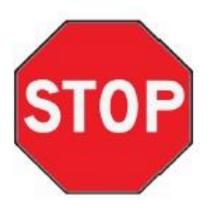
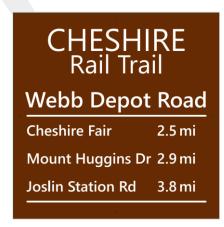


Recreational Use Guidelines for Trail Signing









Introduction

The NH Bureau of Trails developed these Guidelines as a resource for municipalities and rail trail groups that are charged with the responsibility of signing the rail trails in their region. Its purpose is to describe techniques for posting state approved standardized signs to promote uniformity of trail signing throughout the State.

The NH recreational trail network is growing. The user's enjoyment and safety are enhanced when all trail systems are signed uniformly. The purpose of this handbook is to provide a recreational trail signage guideline that results in a good experience for the end user.

These Guidelines should not be construed as reducing the basic recreational trail user responsibility of proper behavior and etiquette while using the NH trail network.



Recommendations

To retain as much uniformity as possible, it is recommended that the trail signing be done by a small group of trail advocates (in hereafter The Trail Signing Group) that are familiar with these Guidelines. The Trail Signing Group should be a part of or work with the local municipality or regional trail group to coordinate placement of signs, so they do not interfere with the running of maintenance equipment and maintenance procedures.

Because the Trail Signing Group is most likely made up of individuals very familiar with the trail system, they should imagine they have never been on the trails before and picture what signs would be necessary to provide trail users a good experience.

The Trail Signing Group should consider bringing in someone unfamiliar with their trail system and have them review signage and suggest improvements.

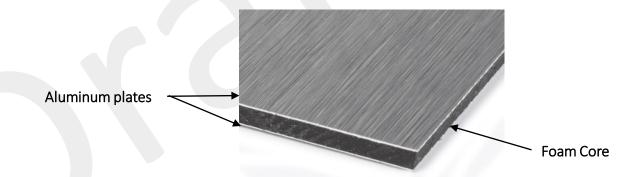
It is recommended that the Trail Maintenance Group members carry these Guidelines, extra signs, and mounting materials with trail maintenance equipment so that vandalized or missing signs can be replaced.

Informational signs placed on the trails to promote local businesses must conform to the standard Information sign color, size, and shape.



BOT Approved Sign Material and Design

- The overall objective is to provide a sign quality that will withstand the yearround elements (no fading or warping) for a minimum of 10 years and provide a professional look
- It is recommended that each sign be constructed of an aluminum/foam sandwich.



- Reflective type paint is required to allow visibility at night
- A library of sign design templates are available at xxx. Each template file will define the sign layout, sign size, font(s), font size(s), and colors. The user will copy a template file to their local system and add in the specific text data for their specific trail/situation. See Appendix A for detailed description.



Acquisition of Signs

- In general, each trail group is responsible for the acquisition of signs for the trails they manage.
- The RTP grant is one funding source that can be used to cover the cost of the signs, posts, hardware, and installation labor
- It is recommended to use a sign print shop to purchase the signs. Such a shop should provide the preferred quality and durability. Ensure to inform the print shop that application of the signs and the expected 10-year life.
- NHBOT has a list of recommended sign vendors which can be found at xxx.



BOT Approved Signs Regulatory Signs



STOP
16" x 16" Octagon
Instruct users to come to a
COMPLETE STOP



SNOWMOBILES PERMITTED
13" x 16" Extended Diamond
Identifies trails where
snowmobiles are allowed.



NO SNOWMOBILES 16" x 16" Square Identifies trails where snowmobiles are NOT allowed



ATV's and TRAILBIKES PROHIBITED
16" x 16" Square
Identifies trails where OHRV traffic
is NOT allowed. May be installed
where spurs leaves a trail



E-BIKES PERMITTED

16" x 16" Square

Identifies trails where eBikes are allowed. May be installed at major trail access points.



