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JERSEY.**

MIDDLESEX GREENWAY: WAYFINDING – THE MISSING CONNECTION.

June 2018

Prepared for the Edison Greenways Group by the Voorhees Transportation Center and
Civic Eye Collaborative

This report was prepared by the Alan M. Voorhees Transportation Center at Rutgers University and the Civic Eye Collaborative for the Edison Greenways Group through the Together North Jersey (TNJ) Local Technical Assistance Program. Funding for the program is provided by the North Jersey Transportation Planning Authority (NJTPA).

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Table of Contents •



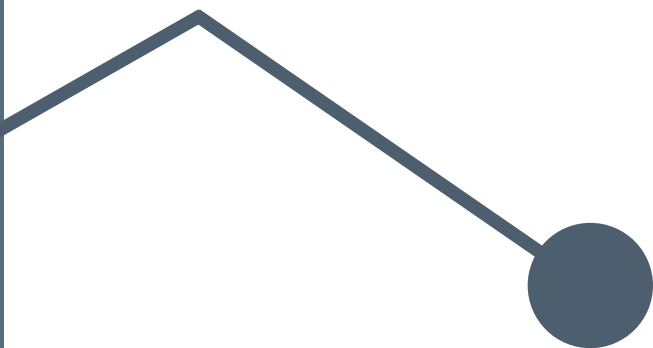
Project Summary and Recommendations.....2

Attachments.....4

 A. Middlesex Greenway Signage Research Review.....4

 B. Proposed Middlesex Greenway Sign Portfolio.....12

 C. Project Film Script and Link to Final Film.....16



PROJECT SUMMARY AND RECOMMENDATIONS

BACKGROUND

The Together North Jersey Local Technical Assistance Program, funded by the North Jersey Transportation Planning Authority (NJTPA), provided the Edison Greenway Group and Middlesex County Department of Parks and Recreation with technical assistance in the area of graphic design and facilitation in order to develop logos for potential use in wayfinding signage along and to the Middlesex Greenway. This work was conducted by the Voorhees Transportation Center (VTC), along with Civic Eye Collaborative (CEC) from February 28, 2018 through June 30, 2018 and included the following components, included as attachments to this memo:

Task 1: Best Practices Research

A VTC graduate student was tasked with conducting summary research on best practices in wayfinding through an internet search and review. VTC and CEC assisted the graduate student by suggesting research topics, providing interview contacts and an interview guide, and reviewing student summary reports. The student produced a summary report titled “Middlesex Greenway Signage Research Review”.

Task 2: Sign Mock-Ups

CEC took the client and the project team through a logo and sign mock-up design and review process. The purpose of the task was to generate potential logos that could be adapted for use on wayfinding signs and as a logo for the Middlesex Greenway. The logo designs were created to be consistent with the Middlesex County brand guidance and design standards, which were provided to the project team by the Middlesex County Department of Parks and Recreation. CEC provided a first set of logo/design options for review and comment. After conducting a review meeting and providing an online survey, a second set of options was generated based on comments. The project team conducted a second review meeting and the Edison Greenway Group and the Middlesex County Department of Parks and Recreation selected a final concept logo.

Task 3: Project Film

CEC developed a script and story arc for a film to visually illustrate the need for wayfinding signs directing trail users to the Middlesex Greenway from Amboy Avenue. The film also generally discussed wayfinding signs, their use, and their appropriateness for the Middlesex Greenway. After getting final approval on the script, CEC developed graphics, filmed, and created CGI imagery of “mock wayfinding signs” to be used in the film. CEC provided a “director’s cut” of the film for review, followed by a final cut based on client comments. The final cut was reviewed and approved by the client and the project team. The script for the film can be found in Appendix C, along with a link to the final cut of the film: “Middlesex Greenway: Wayfinding - The Missing Connection”.

ENGAGEMENT

Throughout the duration of the project, VTC and CEC met monthly with representatives of the Middlesex County Department of Parks and Recreation, the Edison Greenway Group, and the NJTPA to keep the team abreast of progress. The team held these meetings monthly at the office of the Middlesex County Department of Parks and Recreation in Piscataway, NJ. Additionally, VTC and CEC coordinated regularly to ensure that project deliverables were complete, on time, and within budget.



NEXT STEPS AND RECOMMENDATIONS

This technical assistance project has demonstrated how the addition of customized Middlesex Greenway branding and logos would contribute to the Greenway's position as a unique and iconic asset within the county. The next steps for the Department of Parks and Recreation are to share the logo options within the Middlesex County administration, especially with those who make decisions about external branding and marketing.

It is important that the Department of Parks and Recreation convey the value of a unique logo and brand for the Middlesex Greenway. These branding efforts would assist visitors and residents in clearly identifying the location of the Greenway and maximizing its usage. Furthermore, the project has clearly identified a need within Middlesex County Parks and Recreation to pursue additional funding to implement proper wayfinding signage around the Middlesex Greenway. A thorough wayfinding plan should be prepared, identifying precise locations, sizes, and types of signage that should be used to direct people to the Greenway from local roads.

