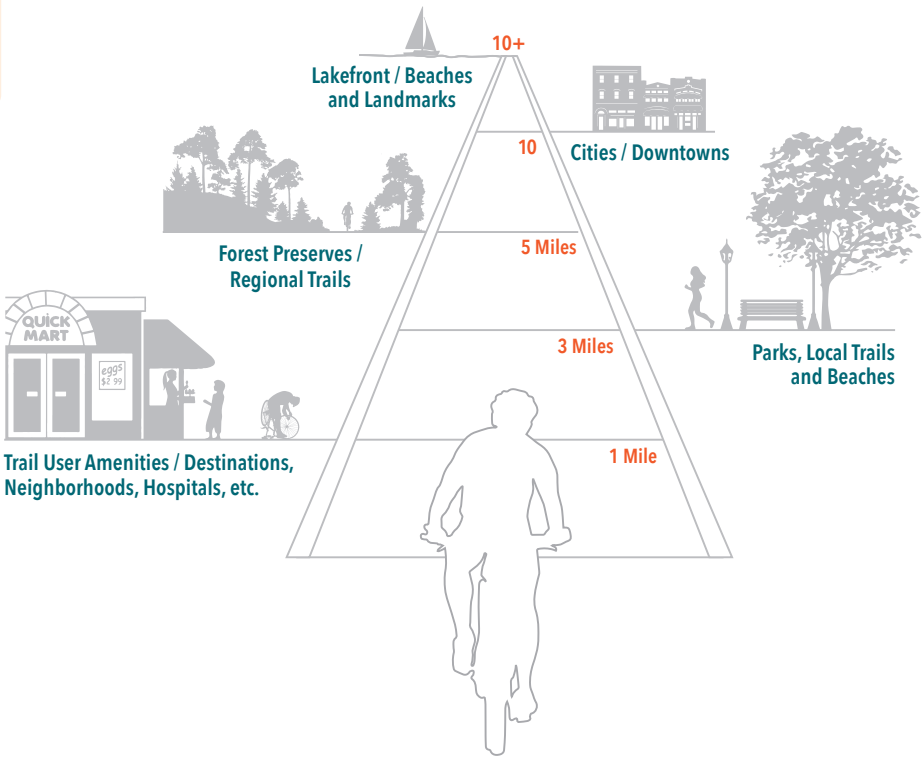
→ **Downtown Libertyville**
or
→ **Dining**

STEP 2:

After identifying which destinations to include in the program, the next step is to determine when and where to include them. The **destination hierarchy diagram below** should be used as a guideline. Confirm the distance to each location as this information should appear on directional signs.

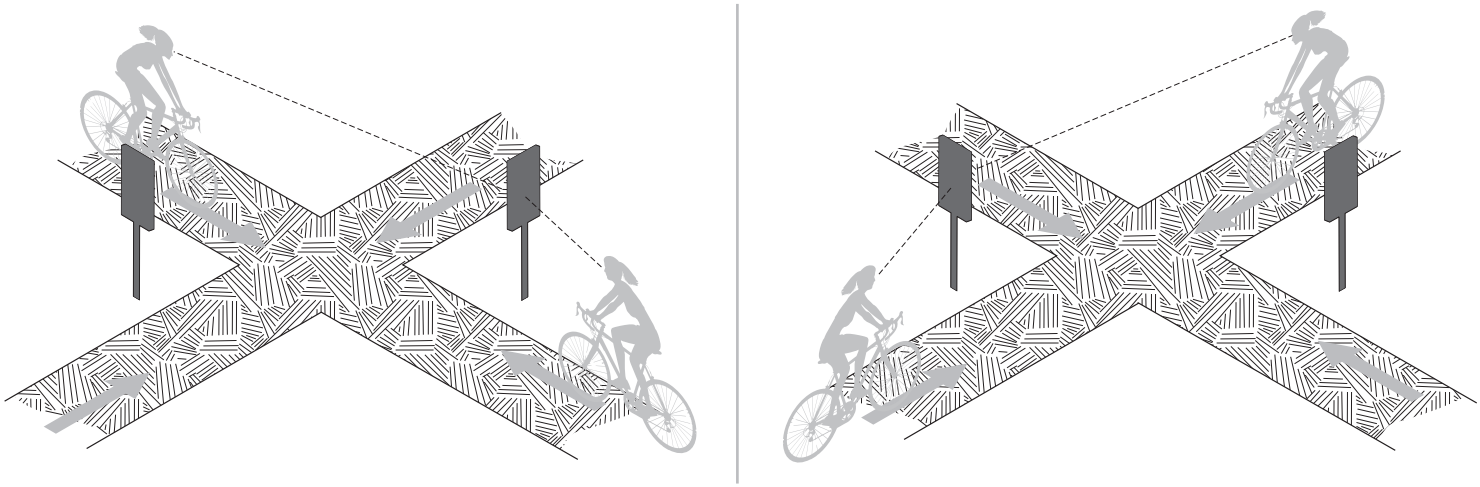
STEP 3:

To determine the proper order of destinations on a sign, destinations should be listed in arrow group orders and then alphabetized within that grouping. Destinations to the left should appear first, followed by destinations to the right, and then destinations straight ahead. Avoid directing to destinations that users have already passed.

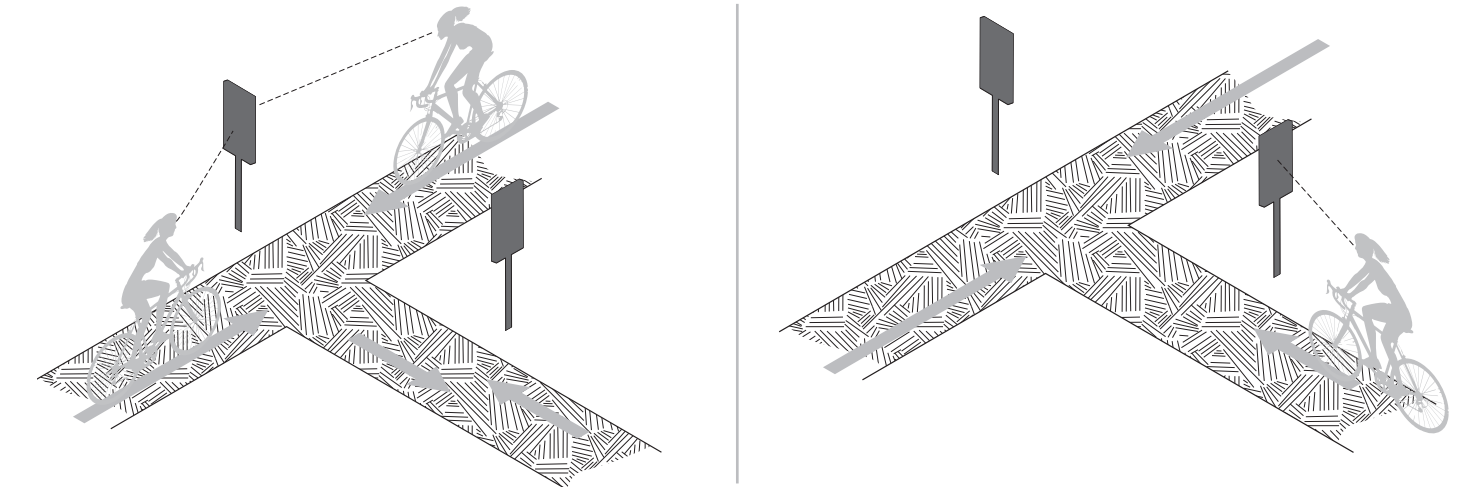


SIGN PLACEMENT GUIDELINES

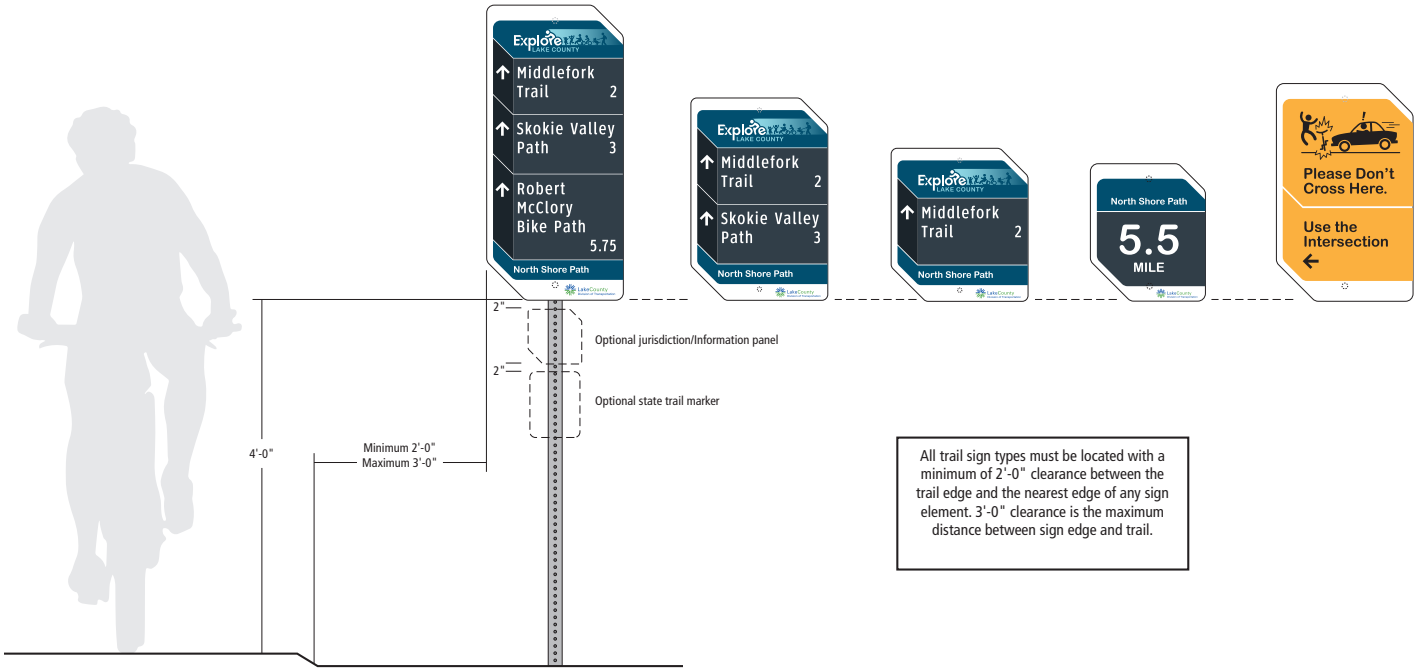
DOUBLE-SIDED SIGN LOCATIONS FOR 4-WAY INTERSECTIONS



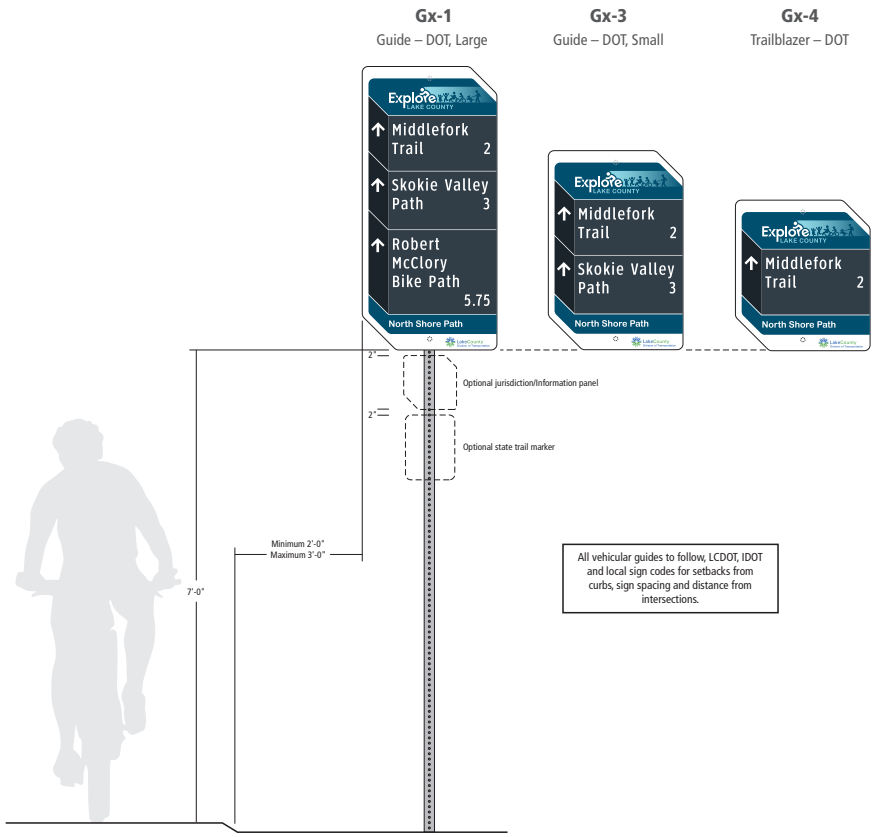
DOUBLE-SIDED SIGN LOCATIONS FOR 3-WAY INTERSECTIONS



SETBACK DIAGRAMS



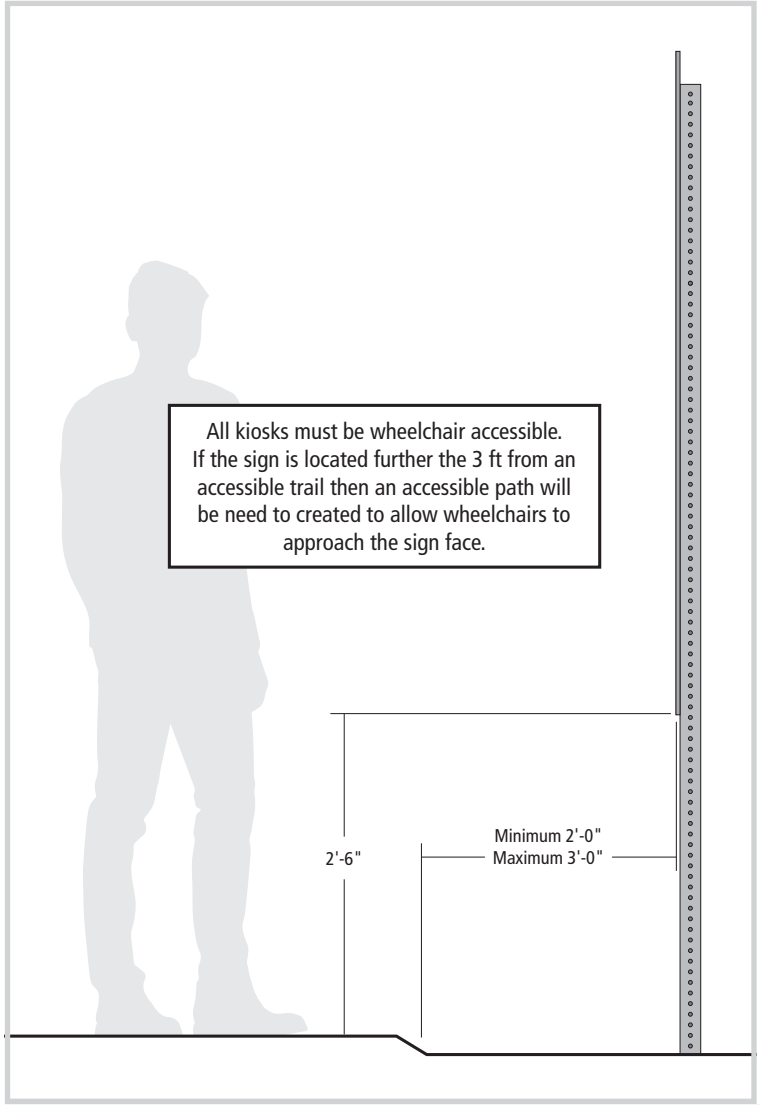
All trail sign types must be located with a minimum of 2'-0" clearance between the trail edge and the nearest edge of any sign element. 3'-0" clearance is the maximum distance between sign edge and trail.



All vehicular guides to follow, LCDOT, IDOT and local sign codes for setbacks from curbs, sign spacing and distance from intersections.

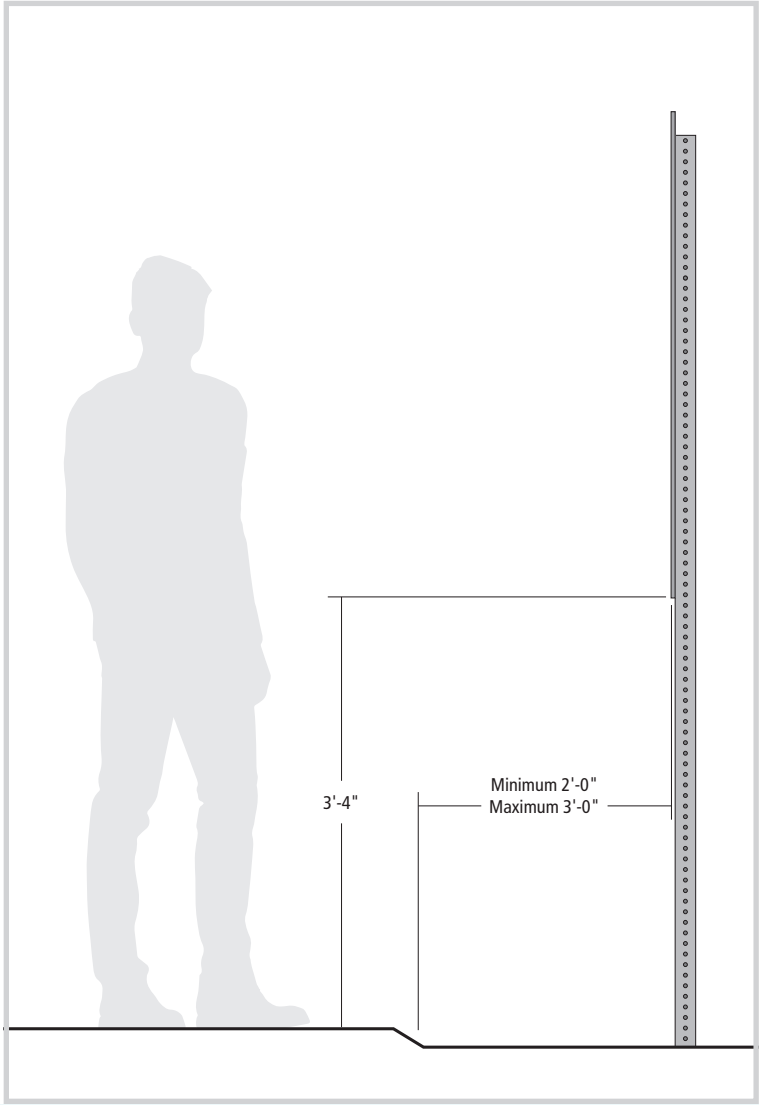
Sign type Kx-1

Kiosk – Large



Sign type Kx-2

Kiosk – Small



MOUNTING DIAGRAMS

RESCUE LOCATOR

Though standards have been created in the sign program to inform users of the trail owner and jurisdiction, this information is not always detailed enough during times of emergency. As Explore Lake County expands, the County should consider the formal adoption of rescue locater numbers based on the United States National Grid (USNG), particularly in less traveled and less populated locations. The USNG can increase the effectiveness of all types of emergency response, ranging from missing persons searches to off-road medical responses.

THE USNG PRESENTS A WIDE RANGE OF BENEFITS FOR TRAIL SYSTEMS:

1. Explore Lake County paths and trails are often times not contiguous, rapidly expanding, and intersects with other systems like the Forest Preserve. This eliminates the ability to identify a location based on a given starting or ending point. The USNG identifies a unique geographic point that does not depend on linear continuity.
2. Location points for future trail segments already exist; they just need to be identified and applied as needed.
3. The sign standard is designed to accommodate the Location Code as needed. Not all signs will require the code; use of the system relies on the discretion of the planner/project manager for each sign location.
4. This code can be applied to existing signage as needed.
5. The system was developed by the Federal Geographic Data Committee to supplement other unique locators (e.g. street address, GPS coordinates), cross jurisdictional lines, and is supported across digital platforms.
6. In some cases, it may be the only way to pinpoint a location in an area with no established road network, or an area affected by a natural disaster where other locators are unavailable.
7. Anyone tasked with identifying locations can use it: private citizens, commercial entities, first responders, the National Guard. It allows both state and federal agencies to integrate response in the event of an emergency. It can be integrated with local 911 systems.
8. It is a grid-based alpha-numeric point reference system that scales from 100,000 square meters at its largest segmentation to 10 square meters at its most precise. Depending on the sign location, a six digit (rural setting) or eight digit (dense urban setting) Locator Code could be used to indicate a trail user's location.
9. The unique combination in the code is never duplicated within a given region.

LOCATION CODE

2136 8156

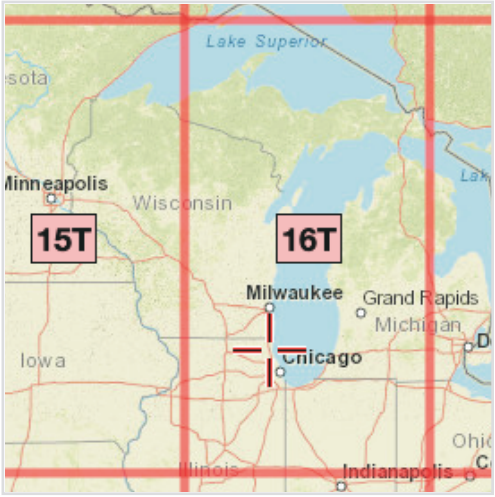
Emergency call 911

Layout to appear on signage

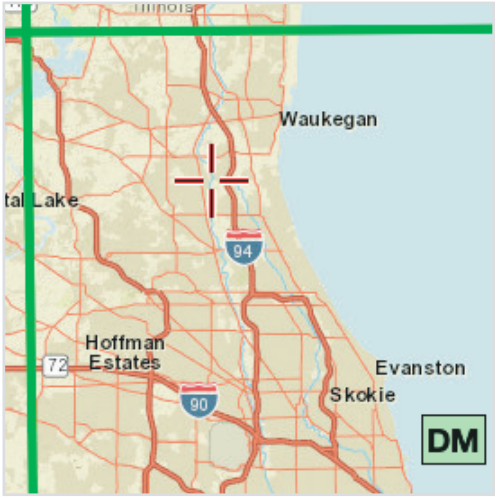
Example Layout for Guide Signs

Example Layout for Information Panels

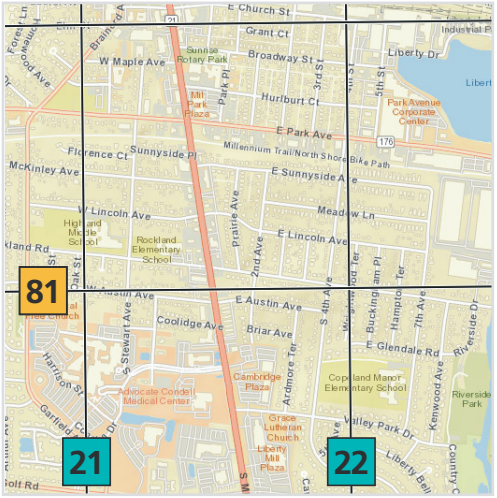
RESCUE LOCATOR (CONT.)



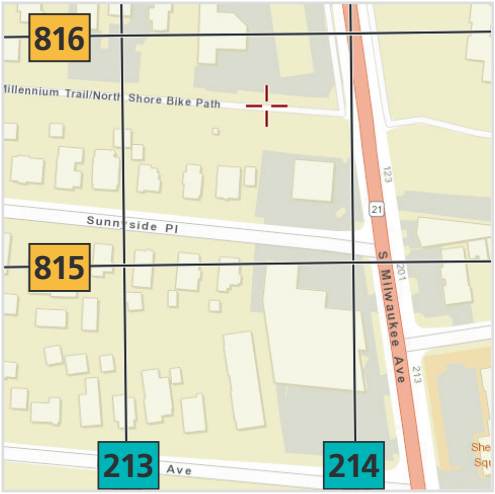
Regional **Location Code**
(does not appear on signs)



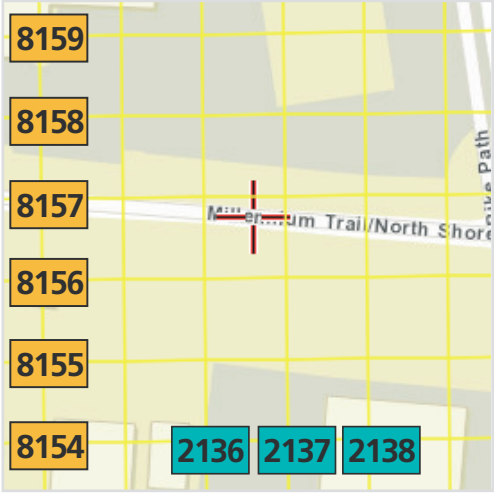
Two Letter
100,000 sq meter code



Four Digit **Location Code**

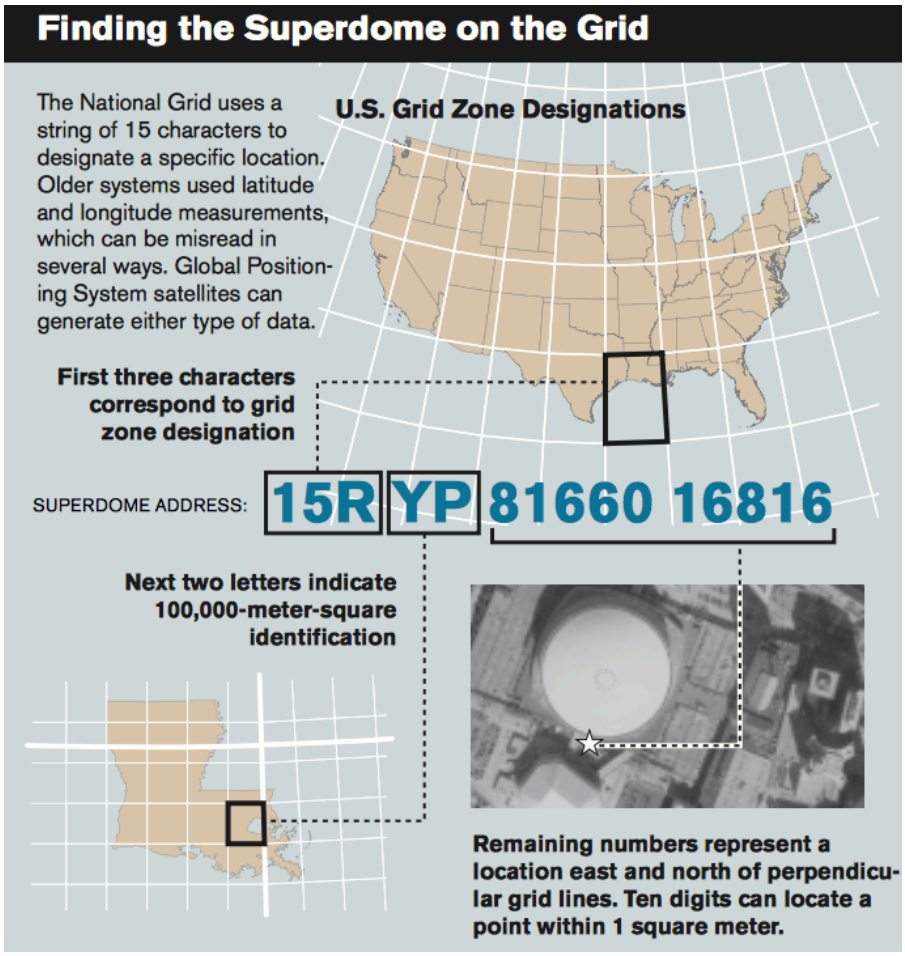


Six Digit **Location Code**



Eight Digit **Location Code**
10 meter / 32.8 ft square

For more information
visit usngcenter.org



APPENDIX A

DESIGN INTENT AND TEMPLATES

This section of the document includes the design drawings and templates needed to fabricate the signs.

COLORS

	1 Royal Blue	2 Light Blue	3 Blue-Gray	4 Dark Blue-Gray	5 LC Logo Green	6 White	7 Yellow	8 LC Logo Blue
Pantone®:	2210 C	635 C	7546CC	7547C	2727C	White	7549 C	369C
Matthews Paint:	---	---	---	---	---	---	---	---
Vinyl Sheeting:	---	---	---	---	---	---	---	---

TYPOGRAPHY

Clearview Highway 2-W

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo
Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 0123456789

Arial Rounded MT Bold

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo
Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 0123456789

ATTENTION:
The fonts used for this project were selected specifically for this project by the Designer and Owner. No substitution of any other typefaces may be made. Under no circumstances are typefaces to be electronically distorted ("squeezed" or "extended") for purposes of fitting to the specified sign or general alteration of the sign face composition unless noted in the drawings. This includes (but is not limited to) stretching, squeezing, tilting, outlining or shadowing.

The Clearview Highway family of fonts are used to typeset directional messaging, information signs, etc. See individual design drawings for details and specifications.

Typesetting Example: Apostrophe

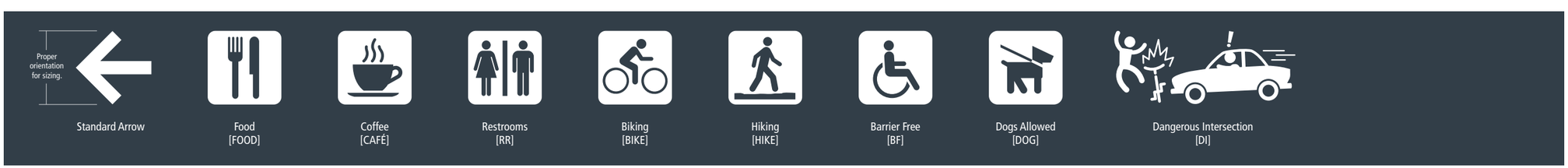
Visitor's - correct
Visitor's - incorrect

GRAPHICS

Color

Black & White

SYMBOLS

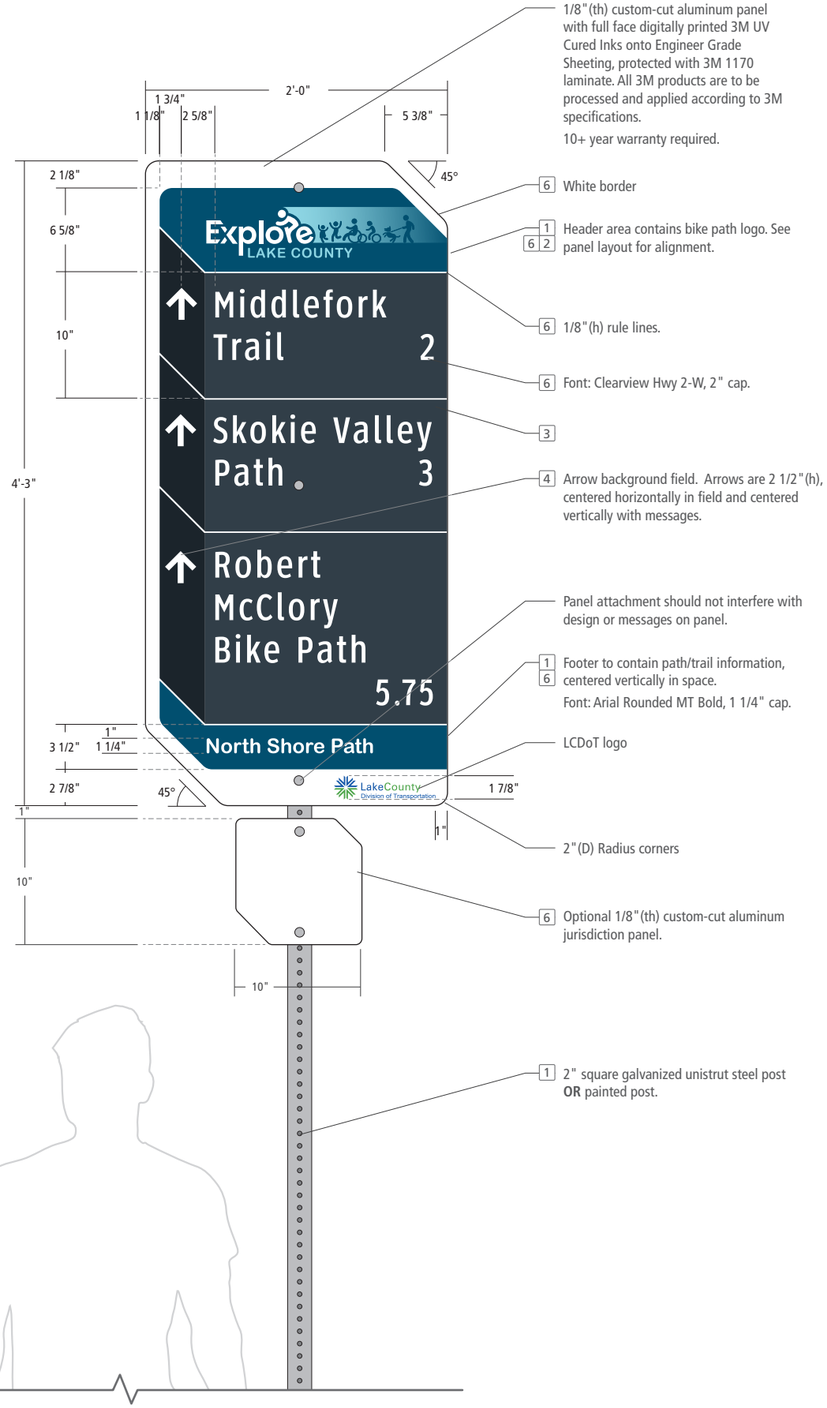


DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

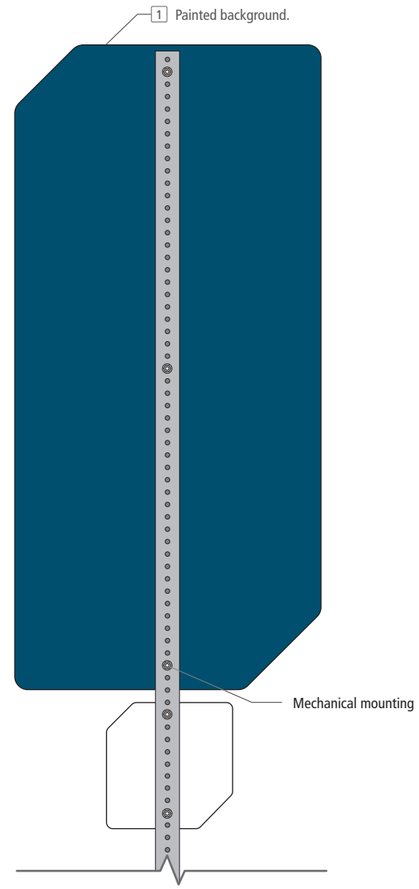
Gx-1

Guide – DOT, Large



Front View

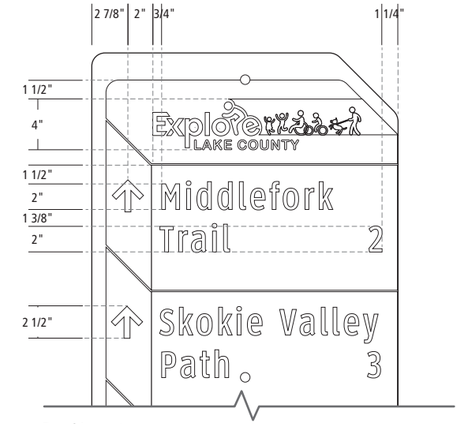
Scale: 1" = 1'-0"