Pet Cleanup Sign 12" x 16" Rectangle Request pet owners to cleanup after their pet



BOT Approved Signs Regulatory Signs



NO DUMPING 12" x 16" Rectangle Instruct users not dump trash



BOT Approved Signs Warning Signs



STOP AHEAD

16" x 16" Diamond

Inform trail users that they
are approaching a STOP sign



SLOW
16" x 16" Diamond
Instructs trail users to slow
down.



OBJECT (Hazard) MARKER
10" x 10" Square
Identifies a fixed object at the side
of the trail. Used when the fixed
object narrows the normal width
of the trail



RIGHT or LEFT TURN
16" x 16" Diamond
Informs the trail user that the trail
ahead makes a significant change
in direction



GATE AHEAD
16" x 16" Diamond
Inform trail users that they are
approaching a gate across the
trail



BRIDGE AHEAD
16" x 16" Diamond
Instructs trail users that they
are approaching a bridge
crossing.



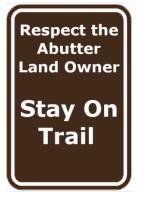
BOT Approved Signs Warning Signs



LOGGING AHEAD
16" x 16" Diamond
This is a temporary sign
Informs trail users that they may
encounter heavy equipment.
This sign should be installed and
removed by the logging
company during the duration of
the tree harvesting. Trail groups
are not responsible for the
installation or removal of this
sign.



PLANTATION
16" x 16" Diamond
Instructs trail users they are
entering a tree plantation and
shall remain on the trail



STAY ON TRAIL
8" x 16" Rectangle
Instructs trail users to respect
the abutting landowners and
stay on the trail



BOT Approved Signs Informational Signs



WAYFINDING
16" x 16" Square
informs trail users the trail
they are on, the road or trail
crossing, the three most near
points of interest



TRAIL COURTESY
16" x 16" Square
Instructs trail users regarding
proper trail courtesy and
yielding



BICYCLE SPEED LIMIT
12" x 16" Rectangle
Informs trail users maximum
bicycle speed limit



WAYFINDING
16" x 16" Diamond
Informs trail users the trail ends



BIKE ROUTE
16" x 12" Rectangle
Informs trail users the trail
they are on is for bicycle use



TRAIL PARKING
16" x 12" Rectangle
Identifies parking areas near
trails



BOT Approved Signs Informational Signs

TOWN LINE

Instructs trail users the town lines they are crossing. Town Line is a two-sign combination. The "TOWN IDENTIFIER" sign mounts parallel to the trail. The "TOWN LINE" sign mounts perpendicular to the trail



TOWN IDENTIFIER 16" x 16" Square Mount parallel to the trail.

TOWN LINE

TOWN LINE
6" x 24" Rectangle
Mount perpendicular
to the trail.



Installation Example



BOT Approved Signs Informational Signs

STATE LINE

Instructs trail users the state lines they are crossing. State Line is a two-sign combination. The "STATE IDENTIFIER" sign mounts parallel to the trail. The "STATE LINE" sign mounts perpendicular to the trail



STATE IDENTIFIER 16" x 16" Square Mount parallel to the trail.

STATE LINE

STATE LINE
6" x 24" Rectangle
Mount perpendicular
to the trail.



BOT Approved Signs

Amenity/Informational Signs



AMENITY SERVICES WAYFINDING 16" x 6" Rectangle

Instructs trail users of direction, distance, type and name of nearby amenities. The sign components are amenity type, direction, and distance.

Amenities Supported



Bus Stop















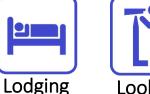






Showers

Snack Bar



Lookout



Picnic Shelter



Picnic Site Restaurant



Restrooms Food



BOT Approved Signs Amenity/Informational Signs



MILE MARKER

3.25 x 6.5" Rectangle
Informs trail users the mile location on
the trail. The sign is designed to fit onto
a standard 4"x4" post. Distance
incrementation shall be from north to
south and east to west. (where is zero?
By trail? By town? By county? It doesn't matter?)



HISTORIC RAILROAD MILE MARKER 6"x12"" Rectangle

Mimics the original railroad mile markers used.



MAINTAINED BY 16" x 8" Rectangle

Located on kiosks, informs trail users who is maintaining the trail.



STREET SIGN 6"x24"" Rectangle Street identifier



Adopt A Trail 16" x 16" Square

Located on kiosks, informs trail users who sponsored the trail restoration/maintenance



Sign Grandfather Clause

Any signs currently installed on the rail trails are not required to be removed. Also, the extension of such signs is permissible. An example is a mile marker sign. If a trail currently has a mile marker sign installed the Trail Signing Group can install additional mile marker signs of the same type. If a trail has no mile marker signs, the Trail Signing Group is asked to follow the mile marker sign design found in this document. This approach applies for all sign types.



Trail Sign Placement

The following provides information on how signs are to be oriented and installed.

ORIENTATION

Signs should be oriented perpendicular to the trail within a 5' by 5' area that starts 3' from the trail's edge and 2' above the trail surface. See Figure 1.

Since the trail will be used in both directions, separate, and often different signage may be needed for each direction of travel.

The most critical part of sign mounting is understanding how reflective signs work. One good analogy is to think of reflective signs as mirrors. To maximize the nighttime view of the sign, the optimum height is at eye level, perpendicular to the direction of travel on the trail.

This orientation also ensures that the sign is visible over the longest possible distance, giving the trail user the longest time frame to read, comprehend, and react to the sign's message. See Figures 2 and 3.

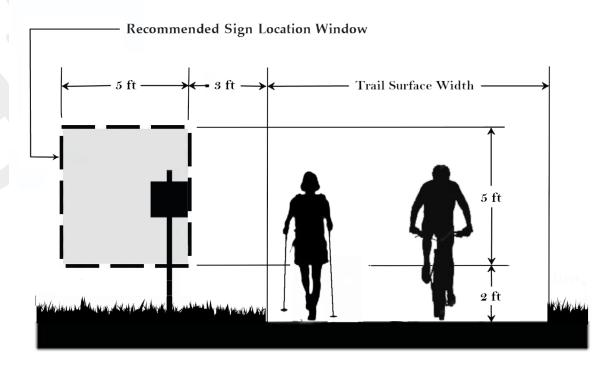
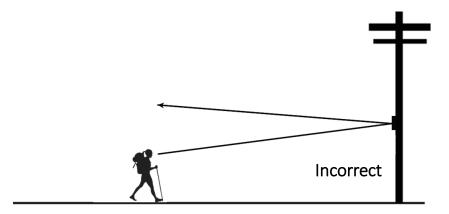


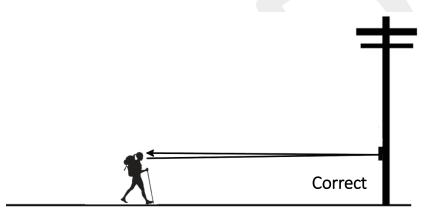
Figure 1: Recommended Sign Location Window



Figure 2: Sign Orientation, Side View

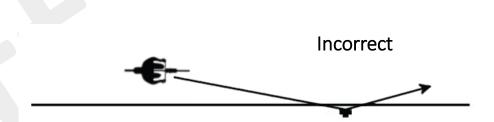


Signs placed too high or too low scatter the light, therefore not reflecting back to the trail user the maximum possible light lowering the viewing distance.

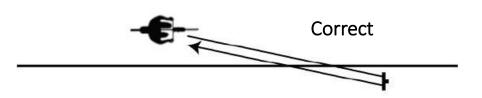


Signs placed at or near trail user eye level yields the maximum reflectivity therefore maximizing the viewing distance.

Figure 3: Sign Orientation, Plan View



Signs facing the trail do not reflect artificial light back to the trail user.



Signs placed perpendicular to the trail reflect artificial light back to the trail user.