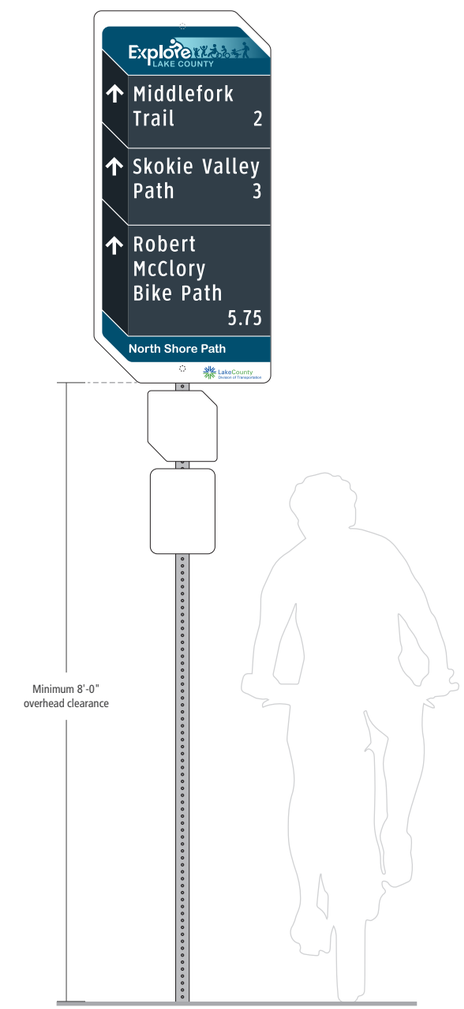
Side View

OPTIONAL MOUNTING TO EXISTING POLE
Attachment Product available from:

BAND-IT - IDEX, INC.
A Unit of IDEX Corporation
3520 Progress Drive
Bensalem, Pennsylvania 19020
Ph: 215-245-7290
www.band-it-idex.com



Panel Layout



Scale: 1/2" = 1'-0"

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

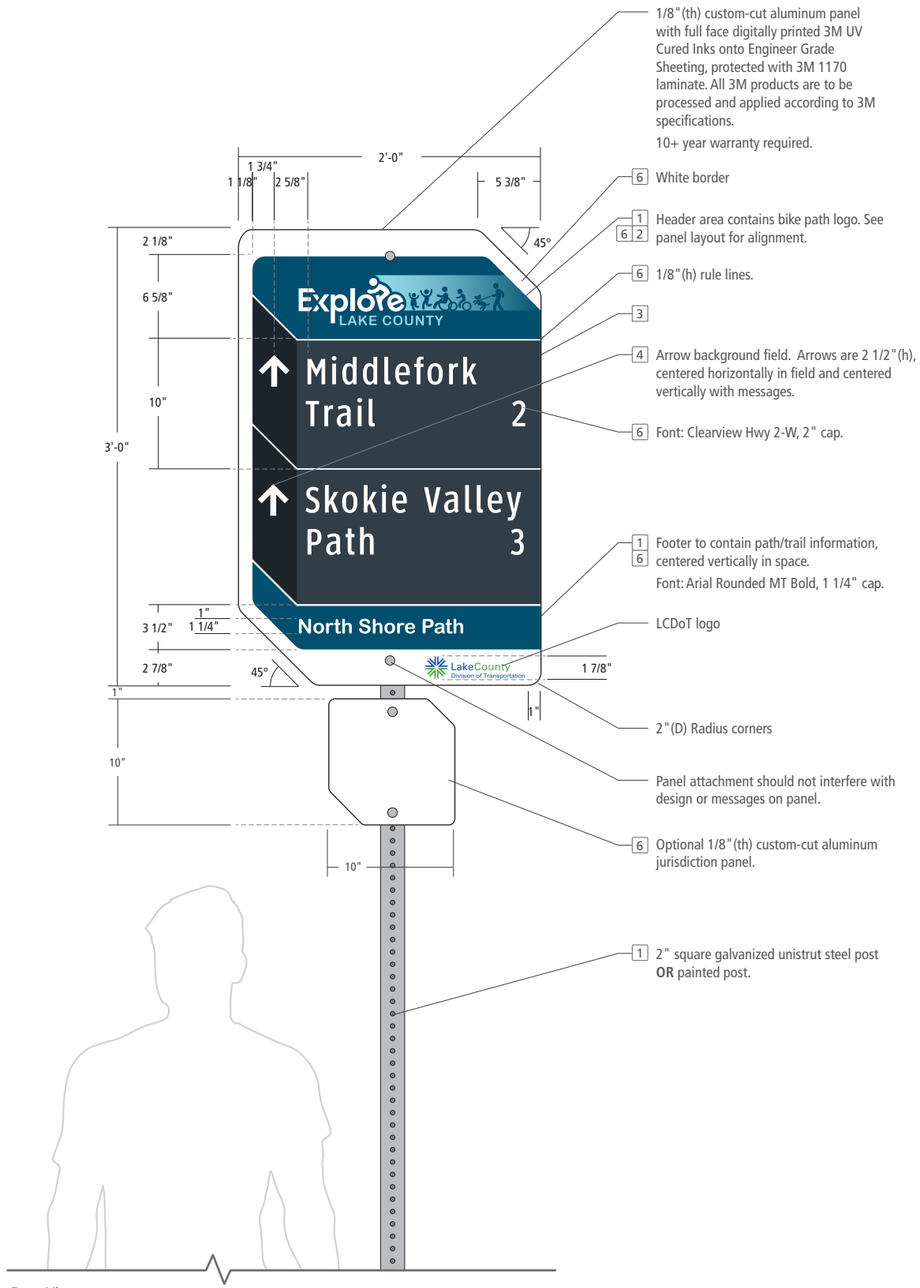
DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

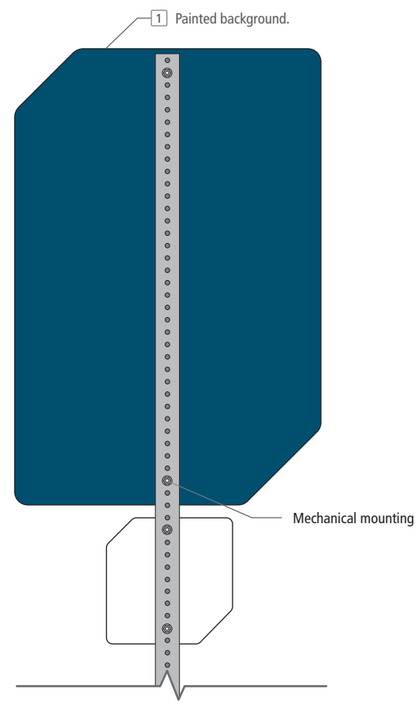
Gx-2

Guide – DOT, Medium



Front View

Scale: 1" = 1'-0"

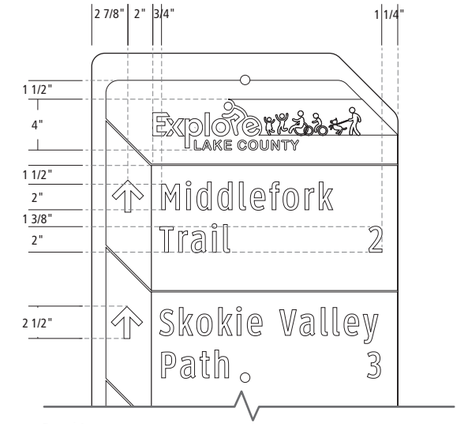


Side View

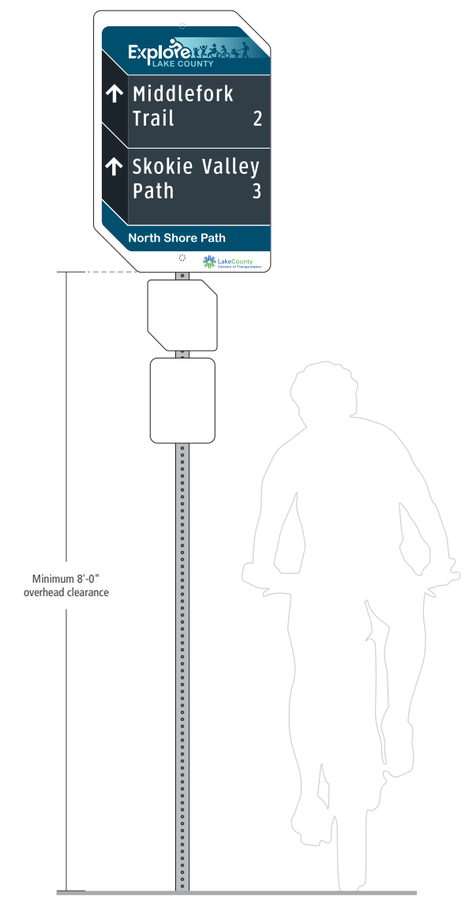
OPTIONAL MOUNTING TO EXISTING POLE

Attachment Product available from:

BAND-IT - IDEX, INC.
A Unit of IDEX Corporation
3520 Progress Drive
Bensalem, Pennsylvania 19020
Ph: 215-245-7290
www.band-it-idex.com



Panel Layout



Scale: 1/2" = 1'-0"

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

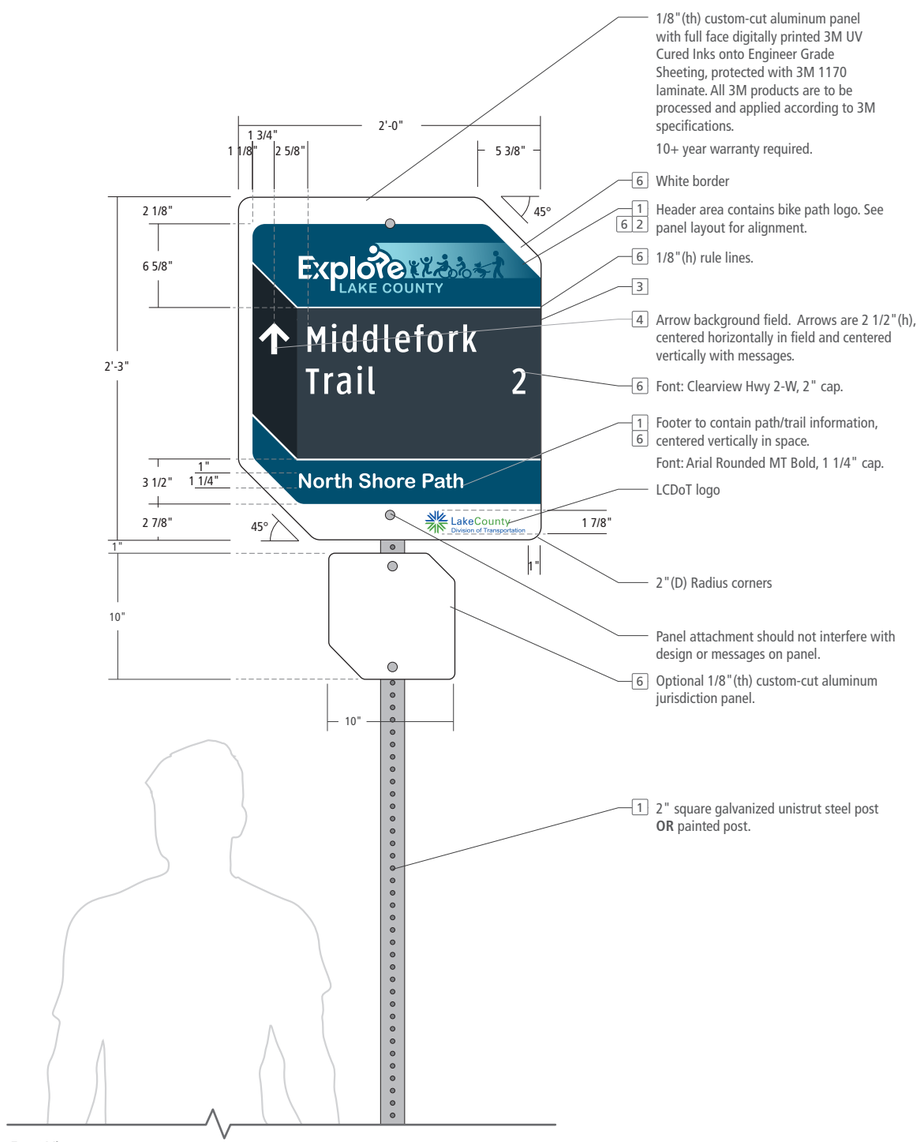
CORBIN DESIGN
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

Scale: 1" = 1'-0"

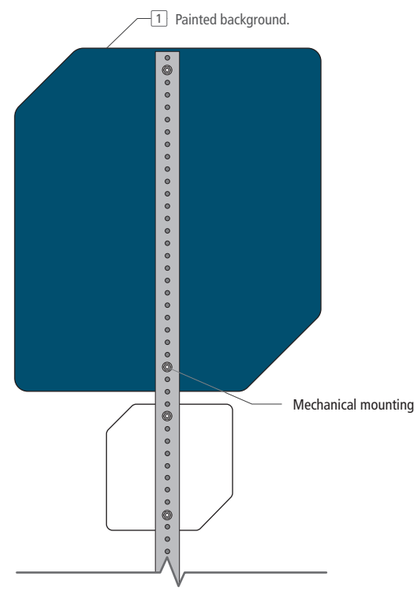
Gx-3

Guide – DOT, Small



Front View

Scale: 1" = 1'-0"

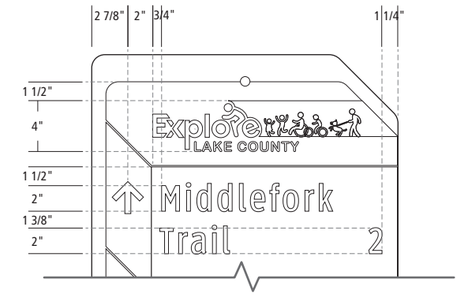


Side View

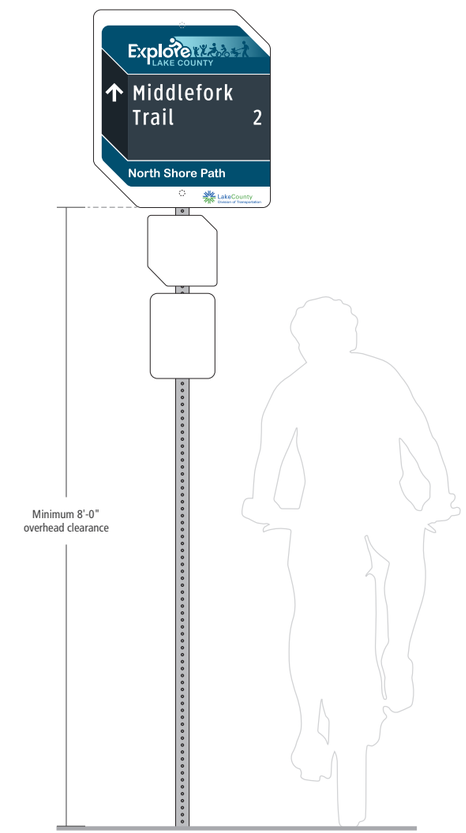
OPTIONAL MOUNTING TO EXISTING POLE

Attachment Product available from:

BAND-IT - IDEX, INC.
A Unit of IDEX Corporation
3520 Progress Drive
Bensalem, Pennsylvania 19020
Ph: 215-245-7290
www.band-it-idex.com



Panel Layout



Scale: 1/2" = 1'-0"

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

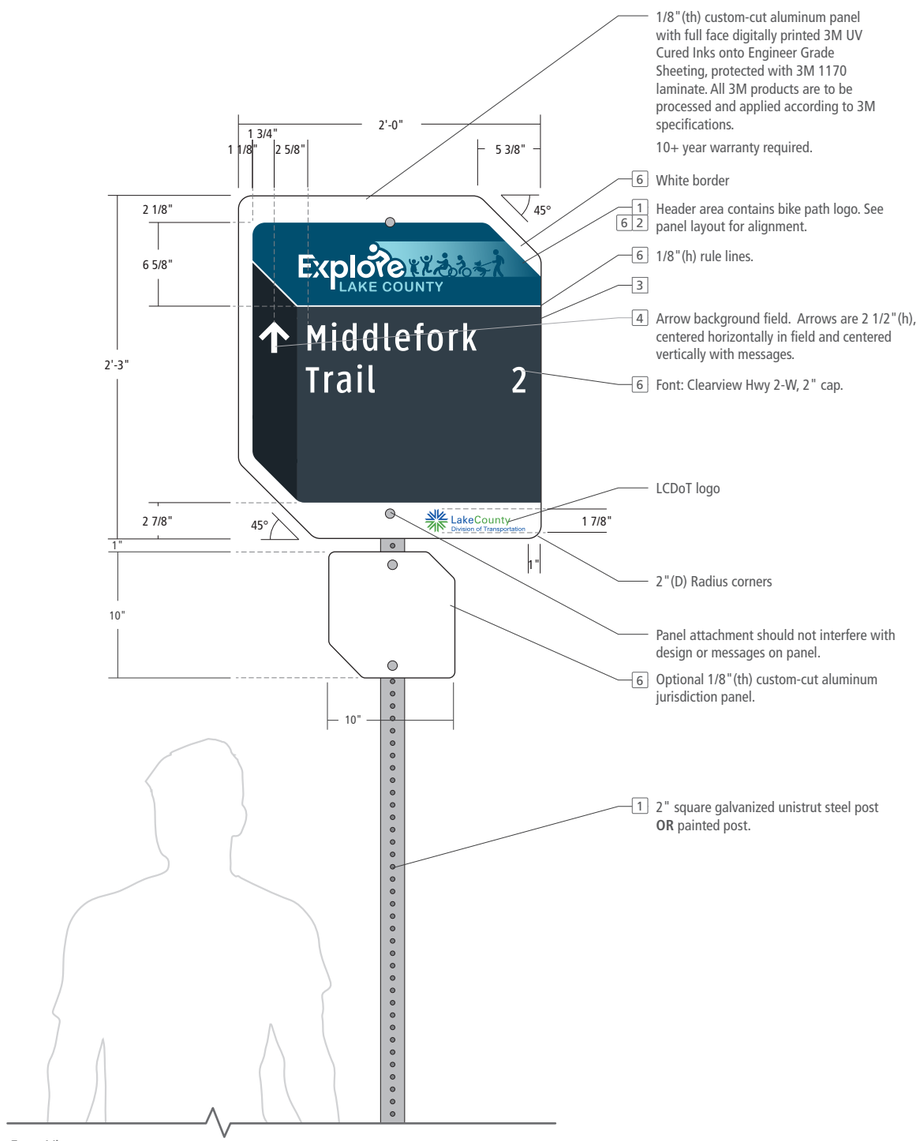
CORBIN DESIGN
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

Scale: 1" = 1'-0"

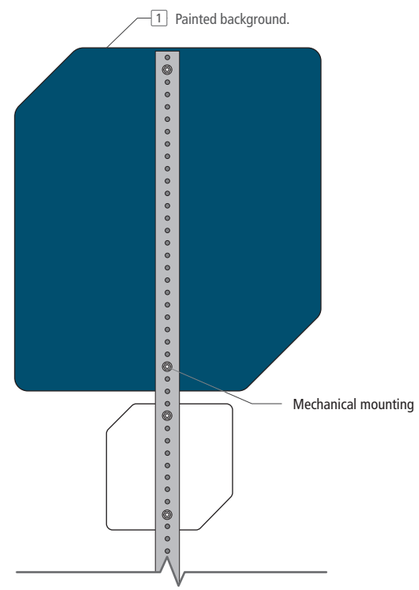
Gx-4

Trailblazer – DOT



Front View

Scale: 1" = 1'-0"

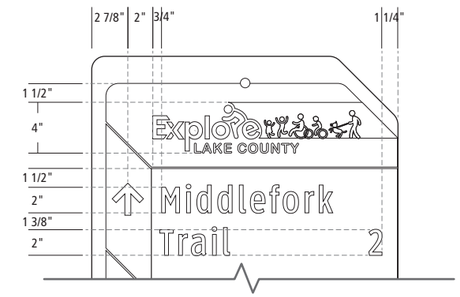


Side View

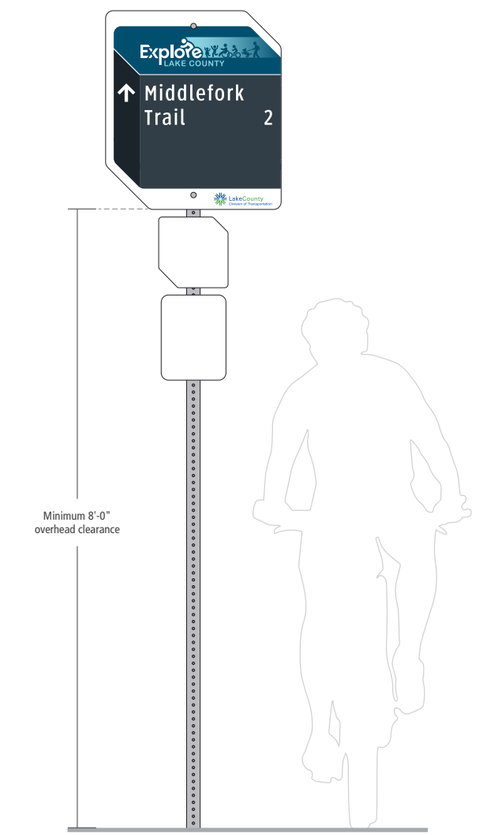
OPTIONAL MOUNTING TO EXISTING POLE

Attachment Product available from:

BAND-IT - IDEX, INC.
A Unit of IDEX Corporation
3520 Progress Drive
Bensalem, Pennsylvania 19020
Ph: 215-245-7290
www.band-it-idex.com



Panel Layout



Scale: 1/2" = 1'-0"

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREE
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

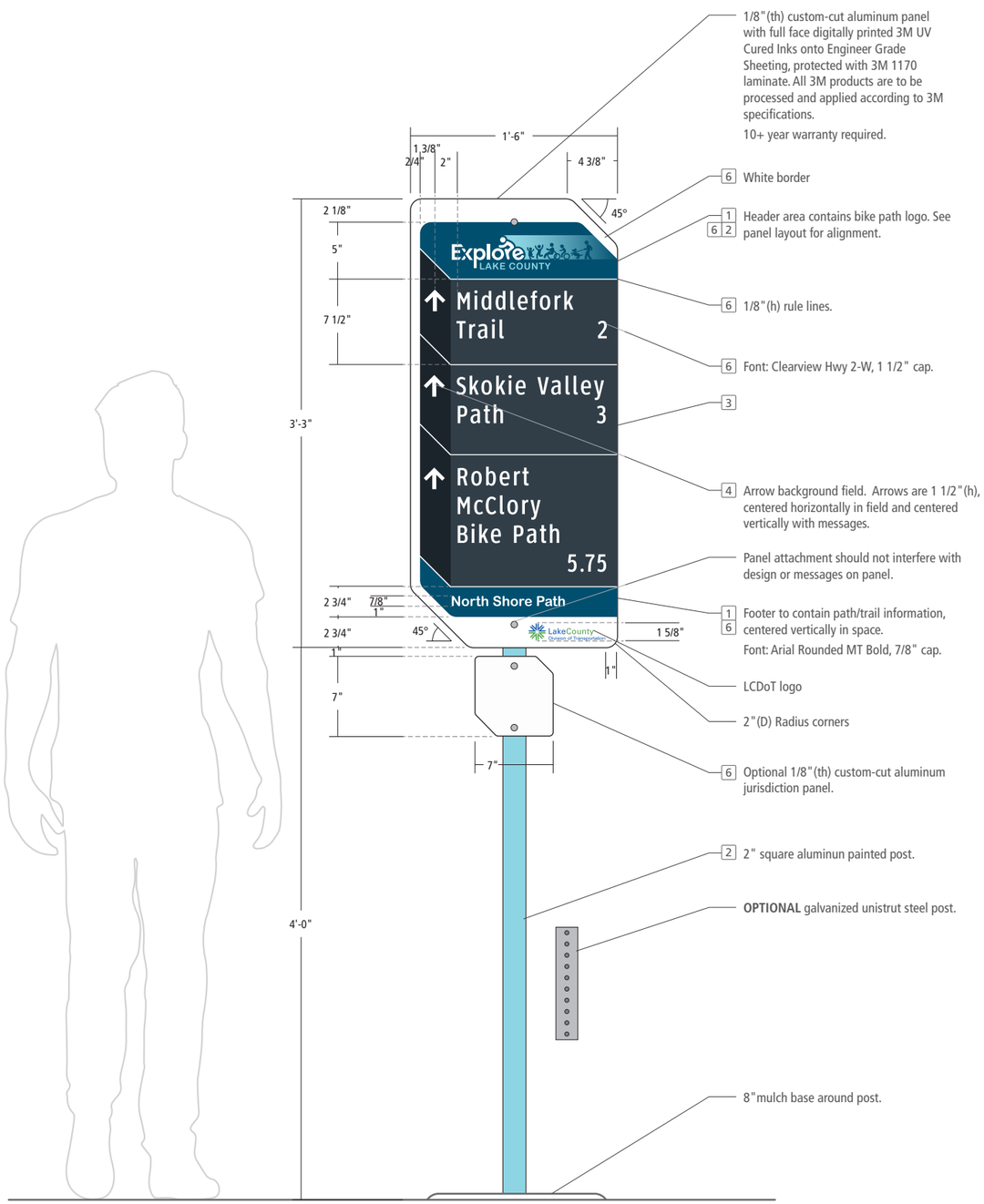
CORBIN DESIGN
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

Scale: 1" = 1'-0"

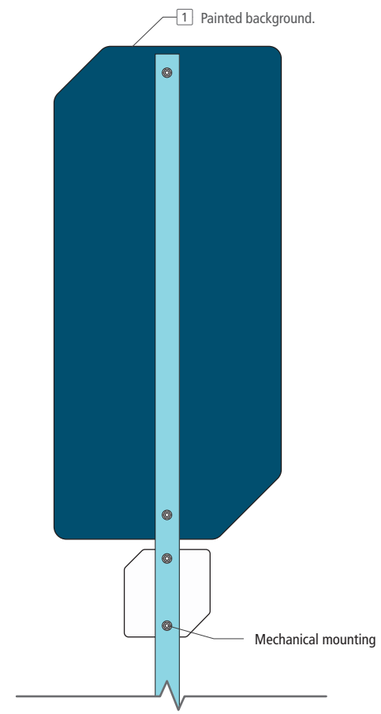
Gx-5

Guide – Path, Large

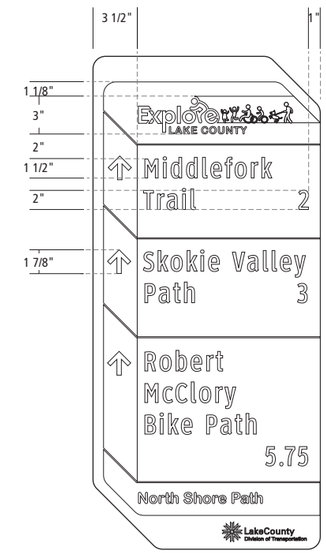


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

Double-sided Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

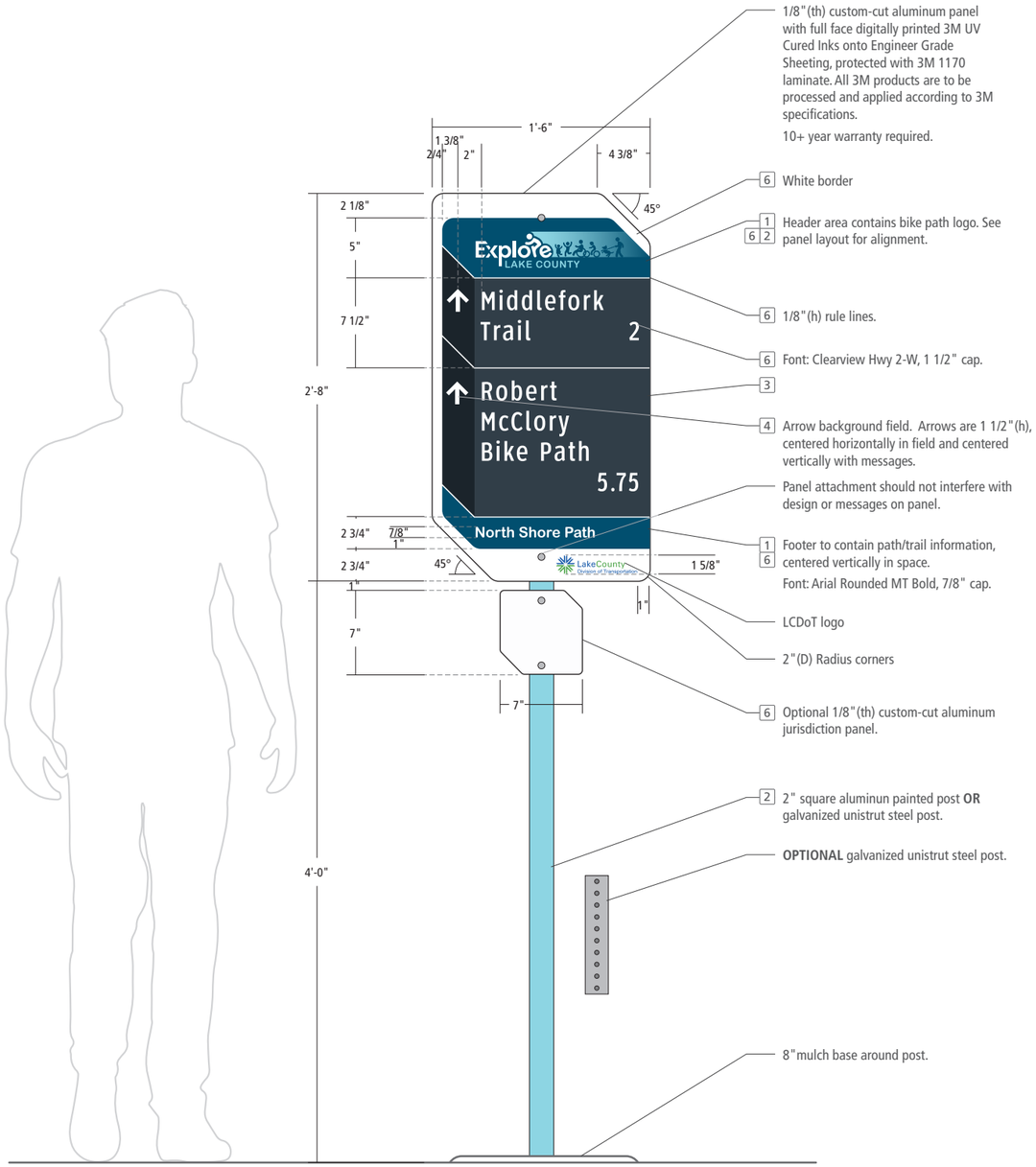
CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

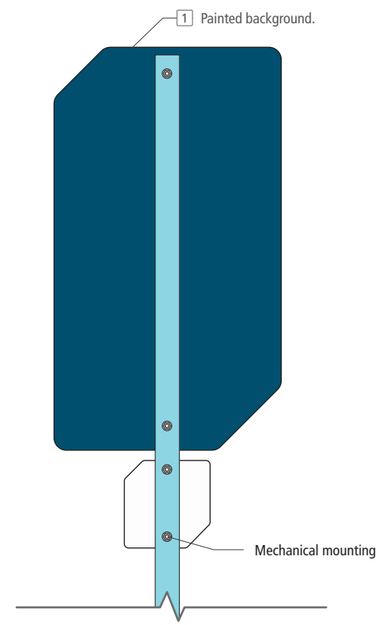
Gx-6

Guide – Path, Medium

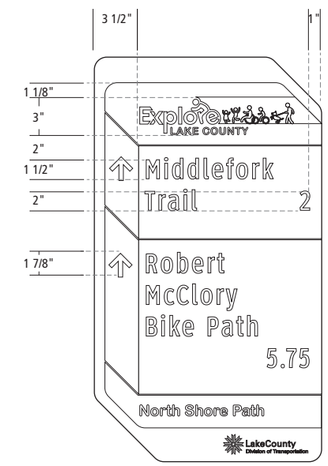


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

Double-sided Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREE
6		WHITE
7		YELLOW
8		LC LOGO BLUE

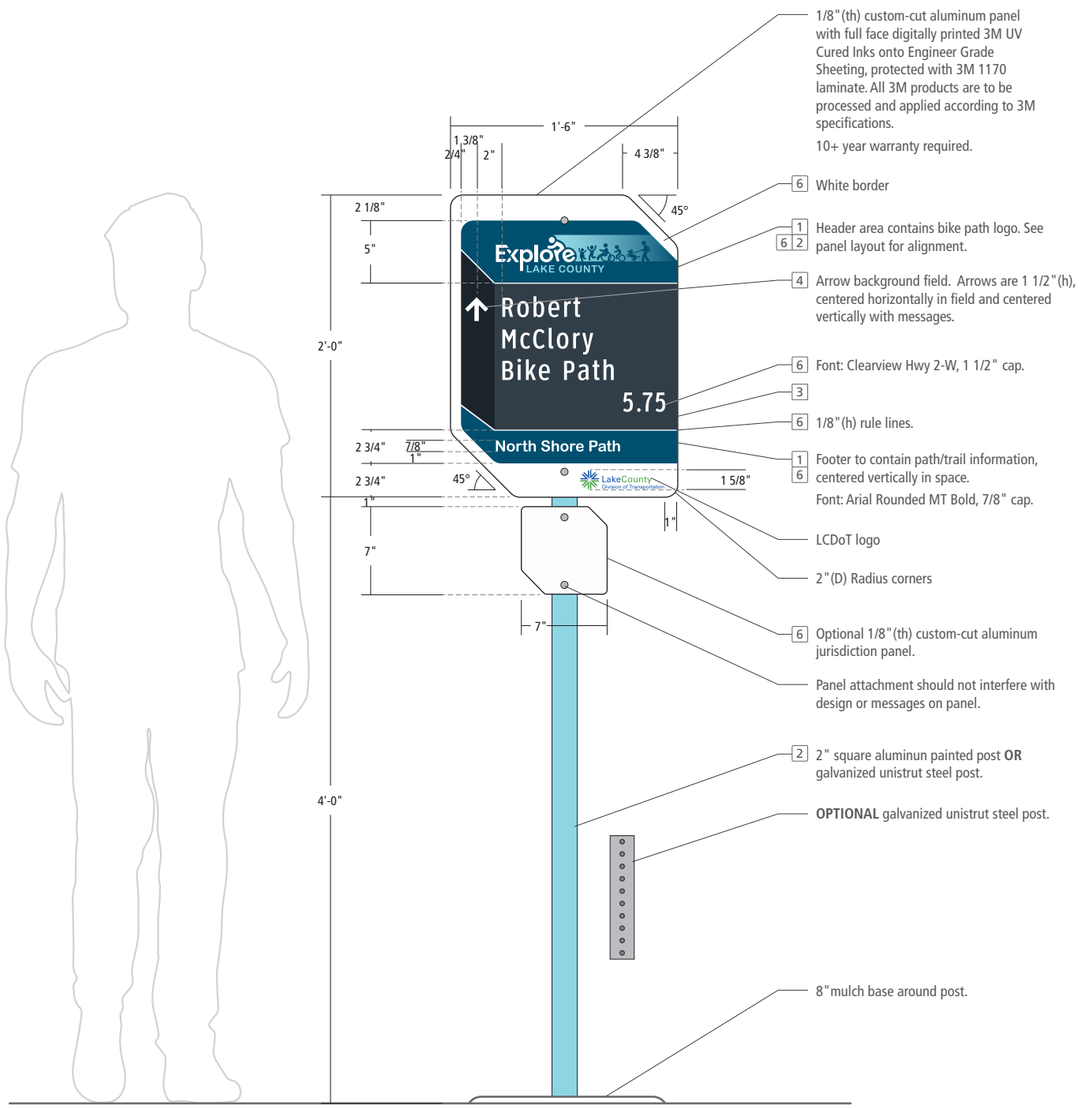
DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

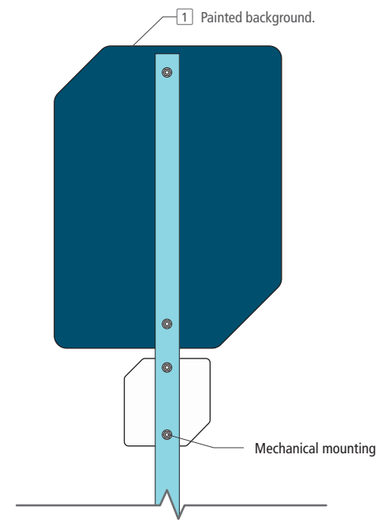
Gx-7

Guide – Path, Small

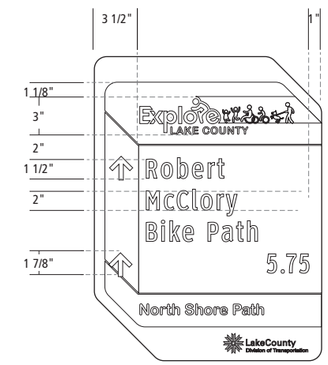


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

Double-sided Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREE
6		WHITE
7		YELLOW
8		LC LOGO BLUE

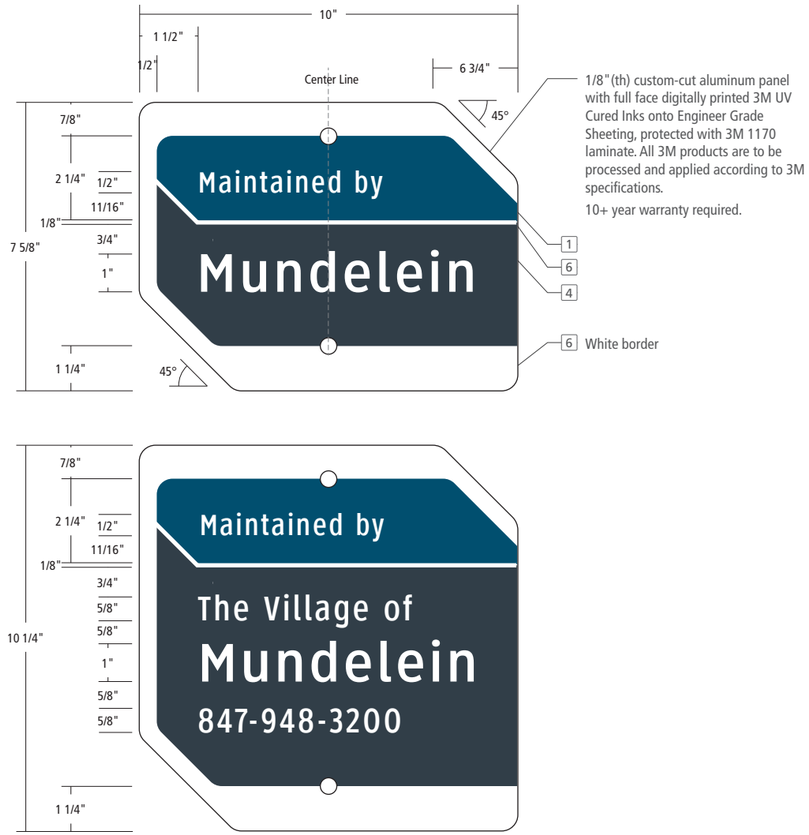
DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN

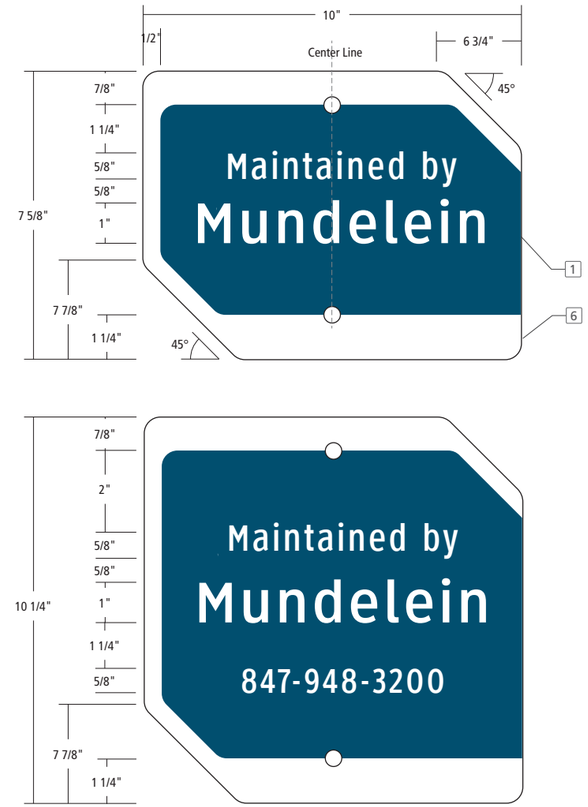
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

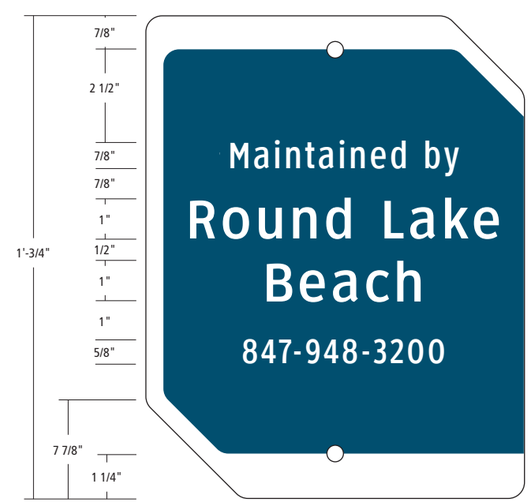
LAKE COUNTY PATHS

Auxiliary Panels



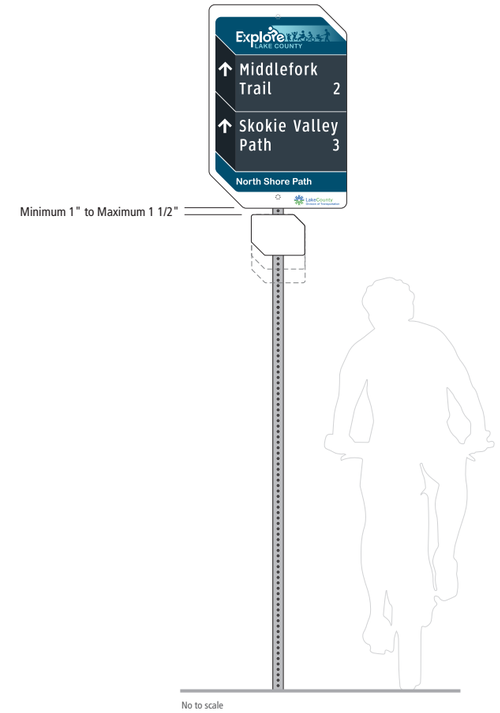
Standard Layout
Scale: 1 1/2" = 1'-0"





Alternate Layout

Alternate Color and Layout



No to scale

COLORS

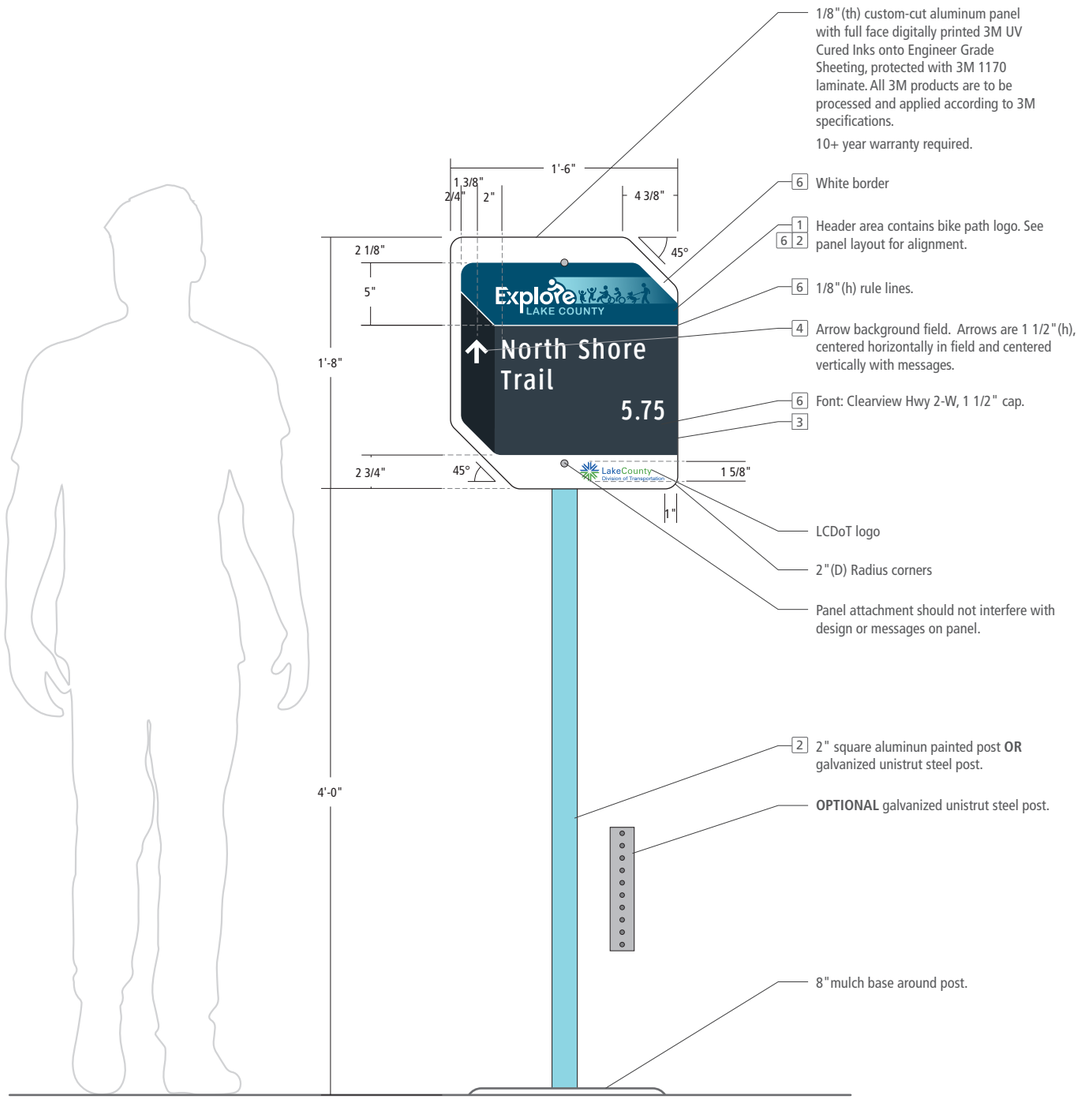
1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN
415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

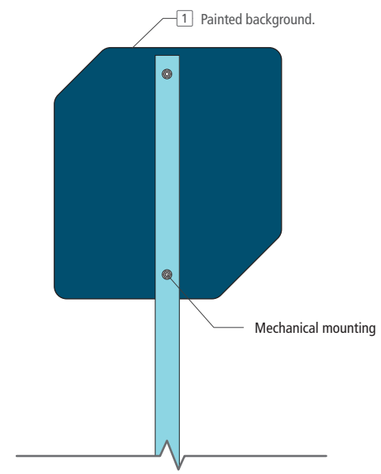
Gx-8

Trailblazer – Path

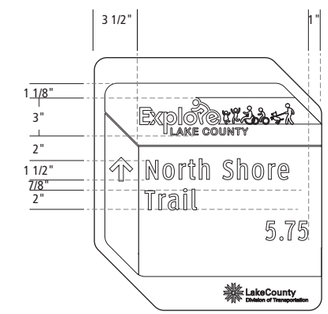


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

Double-sided Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREE
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

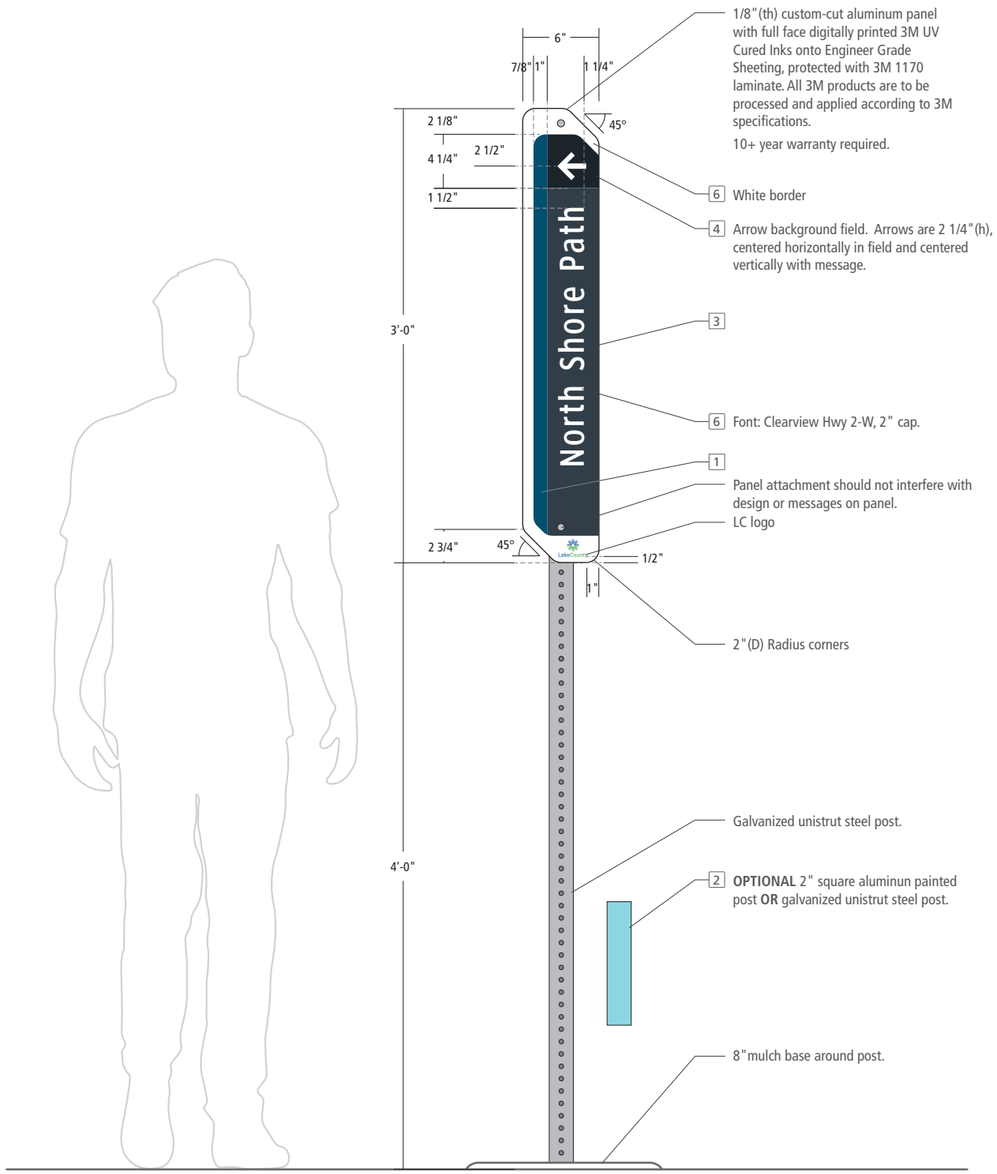
CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

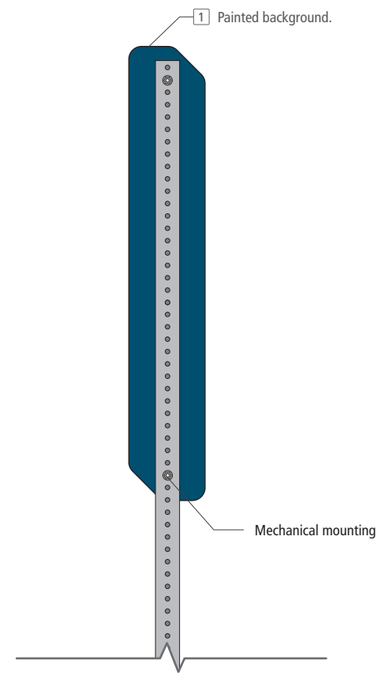
Gx-9

Trailblazer – Path, Tall

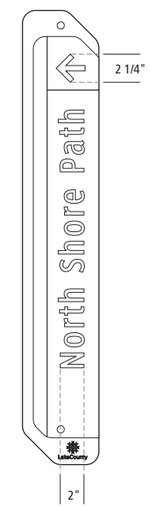


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

Double-sided Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR
5		LC LOGO GREE
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

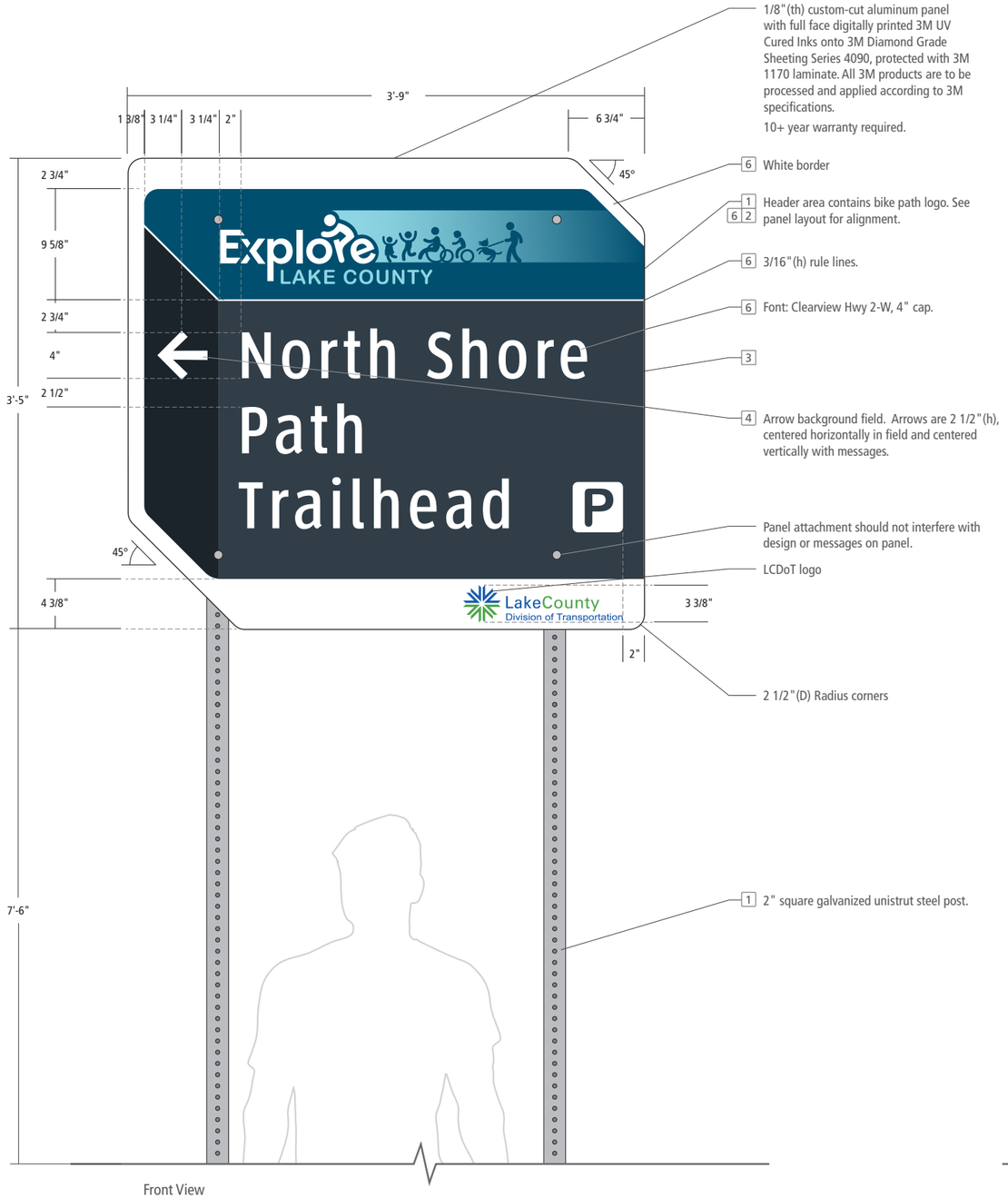
CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

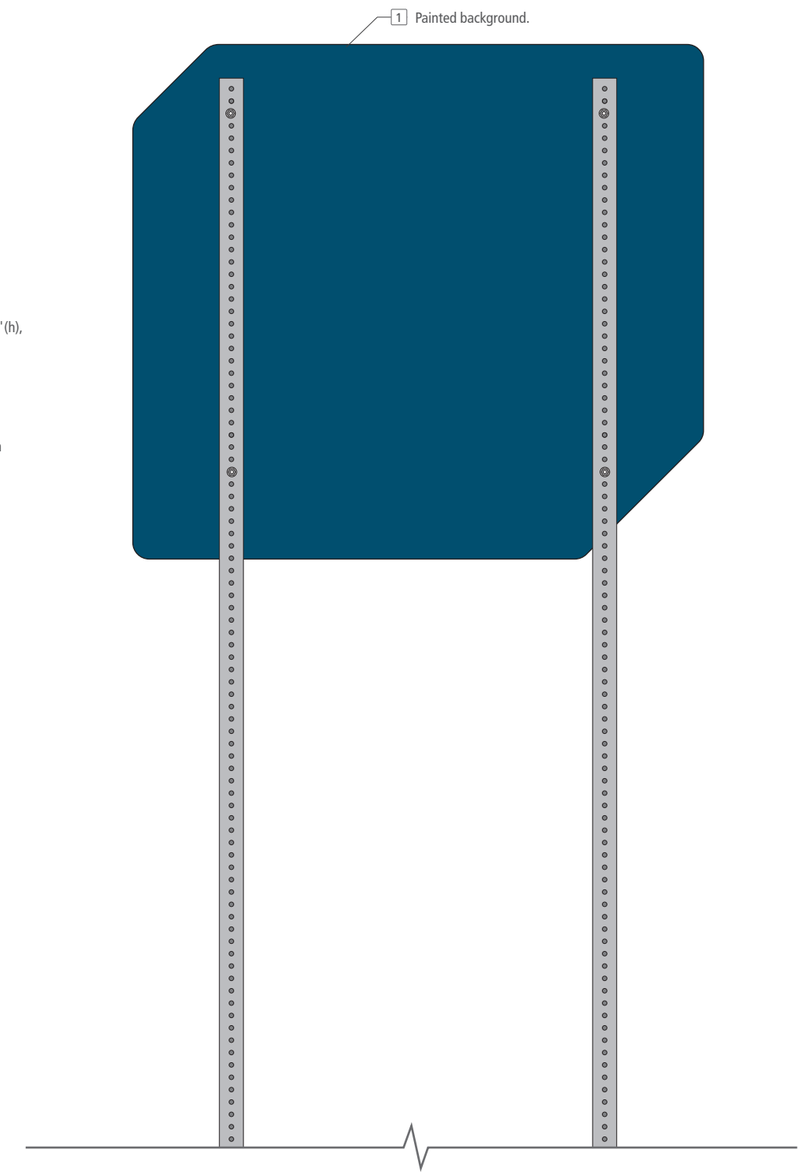
Gx-10

Trailblazer, Large – DOT



Front View

Scale: 1" = 1'-0"



COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

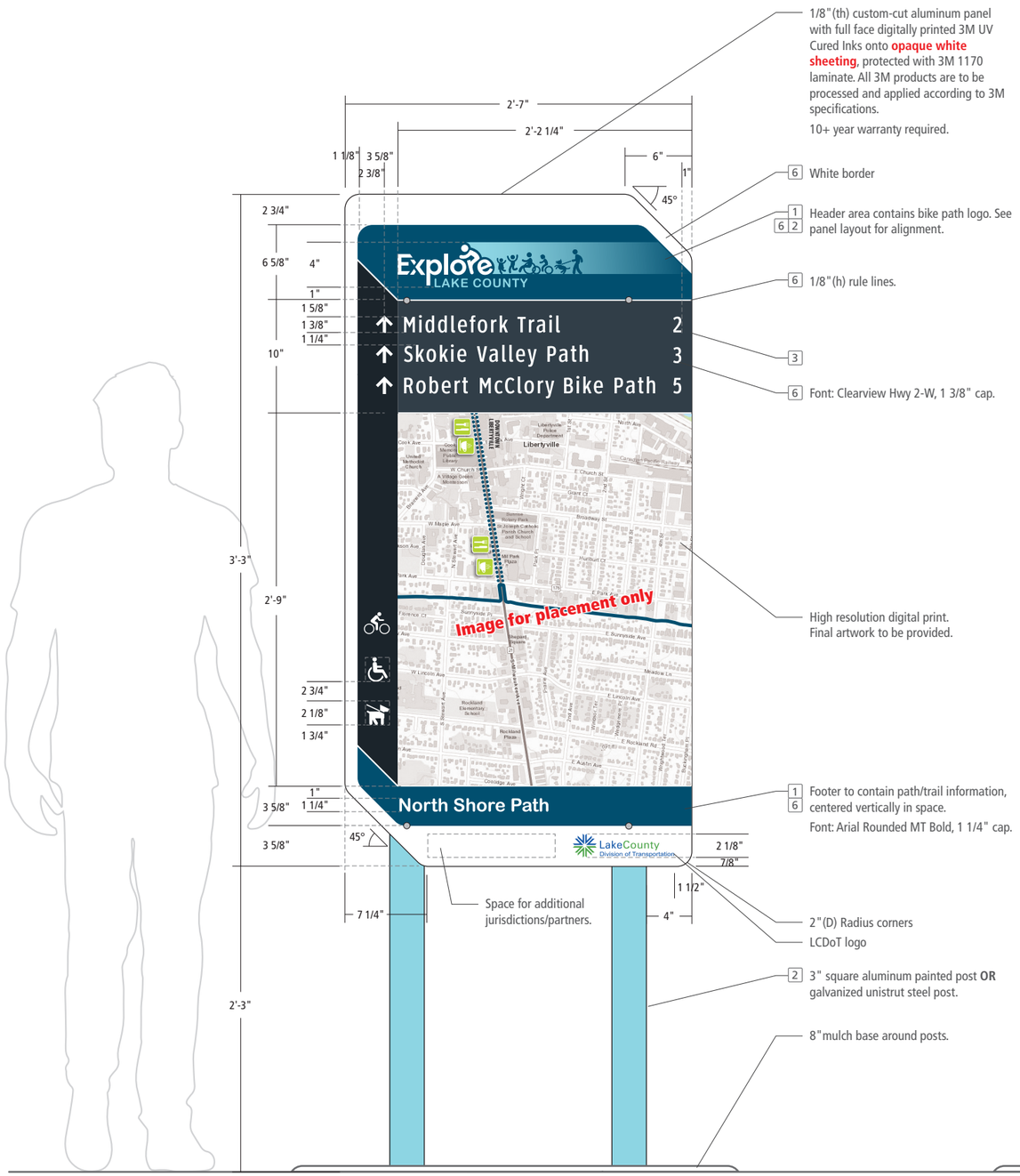
CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

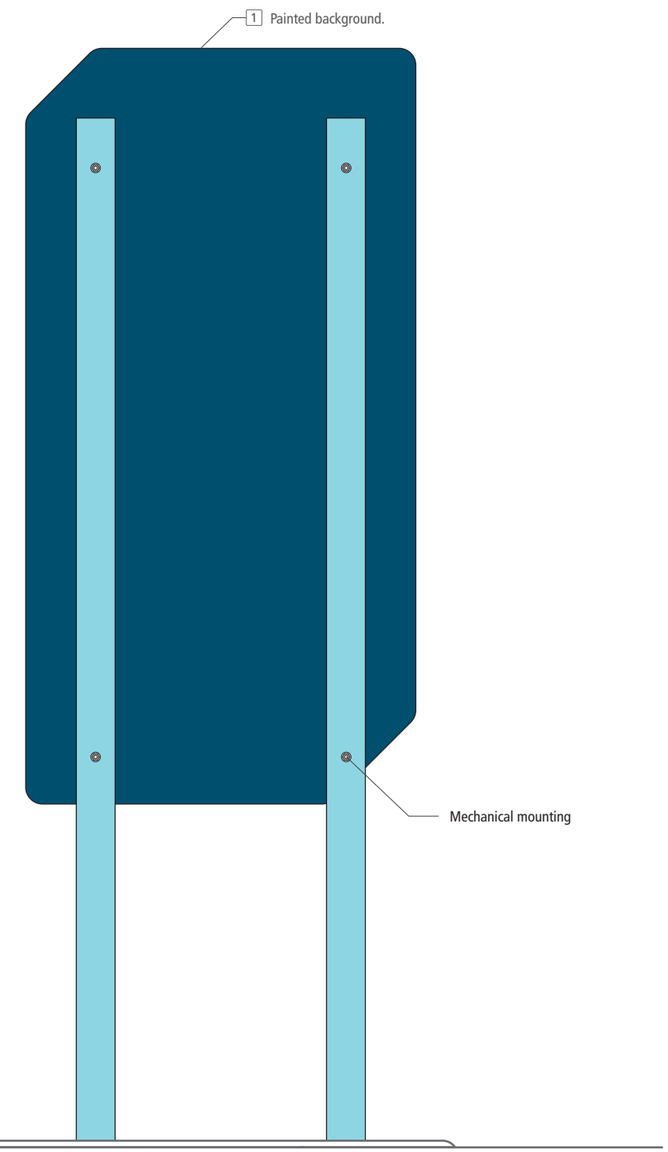
Kx-1

Kiosk – Large



Front View

Scale: 1" = 1'-0"



Side View

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

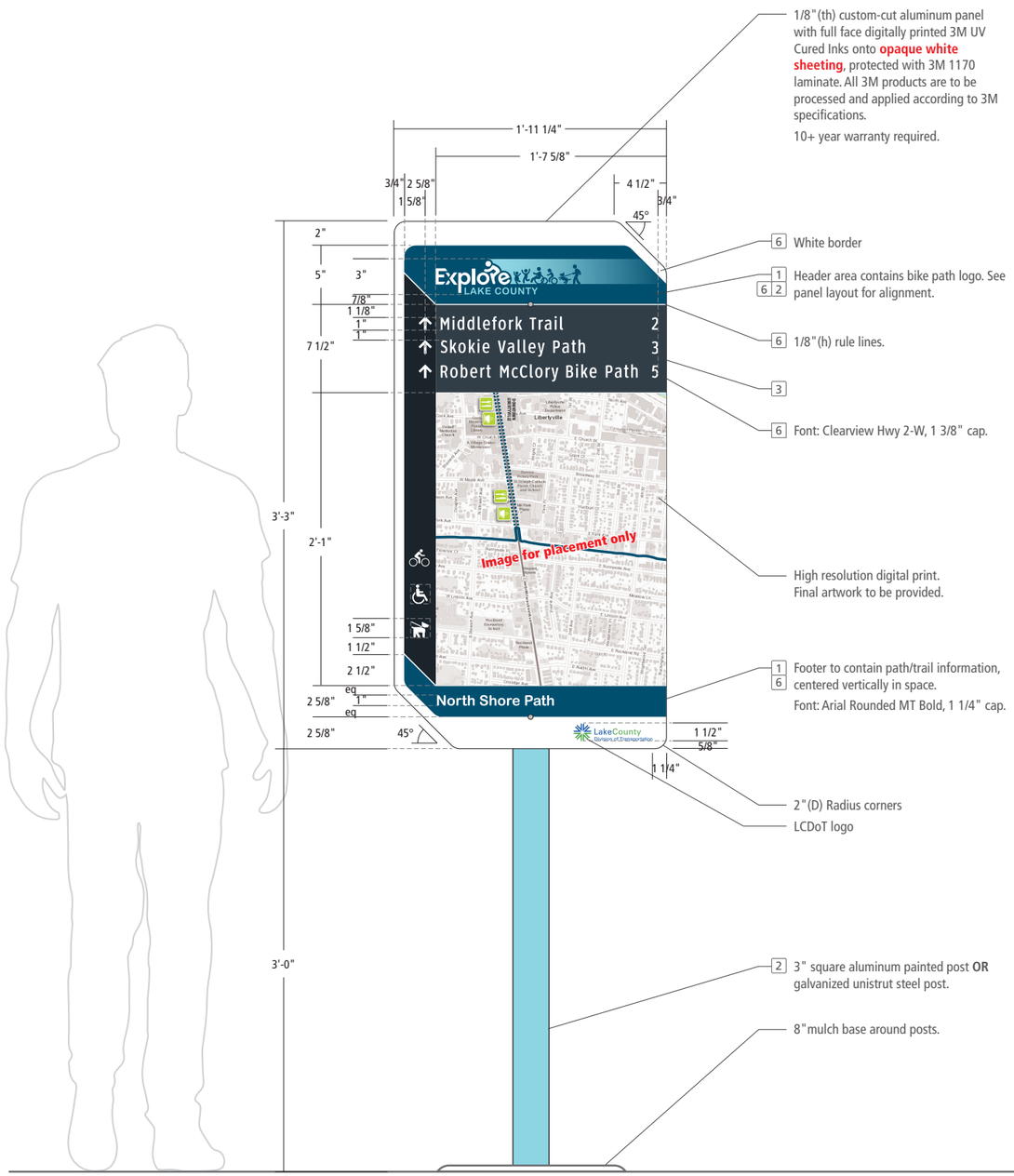
CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

Kx-2

Kiosk – Small

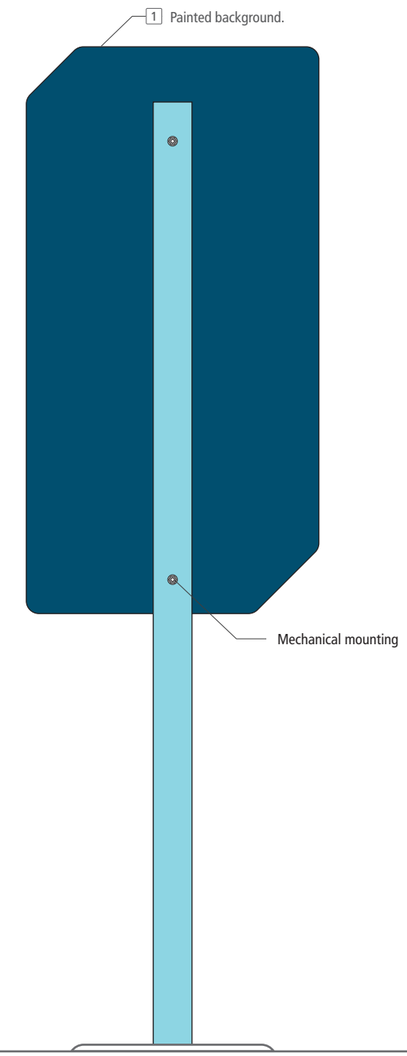


Front View

Scale: 1" = 1'-0"

1/8"(th) custom-cut aluminum panel with full face digitally printed 3M UV Cured Inks onto **opaque white sheeting**, protected with 3M 1170 laminate. All 3M products are to be processed and applied according to 3M specifications.

10+ year warranty required.