Posting Distance

What is the proper distance before a hazard to place a warning sign?

For recreational users, the bicycle is the only user, due to potential speeds to consider when determining posting distance.

There are several factors involved in calculating the minimum posting distance, including: (a) sign legibility or recognition, (b) decision-making time, (c) the coefficient of friction between the bicycle and the trail surface, (d) a comfortable braking distance, and (e) the initial speed of the bicycle when the sign is first observed by the rider.

In these Guidelines, recommended placement of Warning Signs is determined based on the idea that the bicycle should come to a complete stop before the obstruction or trail condition. In some cases a complete stop is not necessary, but it is recommended the posting distance be sufficient for a complete stop in the event it is necessary.

The factor having the greatest effect on calculations for posting distance is the speed of the bicycle when the rider first sees the signs. Since the fastest legal recreational devices are Class 1 and Class 2 eBicycles each with a maximum speed of 20mph, the warning sign placement distance is fixed at 150 ft.



Mounting Considerations

Since recreational use of the trail is year-round, the mounting of signs should accommodate all seasons of the year.

- Generally, signs should be placed on the right side of the trail within the sign window to conform with the rider's familiarity to highway signage. See Figure 1, page 6.
- All signs shall be mounted on posts or kiosks. Screws/bolts should be used instead
 of nails to reduce theft and vandalism.
- Use durable post materials. It is suggested that pressure treated, redwood, or cedar, wood be used for rural areas to maintain the aesthetics of the outdoors. There is no requirement to paint/stain/seal the posts prior to installation. For urban areas, typically follow the post material used by the municipality for road signage (e.g. steel, wood, fiberglass, etc.)
- It is recommended to use anti-theft screws.
- It is not recommended that signs be mounted on trees.



Mounting Considerations Continued

- Overuse of signs should be avoided.
 - Only authorized trail signs should be posted to avoid clutter and confusion
 - If signage is posted for a local business, the amenity wayfinding sign design shall be used, and number of signs carefully controlled by the Trail Signing Group.
 - When more than one sign is mounted on the same post surface, the signs should be placed vertically with the most important sign on the top.
 - No more than 3 signs should be mounted in this fashion.



Trail Sign Schematics

Following are simplified trail sign schematics that are intended to serve as a guide for the Trail Signing Crews. They depict some of the most common basic situations that are encountered on most recreational trails. Not all NHBOT approved signs are shown in theses schematics.

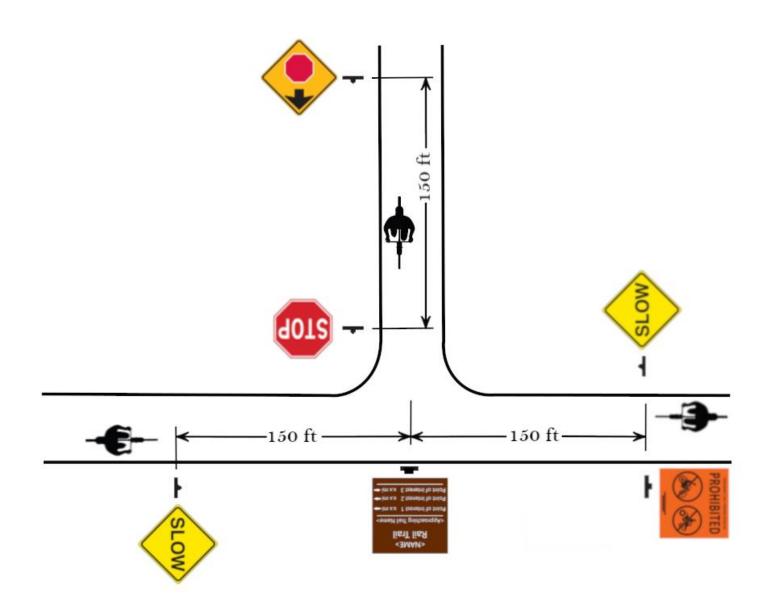
It is understood that unusual situations may be encountered that are related to trail conditions, topography, man-made objects, etc., that will require the trail signing crew to make some modifications. (look again at the snowmobile equivalent section)

The most suitable placement of each sign must be determined at the site, by the Trail Signing Crew, where all situational variables are taken into consideration.