Side View

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN

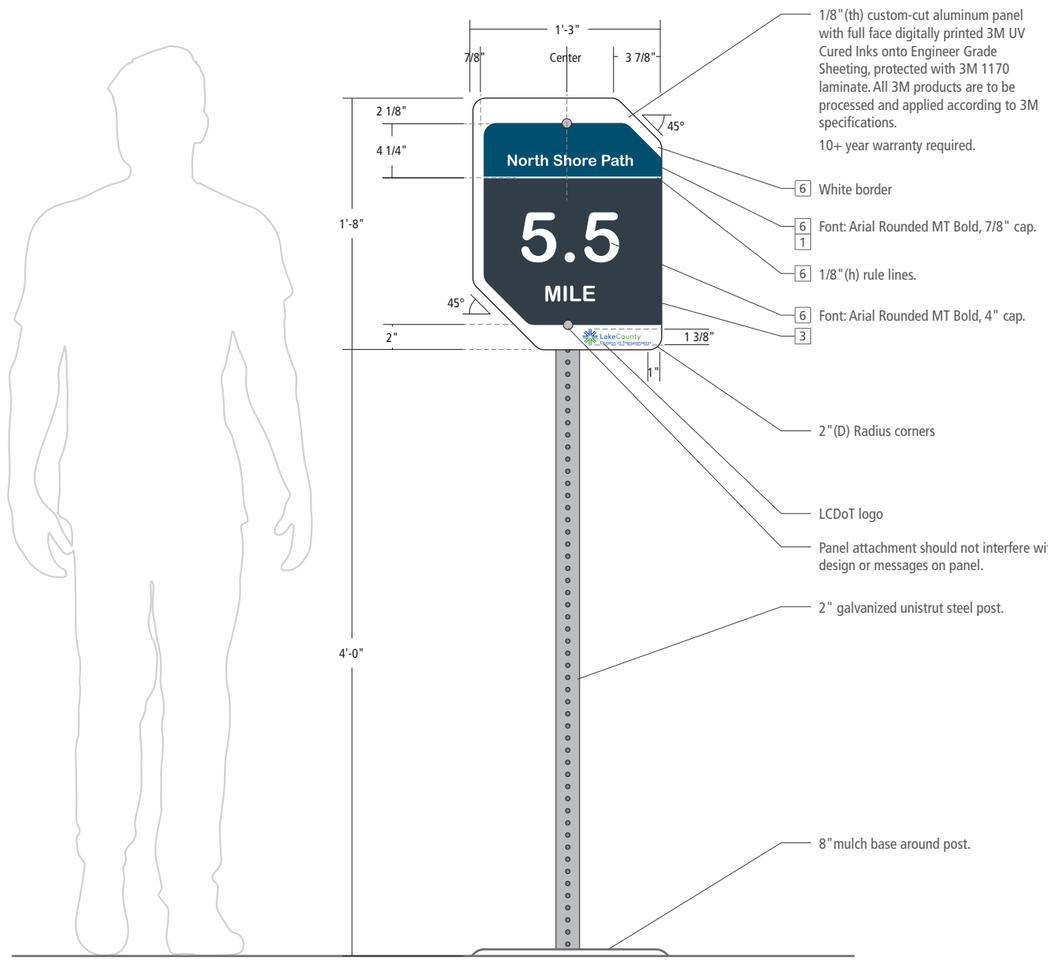
415 S Union, 2nd Floor
Traverse City, MI 49684

231.947.1236

LAKE COUNTY PATHS

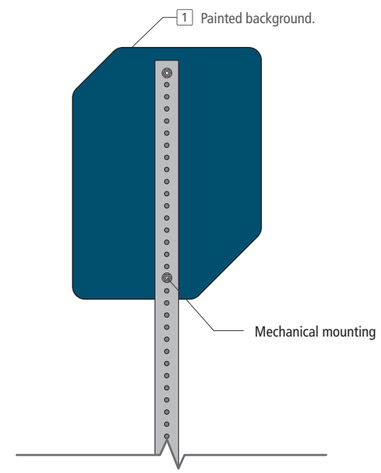
Mx-1

Mile marker

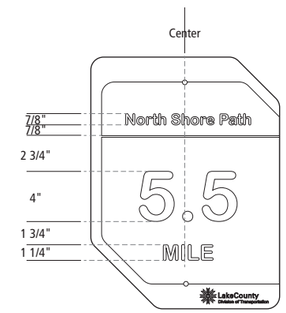


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

Double-sided Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

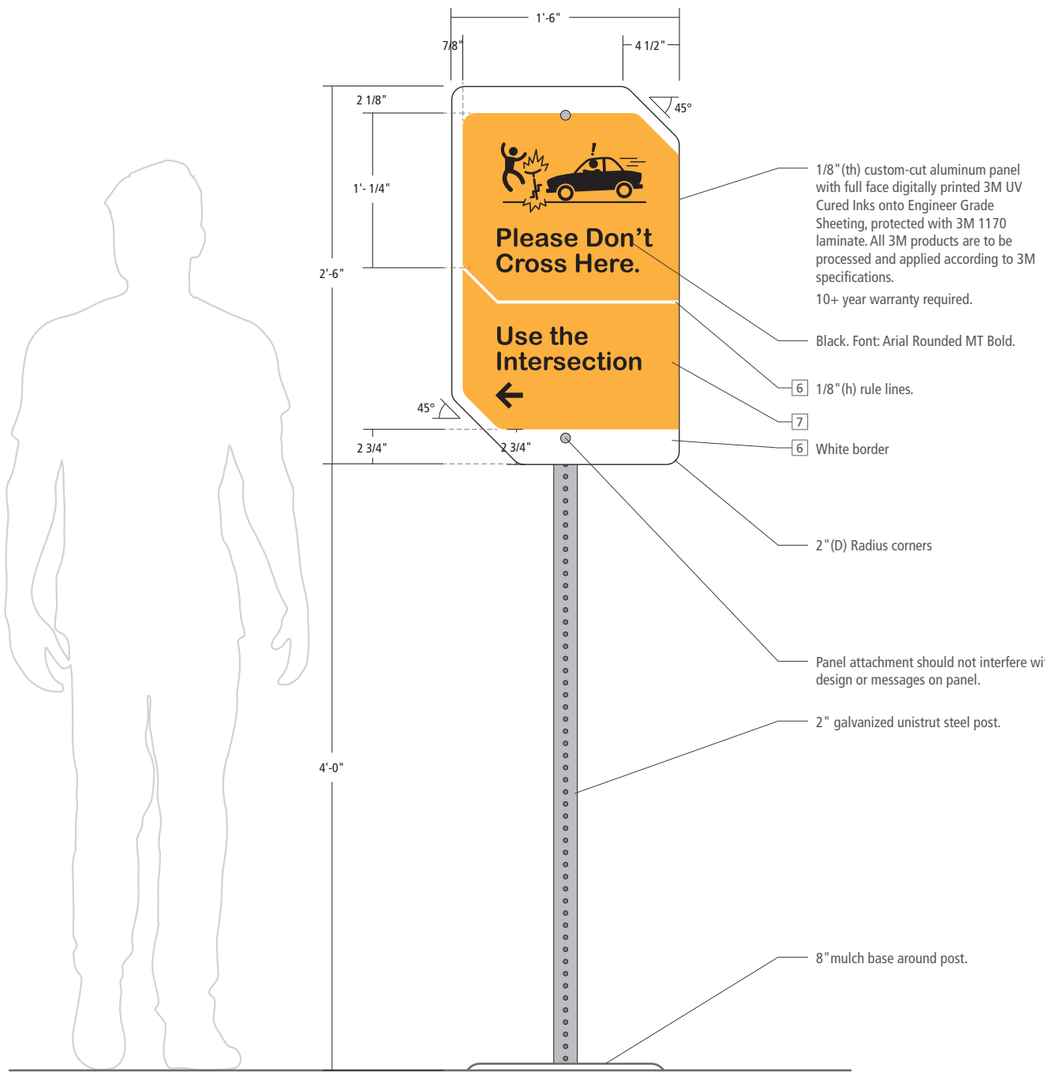
CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

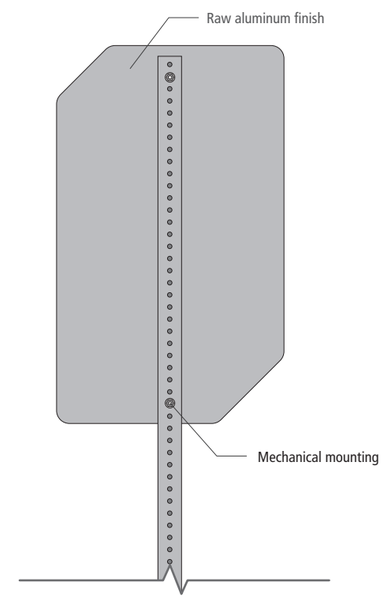
Rx-1

Regulatory Information

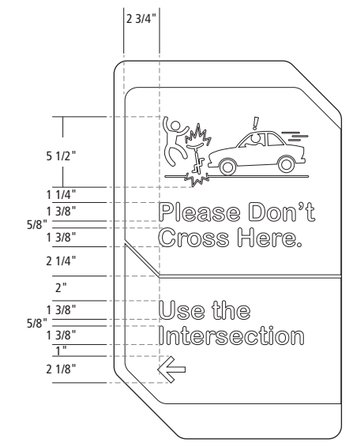


Front View

Scale: 1" = 1'-0"



Side View



Panel Layout

COLORS

1		ROYAL BLUE
2		LIGHT BLUE
3		BLUE-GRAY
4		DARK BLUE-GR.
5		LC LOGO GREEI
6		WHITE
7		YELLOW
8		LC LOGO BLUE

DATE	DESCRIPTION
09/04/20	DRAFT SUBMISSION

CORBIN DESIGN

415 S Union, 2nd Floor
Traverse City, MI 49684
231.947.1236

LAKE COUNTY PATHS

Fabrication Specifications

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes specifications related to fabrication and installation of exterior and interior project signage.

1. Sign type details are listed in the Design Intent Drawings. Design drawings can be provided to the Fabricator in PDF format, or in the latest version of Adobe Illustrator.
2. Sign Location Plans are general in nature and not to scale. They reflect locations deemed desirable for the effectiveness of the overall wayfinding plan. Sign location plans are provided to the Fabricator in PDF format.
3. The Sign Message Schedule includes sign type, exact messaging, layout details, and provides additional installation or graphic layout information specific to each sign location. Sign message schedules are prepared in FileMaker. Fabricator will be provided information in PDF format sorted by sign number. A link to the FileMaker database or an Excel file export of the data are available by request.
4. The materials, products, equipment, and performance specifications within these documents describe the standard of required function, dimension, appearance, performance, and quality to be met by the Fabricator.

B. Fabricator's Responsibilities:

1. Engineer, fabricate and install all signage and graphics per the construction documents.
2. Be knowledgeable of relevant federal, state and local code requirements, and be responsible for ensuring that all signs meet current local, state and federal codes, especially, but not limited to, ADA, Building codes and Fire/Life Safety codes.
3. Perform complete structural design and engineering of the signs and to incorporate all the safety features necessary to adequately support the sign for its intended use and purpose, as required for approvals and permits, and to protect the Owner.
   a. All signs shall meet local, state and federal codes.
   b. Engineered shop drawings for project signage shall be reviewed, stamped and signed by a California-registered engineer.
   c. Shop drawings are to be provided for all exterior sign elements, and for all interior signage that is suspended, mounted overhead, or weighs 20 lbs. or more.
4. Engineer all signs, banners and mounting devices, unless otherwise indicated, to withstand the required wind load (normal to the sign, in addition to the weight of the sign) as specified by ASCE, American Society of Civil Engineers, or greater as per local, state or federal code.
5. Generate graphic layouts for all sign messages, including necessary tactile and Grade 2 Braille (conforming to California's Title 24), from the sign message schedule.
6. Signs listed in the sign message schedule should match those on the sign location plan. Fabricator to notify the Designer and Owner's Representative immediately of any discrepancies before manufacturing the signage.
7. Fabricator is to confirm that all applications of the Scripps brand have been properly reviewed and approved by Corporate Marketing and Communications department.
8. Visit the site to observe existing conditions, verify mounting conditions and space availability, take field measurements, and verify all signage locations with Owner's Representative prior to starting fabrication.
9. Secure any and all necessary permits for signage installation.
10. Work with the Owner's Representative to secure any necessary variances.
11. Provide all submittals outlined in the specifications in a timely fashion and according to the agreed upon schedule.
12. Work with the Owner's Representative to coordinate with the facilities department and other trades performing work on site.
13. Notify the Owner's Representative immediately is any discrepencies exist within the Construction Documents or field conditions.

1.2 WARRANTY

A. Extend in writing all manufacturers' warranties.

B. Obtain a minimum three (3) year extended warranty on all power supplies for illuminated signage.

C. Obtain a minimum five (5) year extended warranty on all paint and powder coat applications.

D. Obtain a minimum eight (8) year warranty on all custom color vinyl or flood-coated vinyl applications. Vinyl shall not fade excessively, discolor, crack, peel, blister, or lose reflectivity.

E. Provide a written full replacement warranty for five (5) years starting from the completion of installation that all signs will be free of defects due to craft work and materials including, but not limited to:

1. Bubbling, chalking, rusting or other disintegration of the sign panel, graphics or of the edges.
2. Corrosion appearing beneath paint surfaces of panels, brackets, posts or other support assemblies (except as an obvious result of vandalism or other external damage).
3. Corrosion of fasteners.
4. The assemblies not remaining true and plumb on their supports.
5. Fading, chalking and discoloration of the colors and finishes within the vinyl and paint manufacturer's stated warranty period.
6. Peeling, delamination or warping ("oil canning").
7. Repair and reinstallation of signage due to failed mountings.

F. Repair or replace, including installation, any defective signs or hardware, which develop during the warranty period and repair any damage to other work due to such imperfections at no charge to the Owner and to the Owner's satisfaction.

G. The Fabricator will be required to fully replace all signs that are in error relative to the working documents (sign message schedule and sign type drawings) that were submitted to the Fabricator upon award of contract.

1.3 RIGHTS AND GUARANTEE

A. Design Rights: Fabricator is hereby granted limited right to the designs as shown and specified herein for the sole purpose of completing contractual obligations to fabricate and install project signage. Fabricator may not manufacture, reproduce or exhibit these designs, or modify them for any other purpose without prior written consent from both the Owner/Owner's Representative and the Designer.

1.4 SUBMITTALS

A. Pre-Fabrication Submittals: Submit the following to the Owner's Representatives and Designer for review and approval prior to commencing with signage fabrication.

1. Shop Drawings: Detailed engineered shop drawings for each sign type are to be submitted as electronic PDF no larger than 11"x 17". Final Shop Drawings are to be stamped by an Engineer licensed in the State of the California to ensure structural integrity and safety. The shop drawings for each sign type shall illustrate/describe the following:
   a. Elevations and cross sections – front, sides, top and back; side sections; internal structure section/details; enlarged details such as of extrusions, push-through letter mounting, mounting plate, etc.; with all final dimensions and call-outs for:
      1) Components – construction details/information related to individual elements
      2) Materials – color, type, gauge, and thickness (including substrates and overlays)
      3) Finishes – color, type of product, manufacturer, and sheen
      4) Fonts, graphics specifications and message fields
   b. Exploded view, unless otherwise indicated – isometric view with components, materials, and finishes.
   c. Cross-section of corners – one illustration for each corner condition. Items to be illustrated: seams, joints, layers, internal support and fasteners
   d. Mounting/installation details – provide foundation cross-sections (including hardware), bracket/post details, elevations, materials, finishes and fasteners
   e. Electrical details are to be provided for all elements that require electricity. Specific items to be listed are:
      1) Light source and/or fixture type and manufacturer
      2) Power supply (transformer)
      3) Amperage and voltage per sign
      4) Electrical service required (source)
      5) Electric Eye and Timer
   f. Lighting detail – provide an internal view of light fixtures, LED layout, transformers, external cut-off switch, light sensor, and timer
   g. Foundation details – provide detailed foundation details including all concrete and reinforcement specifications
   h. Engineering for wind load
   i. Removable panels (where applicable)
   j. Identify any dimensional or other changes in the overall sign required by virtue of the fabrication materials, techniques and/or engineering.
2. Samples: Submit three (3) 5" x 5" samples of each material listed in the design intent material specifications using actual substrate materials for review and approval. One will be returned, one kept by the Owner's Representative, and one kept in the Designer's records.
   a. Label the back of every sample with the project name, sample designation and fabricator name.
   b. The Owner's Representative and Designer reserve the right to reject any sample and require additional samples as necessary to obtain final approval.
   c. Submit three 12"x12" to-scale sample segments of the final insert artwork for interior guide signs, directories and exterior pedestrian maps.

3. Keystroke Proofs: Provide a proofing document of final production keystroke output for all sign messages to verify line breaks, character and word spacing, and interline spacing.
   a. The proofs are to be scaled production art files, not full sized.
   b. Layouts are to be organized by sign type and by sign number within each sign type group.
   c. Each layout is to be identified with the corresponding sign number.
4. Schedule: Provide a detailed fabrication and installation schedule.
   a. Include all pertinent dates and milestones such as submittal delivery dates, required approval dates, fabrication dates and installation dates.
   b. Include all lead times for materials and third-party supplied items.
   c. Allow a minimum of 15 business days for Owner Representative and Designer review with one round of revisions built in unless otherwise noted within the bid schedule.
   d. Include submittal delivery dates.

B. During Fabrication Submittals:
1. Fabricator is required to maintain the detailed fabrication and installation schedule, submitting weekly updates as changes occur.
2. Upon request, Fabricator is to submit photo documentation of signage at various stages of fabrication and installation. Review of these photos does not rule out rejection of the sign during the punch list if they do not meet fabrication requirements.

C. Post-Fabrication Submittals: Upon completion of the initial installation, the following are to be submitted to the Owner's Representatives.
1. Maintenance instructions and manuals for all sign components (lighting, paint, etc.), along with final amended shop drawings, as-installed sign location plans and approved keystroke documents.
2. Instructions for maintenance and waxing of painted, powder coated and fiberglass elements.
3. Templates for all insert based signs, utilizing standard software for the Owner's use in printing replacement inserts.
4. One (1) pint of each finish paint color for touch-up purposes.
5. Labeled, spare keys to master keyed locks on directory or kiosk signage.
6. Warranty documentation, as outlined above.

1.5 QUALITY ASSURANCE

A. The materials, products, equipment and performance specifications described within, establish a high quality standard of required function, dimension, appearance, performance and quality to be met by the Fabricator.

B. Materials used for this project shall be new materials, not reconditioned.

C. Fabricator shall only use workforce skilled and experienced with the products, fabrication methods, and installation requirements outlined for this project.

D. Fabrication and installation is to withstand severe abuse and souvenir theft vandalism, but not less than the equivalent of resisting simple hand implements and tools (screwdrivers, knives, coins, keys, and similar items), and adult physical force. It is the fabricator's responsibility to suggest alternate fabrication or installation methods, should they be deemed necessary to hinder theft or vandalism.

E. Regulatory Requirements: Signage shall meet or exceed requirements of all current applicable local, state and federal codes, including, but not limited to:
1. MUTCD standards manual, (current edition);
2. California Building Code (current edition);
3. California Title 24;
4. California Title 19;
5. 2010 Americans with Disabilities Act Standards for Accessible Design, including local modifications and amendments; and
6. All other local and state building and fire codes.

1.6 DELIVERY, STORAGE AND HANDLING

A. Pack, wrap, crate, bundle, box, bag, or otherwise package, handle, transport, and store all fabricated work as necessary to provide protection from damage.

B. Provide clear and legible identifying information on all product packaging to ensure proper on-site identification and installation.

C. Recommend covering all sign faces with a low-tack protective vinyl cover, to be removed after installation. This is to help minimize minor scratches and nicks that happen during unpacking and installation.

D. Coordinate the delivery and secure storage of signs with the Owner's Representative to meet deadlines.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Substitution:
1. No substitution will be considered unless the Owner's Representative and Designer have received written request for approval.
2. Equal or better equipment or method may be recommended, but fabricator will be required to provide full documentation, upon request, establishing such a substitution's equality or superiority as measured in: compliance with the visual design intent, cost, ease of maintenance, and performance.
3. The Owner's Representative and Designer's decision of approval or disapproval of a proposed substitution shall be final.

B. Approved manufacturers include:
1. Acrylic Polyurethane Paint: Matthews Paint Company or Akzo Nobel
2. Exterior or Interior Vinyl: 3M or Oracal
3. Exterior Perforated Vinyl: 3M
4. Interior Signage System: APCO
5. Interior tactile/braille: APCO DP-Tactile ADA process or equivalent
6. PVC Sheet: Komacel, Sintra or equivalent
7. Non-glare front lens: Calsak Acrycast LX or equivalent
8. Acrylic Sheets: Rohm and Hass Co, Acrylite or equivalent.
9. Panaflex: 3M or equivalent
10. LED lighting system: General Electric, SloanLED, Philips, US LED or equivalent
11. Exterior Extrusions: SignComp
12. Channel letter system: Let-R-Edge or equivalent
13. Exterior Tactile signs: Gravoply or equivalent
14. Stainless Steel Strapping System: Band-It or equivalent
15. Banner Hanging System: Banner Saver
16. High Pressure Laminate: Folia, i-Zone, Trespa
17. Adhesive Silicone: Dow Corning or equivalent
18. Adhesive Tape: Polyfoam or "Isotac" by 3M or equivalent

2.2 MATERIALS

A. Aluminum: suitable for ornamental work. Finish to be smooth and free of imperfections. Alloy based upon structural requirements of the signage design.

B. Aluminum sheet: .125" minimum thickness unless otherwise specified.

C. Aluminum plate: .25" minimum thickness unless otherwise specified.

D. Perforated aluminum plate: varying hole patterns as specified in design intent.

E. Extruded aluminum bars and shapes.

F. Structural Steel: galvanized rolled steel or equal as required to meet structural requirements.

G. Acrylic sheet: varying colors and thicknesses as noted on design intent drawings.

H. Illumination: per design drawings as LED.

I. Day/Night perforated vinyl: 3M custom color vinyl; flood-coating perforated vinyl is not an acceptable solution unless noted within the design intent drawings.

J. Day/Night acrylic: Casacryl or equivalent as noted within the design intent drawings.

K. Adhesive vinyl: opaque color, reflective color, translucent color and transparent color.

L. Electric Eye and Timer as indicated by the Owner's Representative.

M. Exterior grade paint: acrylic polyurethane paint in solid and metallic colors with primer and Super Satin Clearcoat finish.

N. Interior grade paint: acrylic polyurethane paint in solid and metallic colors with primer and satin clearcoat finish, unless otherwise noted.

O. Matthew's Paint reflective white paint or 3M Matte White Light Enhancement Film.

P. Miscellaneous mounting hardware: including but not limited to stainless or corrosion resistant screws, bolts, and hinges, adhesives, and stainless steel cable.

Q. Labels: Only labels required by law are permitted on the exterior of the sign face.

1. Labels shall not be on the primary messaging faces or street facing side of the sign, unless dictated so by the local ordinance.

2. Labels shall be located in a position as discreet as possible.

3. No other labels are permitted on the signs.

4. Fabricator contact information may be placed inside the sign on the access panel.

R. All printed graphics shall be printed at a minimum of 1200 DPI using exterior grade UV inks.

S. Non-illuminated Interior Digital Prints: minimally be printed at 1200 DPI using pigment-based UV inks on a white, satin finish UV-coated photo paper, with a matte UV over-laminate. The thickness of the photo paper must be heavy enough such that no wrinkles will occur once installed.

T. Fonts: purchase fonts associated with the project. See typography standards within the design package.

2.3 FABRICATION

A. Details on design drawings indicate a design approach for sign structure but do not necessarily include all fabrication details required for the complete structural integrity of the signs, including consideration for static, dynamic and erection loads during handling, erecting, and service at the installed locations.

B. Site-verify all locations to determine special installation requirements, uneven footing needs based on sloped grades, and below grade obstructions. Field verify measurements for wall mounted and glass mounted signage, etc. prior to fabrication.

C. Fabricate signage such that major components of the sign can be removed and replaced with similar components. Incorporate this changeability such that it does not promote vandalism, but can be done by a qualified maintenance crew.

D. Fabrication and installation is to withstand sever abuse and souvenir theft vandalism, but not less than the equivalent of resisting simple hand implements and tools (screwdrivers, knives, coins, keys, and similar items), and adult physical force.

E. Within fabrication tolerances, allow for expansion and contraction of materials due to temperature changes as appropriate to the project location.

F. Construction Methodology:

1. The drawings call for a variety of fabrication techniques.
2. Sign faces are to be fabricated using aluminum plate of varying thicknesses, as specified on design drawings, with a minimum thickness of .125 " unless otherwise noted.
3. Push-through copy:
   a. Routered push-through copy from a single sheet of white acrylic.
   b. Acrylic to have a minimum thickness of 3/8".
   c. Acrylic to be pushed through flush to 1/16" unless otherwise noted on design drawing.
   d. Letters and shapes that are routed out and bonded to a separate acrylic sheet are not acceptable.
   e. Acrylic is to be attached to the interior of the sign using mechanical fasteners.
   f. All letter knock-outs (interior of letter forms) are to be stud mounted through the acrylic.
   g. Acceptable spacing between the push-through acrylic and the cutout aluminum is 1/32" for copy 12" or smaller. Copy larger than 12" may have alternate spacing to allow for the change in material expansion.
   h. The edges and corners of routed letterforms shall be sharp and true. Letterforms with nicked, cut, ragged, rounded (positive or negative) corners, and similar disfigurements will not be acceptable.
4. Conceal all fasteners except for access panels or where approved otherwise by Owner's Representative and Designer. Access panel fasteners are to be stainless steel, tamper resistant, counter-sunk flush screws, painted to match adjacent finish.
5. All hardware and fasteners within reach shall be vandal resistant.
6. Any sign faces smaller than 8' by 20' are to be fabricated from 1 piece of seamless material.
7. To prevent electrolysis, separate all ferrous and non-ferrous materials with a non-conductive gasket or barrier and utilize stainless steel fasteners as required.
8. Welded joints:
   a. Exposed welded joints must be filled and ground smooth so that there is no seam visible when painted.
   b. Dimensional and structural welding defects will not be accepted, including but not limited to: poor weld contours, including excessive bead convexity and reinforcement, and considerable concavity or undersized welds; cracks; undercutting; porosity; incomplete fusion; inadequate penetration; spatter; and non-metallic inclusions.
   c. Welding is to be performed by AWS (or similar) certified personnel, following AWS Standard Welding Procedure Specifications (SWPSs) for steel, aluminum, and stainless steel as appropriate.
9. Non-welded joints between various portions of signs must have a tight, hairline-type appearance, without gaps. Provide sufficient fastenings to preclude looseness, racking, or similar movement.
10. Exposed acrylic edges are to be finished such that no saw marks are visible.
11. Drain holes:
   a. Provide drain holes as needed to prevent accumulation of water within signs.
   b. Holes must be inconspicuous and located such that drainage does not occur onto signs, bases, or other surfaces subject to staining.
   c. Provide internal system of baffles to prevent "light leaks" through drain holes of illuminated signs.
   d. Use color-coordinated stainless steel bug mesh screen over drain holes or vents.
12. Non-illuminated sign faces are to have lettering and graphics created as surface-applied vinyl typography unless otherwise noted in the design drawings.
13. Visible metal joints must adhere to a fit tolerance of .01".
14. Channel letters:
   a. Non-illuminated faces must be .125" aluminum.
   b. Channel letter returns must be a minimum of .080" aluminum.
   c. Face-lit channel letter backers must be a minimum of .080" aluminum or greater as required by engineering.
   d. Face-lit channel letters mounted on the first or second story of a building shall be trimless.
   e. Face-lit channel letters installed on the third floor or higher of a building may use a low-profile trim cap.
   f. Jewel trim is not acceptable.
   g. Raceways are not acceptable unless specifically noted on the design intent drawing or if approved by the Owner. Approved raceways must be painted the same color as the wall on which the raceway will be mounted.
   h. Acrylic must fit snuggly into the letter return.
15. Sign panels shall be appropriately pre-drilled/pre-cut before priming and painting or coating.

G. Painting:

1. Metal surfaces are to be painted per the most recent Matthews Paint or Akzo Nobel product bulletins.
2. Paint preparation of all metal surfaces of the sign to include removal of all scratches and imperfections, sanding and chemical etching.
3. Substrate cleaning, preparation, paint application and paint thickness to be in strict compliance with Matthews Paint or Akzo Nobel published recommendations.
4. Aluminum and Steel surfaces to be properly covered with a primer.
5. Acceleration of the drying process is not allowed.
6. All paint and powder coat finishes to be a satin finish unless otherwise noted in the design drawings.
7. All painted surfaces to have a clearcoat finish to add UV protection and protection from the elements.

H. Illumination & Electrical

1. Perform the complete electrical design for illuminated signs.
   a. Illuminated signs shall be designed by an electrical engineer.
   b. Illuminated signs shall be fabricated and wired to be compliant with current UL listing requirements.
   c. Illuminated signs shall be UL Certified.
2. The disconnect switch is to be located in an inconspicuous location, not visible from the primary face(s) of the sign or the street.
3. Fabricator to verify location of power and electrical feed with the Owner's Representative prior to sign fabrication.
4. All internally illuminated signs are to have a master timer with photoelectric eye on/off control to turn the sign on at night and off in the morning, and on during dark conditions.
   a. Location of timer to be coordinated with and approved by the Owner's Representative, building owner/facilities department.
   b. Illuminated signs must be connected to a building timer/photocell, not on individual timers & photocells.
5. All internally illuminated signs and channel letters shall be painted white on the interior using Matthews' reflective white paint, or shall be lined with 3M's Matte White Light Enhancement Film, to enhance and evenly distribute light.
6. Provide concealed access panel in an accessible location on all internally illuminated sign cabinets. Panels are to be flush, lightproof, and watertight.
7. Internally illuminated signs are to have adequate internal system of ventilation to assure a uniform dissipation of heat from electrical components of electrically powered and illuminated signs, heat (solar) absorption by sign and other sources.
8. Any openings in exterior surfaces must be internally baffled to prevent light leaks and prevent entry of rain, snow, wind-blown debris, and other foreign matter, and are to be covered with color-coordinated insect screen on the interior of the face.
9. House all electrical components within sign cabinets, except for remote transformers as dictated by the Owner's Representative. All wiring and raceways within the sign are to be completely enclosed.
10. Transformers for channel letters shall be remote transformers wherever possible. If remote transformers are not applicable, then all electrical components shall be contained within the channel letter itself.
11. Remote transformers must be located within a location easily accessible for servicing without disturbing or interrupting hospital and clinic functions or patient care.

12. Internal illumination is required to provide adequate and even illumination over the face of the sign without hot spots or shadows.
13. Illumination to be provided by LED as specified on design drawings.
14. LEDs or other internal hardware must not be visible through the translucent letterforms and graphics.
15. Test and verify all illumination within the shop environment prior to shipping signs to site.

I. Fonts/Typefaces:
1. Fonts used within the Designer's programs were purchased by and are licensed to the Designer. It is the responsibility of the fabricator to purchase the specified licensed fonts for use within this program. See the design intent typography page for the specific fonts.
2. The fabricator is responsible for spacing the tactile characters (Kerning) to meet ADA code requirements.
3. Letter height/cap height is based upon the height of the capital letter "E" or any capital character that has a flat top and base.
4. Under no circumstances are typefaces to be electronically distorted ("squeezed" or "extended") for purposes of fitting to the specified sign or general alteration of the sign face composition unless noted in the drawings. This includes (but is not limited to) stretching, squeezing, tilting, outlining or shadowing.
5. Ligatures are to be turned off.
6. Apostrophes and quotation marks are to be used, not footmarks and inches. Note that there is a difference in most fonts.
7. Fabricator to reference spacing within the Design Intent Drawing package. Layout of copy is critical for the proper function of the wayfinding signage. Any typesetting concerns or issues are to be brought to the Designer for resolution recommendations.
8. Fabricator is responsible for correcting any typesetting errors that may be necessary.

J. Silk-screen, digital printing and vinyl copy:
1. All letterforms, symbols or graphics shall be reproduced either by photographic or computer-generated means.
2. Cutting shall be done such that edges and corners of finished letterforms will be straight, sharp and true.
3. Letterforms with nicked, cut, ragged, rounded corners, and similar disfigurements will not be acceptable.
4. Copy is to match the sheen of the copy panel background (satin).
5. Surface of letters shall be uniform in color finish, and free from pinholes and other imperfections.
6. Silk-screened images shall be executed with photo-processed screens prepared from original electronic art.
7. Use only weather- resistant coating materials that are compatible with substrates.
8. Silk-screening shall be highest quality, with sharp lines and no sawtooths or uneven ink coverage.
9. Images shall be uniform in color and ink thickness.
10. Images shall be free from squeegee marks and lines resulting from improper print stroke or screen off contact height.

PART 3 - EXECUTION

3.1 FABRICATORS

A. Exterior Fabricator List: Contractor may use one of the Owner-identified signage fabricators for exterior signage.

B. Interior Fabricator List: Contractor shall use the Owner-identified signage fabricator for interior signage.

3.2 DEMOLITION

A. It is required that the fabricator remove existing signs as identified in the bidding documents.

B. Fabricator is to remove all below grade footings and foundations completely and fill with compacted soil and repair landscaping, unless prior approval for an alternate solution is provided by the Owner's Representative.

C. For exterior wall mounted signs and individual letters, Fabricator is to remove the sign, fill holes, power wash the façade and touch-up paint as required.

D. If there are electrical connections, they must be properly terminated.

E. Fabricator is responsible for returning signs that meet the signage standards (include interior APCO sign frames) and can be reused to the Owner for storage.

F. Fabricator is responsible for disposal of demolished signage. Recycling is recommended. Open dumping is prohibited. Coordinate with Owner's Representative.

G. Fabricator is to repair and bring to consistent look with surrounding area, any areas damaged or left exposed in an unfinished condition due to the removal of a sign.

3.3 INSTALLATION

A. Permits and Variances:
1. Research relevant local code requirements and honor the same in fabrication and installation.
2. Secure any and all necessary permits for signage installation. Coordinate with the Owner to secure variances, should any be required.
3. Coordinate with the Owner to have all underground utilities properly located and marked. Any damage to below-grade utilities or structures for which the Owner or Owner's Representative has provided adequate location information is the responsibility of the Fabricator.

B. OSHPD Review:
1. Research relevant local code requirements and honor same in fabrication and installation.
2. Coordinate with the Owner's Representative to ensure all signage is properly reviewed when installed within an OSHPD building.

C. Ensure that every building-mounted sign location has the necessary blocking for safe and secure mounting. Where additional blocking is needed, recommend changes and additional associated costs, and receive approval prior to beginning installation.

D. The final Sign Message Schedule or annotated layouts and Sign Location Plan shall be consulted together and shall be approved by the Owner to determine the precise location for each sign. Any necessary adjustments will be made with the approval of the Owner.

E. If installation subcontractors are utilized, the Fabricator must provide a company representative to act as on-site supervisor through the duration of the installation process to oversee any subcontracted installation work.

F. Fabricator to maintain current signage and directional information during installation in order to continue to provide proper wayfinding. This can be done through the use of temporary signs, or vinyl over existing sign faces.

G. Fabricator to coordinate delivery of signage with the Owner's Representative.

H. Fabricator to provide a site logistics plan indicating the work areas, proposed equipment and power sources, extent and duration of street closures, and schedule time/dates of the respective sign installations. This schedule is to be updated on a weekly basis if changes occur.

I. Electrical:
1. The Owner or Owner's Representative will be responsible for providing a power source to within 10 feet of the base of each sign requiring power (either at grade or below grade).
2. Power is to be 120 or 277 (LED illumination should be 120) volts at 60 cycles unless otherwise noted by the Owner's Representative. Fabricator to confirm based upon location source with the Owner's Representative.
3. Manipulate the existing conduit to its proper location, install an external disconnect, extend the conduit through the concrete base (or posts) to align with the point of hookup, and run the power supply through it.
4. Conduit running from the disconnect to the sign shall travel within the concrete base, not on its surface.
5. Perform final hook-up. This may not be an excluded service from the quote.