Informing the trail user and trail user safety are paramount and must be considered by the Trail Signing Crew.

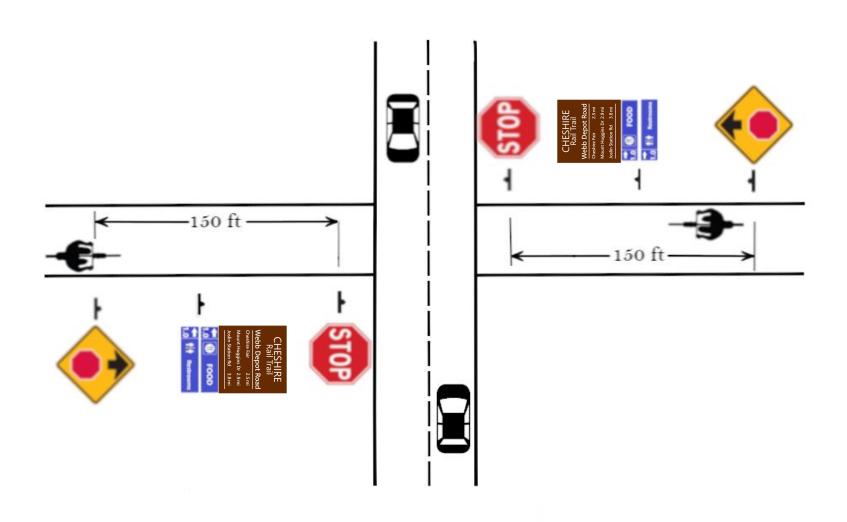


Trail to Trail T Intersection Schematic





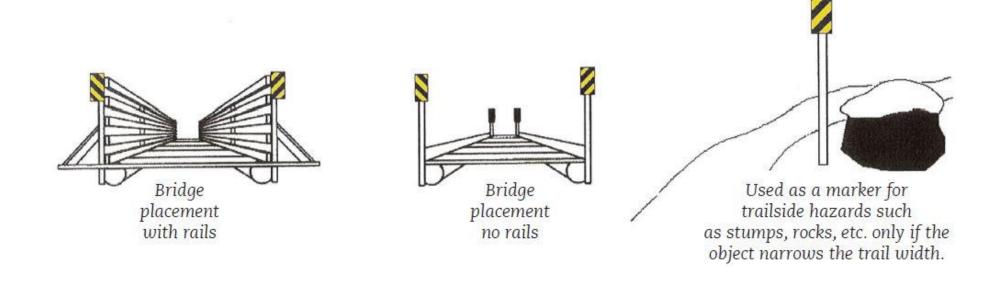
Trail to Road Intersection Schematic





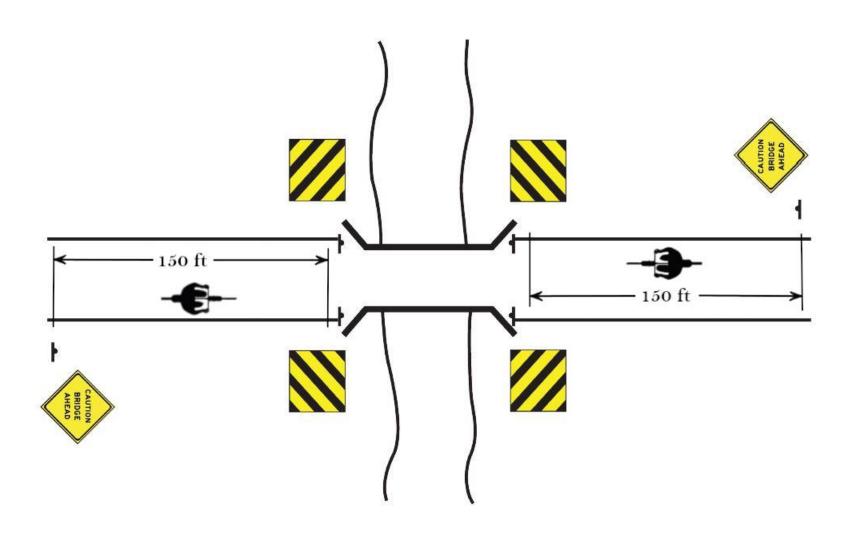
The Object Marker

Object Markers are valuable signs that show safe passage on a trail. They are usually placed on bridges, but may be used on permanent trailside hazards such as stumps, rocks, etc. When mounting these signs, the yellow and black stripes should always point down and away from the hazard toward the safe lane of travel.