J. Masonry/Footings:

1. All concrete bases for signage are to be poured in place from thoroughly mixed and agitated concrete.
2. Footings are to extend beneath the frost line, or deeper to meet local code.
3. All footings or bases should be poured within a form and level with grade unless otherwise specified in the design drawings or as specified by state or local code.
4. Foundation/footings should not extend above grade more than 2" and exposed edges should be finished with a bevel to prevent chipping, unless otherwise indicated in Design Intent Drawings or installed on an uneven grade.
5. It's recommended that the concrete be floated by machine or hand before finishing in order to embed larger aggregates especially when part of the footing or base extends above ground.
6. Concrete surface should have a smooth or brushed finish grade appearance. Match the finish appearance of connecting concrete surfaces when applicable.
7. All concrete bases and footings should be edged to break any bond with the form and create a neat appearance. All forms should be removed once the concrete has properly cured.
8. Provide the necessary templates, mounting plates and hardware for concrete and masonry bases.
9. All masonry (concrete block, poured concrete, brick, slab, veneer, mortar, etc.) is to be properly treated and protected to maintain the structural integrity of the masonry work with exposure to all environmental conditions found at the site. For exposed or visible masonry, this shall include the application of protective sealers or similar finishes to diminish the effects of close-proximity sprinkling or irrigation systems.
10. Wet concrete with footers and posts must fully cure in place before signage is installed on the footers or mounted to the posts.

K. Mounting:

1. Signs are to be mounted on J-bolt footings or breakaway bases, centered on the concrete base or footing, and engineered per code, unless otherwise specified in the design drawings or required by code.
2. It is preferred that all bolts, nuts, washers, or other fasteners be stainless steel. However galvanized steel is acceptable, so long as all exposed surfaces are sealed.
3. Fabricator is required to specify mounting hardware and anchoring per the engineering of the signage. The visual appearance of the sign is not to be compromised from that shown in the design drawings.
4. Install all signage products such that there are no misalignments between visible components. Sign elements intended to be removable or changeable after installation must function as intended without binding, sticking or blocking.
5. All signs to be mounted level and true, and within the guidelines of applicable local, state and federal codes including, but not limited to, the 2010 Standards for Accessible Design (ADA) and fire/life safety codes, where applicable.
6. If signs are to be installed in a parking garage where the structural elements are not level due to the grade of the garage, the Owner is to decide whether the sign should be mounted level or aligned with the structural elements.

L. Locating Signs:

1. Fabricator's installers must have applicable understanding of the 2010 Standards for Accessible Design (ADA) mounting guidelines, city zoning and other applicable federal, state and local codes, general sign locating practices, and any particular unique installations.
2. Installers are to follow the regulations, noted guidelines, custom notes within the Sign Message Schedule, and architectural details around an installation location for the best visual placement.
3. Keep a reasonable distance from protruding objects.
4. Any signage that is improperly located is to be moved to the proper location, and all repairs to wall surfaces and signage are to be handled by the Fabricator.
5. If the installers are unable to make a decision about any sign locations, they can contact the Designer, providing a graphic representation of the questionable area, or contact the Owner's Representative for on-site options. If there is a code requirement regarding the sign location, the installer must notify the Owner's Representative of the requirement.

M. Landscaping:

1. A 6" deep stone bed, extending a minimum 2' wide from each sign face (or as noted in the design intent drawings) must be added within soft scape areas.
2. Stone bed edging shall be 1/8" by 4" mill finished aluminum landscape edging in either an oval or round shape.
3. Stone type to be coordinated with Owner.
4. Stone beds do not apply to regulatory sign posts.
5. Signs within hardscape areas must be finished even with the existing hardscape surface and colored to match.

N. Upon completion of installation, Fabricator is to remove any protective covering, tape, or installation hardware. Fabricator is then to clean the sign per the manufacturer recommendations, ensuring that sign is clean from dirt, stains, fingerprints, tape residue, etc.

O. All exposed hardware is to be touch-up painted on site as required immediately following installation prior to punch list.

P. All minor blemishes or marring are to be repaired such that the repairs are imperceptible. Components having permanent, non-removable scratches or defects are to be replaced completely.

Q. Site Safety and Restoration:

1. Fabricators are responsible for their own safety during the installation period.
2. Maintain a safe environment for pedestrians and vehicular traffic during the installation period, following OSHA safety standards as necessary.
3. Keep the Owner's premises and the adjoining premises, driveways and streets clean and clear.
4. Job site shall be left safe, neat and clean at the completion of each day's operation.
5. In addition to maintaining old or temporary signs for their directional or informational purposes, Fabricator is to maintain signage that meets or exceeds MUTCD and local standards during the installation period.
6. At the completion of work, remove all rubbish, tools, equipment, and surplus materials, from and about the premises, and leave the site as originally found.
7. Repair or correct damage to other contractors' work resulting from signage installation work.

3.4 PUNCH LIST

A. The Fabricator's onsite representative is to complete a walk through with the Owner's Representative immediately following installation to identify any errors, such as construction or installation issues. Such errors are to be corrected in a timely manner, and to the satisfaction of the Owner's Representative.

B. Fully replace all signs that are in error relative to the working documents (final sign message schedule and design drawings).

C. Correct any installation misalignments at no charge.

PART 4 – GRAPHICS SCHEDULE

4.1 SIGN MESSAGE SCHEDULE

A. The Sign Message Schedule for sign types is a part of the Construction Documents. These Sign Message Schedules provide a listing of sign types, quantities, and messages. They are to be used in conjunction with other components of Construction Documents, including Sign Location Plans and Design Drawings.

END OF SECTION

APPENDIX B

FULL SURVEY RESULTS

This section of the document includes the full responses from both online surveys.

Q9 What suggestions would you have to improve your wayfinding experience on Lake County bike trails and paths?

Answered: 390 Skipped: 130

#	RESPONSES	DATE
1	additional signage	5/23/2019 11:19 AM
2	Better, safer ways to interconnect trails. Better and earlier, signage for path closures	5/23/2019 9:37 AM
3	your doing a great job !	5/23/2019 4:50 AM
4	The urban flooding that has been increasing in Lake County along Des Plaines prevents people from biking or walking in their own yards. Fix the storm system problems before bike paths.	5/22/2019 11:37 PM
5	Paper maps or printable PDFs would be nice for us seniors who are not so tech savvy.	5/22/2019 10:43 PM
6	Not so much wayfinding, as connecting more destinations. My workplace is on Polo Trail in Green Oaks, and it's a dangerous ride down Bradley road to get there from the North Shore bike trail.	5/22/2019 9:44 PM
7	n/a	5/22/2019 6:21 PM
8	1. different size trail loops. 2. more trail connections. 3. more access points.	5/22/2019 5:37 PM
9	Maybe using color coded mileage markers to coincide with the trail being ridden. Lake County does a fantastic job maintaining the trails!	5/22/2019 4:53 PM
10	put back the access to the village hall that was removed recently	5/22/2019 4:26 PM
11	More signs/maps on paths	5/22/2019 4:19 PM
12	In the winter, snow blowing would be nice, and salt on the steep slope on the east side of Dawes would be great	5/22/2019 4:17 PM
13	I sign detailing total distances. As an example, if I am using the east/west trail along 176, when I get on at butterfield, as sign showing distance to Lakewood forest preserve or to Green Bay rd. would be helpful. Also, signs along the way showing diecrtions to the DesPlanes River trail; Middlefork Savannah etc would be helpful. The signage at the north end of the robert McClury trail near Great Lakes is virtually impossibel to find if you want to continue riding north along the McClury Trail	5/22/2019 3:24 PM
14	The bike trails are really nice, however, they are underutilized. People all say it is impossible to get to them from many areas without a bike rack on your car, as there are few connecting paths and many one lane roads with no bike lane. Therefore, it would be extremely helpful to have additional bike lanes and more access to the paths from throughout Lake County. Specifically, Millenium Trail. Adding bike lanes on Gilmer would be wonderful so people can actually ride to the trails.	5/22/2019 2:48 PM
15	Signage is really pretty good, no issue with me. I would like to see more trails linked together if possible.	5/22/2019 2:47 PM
16	I want to have the East West bike path (Mundelein - Libertyville - Lake Bluff) available for cross country skiing - no snow removal.	5/22/2019 2:32 PM
17	More frequent and detailed maps posted along the trails.	5/22/2019 2:15 PM
18	A website that allows you to put in a beginning point, and an ending point and have it show you bike routes to get there. For example, Mundelein to Botanical Garden. Also be able to put in a start point and ask for a 20 mile round trip trail ride.	5/22/2019 2:08 PM
19	Better mile posts	5/22/2019 1:56 PM
20	more Mile markers (and signs for people with dogs to keep them under control instead of running in front of my bike)	5/22/2019 1:09 PM
21	I would love to commute to work by bike but there is no connection from the bike path to the industrial park off Bradley Rd. Riding a bike on Bradley is extremely dangerous. A bike path or even a decent shoulder down Bradley would very nicely extent access for commuters.	5/22/2019 12:48 PM

22	Expanded network of trails	5/22/2019 10:21 AM
23	More paved trails for road bikes	5/22/2019 9:11 AM
24	Signage	5/21/2019 10:57 PM
25	Have better signage for trail confections like inbetweeen the North shore bike path and the millennium trail	5/21/2019 7:49 PM
26	I work at Green Oaks IL and there is section of Bradly Rd from the east Oasis access to IL 176 that extremely dangerous for bicycling. No shoulders and if wider shoulder area is built many of the local business employees will use it.	5/21/2019 6:16 PM
27	Better Signs	5/21/2019 3:37 PM
28	SIDEWALKS or BIKE LANE on Oak Spring road between DesPlaines River Trail access point and Saint Mary's Road. We use this bike trail with our family and have to drive to the trail because it's not safe for children to ride their bikes on Oak Spring Road. People drive very fast and very dangerously through this area and it's not safe for walkers or bikers to get to the trail!!!	5/21/2019 11:38 AM
29	More mileage indication and connection information needed.	5/21/2019 10:21 AM
30	More safe connections away from car traffic, and more safe routes for people walking and biking to the trails from things like schools, libraries, parks, and other common public spaces.	5/21/2019 9:32 AM
31	Substantial improvement needed in chain o lakes area	5/21/2019 8:45 AM
32	I can't think of any improvements. I think they are easy to find and use.	5/20/2019 9:45 PM
33	Would like to know distances, from where I started, and at points along the way. I don't recall these, particularly on the Millennium Trail from Lakewood to near Rte 120. Boy was that a long way! And we had to come back!!	5/20/2019 8:47 PM
34	Night riding for Lake county residents that pay an annual fee. Transportation and recreation know the trail system. To keep the trail system funded I would do what Wisconsin does and charge every cyclist a $15-20 fee for trail access for the year. If somebody wants a recreational or transportation license for riding at night charge $100 for an annual license. With a waver taking out responsibility. People using the trail system at night for transportation are not parking in a parking lot so close them at dusk!!!	5/20/2019 8:22 PM
35	Put area / close landmarks / roads on the maps throughout the trails. Use distance markers from one point to the next. Show connecting trails or roads on map.	5/20/2019 4:03 PM
36	I'm happy with current methods.	5/20/2019 3:49 PM
37	advertise the online maps in regular newsletters and correspondence that so many trails exist, other than the obvious ones that can be seen from automobiles.	5/20/2019 2:42 PM
38	More signage, more PR/communications.	5/20/2019 11:50 AM
39	I use TrailLink to find paths and Waze to find parking but sometimes I'm driving around in circles trying to find parking at a trailhead	5/20/2019 11:49 AM
40	more bathrooms for the ladys	5/20/2019 11:35 AM
41	A few more "you are here maps" along the way would be great!	5/20/2019 11:12 AM
42	Clear signage.	5/20/2019 11:06 AM
43	Every neighborhood should be able to access a trail without using a dangerous road or having to drive to a safe access point, not just the wealthy people of Mettawa, the North Shore, etc. EVERY. NEIGHBORHOOD. Homes near Casey & 45 included.	5/20/2019 10:44 AM
44	Extend signage, especially more consistent mileposts.	5/20/2019 10:32 AM
45	Repave some of the trails, Fox river trail south of East Dundee are bad/bumpy. More visual maps posted.	5/20/2019 10:24 AM
46	Signage giving users how far the end of the trail is, connections (with destinations) and how far to get water/food/etc off the trail.	5/20/2019 10:10 AM
47	Informational signs regarding what amenities may be nearby. Inclusion of mile markers similar to what is seen on the Des Plaines River Trail	5/20/2019 9:26 AM

48	Entrance points should be prominent and well marked. All the main trails have nothing to denote that they are there or it's only the few really large main trails. There is literally no good parking or not enough entrances to access the trails. It's effort to reach a trail and it shouldn't be like that.	5/19/2019 8:55 PM
49	Don't like ebikes on the trail they go to fast	5/19/2019 7:09 PM
50	Wayfinding signage is great, but let's not get too carried away. After all, these trails are in forest preserves.	5/19/2019 5:15 PM
51	More signage	5/19/2019 4:01 PM
52	Some occasional portapottys and water stations would be nice. Also, some reminder signage about calling out "On your left!" when you are about to pass someone. Even experienced cyclists don't always do this.	5/19/2019 2:23 PM
53	Signage at intersecting points indicating various destinations and distance	5/19/2019 12:21 PM
54	We are relatively new to the area and just starting to really explore. We love the bike paths we've used up to this point, but yes - sometimes it feels as though the signage is lacking, especially for newbies. It would be nice to have clear indications about which to path to follow and exactly where they lead. This often is not the case, and we end up relying on our phones instead.	5/19/2019 11:29 AM
55	Paved bike trails would be nice instead of gravel. Otherwise trails are clean and kept	5/19/2019 2:59 AM
56	Bike path on Rollins rd needs to have better lighting. I will not use it after sunset	5/19/2019 1:34 AM
57	More restrooms and water access.	5/19/2019 1:18 AM
58	Add mileposts on the trails.	5/18/2019 9:44 PM
59	make it awesome and then make it a tourist attraction	5/18/2019 8:12 PM
60	Add a few more wide view maps. A good example is Busse Woods	5/18/2019 6:53 PM
61	More directional signage and signs to nearby amenities.	5/18/2019 6:11 PM
62	Larger signage with more destination info similar to auto signage on roads & expressways	5/18/2019 5:42 PM
63	—	5/18/2019 3:43 PM
64	Extend prarie crossing trail south to rt 60 Add trail south of Hawley on rt 83 Add trail along 120 west of 83 Extend trail along 176 directly into Wauconda	5/18/2019 3:11 PM
65	Put up signs telling cyclists to announce intentions to pass walkers or other slow moving pedestrians!!! We NEED these signs desperately!! Cyclists use bike paths like it's the Indy 500 and my dog and I are going to get killed. Friend already got hit by one and broke her leg.	5/18/2019 12:05 PM
66	Signage and directions	5/18/2019 10:28 AM
67	Maps available online or google map type program to assist in mapping out travel, runs, or biking.	5/18/2019 8:57 AM
68	Frequent trail system map boards	5/18/2019 8:51 AM
69	Signage showing other paths to loop into....	5/18/2019 8:07 AM
70	Wish there were more easy to get to starting points from my home	5/18/2019 7:13 AM
71	none	5/18/2019 7:06 AM
72	Where paths cross streets, it would be very helpful for there to be a sign with the street name to help you get your bearings.	5/18/2019 6:13 AM
73	More trails. More under/overpasses. Groomed trails for fatbikes in winter. Find a way to keep the DPRT from flooding.	5/18/2019 2:03 AM
74	More signage along routes with clearer maps.	5/18/2019 12:36 AM
75	Unfortunately, not sure if this exists but an app that can help identify your location would be great! Also, routes or path milestones and available amenities or paths would be great. An interactive app, almost like a map app. Events, closures, distances on the app would be great. Thank you!	5/17/2019 11:40 PM
76	Would like to find integrated map which contains neighborhood paths and designated bike lanes I find it difficult to know how to navigate between paths and around breaks in path (eg washington road path which stops just east of huntclub and restarts just west of hunt club. Why? How is rider to know that trail continues or how to proceed besides riding on a very busy street?)	5/17/2019 10:38 PM

77	Everything's fine.	5/17/2019 9:56 PM
78	X	5/17/2019 9:38 PM
79	More signs & more detailed online maps	5/17/2019 9:22 PM
80	Continue with making connections from preserve to preserve	5/17/2019 9:07 PM
81	I've enjoyed these trails for years.	5/17/2019 8:53 PM
82	Updated Maps	5/17/2019 8:53 PM
83	N/a	5/17/2019 8:44 PM
84	More signs please	5/17/2019 8:31 PM
85	Regular rest points with CLEAN AND SAFE (LIGHTED?) RESTROOMS AND DRINKING FOUNTAINS AND A BENCH.	5/17/2019 8:18 PM
86	More paved trails	5/17/2019 8:03 PM
87	More connections to downtowns and village centers to facilitate increased bike and pedestrian use and reduce reliance on cars. It's generally difficult to get anywhere without going way out of your way if you stick to existing paths and trails.	5/17/2019 7:01 PM
88	Greatly appreciate the on line map showing flooding. Also appreciate showing paved vs. Unpaved. Suggest keep connecting more trails to each oher.	5/17/2019 5:44 PM
89	Continue the McClory extension trail to DRT	5/17/2019 5:36 PM
90	Increase signage & interconnected paths	5/17/2019 5:32 PM
91	None! Lake County bike trails are AWESOME!!!	5/17/2019 5:21 PM
92	improve the route markings for where the trail sections have gaps so it's easier to find the next section of trail	5/17/2019 5:16 PM
93	Not sure since I only goon the trails I have knowledge of.	5/17/2019 5:11 PM
94	It'd help to have signage getting bikers onto those nice paths and out of the roads.	5/17/2019 4:59 PM
95	Paved instead of gravel. Solar lights for safety.	5/17/2019 4:56 PM
96	Some of the signage is confusing. For example, a friend and I got lost cycling in the Old School preserve, but the signage wasn't helpful	5/17/2019 4:45 PM
97	Ways to work around flooded river	5/17/2019 4:44 PM
98	Expand trails and bike lanes especially from Waukegan and East Gurnee westward.	5/17/2019 4:25 PM
99	Consistent and fun/exciting signage.	5/17/2019 4:18 PM
100	Better maintenance. Ravinia Woods trail is always washed out.	5/17/2019 4:15 PM
101	Clear and accurate mileage. clear street names at each street stop.	5/17/2019 3:44 PM
102	Better warnings to cars about bike crossings	5/17/2019 3:43 PM
103	have the trails listed on google maps, similar as if you were in your car driving	5/17/2019 3:12 PM
104	Knowing the area the only improvement would be to have maps of the trails by the parking areas current. Phones have made it easy to find your way around.	5/17/2019 2:56 PM
105	None- Beautiful trails and fun navigating them.	5/17/2019 2:56 PM
106	More frequent maps - like LCFPD has for their properties - and also include distances and nearby points of interest. Put this ON THE TRAIL SIDE!	5/17/2019 2:51 PM
107	More maps posted at major intersection points	5/17/2019 2:41 PM
108	More safe bike paths to public transportation especially Metra stations.	5/17/2019 2:39 PM
109	more trails. more connections to non LC trails	5/17/2019 2:32 PM
110	More signage especially pointing to nearby restaurants and other facilities. Also, where do all these side trails go? I usually stay on the main trail because I don't know where the off-shoots are going to take me	5/17/2019 2:30 PM

111	Going east on Hawley in Mundelein to connect to eastbound trails ... you have to sidewalks... this is dangerous for bikers and people attempting to back out of their driveways or have children using the sidewalks. Would like a path around Mundelein	5/17/2019 2:18 PM
112	Ask horses to stay to far right at all times. Add a few more signs telling cyclists to call out "on your left" when approaching other bikers or walkers from behind! During the winter, install HUGE signs asking the walkers and fiat tire bikers to stay off the ski trails!	5/17/2019 2:00 PM
113	I would like more information.	5/17/2019 2:00 PM
114	More paved paths would be great, when the limestone gets wet with a road bike the paths are hard to ride.	5/17/2019 1:53 PM
115	Just their placement in residential areas	5/17/2019 1:36 PM
116	Perhaps research other bike paths for best practices. Be sure to use large fonts for easy reading.	5/17/2019 1:13 PM
117	Small, occasional mileage markers would be nice but Lake County has a tendency to go "sign crazy". This is supposed to be a NATURE experience and we don't need 50 signs clogging up the environment or the experience of the natural environment. Take a look at the ridiculous roundabouts (aka, crop circles, wheel of fortune). We went from 3 stop signs in a cornfield, to 10 streetlights and 23 road signs--with more appearing on a regular basis. It's nuts! LCFP needs to remember it is NOT A PARK DISTRICT. Give us access points to the trailheads and a well-maintained but small bathroom facility and some area wildlife and vegetation information-- then stand down. By the way, the LCFP trails are wonderful and the best part is the natural state. Let's remember the mission while making small improvements in signage without going overboard!	5/17/2019 12:51 PM
118	Better interconnection. More paved trails specially in the north of lake county.	5/17/2019 12:41 PM
119	1) an interactive App that could be used to help find best / safest direct pathway from point A to point B	5/17/2019 12:41 PM
120	A connection from antio H to surrounding trails, an plenty of signs within the trails	5/17/2019 12:38 PM
121	Add more trails and routes that are paved. Make it safer for cyclists and autos with larger bike lanes	5/17/2019 12:33 PM
122	Distance to a location signage. Perhaps an app that would have the trails and your location in them. It would also be nice to have trails that circle back in spots or intersect so that I didn't have to worry so much about going to far and not being able to get back easily. Now, the farther I go on a trail, it's always in my mind that I have to come all the way back. If trails intersected and crossed back on themselves, I would be more inclined to keep riding.	5/17/2019 12:32 PM
123	Though I use a odometer, it is nice t see mile markers.	5/17/2019 12:24 PM
124	Make all bike paths interconnected with clear signage. If possible make bike paths continuous so I can avoid riding on the street. Or use dedicated bike lanes to connect paths.	5/17/2019 12:18 PM
125	App	5/17/2019 12:12 PM
126	I am more interested in the expansion of paved bike paths than I am in efforts to improve wayfinding. Have Garmin, Will Travel (easily).	5/17/2019 12:07 PM
127	Safer roadway shoulders W/out better law enforcement on roadways, or wider road shoulders, bike trails are BEST/safest option. Lifelong Lake Co. resident.	5/17/2019 12:06 PM
128	None	5/17/2019 11:59 AM
129	Better signage to connecting local/municipal bike infrastructure and destinations.	5/17/2019 11:49 AM
130	More on-trail signage is always helpful, especially at intersections. The Millennium Trail signage is good. However, the Robert McClory Trail isn't as good for signage.	5/17/2019 11:25 AM
131	Connect Round Lake Communities along Cedar Lake Road with Saddle Brook and the Trail along Peterson.	5/17/2019 11:25 AM
132	I think the trails are great. My only complaint, which is constantly being addressed is that I like to take very long rides around the county, and there are gaps from one section of trail to the next where I have to get off trails onto roads and then find my way back to the next section of trail. Keep doing what you're doing and joining up all the sections so we can take longer and better rides around the area!	5/17/2019 11:21 AM
133	thank you for all the nice trails!	5/17/2019 11:19 AM

134	Keep paths groomed, compressed and level. Ruts form from horses during wet weather and tend not to be repaired during spring-summer-fall seasons.	5/17/2019 11:02 AM
135	Skokie Valley Trail	5/17/2019 10:48 AM
136	It would be helpful if there were additional trash cans along the way or poop-bag stations for dog waste at map points or mile markers (those are always nice)	5/17/2019 10:12 AM
137	Eye-catching signage that advertises the trails at significant road crossings. Signage that indicates connections to other trail systems like the forest preserves. They could be color-coded differently than the county trails, with the goal of having the overall network better understood.	5/17/2019 10:07 AM
138	Although there are many trail connections, I'd still like to see more. I don't have any safe ways to get myself and my family to a major trail system, even though we live close by the Rollins and the Millennium Trail here in Country Walk in Round Lake Beach. Taking the open road, even with a bike lane, is just too unsafe with the faster traffic. I'm also very hesitant to bike with my children on sidewalks that are right against the street such as on Hook Road and Rollins. I can tell there's an effort to make connections using current roads that I appreciate, but I still feel they're too unsafe for my family. If the sidewalks and trails running parralel to a road were offset from the road few yards and also not shopping toward the street, I'd feel a lot safer taking children my children and we'd use the trails a lot more for recreation.	5/17/2019 10:00 AM
139	Parking at trail access points and easily found restrooms - or directions to restrooms - are the only two big challenges to an otherwise pretty great system. I often leave from home, which limits the bike trails I experience, or park at friends' homes/in their neighborhoods and wend my way back to the trail.	5/17/2019 9:44 AM
140	I'd like to see more bike paths leading to neighborhoods so you don't have to drive your bike somewhere to use them	5/17/2019 9:43 AM
141	None	5/17/2019 9:26 AM
142	Have signage in more locations indicating the trail you are on (and approximate MP), and the distance to next trails and parking areas.	5/17/2019 9:20 AM
143	Well... more maps on the trail. The Forest preserve seems to do the best job posting maps of trails within their boundries.	5/17/2019 9:14 AM
144	Complete all of the regional trails.	5/17/2019 9:09 AM
145	Please be sure to do maintenance on trails after winter	5/17/2019 9:03 AM
146	Connect Countryside Manor to nearest bikeway access point	5/17/2019 9:00 AM
147	Connect Countryside Manor to nearest bikeway access point	5/17/2019 8:59 AM
148	Would love to see more biking and walking trails	5/17/2019 8:50 AM
149	Build a direct straight trail thru the city of Highland Park	5/17/2019 8:49 AM
150	Bear in mind aged users who need more direction	5/17/2019 8:45 AM
151	Better designated bike paths along roadways. Many cyclist use the roads near by & some areas are not wide enough to safely pass them while driving & why i stick to preserve trails or designated paths.	5/17/2019 8:31 AM
152	More signs	5/17/2019 8:28 AM
153	Continue the bike trail along Allegheny Rd.North of Peterson Rd.	5/17/2019 8:28 AM
154	We need more paths that are inner connected.	5/17/2019 8:22 AM
155	I think making the trail more obvious to what it is and maybe mile markers	5/17/2019 8:16 AM
156	A coordinated effort of signage between at intersecting trails or between different trail systems. It is difficult to leave one trail system and find your way to a different trail that may be managed by a different agency or municipality.	5/17/2019 8:14 AM
157	Signs that give information on what is nearby and what points of interest may be ahead.	5/17/2019 7:56 AM
158	We need a safe sidewalk on Hainesville Rd to access any bike trails.	5/17/2019 7:47 AM
159	Wi Fi	5/17/2019 7:41 AM
160	distance to destinations information milepost and improved information on current location	5/17/2019 7:23 AM

161	I use them for walking/exercising both myself and my dog. I bring my own doggy poop bags but many people do not so there needs to be more bag stations AND receptacles to dispose them in. I see too many people either leave their dogs poop in the path OR if they do pick it up they just throw the bag into the woods because they don't want to carry the bag to the entrance/exit.	5/17/2019 7:18 AM
162	Make if access available without having to load bike in car; hard for kids in subdivisions north of 173 to access paths because they have to cross major highway.	5/17/2019 7:15 AM
163	I live just off the north shore bike trail. I use it to get places and to access other bike trails. When I bought the house I always envisioned that I would use it more frequently, but I haven't because the trail intersects with so many major roads and those intersections are not nice to navigate. With kids on bikes, they also do not feel safe to me. I've been to the Netherlands. They definitely know how to make safe paths for bikers. As I explore possible routes it would also be nice to have a resource in which you put in a location on a main trail and then from that location you could generate ideas for various rides (5, 10, 15, 25, 50 mile). Right now I look at maps of trails and then try to switch to google maps to plan out destinations, but google isn't made for routes that start and end in the same place.	5/17/2019 7:01 AM
164	who uses them? i never see people on them	5/17/2019 5:33 AM
165	I need to use your website more often. I usually just go to the trails with which I'm familiar, such as the Des Plaines River Trail. No particular recommendations at this time. Thank you for providing information and trails for bikers.	5/17/2019 2:30 AM
166	More on trail signage. More details on nearby areas, including availability of restrooms, water, etc.	5/17/2019 1:39 AM
167	Better signage, more frequent signage.	5/17/2019 1:16 AM
168	Posted maps with arrows to what's next in any direction	5/17/2019 12:53 AM
169	Connect northwestern lake county with other trails, particularly the Antioch/chain of lakes area is lacking trails/access to trails by bike or walking	5/17/2019 12:30 AM
170	None	5/17/2019 12:10 AM
171	More maintenance after flooding and large rainfalls. Other than that, good.	5/17/2019 12:09 AM
172	Knowing the best way to get from the west side of 45 to the east side of 45 to connect bike paths.	5/16/2019 11:58 PM
173	None	5/16/2019 11:49 PM
174	Work with villages to Identify key connections to office parks and commercial sites to ensure there are connecting side walks or bike lanes. These side roads are feeder branches to the main trails and will increase commuter activity and lessen car traffic. For instance connect the north shore trail down Bradley rd to the Mettawa trails near Bradley Ed/ Riverwoods. In this example the shoulders along Bradley are narrow and dangerous for cyclists to use to get the north shore path. Some commuters need to get to Metra stations in lake bluff, libertyville or lake forest. Same regarding Abbott park access,	5/16/2019 11:48 PM
175	An entrance on 120 near 21. We have to go either all the way up to Washington or all the way down to Casey. There is an 'entrance' but it is very very dangerous to get to.	5/16/2019 11:47 PM
176	Clear maps	5/16/2019 11:25 PM
177	,	5/16/2019 11:20 PM
178	Overall path maps located on the trails.	5/16/2019 11:06 PM
179	Need more connecting paths. good north/south paths (McClory, DPRT, Skokie) but not a lot of East/West trails	5/16/2019 11:04 PM
180	More maps & ones that include an overview of the surrounding area	5/16/2019 11:04 PM
181	Add some additional water fountains on the north end of the trail.	5/16/2019 10:57 PM
182	Signage to local services	5/16/2019 10:51 PM
183	Make the connections all paved. Some are threw neighborhoods or roads that aren't paved or clearly marked.	5/16/2019 10:32 PM
184	Crossing 43 on the 176 path is really tricky - the pedestrian crossing button is in an inconvenient spot.	5/16/2019 10:26 PM

185	Look at a map and fill in the holes. Why is it you have to drive to get to a trail (or risk your life pedaling on a two-lane, gravel-shouldered road filled with speeders and distracted drivers)?	5/16/2019 10:10 PM
186	I'd like to see more maps along the trails especially at Junctions.	5/16/2019 10:09 PM
187	Need an access path between Washington and Rt 120.	5/16/2019 10:06 PM
188	Find better ways to connect the trails.	5/16/2019 10:00 PM
189	We have a beautiful trail system! I would never let my Wife or Daughter travel the trails by themselves! We need some form of camera system lining the trails! My biggest complaint is that I like to cycle in the spring and the trails are underwater under most bridges!	5/16/2019 9:59 PM
190	More signs. They could be small and discreet like the mile markers but would be good to have directionals. Maybe restaurants could sponsor signs I,e, “exit trail here for Dairy Queen”	5/16/2019 9:49 PM
191	Signage indicating intersecting trails.	5/16/2019 9:40 PM
192	Would love mile markers	5/16/2019 9:35 PM
193	It would be a real plus to be capable of obtaining ample intersecting trail information from the typical signage , etc.	5/16/2019 9:33 PM
194	Additional signage showing how to get from trail to trail on roads, through neighborhoods, etc.	5/16/2019 9:11 PM
195	better trail maintenance and drainage	5/16/2019 9:07 PM
196	Trail markers, parking and maps online that are smartphones friendly and printable	5/16/2019 9:04 PM
197	Increased connections of trail segments. For example, connect Washington from Grayslake to the Des Plaines river trail.	5/16/2019 8:46 PM
198	No	5/16/2019 8:36 PM
199	More paved trails that restrict horse usage.	5/16/2019 8:28 PM
200	Bring back bg bike path on lake cook.. it’s been closed for two years !!	5/16/2019 8:25 PM
201	Clear direction to points of interest.	5/16/2019 8:16 PM
202	None	5/16/2019 8:05 PM
203	More mile markers. An app on my smartphone with navigation on the trails.	5/16/2019 8:04 PM
204	Maybe some emergency call boxes to enhance security would help ease safety concerns.	5/16/2019 7:59 PM
205	For paths that are close together but require to cross a street, it would be nice to have a walk signal at the lights, or any lights near by that would allow pedestrians or bicyclists to easily cross traffic to get to them. i.e., Hwy 45 and Dada Dr in Gurnee.	5/16/2019 7:52 PM
206	I get on the Trail at Wadsworth Rd. Plenty of bathrooms along the trail as well as food places. There are very few options for me to connect with another trail from here unless I want to travel by car which I prefer not to do. Nothing to do at Russel Rd. and Belvidere, and you are taking your chances going West on Grand. Plenty to do in Libertyville but I don't always have the time to go there. Very pleased with the trail, you are doing a great job, just wish someone could clean up the Des Plaines River.	5/16/2019 7:46 PM
207	It would be helpful if there was a map (printed or online) that showed all the bike maps in Lake County (all the maps including county, forest preserve, state, and village).	5/16/2019 7:43 PM
208	Just keep doing what your doing.	5/16/2019 7:21 PM
209	They are always flooded.	5/16/2019 7:16 PM
210	more signs . more place to get maps or updated maps. better trail markers , with distance	5/16/2019 7:13 PM
211	Personally think they are very user friendly	5/16/2019 7:12 PM
212	Have more signs along the paths.	5/16/2019 7:07 PM

213	My primary way of finding out about existing or new trails is via the lake county website. it has always been really, really hard to use via mobile phone, so I find myself stopping to check the map, check Google maps to find where I am, going back to the lake county map... it's a mess. Make the route planning and mobile way finding experience easier! In areas like Lakewood where it's one self-contained trail system, it's easy to get around. BUT, I want to ride further, and use the Lakewood trails to get somewhere else. That's where the guessing game begins. It's hard to navigate between trail complexes. I want to be able to identify good 10 mile, 15 mile, 20 mile routes near me that can take me through new areas I haven't figured out by myself. Most of us have a distance we like to go -- and will ride these routes repeatedly for daily / weekly exercise. Look at "routes" as much as trails and share some "good X mile workouts" - organizing them by distance, themes (woodland routes, speedy, hilly, etc)	5/16/2019 7:05 PM
214	More information on signs	5/16/2019 6:49 PM
215	More location markets and destination signs	5/16/2019 6:48 PM
216	Better signage with occasional signs with an overview of the entire trails.	5/16/2019 6:33 PM
217	More tunnels under roadways Why don’t they add a bike path every time they do road improvements	5/16/2019 6:31 PM
218	Vistas or lookouts are a nice feature.	5/16/2019 6:30 PM
219	Figure out how to inform bikers of amenities restaurants near by	5/16/2019 6:21 PM
220	More publicity. I did not know there was a website until I took this survey. Printable maps. Signage about nearby destinations and rest areas, like the ones on interstate hwys.	5/16/2019 6:13 PM
221	Consistent signs, better trail markers, more signs showing proximity to other trails and distance	5/16/2019 6:12 PM
222	Clarify entries and information along the way. Build more pathways in the Long Grove area.	5/16/2019 6:12 PM
223	Signage on trails about the local area - restaurants? libraries? local tourist spot? - within a mile or so of the trail.	5/16/2019 5:58 PM
224	Would be nice to have a bike pump on the trails Water at some points is nonexistent or tastes horrible	5/16/2019 5:57 PM
225	Signage and lights	5/16/2019 5:55 PM
226	Please consider making Grassy Lake a bike path.Because of it’s proximity to my home, I would use it about three times a week.	5/16/2019 5:53 PM
227	Add more bike lanes to existing roads	5/16/2019 5:49 PM
228	An App just for the lake county trails would be good.	5/16/2019 5:48 PM
229	Mark distances on downloadable maps. Make any signage tasteful and dignified additions to a nature preserve. Name streets that we're passing. From paths, it might be nice to have directionals to the nearest cities, lakes, amenities, or connecting paths.	5/16/2019 5:46 PM
230	Don't follow the example of the dumb - meaningless LCDOT route signs, the purpose of which no one knows	5/16/2019 5:42 PM
231	I just wasn't aware of bikelakecounty.gov. I would like improved large maps on the trails.	5/16/2019 5:40 PM
232	Turn off all the lights at night. I can see the stars better	5/16/2019 5:38 PM
233	No suggestions at all.	5/16/2019 5:36 PM
234	more drinking water available	5/16/2019 5:35 PM
235	N/A	5/16/2019 5:29 PM
236	New road construction should include a bike lane.	5/16/2019 5:28 PM
237	Not clear on the origin point of certain trails - at intersections would be good to have a recap of something like "Red Trail - mile 2 of 4" and "Yellow Trail - mile 3 of 6"	5/16/2019 5:24 PM
238	Connect countryside mnore subdivision to,the bike path so we don’t have to ride on major roads to get to one. And. Hold the bike path on route 137	5/16/2019 5:22 PM
239	More detailed information online that is readable. Difficult to read the maps on line ...hard to see.	5/16/2019 5:18 PM
240	Signage for town you are in, significant locations you might be near	5/16/2019 5:15 PM

241	Please add trails/bike lanes near schools (Lakes High School/ Oakland Elementary) down Grass Lake rd and Deep Lake Rd That would also connect to current trails (Sun Lake, McDonald woods, Hastings Lake)	5/16/2019 5:13 PM
242	needs to be web based if possible. linked to GPS with water , restrooms and first aide locations. Emergency phones need to be strategically placed	5/16/2019 5:07 PM
243	Distance and waypoint signage	5/16/2019 5:05 PM
244	More physical maps of the immediate area with points of interest like parks.	5/16/2019 5:05 PM
245	I don't you use a bike I walk the bike trails I find that it is easier to get around One day I will try using a bike to get around	5/16/2019 5:03 PM
246	User fees, I hate taxes going to bike paths that 99% of people in this country don t use of need. I walk in forest preserves and think used fees are need there too for the same reason.	5/16/2019 5:03 PM
247	Nothing	5/16/2019 5:03 PM
248	I would love for more bridges or underpasses to avoid crossing busy intersections.	5/16/2019 5:02 PM
249	Make the forest preserve trail signs bigger and add map signs at intersections. Overall those little signs are confusing and hard to read. The maps aren't well placed.	5/16/2019 4:57 PM
250	It would be nice to have one location with all of the bike trail information listed. There is a lack of connectivity with the current trails.	5/16/2019 4:56 PM
251	More signage at the trail splits	5/16/2019 4:56 PM
252	I would love to see some municipal outreach on this. It is possible that biking could be a way for our communities to be connected. I would LOVE to see the defunct 53 ROW turned into a massively innovative functioning human-powered transportation artery through our county. Let's think big, conserve our natural areas and build something that can bond us all and connect our communities!	5/16/2019 4:55 PM
253	I would like to become more aware of new trails and connections. Where would I find this information? An app? Lake County Forest Preserve Website? I still don't know all of the Millennium trail- where would I find that information? Does our trails connect with other counties and how do I find their trail system?	5/16/2019 4:55 PM
254	Integrated signage and online info among villages, county and forest preserve to help people find connections, see distances between locations, etc	5/16/2019 4:55 PM
255	Improved signage	5/16/2019 4:55 PM
256	Wish there were more paved routes due to road bike usage. Too much traffic to compete with on roads	5/16/2019 4:51 PM
257	More over and under passes. Very dangerous when crossing streets and highways. Ie route 22	5/16/2019 4:50 PM
258	Easy guide signing to nearby businesses.	5/16/2019 4:48 PM
259	I rarely use the paths but my son and friends have used them to go to work. Parking and signs are important.	5/16/2019 4:46 PM
260	It would be great to have more information available with a phone app	5/16/2019 4:45 PM
261	Add a bike path so that high school students will have the option to bike to school from home and vice versa	5/16/2019 4:45 PM
262	None. The trails are fine. Stop wasting money on signage and other nonsense. Everyone uses cell phone technology, web or a map.	5/16/2019 4:44 PM
263	None	5/16/2019 4:42 PM
264	Mile markers to/from	5/16/2019 4:42 PM
265	More signage, better connectivity.	5/16/2019 4:42 PM
266	water fountains	5/16/2019 4:41 PM
267	More “you are here” signage. Otherwise, just fine.	5/16/2019 4:41 PM
268	The section of trail by prarie crossing is in really bad shape. This needs to be fixed. Do something about the many street crossings in Libertyville. They are dangerous. Finish the millennium trail.	5/16/2019 4:40 PM

269	I very rarely see any signage on Lake County bike trails. I am very dependent on my GPS to navigate the system. Coming from Northern Virginia, this was a huge change for me. I would encourage Lake County to investigate how Arlington, Alexandria and Fairfax County all label their trails and trail heads. It is a very easy system to navigate without GPS.	5/16/2019 4:40 PM
270	NONE	5/16/2019 4:39 PM
271	Make the signs a neon color or another one that stands out better...and more of them would be great!	5/16/2019 4:39 PM
272	Unrelated, but more water fountains.	5/16/2019 4:38 PM
273	DPRT signs are small and sometimes hard to read. increase the size of signs at trail intersections or decision points	5/16/2019 4:38 PM
274	Sending out information through villages in Lake County's newsletters	5/16/2019 4:38 PM
275	allow bikes on the trails in Flint Creek	5/16/2019 4:38 PM
276	.	5/16/2019 4:38 PM
277	I'd rather see more bike lanes or wider shoulders on the existing roads as most of the cycling I do is on roads rather than trails.	5/16/2019 4:37 PM
278	This survey seems aimed at those who use forest preserve or other trails. I used those on along Riverwoods Rd & Deerfield Rds as they are closest to my home.	5/16/2019 4:37 PM
279	Usually no problems at all. Sometimes we have trouble locating some new places from navigation/street directions. So it’s not inside the forest preserve that is the challenge to us, but the signs and/or navigation getting to the parking lot. Once we’re there we’re fine.	5/16/2019 4:36 PM
280	.	5/16/2019 4:28 PM
281	Make sure it’s clean and has plenty of bathrooms	5/16/2019 4:21 PM
282	Please connect the trail that dead ends in round lake beach. It needs to cross 134 and connect to the other trails	5/16/2019 4:17 PM
283	Paved paths at rolling savana; bike bridges over river so trails are less likely to close when moderate flooding occurs.	5/16/2019 4:14 PM
284	Perhaps signage at crossroads about distance to an entrance or bathroom (we frequent Rollins Savannah but to newcomers it is difficult)	5/16/2019 4:13 PM
285	Make maps better. Create an app people can use. Monthly route/path highlight campaign to help familiarize more people.	5/16/2019 3:57 PM
286	I don't have any suggestions, it's fine for me. Why do you assume that people don't know where they are?	5/16/2019 3:52 PM
287	More signs would be helpful.	5/16/2019 3:51 PM
288	None	5/16/2019 3:48 PM
289	Gurnee has good trails. But we can’t get to the Millennium Trail from the Gurnee Trails. Need a connection across 45 in Gurnee.	5/16/2019 3:44 PM
290	Added restrooms	5/16/2019 3:41 PM
291	Sign that indicate miles left on the trial until the next street or Avenue.	5/16/2019 1:15 PM
292	Connect Chain O Lakes Bike Path to other county trails.	5/16/2019 12:31 PM
293	More trails in fox lake to other direction not just one way. Need one north and south..	5/16/2019 9:11 AM
294	I'd like a map easy to read with trails on it	5/16/2019 9:05 AM
295	Mile markers, signs on the path indicating what road the path is crossing (really helps with figuring out where you are!)	5/15/2019 2:01 PM
296	1) Signage to what is nearby on access points (gas station, food, restrooms, etc.) 2) Alert signs before an intersection that give you helpful info on which way to go. 3) Signage that gives mileage to different destinations or intersecting trails.	5/15/2019 11:43 AM

297	Signage: show destination and distance, not just "bike path" Surface: maintain Safety: consider improvements at grade level crossings of major roads and anywhere a driveway crosses bikepath. Access: access to NS Bikepath from Rockland Ave is poor. Gravel dangerous. Trimming: Brush frequently overhangs path, esp Green Bay Trail N of Rt 176. A swipe across an eye could cause injury and serious liability. Trimming once or twice per season would be an easy win! Thanks, Steve Ulrey Stephen.ulrey@sbcglobal.net	5/15/2019 11:25 AM
298	Better connection between trails and connections between neighborhoods and the trail — I'd like to ride my bike to the trail but there's no easy/ safe path to do so	5/14/2019 11:11 PM
299	Distances.	5/14/2019 10:47 PM
300	More signage with a you are here marker	5/14/2019 7:01 PM
301	More signage with a you are here marker	5/14/2019 7:01 PM
302	None	5/14/2019 6:54 PM
303	Connecting trails would be fantastic with better signage and not having to deal with crossing alot of streets to continue onto the next leg of the trail. Too much stop and go to cross streets.	5/14/2019 5:47 PM
304	Signs at smaller intervals than 1 mile, preferable 1/4 miles intervals	5/14/2019 4:30 PM
305	None	5/14/2019 2:39 PM
306	X	5/14/2019 11:19 AM
307	More signage, especially at crossroads!! E.g. no sign at the turn off on the DPR from Old School FP toward 60 at the tracks; Daniel Wright Woods is RIDICULOUSLY hard to determine where you are and to follow sparse existing signage; Rollins Savannah is like the Bermuda Triangle (no signs!); no signage when leaving Independence Grove over the river and going onto the DPR South — lots of lost people still think they're in Independence Grove (!); no visible signage at 176 and DPR — I could give LOTS more examples. NEED MORE AND BETTER SIGNAGE!!!	5/14/2019 11:02 AM
308	Need more road bike paths	5/14/2019 8:38 AM
309	More restrooms at trailheads. Winter accessible ones would be great	5/14/2019 8:08 AM
310	None	5/13/2019 9:32 PM
311	I'm okay but the general community has no clue about the trails. My gastroenterologist lives and works in Highland Park, one mile from two different trails. He had zero idea either trail was there or that they went anywhere. I had to explain he could follow on north to the Wisonsin border and, with a few connections, south to south of the city.	5/13/2019 9:17 PM
312	Connectivity is a big problem. I know where one trail is and where another is, but I don't know how to bridge the gap. Road intersections are a big problem. They are officially "accessible", but don't feel safe to cross. This makes it hard to figure out the safest way to travel.	5/13/2019 8:16 PM
313	Ground markers	5/13/2019 7:51 PM
314	Plantings more trees □, sometimes it feels like it's missing tons of □!!!	5/13/2019 7:43 PM
315	None	5/13/2019 6:59 PM
316	Ideal thinking would be to have signs similar to the ones we find in interstates - Like restaurant, neighbourhood information, connectivity to other trials, where to exit info etc.,	5/13/2019 5:27 PM
317	I think more trail maps along the route could help.	5/13/2019 5:05 PM
318	More trash cans	5/13/2019 5:00 PM
319	Bathroom signs; more trail markers, more maps posted	5/13/2019 3:43 PM
320	Use GPS thingies so I can use my Mapquest app in my smartphone to learn the way around. Generally, anyone capable of being lost in an LCFPD location isn't worth recovering and probably can't read a sign.	5/13/2019 2:50 PM
321	Remove the horse shit. Keep signs minimal and dignified. These are supposed to be nature preserves, not gaudy shopping malls. Add indicators for rights of way. Pedestrians>>cyclists>>equestrians.	5/13/2019 2:44 PM
322	Hiking & Biking in Lake County, Illinois, by American Bike Trails (Ray Hoven)	5/13/2019 1:01 PM

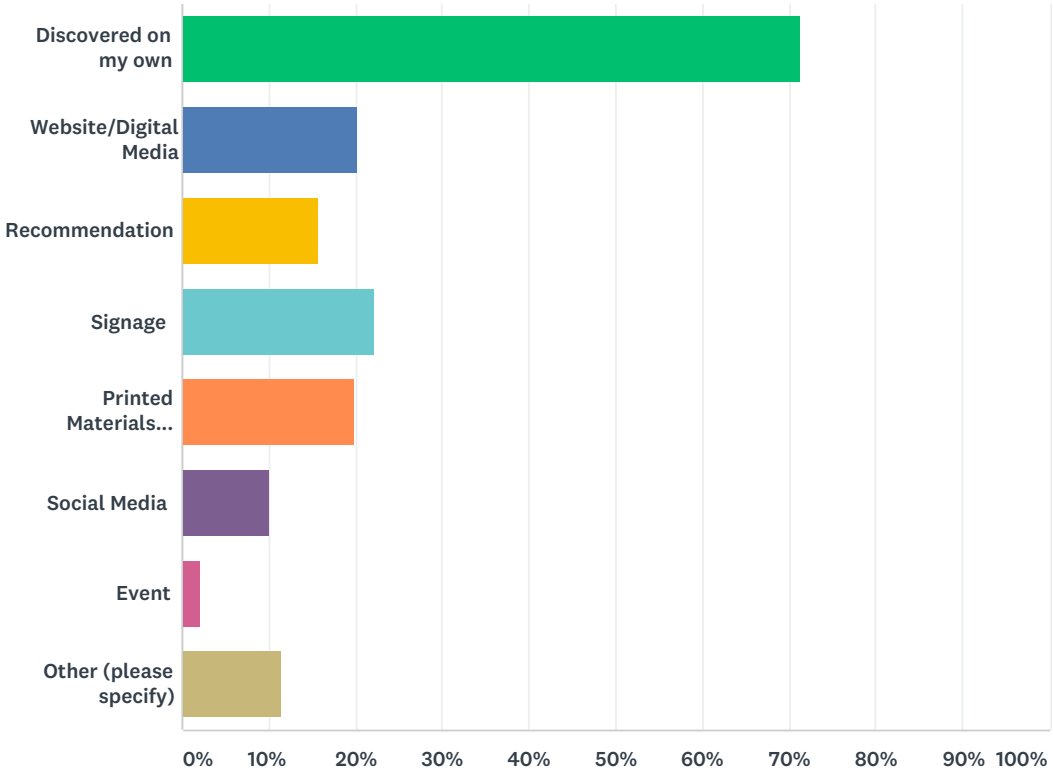
323	Signage designating location & distance to other trails or area amenities. Bike L/C app could track smart phone.	5/13/2019 12:47 PM
324	It's fine the way it is. I know the trails pretty well.	5/13/2019 12:42 PM
325	A more coordinated sign system, connecting local bike paths owned by various entities (i.e. show the broader network versus individual trails)	5/13/2019 12:18 PM
326	I recently biked the entire Des Plaines River Trail for the first time. I took multiple wrong turns along the way because signs were virtually invisible. Some were facing the wrong direction, some were surrounded by leaves, and all were too small, in camouflage colors, with text that can only be read by someone who is stopped and close to the sign. Signs should be visible to cyclists who are moving at 15 MPH, and should be placed roughly 100' before any intersection. Currently, signs are at intersections and often easy to miss.	5/13/2019 12:08 PM
327	Rest area information, distance signage.	5/13/2019 9:25 AM
328	I'm satisfied as is	5/12/2019 12:31 PM
329	Better signage on distances and destinations	5/11/2019 11:32 PM
330	improved signage so new users will discover	5/11/2019 4:01 PM
331	Keep electric bikes and skateboards off the trails also keep gasoline power be vechiles of the trails keep the mob bikers off the trails there are many	5/11/2019 10:53 AM
332	More trails.	5/11/2019 10:49 AM
333	Directions to navigate around closed underpasses during flooding	5/11/2019 9:38 AM
334	Improve the confusing forest preserve trail signs and make them easier to read - larger	5/11/2019 8:06 AM
335	Better signage and better apps/websites	5/11/2019 7:02 AM
336	Remove the stop signs! I have never seen a bike rider stop, unless they think they are about to get hit by a car.	5/11/2019 6:43 AM
337	Emergency call buttons throughout, similar to what you see on college campuses. Light up dark areas, especially under tunnels and underpasses. More designated crosswalks with signage to alert traffic to stop.	5/10/2019 9:02 PM
338	Make bike paths wide enough for adult 3 wheel bikes	5/10/2019 8:48 PM
339	Use the trails to learn... RRs are typically located near parking and trails circle out and return--easy	5/10/2019 6:27 PM
340	Larger signs (smaller ones are difficult to read while passing by on a bike); more mile-marker signs; more signs with directions to food/beverage locations.	5/10/2019 12:07 PM
341	Need distances and nearby amenities Need more toilet facilities	5/10/2019 11:09 AM
342	Improved signage	5/9/2019 10:51 PM
343	Keep up the good work!	5/9/2019 9:27 PM
344	Signs for closing of underpasses could be more current	5/9/2019 2:33 PM
345	Show destinations nearby	5/8/2019 9:09 PM
346	Trail mileage, destination and mileage off the trail at intersections and points to special sites or facilities	5/8/2019 4:35 PM
347	More signage. I use the Skokie Valley trial which has long stretches without an intersection, knowing distance and which street I am approaching would be helpful. I've also noticed a number of business along the trail - consider improving access or signage identifying commercial destinations, I like to find places I can bike to easily.	5/8/2019 12:10 PM
348	I know where I am but I get asked by others where they are at.	5/7/2019 8:51 PM
349	Color-coordinate trails and establish color markers periodically along the trail (e.g. Blue = North Shore, Red = Robert McClure....follow those color markers to your desired destination on that trail).	5/7/2019 3:36 PM
350	Distance to destination signs would be great.	5/6/2019 5:05 PM

351	When I drive my car, I like to see signs that let me know there's a trail parallel to or crossing my route. It encourages me to try that trail in place of my car. An example would be seeing the trail name sign on a trail bridge crossing the roadway.	5/6/2019 1:41 PM
352	none	5/6/2019 12:28 PM
353	A cohesive design or design element for multi-agency trails that either align or intersect so the user knows when they are on a forest preserve trail or regional trail v.s. a roadway connection or LCDOT bike path. The Millennium Trail is a good example -- forest preserve signage is consistent when you're on that section of the trail that runs through the preserves, but when you are on the Millennium Trail through downtown Mundelein the signage is lost or nonexistent and it's hard to know if you're still on the Millennium Trail through that section.	5/6/2019 12:20 PM
354	None	5/4/2019 7:01 PM
355	Keep up the good work of keeping them clean! Thanks!	5/4/2019 3:44 PM
356	None	5/4/2019 11:21 AM
357	More trails	5/4/2019 9:33 AM
358	Larger signs that show the connected trails	5/4/2019 9:23 AM
359	I have given many detailed suggestions to the consultants working on this project.	5/4/2019 9:22 AM
360	subtle and tastefully designed signage indicating: mileage posts, cultural interest, communities (food, retail). I also think having an occasional large area map with a 'you are here' would help anyone less familiar with the network. Lastly, CONSTRUCTION warning and notification!!! Too often, I find myself blocked or having to go around construction vehicles or other obstructions on the path -- with no advanced warning. It would be great if there was a sign up page where email alerts could be sent to those of us that rely on the paths.	5/4/2019 9:20 AM
361	More north/south trails that aren’t affected by river flooding.	5/4/2019 8:58 AM
362	Signs should be subtle	5/4/2019 8:01 AM
363	in lake bluff the trail crosses under railway south of 176, there is a simultaneous curve, blind corner, and intersection with a turn off. it is also downhill promoting speed. the result is a very dangerous point that could be improved with a convex mirror allowing vision around the corner.	5/4/2019 8:00 AM
364	More trails	5/4/2019 12:17 AM
365	An app that’s maps trails/paths and includes nearby services (e.g., emergency, food/water, etc)	5/3/2019 11:34 PM
366	Arrows to nearby destinations/towns. Mileage to municipalities/downtown areas. Better signs at awkward intersection crossings (Butterfield, Milwaukee, Downtown Mundelein)	5/3/2019 5:35 PM
367	Easier connections of trails both with digital maps and physical signage. It takes a lot of knowledge currently to get you from one trail to another especially when they are not managed by the same agency. For example, going from the DPR to the North Shore Path.	5/3/2019 5:07 PM
368	More interconnecting paths. More maps along the trails showing nearby trails	5/3/2019 10:15 AM
369	I'd love to have a little more physical signage on the trails and/or an easy to use app that provide a more comprehensive view of the existing trails and where I am on them at a given point. The single biggest thing that makes navigating and wayfinding hard for me as a cyclist (and runner too) is getting from trail to trail in areas where two pieces of trail are not quite connected.	5/2/2019 3:59 PM
370	Integrate Lake County trail information with that of local municipal paths on one phone app.	5/2/2019 2:59 PM
371	as at some locations, comprehensive signage for connecting trails and their routes and distances	5/1/2019 10:32 PM
372	Just getting a system of signs will be a great help!	5/1/2019 7:32 PM
373	Perhaps a QR code to automate "you are here" on my smartphone	5/1/2019 7:21 PM
374	Find a way to connect the Village of Long Grove north along 83 and east/west along 22. Most importantly none of the village residents can walk or bike to the downtown, which is one of the best destinations in the state.	5/1/2019 7:00 PM
375	Improve signage and update 2015 trail map	5/1/2019 6:55 PM
376	Much better signage. I don’t ride on trails I don’t know well because I worry I will get lost. I would love to have signs with information about local attractions	5/1/2019 6:54 PM

377	Better maintenance of Prairie Crossing section	5/1/2019 6:50 PM
378	Pretty self sufficient.	5/1/2019 6:47 PM
379	Connecting to other trails, nearby things to see and do, bike repair stops, food, etc	5/1/2019 6:44 PM
380	Perhaps adding map stations near more trail / road intersections where cyclists are likely to hop on. Maps by parking lots and trailheads are pretty good	5/1/2019 6:42 PM
381	More concise info	5/1/2019 6:40 PM
382	Connect trails. Link subdivisions to major trail systems. Show the connections.	5/1/2019 6:30 PM
383	More connections between trails. Signage will be helpful, and distances	5/1/2019 6:27 PM
384	Making the paths safely accessible by walking/bike from nearby subdivisions.	5/1/2019 6:23 PM
385	It would be nice to identify trail spurs junction points example: subdivision: major roads; parks - example NSP MERGES TO GREENBAY TRAIL	5/1/2019 6:23 PM
386	Better signage showing connecting trails and off trail connecting routes	5/1/2019 6:17 PM
387	Signs indicating distances to towns and services and clearly marked crosswalks at road crossings	5/1/2019 6:12 PM
388	Better connections.	5/1/2019 1:01 PM
389	Distance to destinations would help greatly.	5/1/2019 12:56 PM
390	More signage	5/1/2019 12:55 PM

Q1 How did you become aware of the Lake County bike paths? Select all that apply.

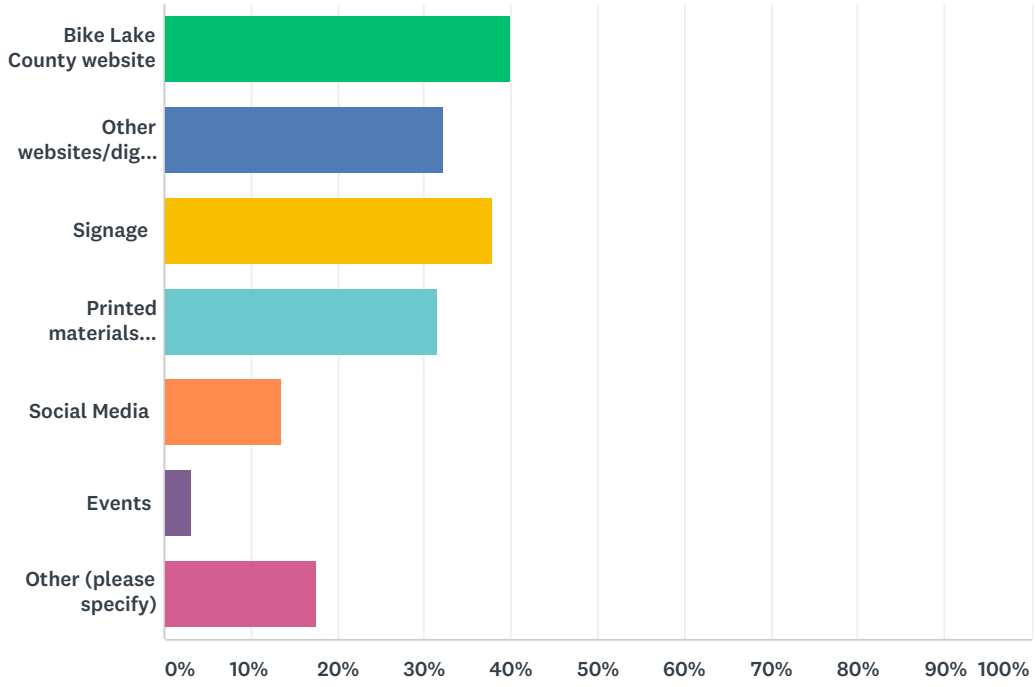
Answered: 624 Skipped: 0



ANSWER CHOICES	RESPONSES	
Discovered on my own	71.31%	445
Website/Digital Media	20.19%	126
Recommendation	15.71%	98
Signage	22.28%	139
Printed Materials (maps, newspaper articles, etc.)	19.87%	124
Social Media	10.10%	63
Event	2.08%	13
Other (please specify)	11.54%	72
Total Respondents: 624		

Q2 Where do you find information regarding the paths and trails? (Select all that apply)

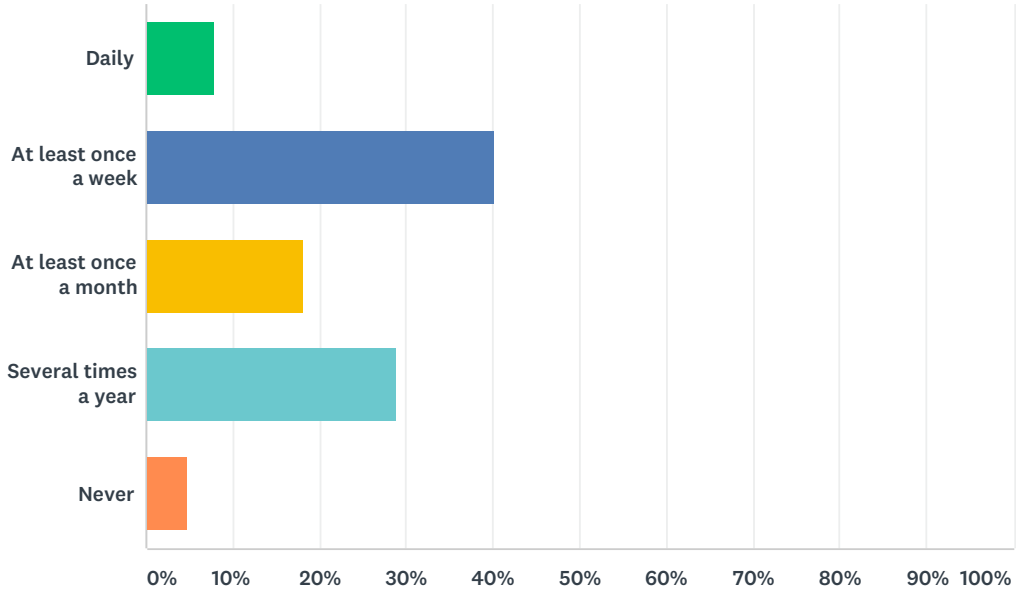
Answered: 622 Skipped: 2



ANSWER CHOICES	RESPONSES	
Bike Lake County website	39.87%	248
Other websites/digital media	32.32%	201
Signage	37.94%	236
Printed materials (maps, newspaper articles, etc.)	31.67%	197
Social Media	13.67%	85
Events	3.22%	20
Other (please specify)	17.52%	109
Total Respondents: 622		

Q3 How often do you use the Lake County bike paths and trails throughout the County?

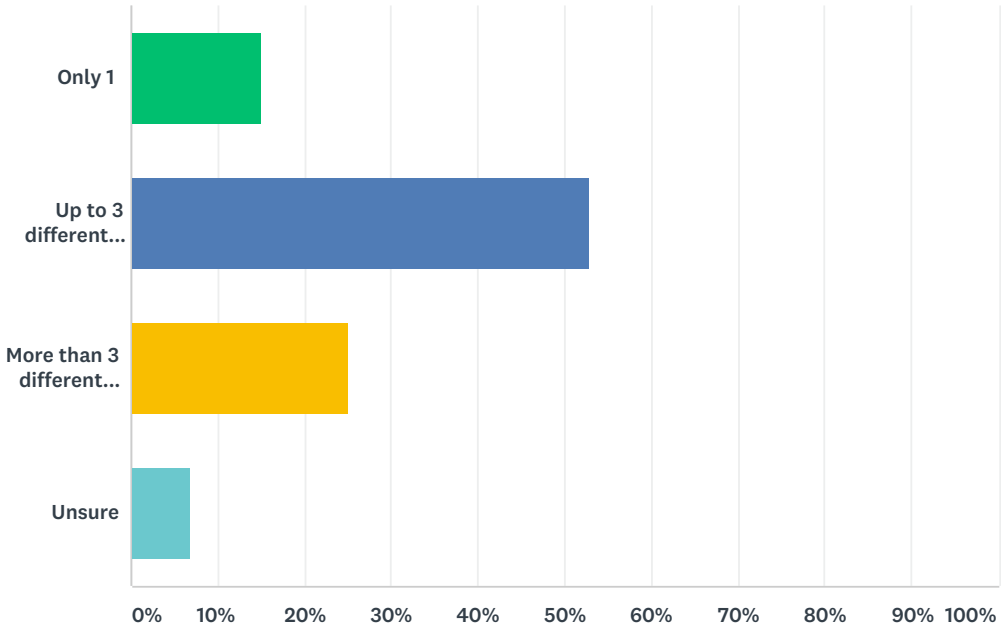
Answered: 624 Skipped: 0



ANSWER CHOICES	RESPONSES	
Daily	7.85%	49
At least once a week	40.22%	251
At least once a month	18.27%	114
Several times a year	28.85%	180
Never	4.81%	30
TOTAL		624

Q4 How many trails do you use on a regular basis?

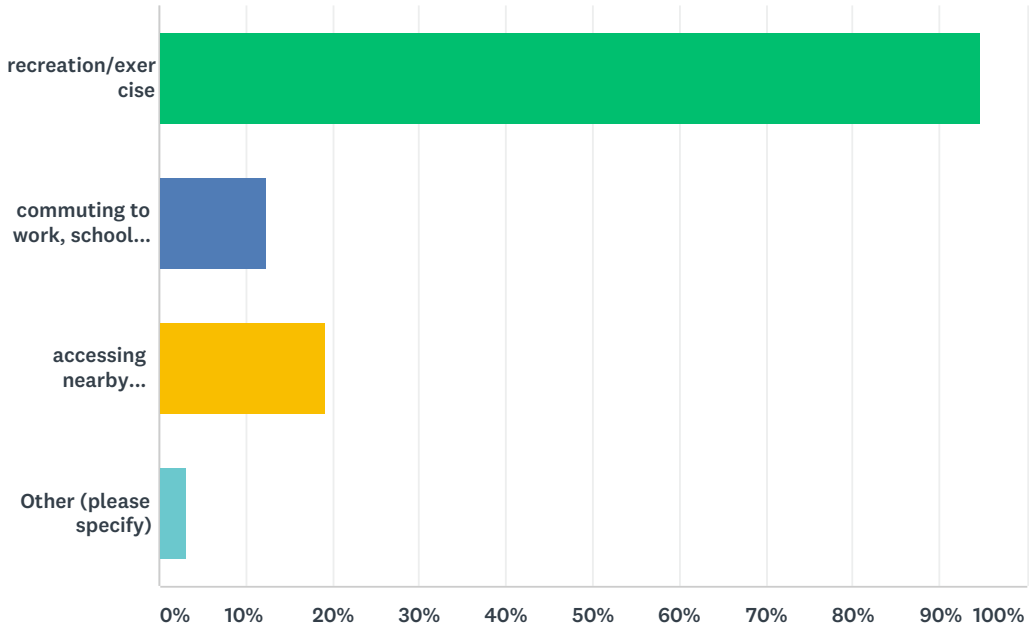
Answered: 618 Skipped: 6



ANSWER CHOICES	RESPONSES	
Only 1	15.05%	93
Up to 3 different trails	52.91%	327
More than 3 different trails	25.08%	155
Unsure	6.96%	43
TOTAL		618

Q5 Do you primarily use the Lake County bike trails for:

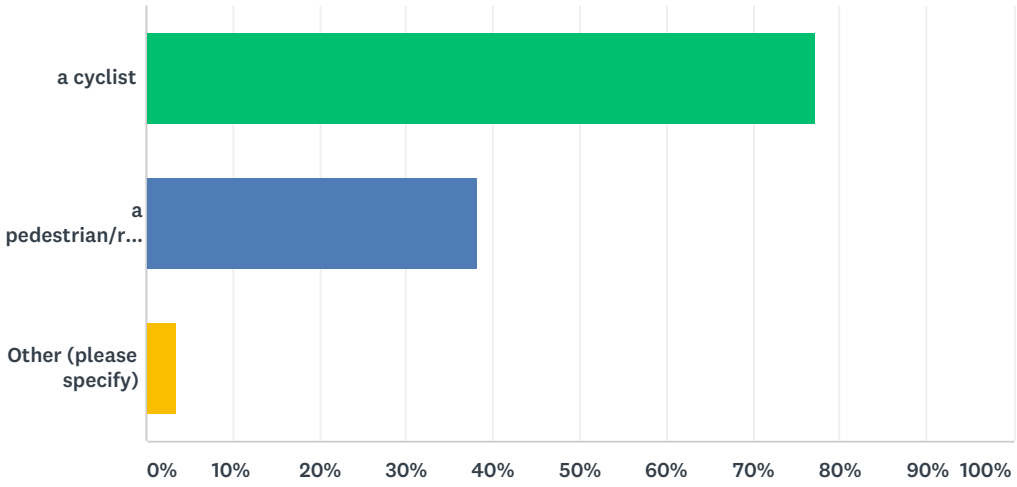
Answered: 620 Skipped: 4



ANSWER CHOICES	RESPONSES	
recreation/exercise	94.68%	587
commuting to work, school or running errands	12.42%	77
accessing nearby destinations without using a vehicle	19.19%	119
Other (please specify)	3.06%	19
Total Respondents: 620		

Q6 When using the trail, are you primarily:

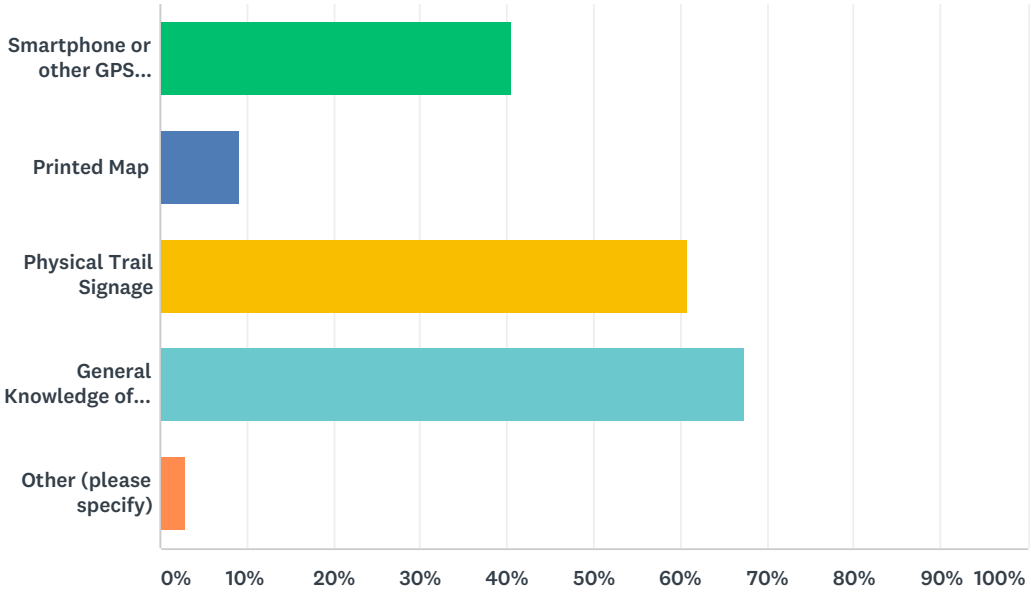
Answered: 620 Skipped: 4



ANSWER CHOICES	RESPONSES	
a cyclist	77.26%	479
a pedestrian/runner	38.39%	238
Other (please specify)	3.55%	22
Total Respondents: 620		

Q7 While you are on the Lake County trails, what tools do you rely on for navigation?