Common Bridge Schematic

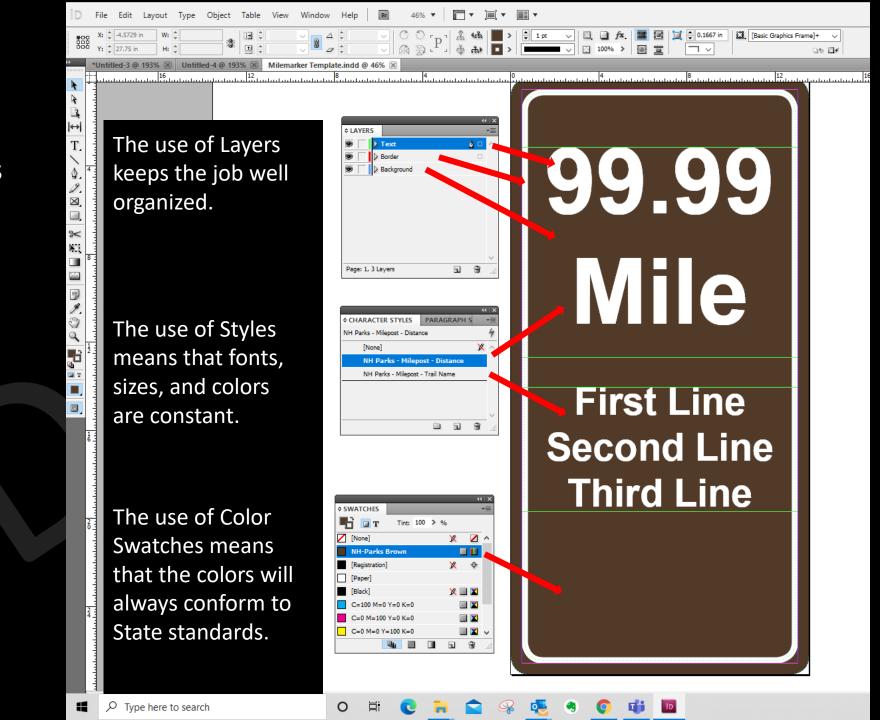




Appendix A

Signage Design Template Detailed Description

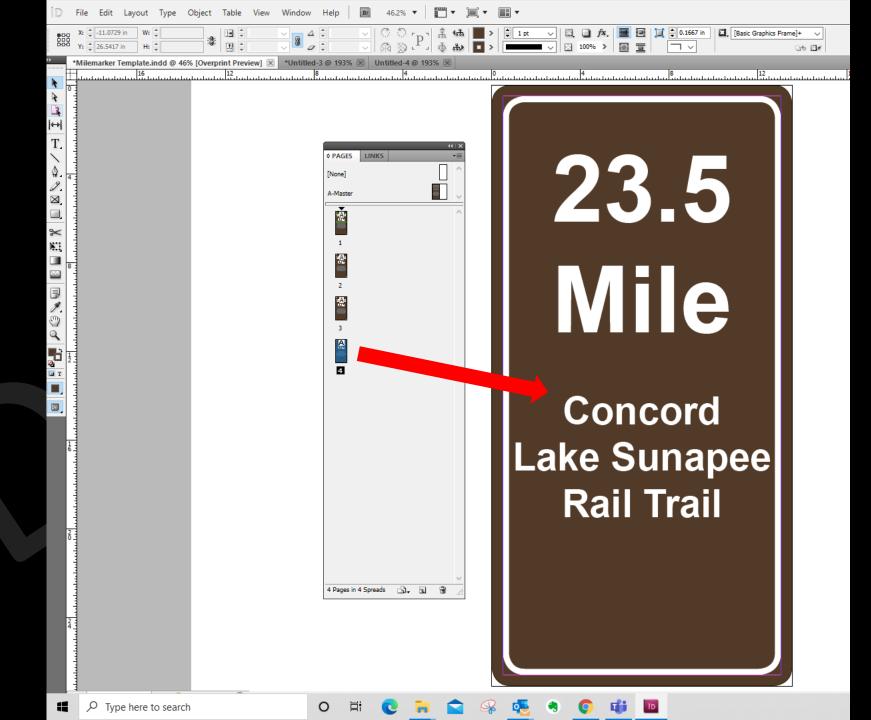
The use of templates ensures consistency among signs, as all design decisions are predetermined.



Some tools allow the creation of a Master Page.
All pages that are tied to the Master Page will have the same fonts, spacing, and overall layout.

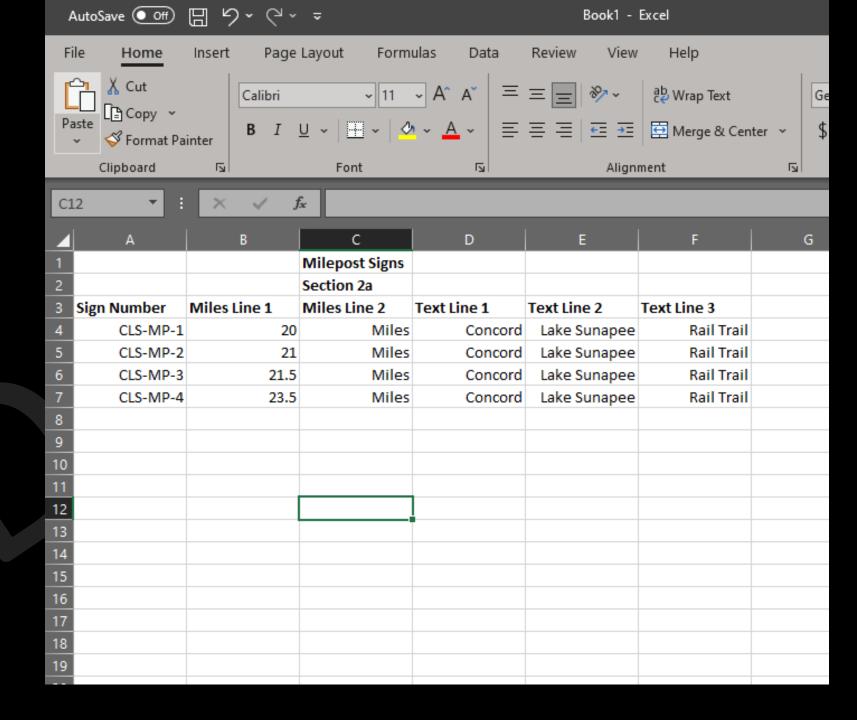
The publisher adds pages as necessary, then modifies the text to reflect each new sign.

Like pages in a book, the signs can be printed in groups, one at a time, or all at once.



Information could be supplied by the local trails group in the form of a simple spreadsheet.

This would give the local group control over what signs went where, as well as creating a tracking number to keep track of each sign on the project.





Appendix B

Sign Cost Estimates



State of New Hampshire Department of Natural and Cultural Resources Division of Parks and Recreation Bureau of Trails www.nhtrails.org

Created 2022