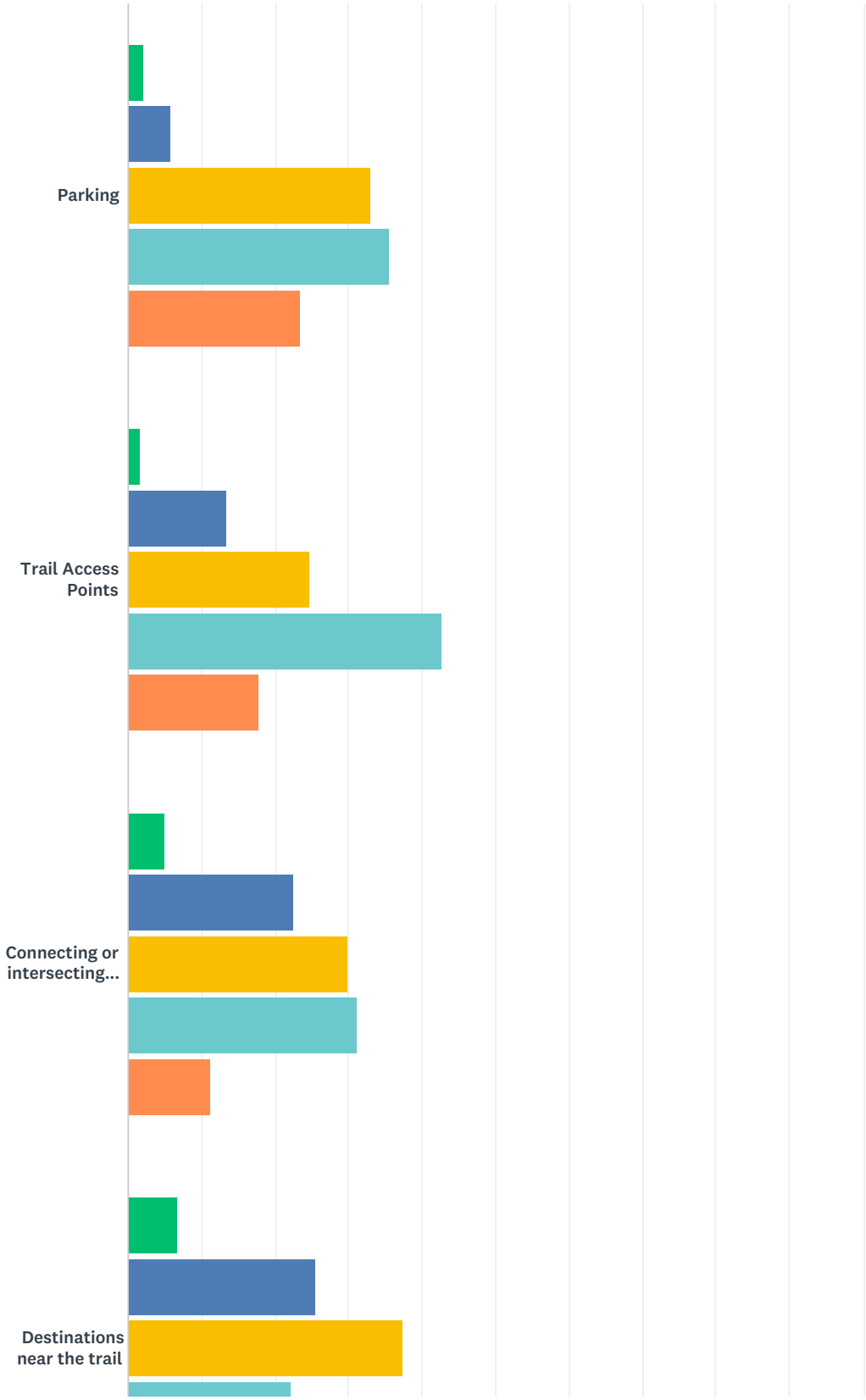
Answered: 622 Skipped: 2

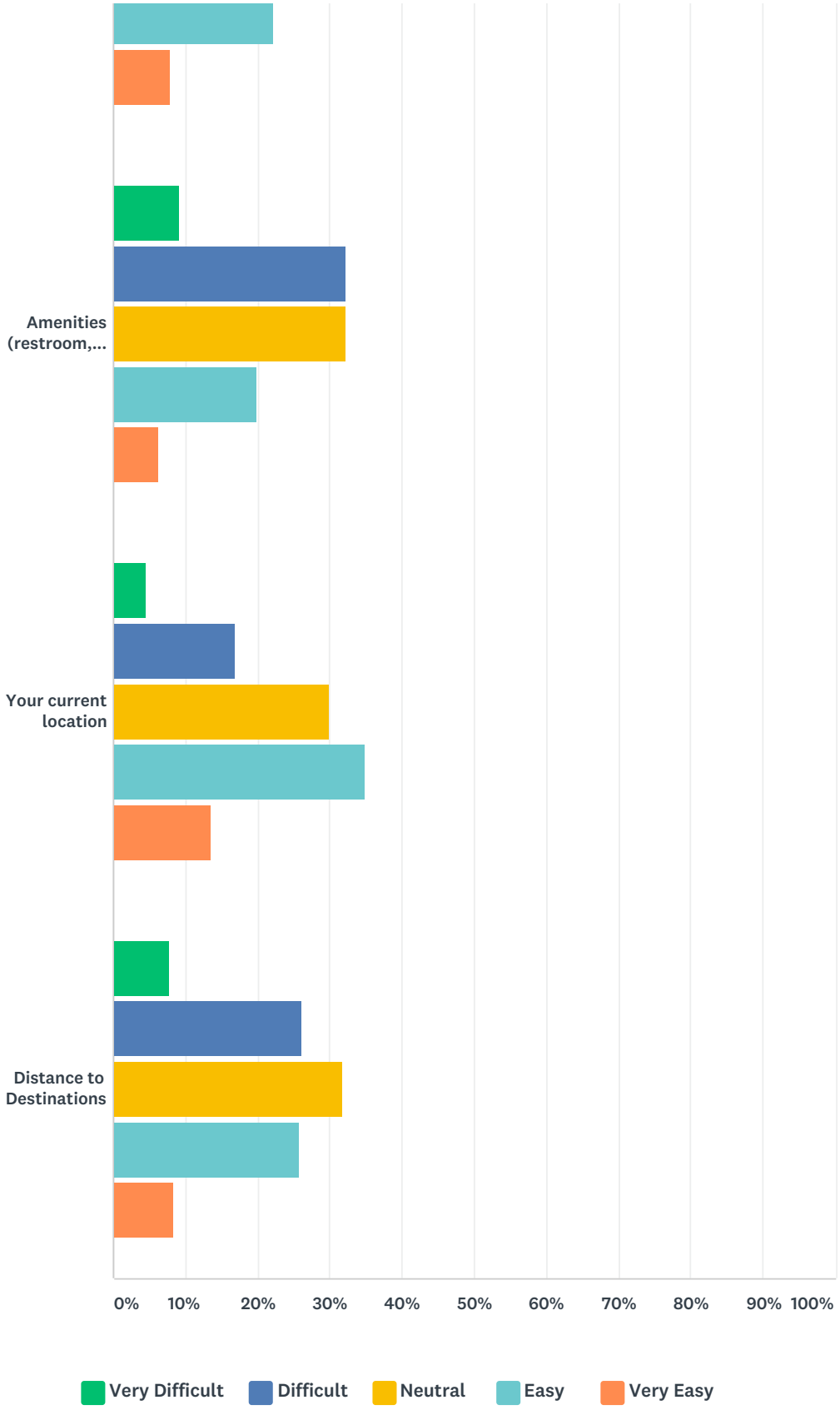


ANSWER CHOICES	RESPONSES	
Smartphone or other GPS device	40.68%	253
Printed Map	9.16%	57
Physical Trail Signage	60.93%	379
General Knowledge of Area	67.36%	419
Other (please specify)	2.89%	18
Total Respondents: 622		

Q8 On a scale of 1-5 with five (5) being the easiest, how easy is it for you to find the following:

Answered: 617 Skipped: 7





	VERY DIFFICULT	DIFFICULT	NEUTRAL	EASY	VERY EASY	TOTAL	WEIGHTED AVERAGE
Parking	2.04% 12	5.77% 34	33.11% 195	35.65% 210	23.43% 138	589	3.73

Trail Access Points	1.65% 10	13.37% 81	24.59% 149	42.57% 258	17.82% 108	606	3.62
Connecting or intersecting trails	5.06% 31	22.68% 139	29.85% 183	31.16% 191	11.26% 69	613	3.21
Destinations near the trail	6.71% 41	25.53% 156	37.48% 229	22.26% 136	8.02% 49	611	2.99
Amenities (restroom, water, emergency services, etc.)	9.25% 57	32.14% 198	32.31% 199	19.97% 123	6.33% 39	616	2.82
Your current location	4.58% 28	16.86% 103	29.95% 183	35.02% 214	13.58% 83	611	3.36
Distance to Destinations	7.82% 48	26.22% 161	31.76% 195	25.73% 158	8.47% 52	614	3.01

Q9 What suggestions would you have to improve your wayfinding experience on Lake County bike trails and paths?

Answered: 468 Skipped: 156

Q10 Personal Information (Optional)

Answered: 506 Skipped: 118

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Age	12,371	6,086,549	492
Zipcode	60,089	30,225,003	503
Total Respondents: 506			

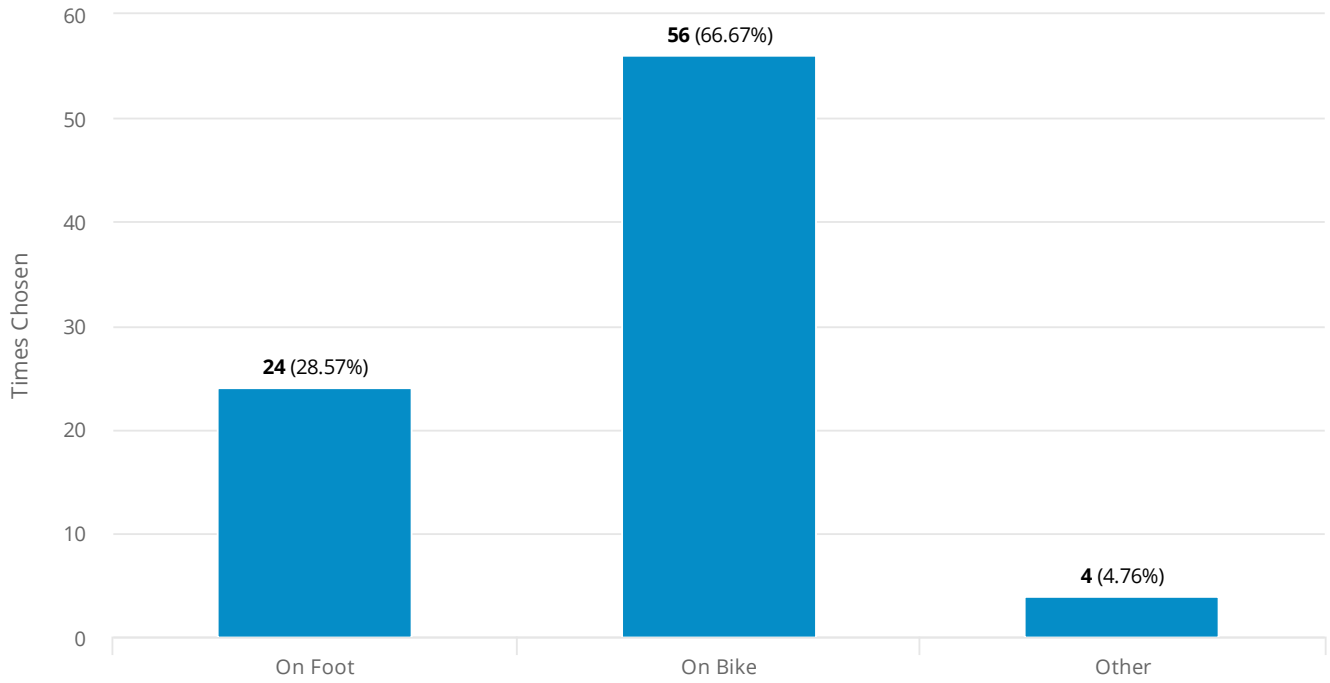
BASIC STATISTICS					
	MINIMUM	MAXIMUM	MEDIAN	MEAN	STANDARD DEVIATION
Zipcode	53,170.00	90,210.00	60,048.00	60,089.47	1,414.03
Age	18.00	6,060,060.00	55.00	12,371.03	272,928.38

SurveyHero

Explore Lake County - Wayfinding Test Route

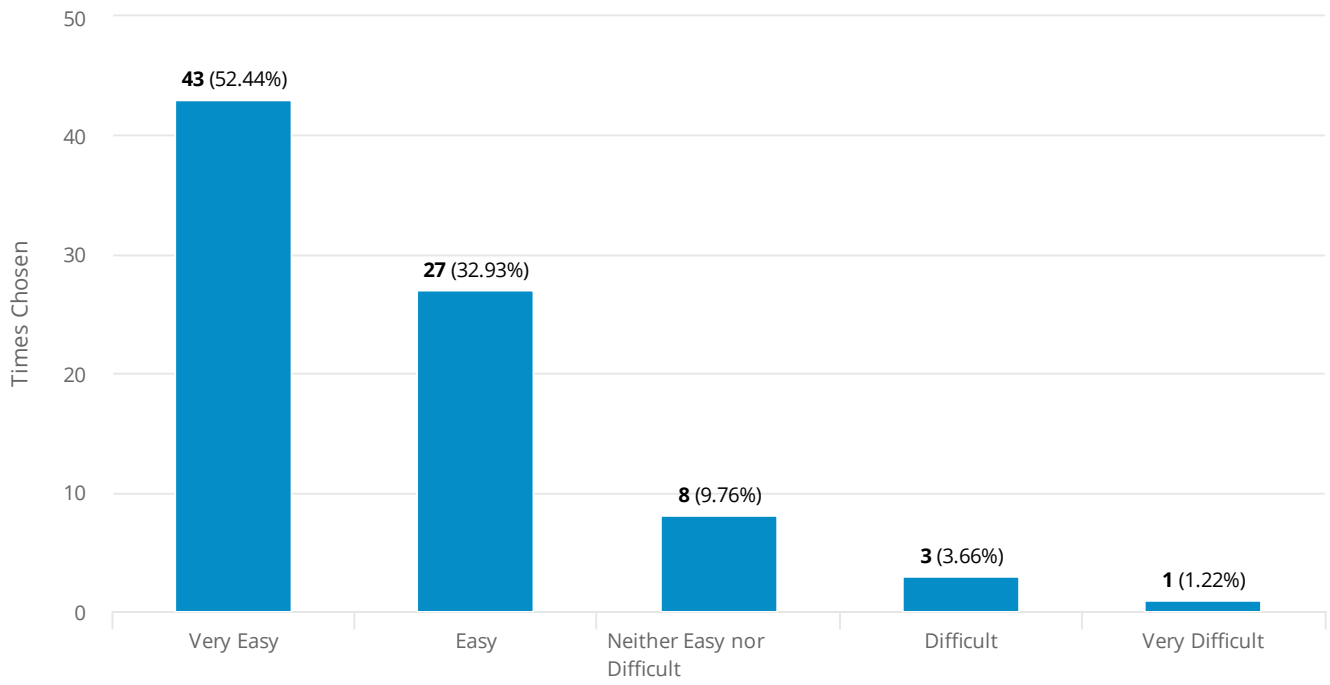
How did you experience the Test Route?

Number of responses: 84



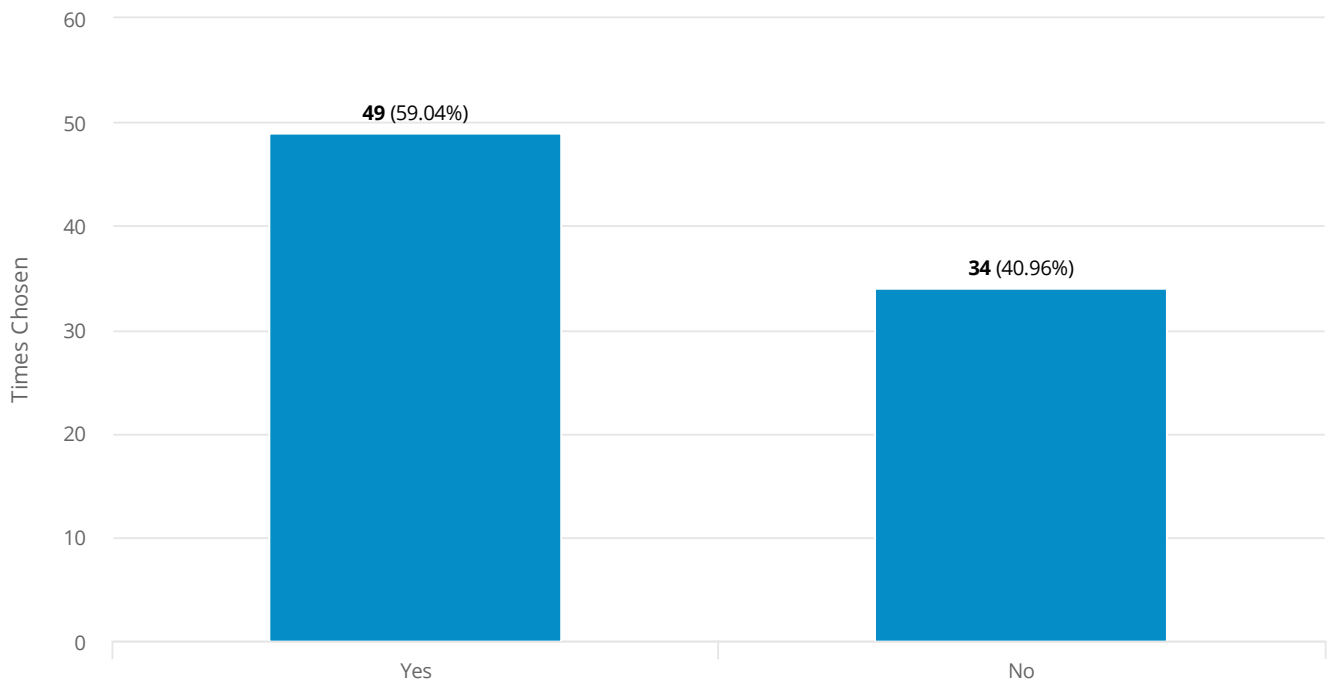
How easy was it to find the signage on the test route?

Number of responses: 82



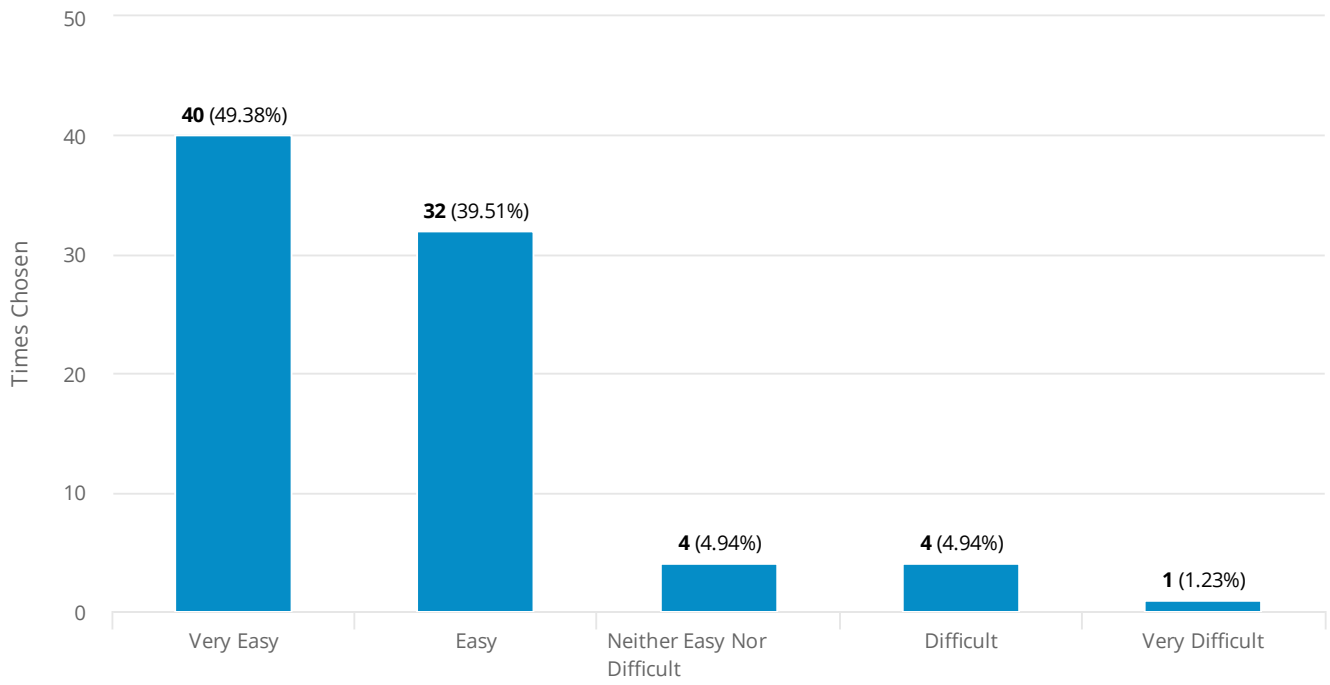
Did you understand that the county trail system has been rebranded as "Explore Lake County"?

Number of responses: 83



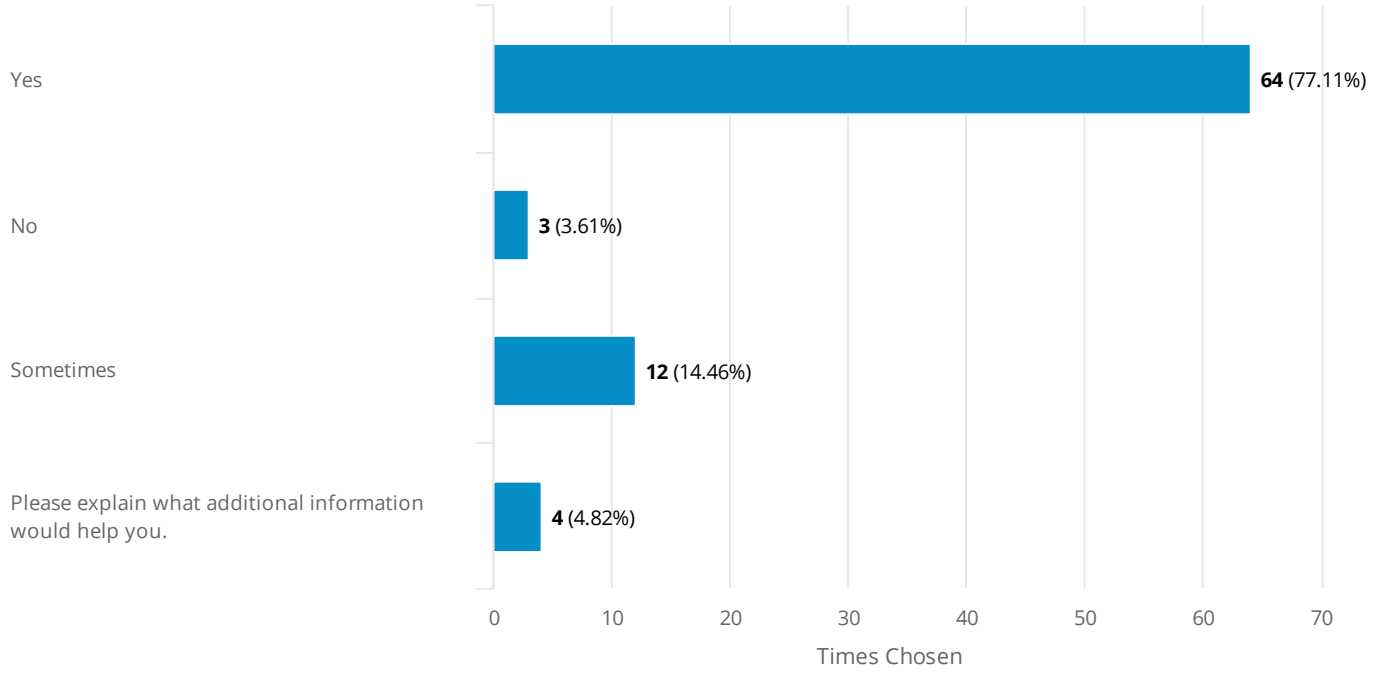
How easy was it to identify the name of the trail you were using?

Number of responses: 81



Did the signs contain the information you needed to find destinations along the test route?

Number of responses: 83



"Please explain what additional information would help you." text answers:

None. Stop wasting money. They are useless. Anyone with 1/2 brain can figure out the path.

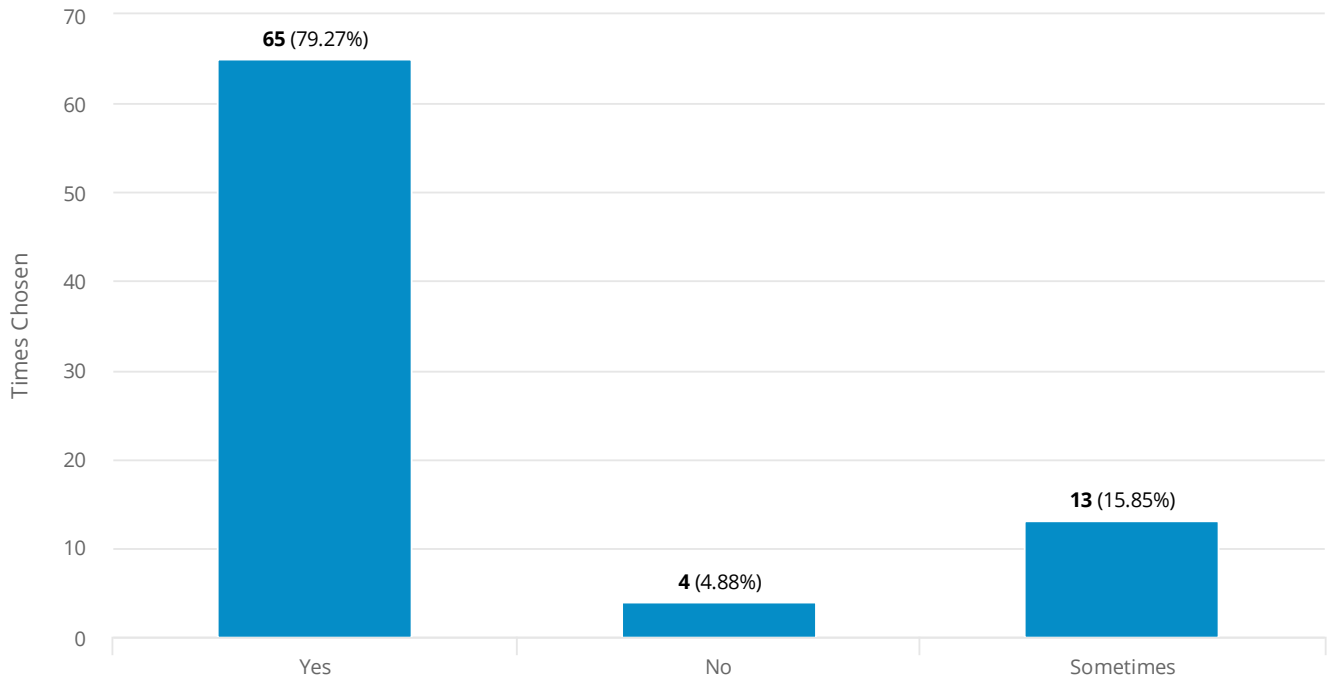
Unclear what the blue dotted line means. Would also be nice to not parks and picnic areas.

Signs were located off the trail turned to face street traffic.

Could every distance marker contain the name of the trail?

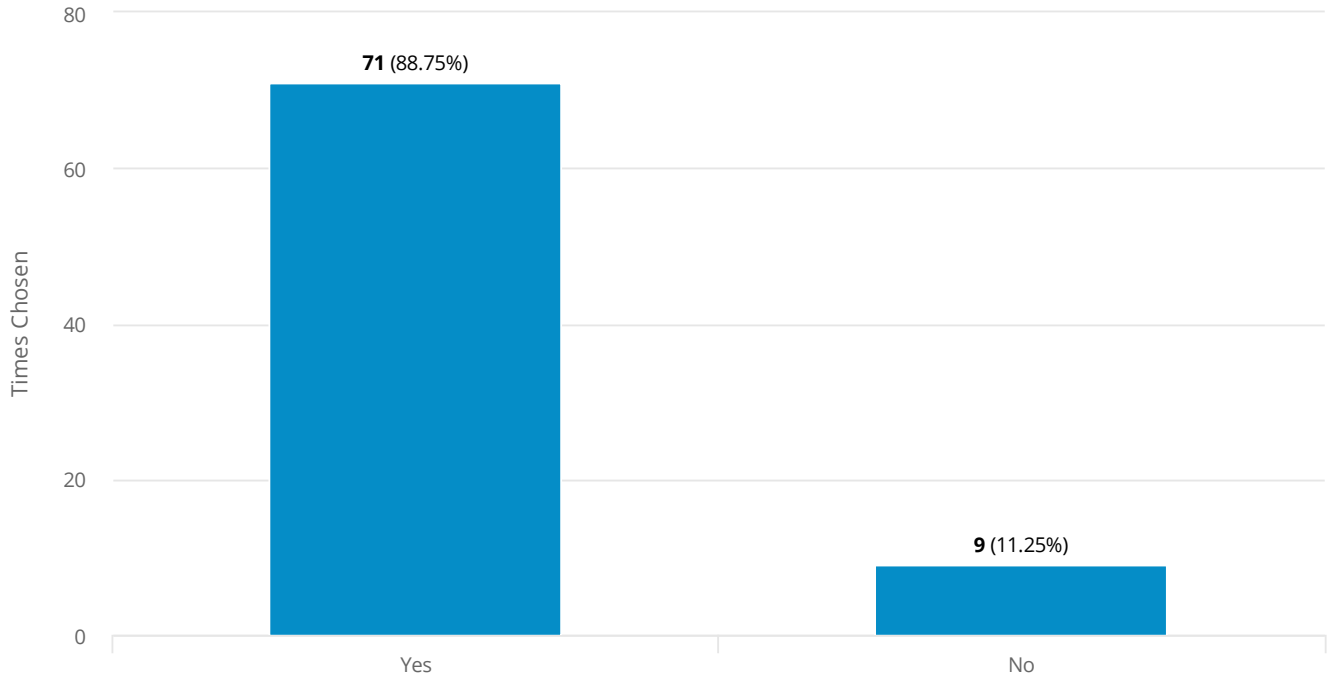
Was the distance to destinations easy to understand?

Number of responses: 82



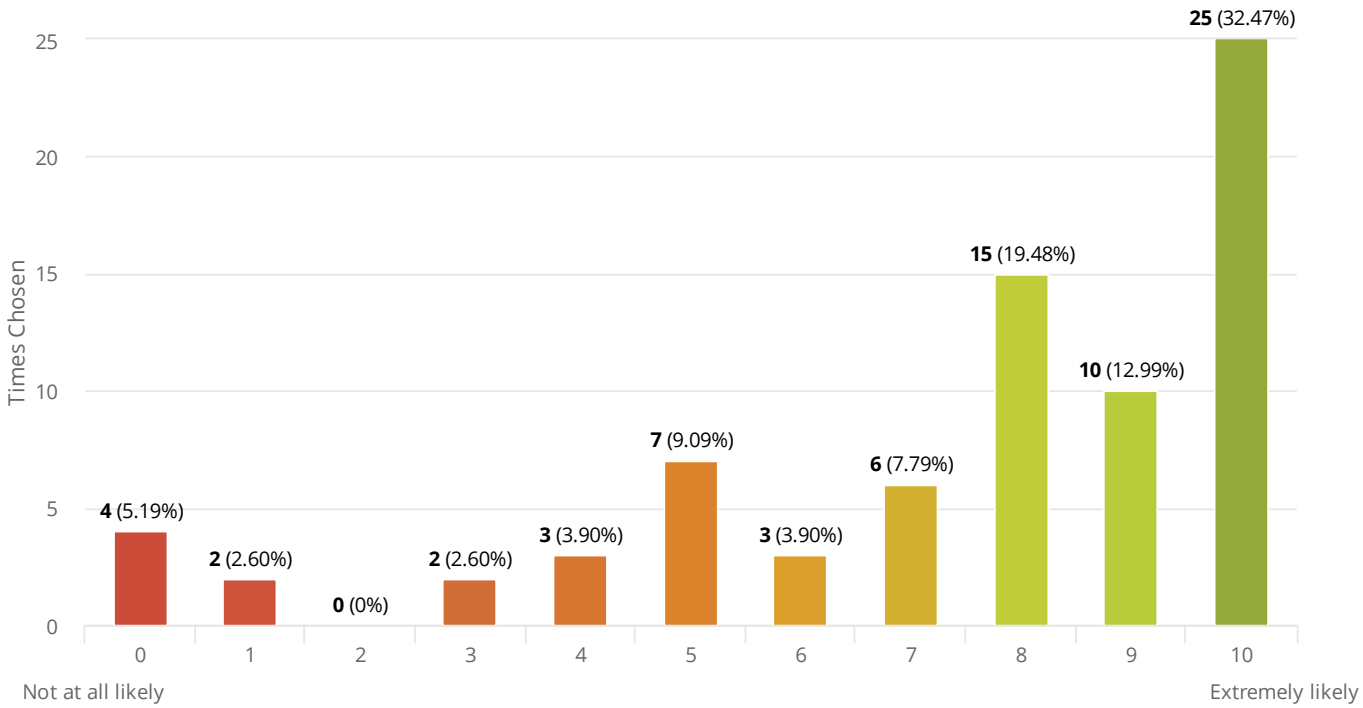
Evaluation of Trail Kiosk:

Number of responses: 80



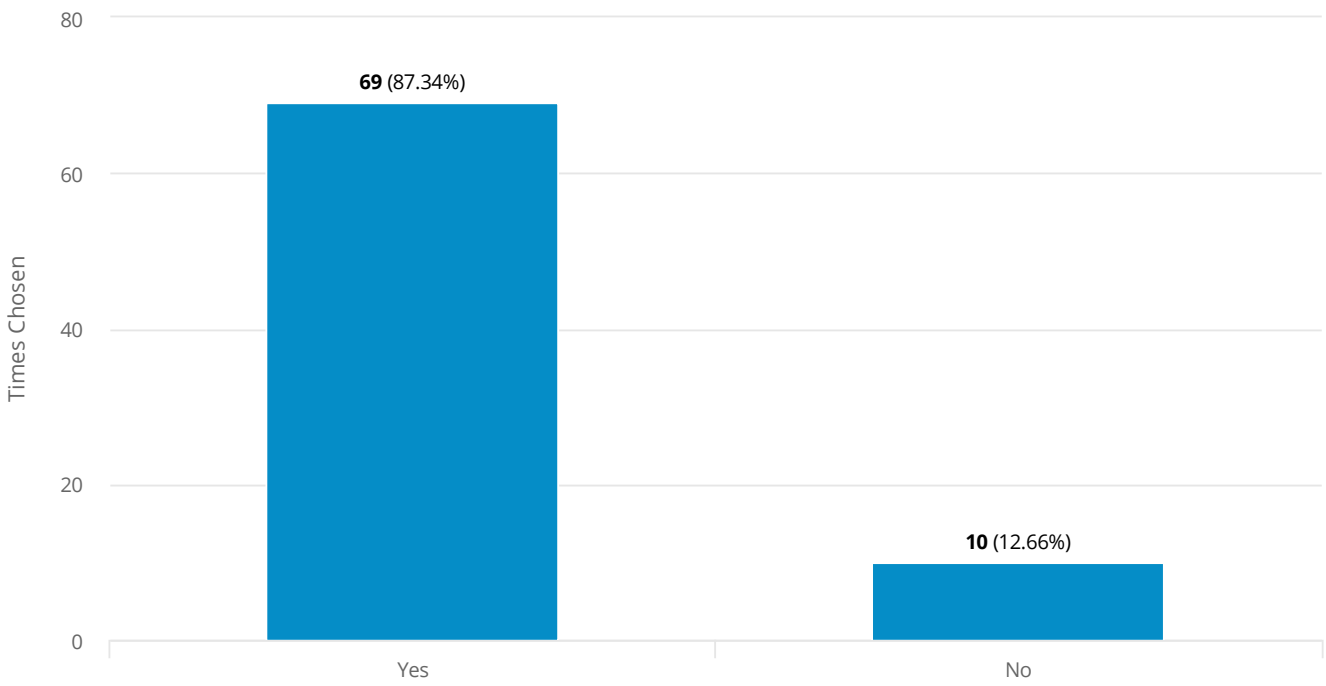
Evaluation of Trail Kiosk:

Number of responses: 77



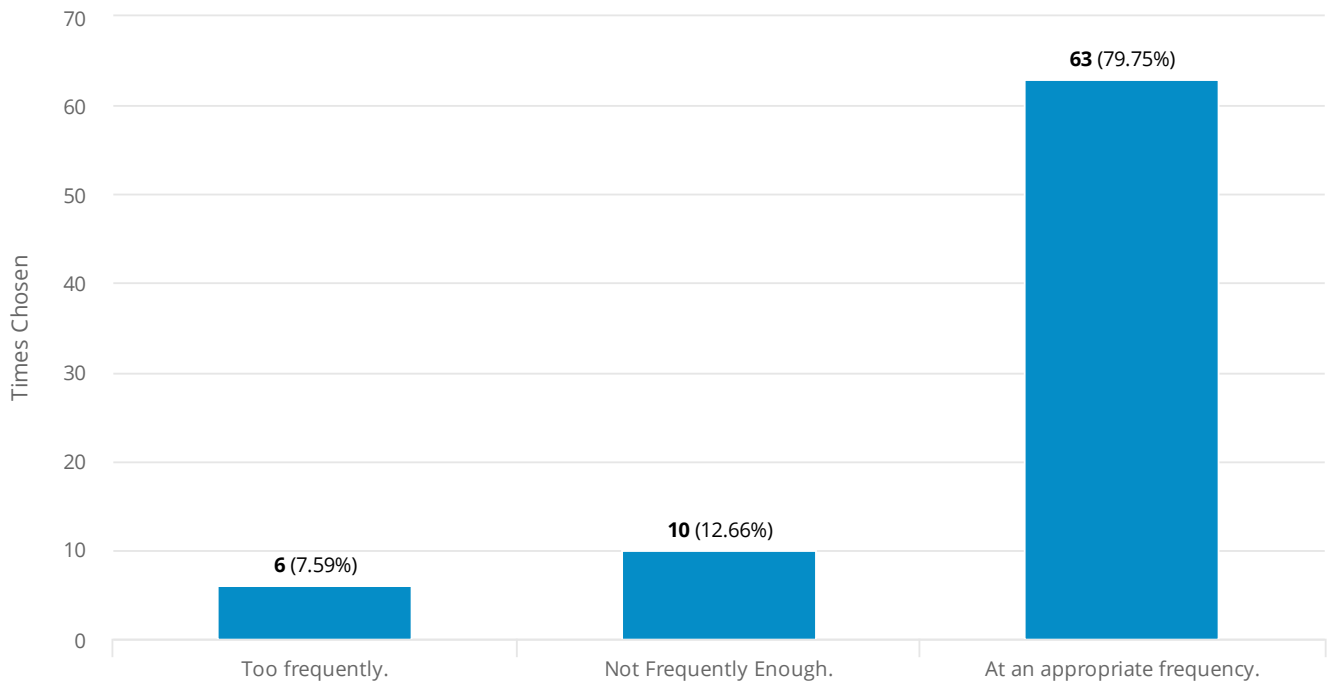
Evaluation of Regulatory Signs:

Number of responses: 79



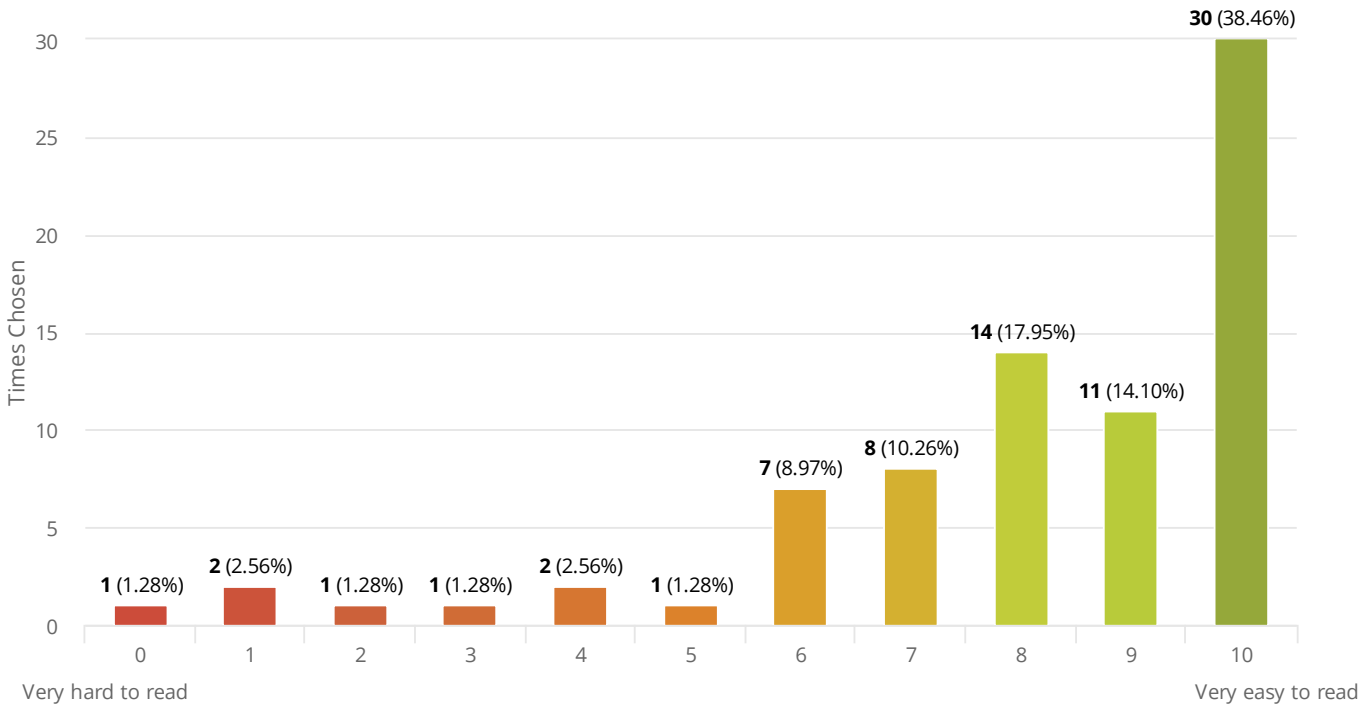
Evaluation of Mile Markers:

Number of responses: 79



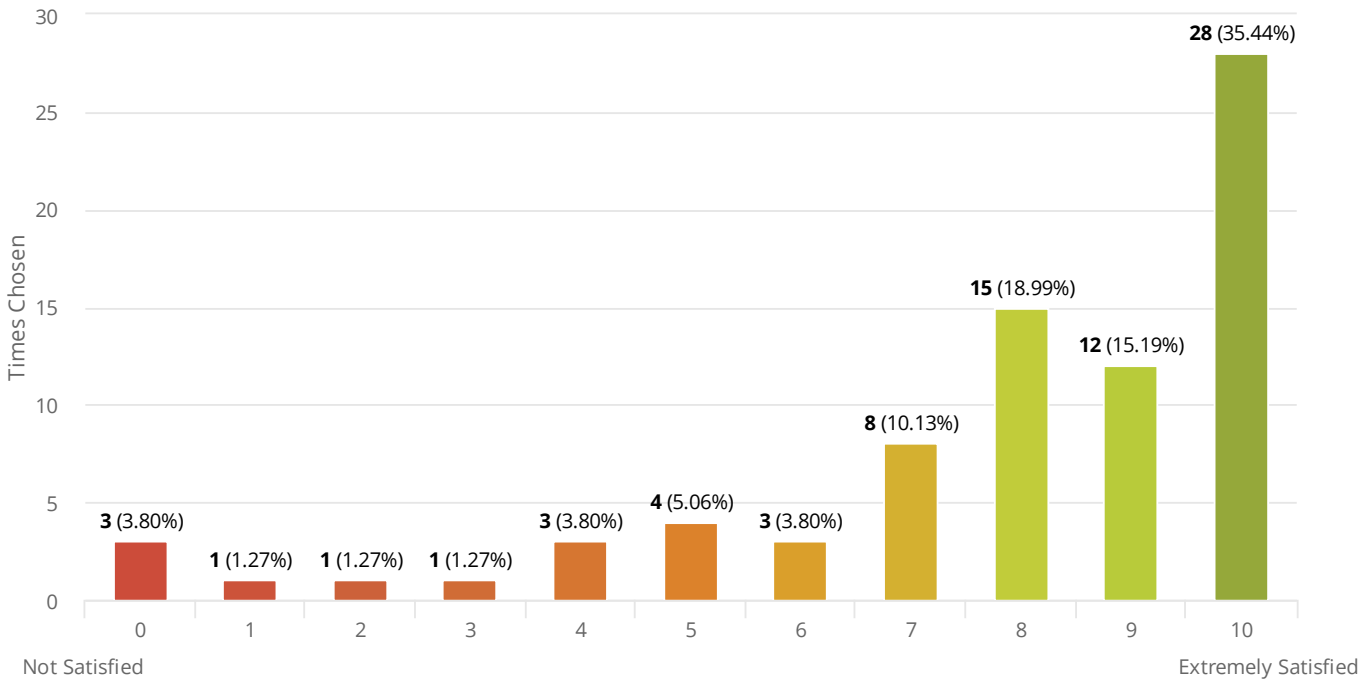
How legible was the text on the signs?

Number of responses: 78



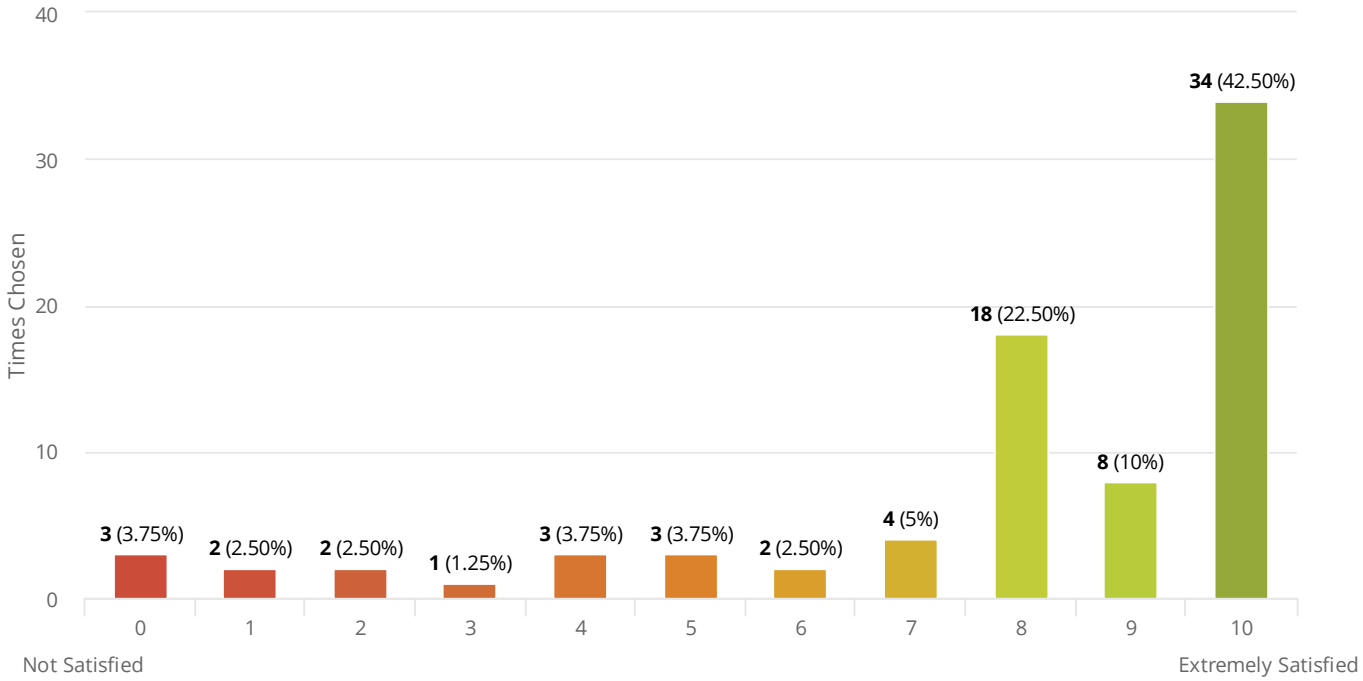
Overall, how satisfied are you with the overall design on the Test Route signage?

Number of responses: 79



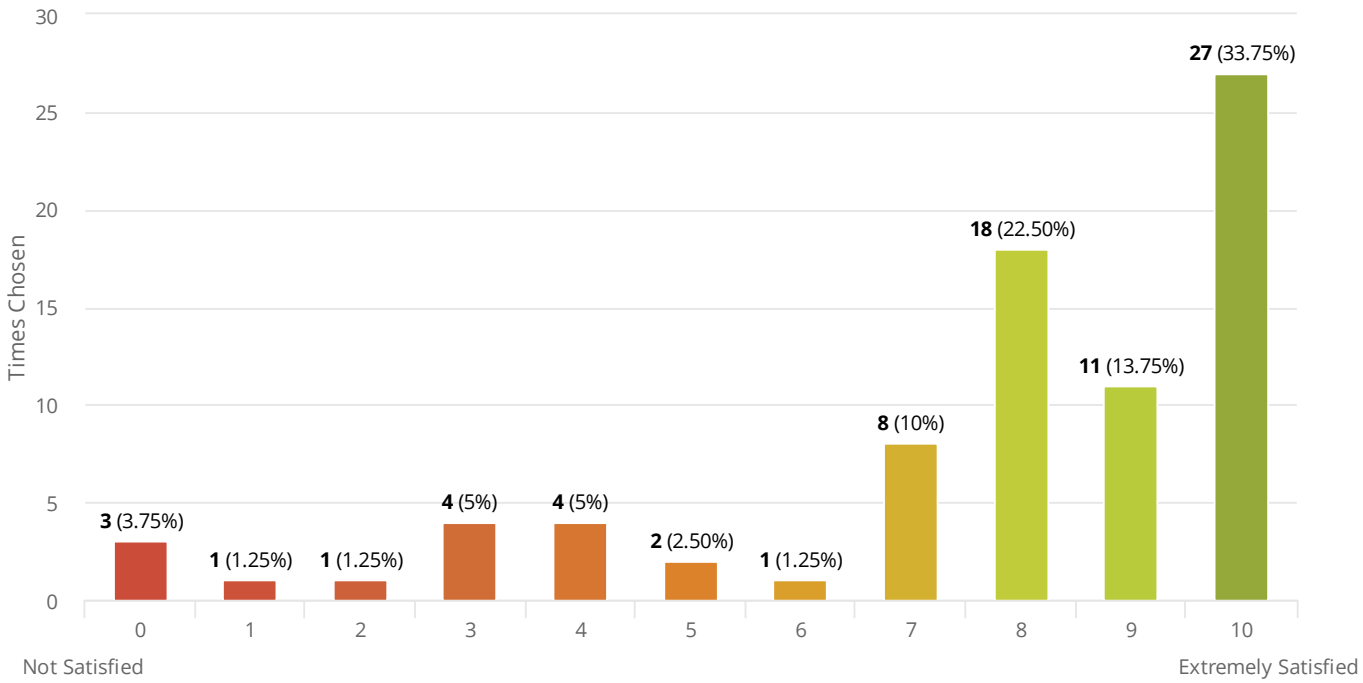
Overall, how satisfied are you with the color scheme on the Test Route signage?

Number of responses: 80



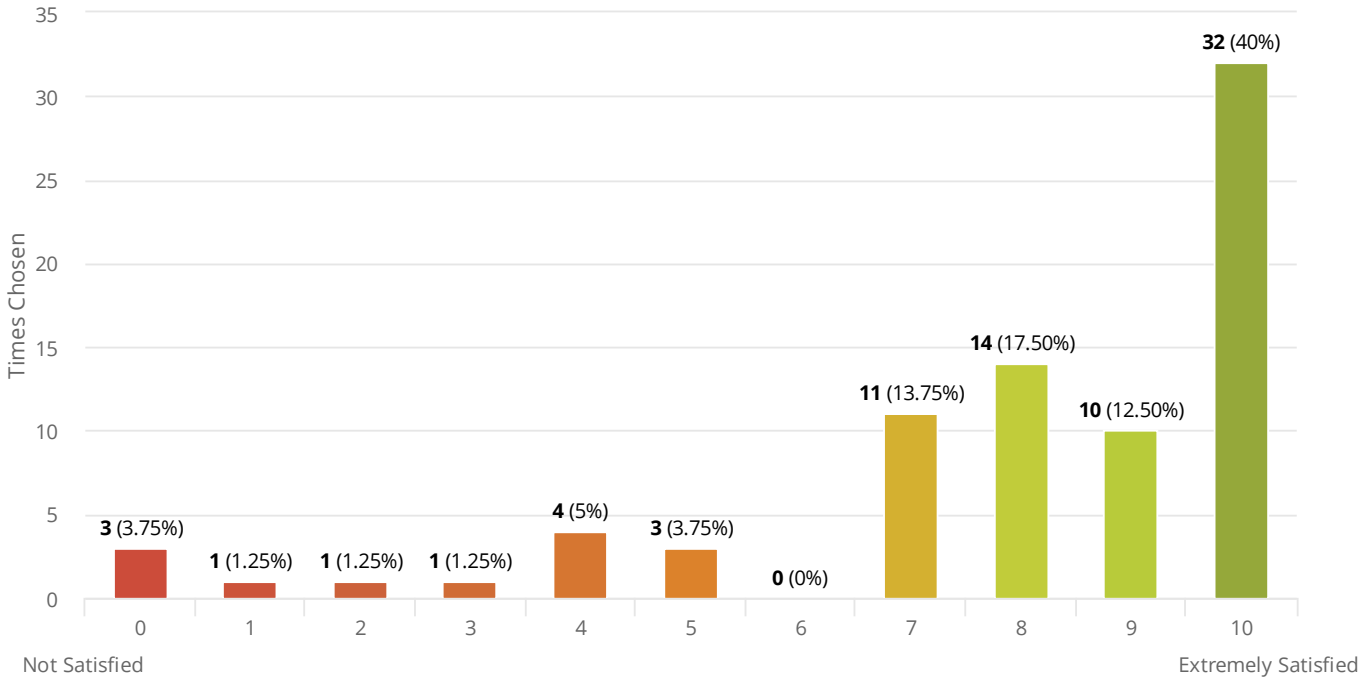
Overall, how satisfied are you with the usability of the Test Route signage?

Number of responses: 80



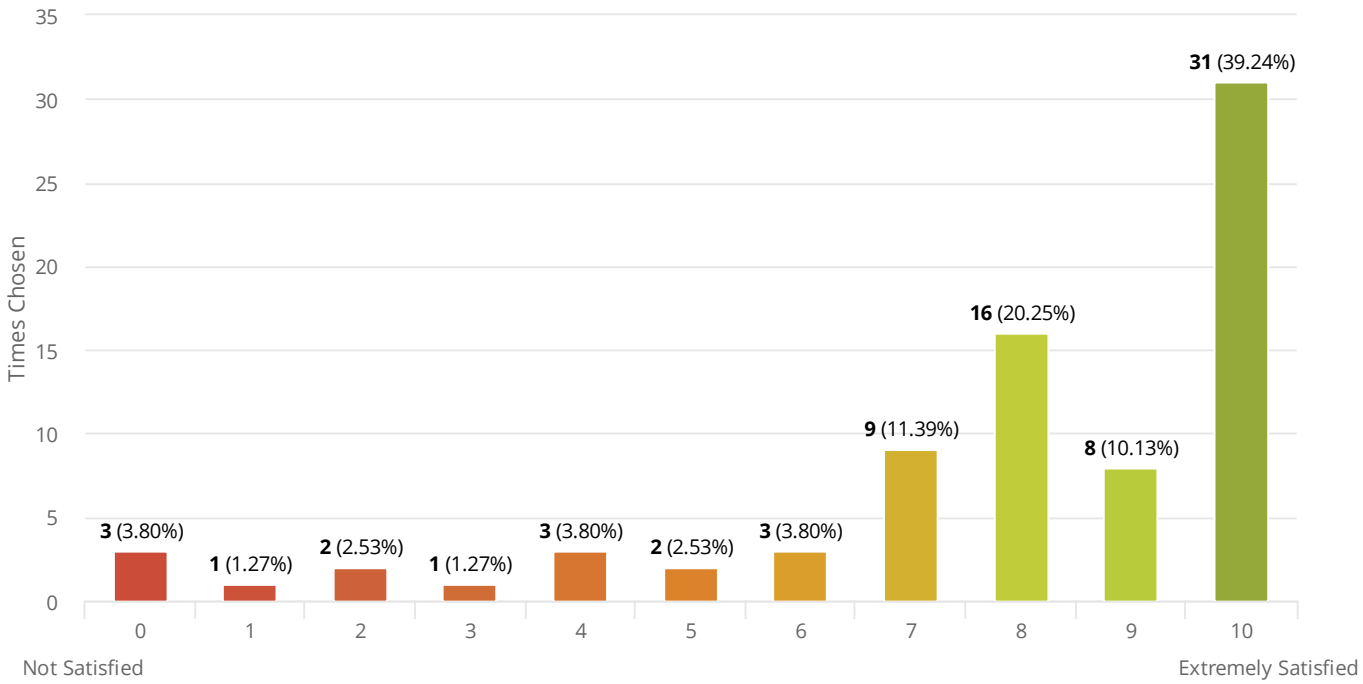
Overall, how satisfied are you with the size of the signs on the Test Route?

Number of responses: 80



Overall, how satisfied are you with the size of information (text, symbols, arrows, etc.) on the Test Route signage?

Number of responses: 79



Please provide any additional comments and feedback.

Number of responses: 39

Text answers:

they just kinda arrived and i noticed them right away on my run! i even complimented someone from the forest preserve and they were like - those aren't our signs! :-)) sooo great work! thanks

If the intent is to stop at each sign to read it, the size was fine. I did not stop at each sign, but tried to read while slowly riding by and it seemed a little small except for the path name and distances. Overall having these signs is helpful to know about how far I've ridden and what other paths or destinations might be nearby to 'explore'.

Sometime the orientation of the map seemed wrong or at least not intuitive. I'm pretty map savvy but had to figure out which direction was which. Maybe I was over thinking?

I'd still like signs to point out more restaurants. I'm pretty familiar with the trails so know what's around me. But people not familiar with the area are unlikely to know for instance there might be a restaurant just out of sight.

The worst thing is the design of this survey instrument! Did you invite anyone in measurement theory to participate in its development? Start with item #1 and the alternative responses: no "both" and no follow up for "Other" does not invite further participation. As to the signage, my family's interest is in MINIMIZING it!

Not just the size but the number of signs! One of the joys of using trails is to avoid the encumbrances of city clutter.

The signs are very helpful. They give me information that on previous rides I thought would be helpful. Now the information is there.

Great idea, love this new information.

Maps should follow normal standards of north on top and be placed so that a person reading them is facing north when they look at them. They should indicate something of destinations off the edge of map through arrows, etc. A systemwide map should be considered too to show opportunities for loops and connections.

How about telling us “How Much?”, and please identify the real need.

This is great. Just used a similar marker system around Milano, Italy. Another consideration is additional signage about items of historical significance along the route.

I have experienced on foot and bike, from the western terminus in Mundelein to just after the Des Plaines interchange east of Culver's in Libertyville (we turned south toward Old School). These are a fantastic addition and I eagerly await mass deployment.

How about getting HORSE owners to clean up the massive piles of horse crap on certain trails, no different than pet owners. They have poop bags that strap to the horses butt!!

Email me at rpscfo@yahoo.com to discuss or further this. Thank you.

-concept is great; execution could be improved
- mile markers, yes; half-mile markets, no...it's visual clutter and unnecessary
- signs could be greatly simplified: including 2 logos (Explore Lake County and Lake County) is too much info and unnecessary for usability
- the dimensioned (cube) design doesn't work...it makes the printable area too small; you'd be able to increase the point size of the relevant info if you went with a less complex design
- all signs (trailhead, mile marker, crossing) should be the same color and design/shape so the hiker or biker knows to consistently look for that as they traverse the trails
- keep it simple!

I am so happy to see these signs along the way. If this gets implemented throughout Lake County, I'd like to see more points of interest on the signage.

Certainly much harder to read than the old mile marker types of signs you see on the Skokie Valley trail eg. The purple-ish background is very tough.

Signs not necessary. Spend money on new trails.
Repair stations are nice. Signs saying where these are ... good.

Brighter colors so they stand out better or perhaps a flag at top of sign, etc.

Love the new signs! It’s great to have more info on the trails

Stop wasting money. The signs are useless and destroy the ambiance. The paths are easy to find and navigate. Even the criminals use them now. Terrible waste of money.

The sign is incorrect with distance to Mcclory bike path

The colors were probably chosen to be unobtrusive, but that's the problem; you can fly right by them and not notice them. I looked for them and am sure I missed a few. It would be helpful if they were bordered in day-glo orange or ha some brightly colored logo or symbol in safety yellow or chartreuse so that they are easy to spot. I do wish to say that I think the idea is great in concept and I applaud the initiative.

As more and more people are riding bikes during this time, it will assist those that are timid to explore.

I'm at the North Shore bike path intersection with Des Plaines trail.

Old school forest preserve is on the directional sign (1 mile away). It should also be labeled on the map itself. If you don't know the area, it's hard to tell if you stay on NSBP or go south on Des Plaines to get to Old school. Map label would help. Thank you for doing this!

I particularly like the maps providing context for where I am and could go.

The intersection at 4th Ave didn’t have any Explore LC signs that we saw, so you wouldn’t know, walking along 4th, what it was or where it was going (if you weren’t from the area, as we aren’t).

Thank you! I’ve been riding LC Trails for over 20 years, and I just discovered one of the signs yesterday on the NSTrail in Libertyville. It’s exactly what I’ve needed all these years! It’s very easy to read& has all the pertinent information (map, mileage, location of trails, etc). I was happy to show my teenage son, who is just starting to get around on the trails by himself. These will be very helpful for him as he is still figuring out his orientation & is starting to familiarize himself with LC Trails. This made my day!

The signs for crossing intersections that required a dog leg to the main road intersection crosswalks could have been more clear including a preparatory sign 100 feet prior to alert people on the trail.

Love the new signs! Put up more landmarks please!

FYI, I am a former Director of the LCDOT and a long-time Lake County resident and cyclist. I think the Explore Lake County Wayfinding study is great forward progress. There is one important tweak needed for the signs.

I have been cycling multi-jurisdiction paths/roads in Lake County for years and have witnessed the growth in the path system and the many agencies now involved in what is still evolving as a system that can eventually

be interconnected, as you also wish to see. I have a vision for how the new Explore Lake County wayfinding signs could be used to their fullest extent countywide, some day in the long-term future. You are not at that step now but you are in effect laying the groundwork for it.

The one needed tweak is the logo on the bottom of the signs. All the Explore Lake County signs, as presented, (i.e. guide, mile marker & path blazer signs) have the Lake County logo on the bottom but that needs to be tweaked to be the Lake County logo with the usual Division of Transportation words-i.e. what is on LCDOT letterhead, etc. It is important to the path user to know what agency has jurisdiction-ownership of the path one is on. Why would LCDOT want to lose the opportunity to indicate it is the LCDOT that has jurisdiction-ownership of its own path facilities when the new signing plan is implemented in the field on the LCDOT physical signs.
When the Explore Lake County plan signs are, hopefully, eventually used on non-LCDOT facilities then that LCDOT logo at the bottom would be replaced by the appropriate logo of the agency have jurisdiction-ownership. Naturally, those agencies are going to insist that their jurisdiction-ownership is conveyed by any wayfinding signs they would ever agree to use.

As I have some other comments that might be useful, I will submit them thru the bike lake county. Thanks for the opportunity to comment and thanks for the great work to date!

Suggest putting the mile markers at every mile instead of every half mile

Add additional destinations

The design is very modern, I would like to see something more traditional or historic to add character to the community.

Would also be helpful to show bike friendly roads to destinations. And, in order to get more info about the establishments shown, would be nice if a link/QR code could take you to a page with more details on options shown.

AT the Kiosk at the intersection of the river trail and the northshore path: many of the street names were upside down.
This sign should have some help for getting to Independence Grove which is perhaps the most attractive and interesting
places that on the trail system.
Also, bathrooms should be marked on the map.

The reason for the 6 ratings is that I think the indistinct background on the main kiosk map at the intersection of the N.S. trail and DPR trail is not good because it's very hard to read the names of main intersecting arterials and even highways (e.g. 294, 41) as well as the names of main attractions in the areas, such as the names of the Forest Preserves. The map fails to show the link from the N.S. path into Old School F.P., even though there is a sign at that location. To be of value, it also needs to indicate best routes using municipal or other connections to get, for example, from the south end of the Middle Fork F.P. trail to the Skokie Valley trail and should show, as another example, the Laurel Ave. connection in Lake Forest to get from the Skokie Valley Trail to the McClory trail as well as the connection on Deerpath in Lake Forest, also including how to get to Deerpath from the south end of the Middlefork Trail. Without showing municipal and other connections, such as, as one example, how to get from the west end of the Casey Trail, through the Prairie Crossing trail, and over and up Atkinson Road to Rollins Savanna, this project is of limited utility. The sign designs are fine, but I suspect the "kiosk" signs (i.e., those with maps) should appear with frequency and not have the blurred background of the

sample kiosk sign. I provided pages of notes as to where I believe better signage is needed at your initial meeting over a year ago and would be glad to visit about any of this.
David Barkhausen, Lake Bluff; 847-337-8911; dbarkhausen@sbcglobal.net

There needs to be a bike crossing sign for cars on 176 and Milwaukee. Very dangerous crossing! Have seen many close calls there over the years.

Looks great! Thanks for doing this. The trail system is a hugely under-rated resource for Lake County residents.

Why “6 mile” not mile 6? Why were signs at Demond, and Dawes place around the corner where riders couldn’t see them? The old trail signs in green were far more legible.

I joined the trail at 4th street in Libertyville and then went West into Mundelein. I saw no trail kiosk.

thank you for asking for feedback!
mile marker signs are hard to spot and read when they are in the shade as they blend too much into the background
the big navigation signs are too busy; you've tried too hard to make them interesting with then 3D look; the compass direction is way too small and should not only show what direction is north but also the directions the trail is headed if not north; please make sure the sign is far enough off the path so people need to read if from the grass--otherwise it creates a hazard as people congregate on the path itself and block it; while others said they like the 3D effect, I personally don't and I think you should get feedback from users on a 2D version that's simpler

Personal Information (optional)

Number of responses: 70

Age	Zip Code	How often do you use the trails?
59	60031	4xyr
42	60048	Daily
48	60048	few times a week
50	60048	3-4 times a week for my runs!
49	60013	few times a year
60	60172	once month
43	60048	daily/weekly
54	60030	maybe once a month

Age	Zip Code	How often do you use the trails?
39	60048	5-7 times a week
65	60031	A couple of times a week
72	60089	infrequently
85	60048	Daily
70	60060	Every few weeks
65	60031	rarely during pandemic - too many unsafe riders not social distancing (I prefer roads)
-	-	Several times a week.
-	-	daily
60	60048	2-3x per week
61	60048	More frequently than weekly
28	60031	weekly
69	60040	Once a week
64	60048	5 times a week
53	60047	Often
53	60060	daily
40	60048	A few times each week.
55	60048	a few times a week
54	60073	Weekly
51	60035	Nearly daily
-	60061	Everyday. Roads and gravel trails more often
52	60045	weekly
44	60087	somtimes
63	60061	Occasionally

Age	Zip Code	How often do you use the trails?
49	60030	3-4 times a week
49	60060	weekly
57	60060	Weekly or more
44	60060	1-2 times per month
31	60015	2/week
57	60035	Daily
72	60060	4-5 days per week, March-November.
42	60061	2-5 times per week.
53	60048	4 times per week
38	60060	-
25	60060	weekly
44	60047	Infrequently
-	-	At least once a week, more often during the summer & fall.
62	60060	3-4 times a week
43	60035	Frequently
22	60060	Once or twice a week
50	60048	3-4 times a week
56	60015	Daily
38	60048	Almost daily
70	60030	LCDOT trails. I thought you were now calling them Paths? 3-4 times a week
65	60060	Several times per week
65	60048	Weekly
43	60048	Weekly

Age	Zip Code	How often do you use the trails?
34	60048	5 times / week
63	60048	Several times per week.
77	60048	three times a week in season
70	60044	frequently for recreation in good weather
61	60048	Every day in the summer
41	60048	Daily
72	60085	4-5 times a week.
50	60048	Once a week
70	70049	Daily
48	60048	Twice per week
63	60035	once every week in summer time
73	60045	Two or three times a week; sometimes more.
43	60048	Rare. Jon from LCDOT. We should have a comment section on this survey.
48	60048	Frequently. DPR trail mostly for fun, North Shore Path mostly for commuting/fun.
48	60048	Daily
56	60048	Several times a week

END