The county may consider pursuing a county-wide wayfinding plan for all Middlesex County parks in order to ensure the provision of adequate wayfinding signage to all parks that conforms to current standards and best practices. Additionally, the county is slated to embark on a reexamination of its Comprehensive Master Plan in the coming year. It is recommended that recommendations for wayfinding signage be included in any Open Space and Recreation element of the plan.

ATTACHMENTS

Project deliverables from Civic Eye Collaborative and the Voorhees Transportation Center:

- A. Middlesex Greenway Signage Research Review
- B. Proposed Middlesex Greenway Sign Portfolio
- C. Project film script and link to final film

ATTACHMENT A:

MIDDLESEX GREENWAY SIGNAGE RESEARCH REVIEW

INTRODUCTION

This research memo provides a summary of preliminary research on wayfinding signage practices and standards as part of the Together North Jersey technical assistance support to the Middlesex Greenway/Edison Greenway Group. The purpose of this research is to guide the development of signage logos and templates and inform the production of a project film that will demonstrate the need for wayfinding signage along the Middlesex Greenway. Desktop research and expert interviews were conducted in the preparation of this report.

PURPOSE OF A WAYFINDING SIGNAGE SYSTEM

A wayfinding system is generally useful because it:

- Creates a sense of place;
- Builds brand identity;
- Eases navigation through the trail;
- Enhances user experience, and
- Builds a storyline for the trail.

A wayfinding signage system for the Middlesex Greenway would help create a sense of direction for the users of the Middlesex Greenway. It would also allow residents and visitors in the towns of Metuchen, Edison, and Woodbridge to more easily identify entry points to the trail and generate broader awareness about the Greenway as a recreational resource for these communities.

A wayfinding signage system would provide an opportunity to enhance the brand value of the Middlesex Greenway by connecting the signage to the well-established Middlesex County brand identifiers and more clearly identifying the Greenway as a Middlesex County asset of the County park system.

BASICS OF WAYFINDING

A wayfinding system needs to provide enough information to acquaint new users to a place, while not adding excessive clutter to roads and trails. Many are unfamiliar with directional signage outside of an urban context. Unclear trail signage can be disorienting for new users. For this reason, a wayfinding system should lead users into the Greenway, but also safely lead them out of the Greenway.

Making sure that the signage is not too complicated to read is also important for users to easily process the information. Similarly, providing information on a user's current location and nearest exits can make the users feel safer, and therefore, more likely to use the Greenway often. The following are the basic principles of a good wayfinding system:

- A system should be targeted at first-time users;
- Every message must be concise and easily understandable;
- Signage should provide exact distances to destinations, accurate directions, and include information on a user's location (such as a "you are here" pin point);
- Signage should highlight exit points as well as entry points.

FUNCTIONALITY

To ensure the functionality of the signage system, the following considerations are most important:

- **Location of the signs:** Signs must be placed in a way to maximize clarity and visibility for all trail users.
- **Legibility of message:** The font typeface, height, width, and color must be legible to all persons, including those with poor eyesight.
- **Flexibility:** The design should be versatile and adaptable to fit the requirements of various locations and users.
- **Maintenance:** It is important to consider the costs of sign maintenance (such as general wear and tear), climate induced damage, periodic maintenance, and natural growth (such as mold, bushes, tree foliage, etc.) that may periodically cover part of the signage system.

DESIGN CONSIDERATIONS

The design of the signs must consider:

- **Informational architecture:** The design should ensure that the font, colors, and other factors do not hinder the relay of information to the user.
- **Aesthetics of the sign:** The signs should be aesthetically pleasing to attract attention.
- **Choice of material:** The material chosen should be able to withstand harsh weather conditions.
- **Compliance with Manual on Uniform Traffic Control Devices (MUTCD) guidelines and local ordinances:** Every municipality and county have different ordinances for signage systems. It is important to know the local “dos and don’ts” as well as the regulations of MUTCD.
- **Budget:** It is important to consider the budget when designing the signage system to not interfere with overall planning efforts.



WAYFINDING STANDARDS AND DESIGN

The Manual on Uniform Traffic Control Devices (MUTCD) defines the nationwide standards for traffic control devices. Below are some excerpts of important rules and regulations pertaining to wayfinding:

Legibility: Every 40 feet of desired legibility requires a letter height of 1-inch

Reflection: The manual requires use of high-intensity prismatic vinyl background for retro reflectivity

Letter Height: For speeds less than 25 mph:

- 4-inch cap height for primary message
- 2.5-inch cap height for secondary message
- Listings per sign: 3

Typeface (acceptable): Highway Gothic (or other clearview typefaces)

Footer (Break-away): Pole safe or break safe transpo footers are required

Sign Dimensions:

- Sign Plates should preferably be in multiples of 6 inches.
- In certain cases, smaller than nominal size might be accepted

Letter Style:

- Must be uppercase, except destination names, which can be lowercase with initial uppercase;
- To maintain legibility, use of wide spacing between letters is crucial as compared to wider and taller letters in a cramped space.

Below are on-trail signage designs from the Bronx River Greenway with dimensions as reference:



Different Signage Boards with Dimension: <https://www.behance.net/gallery/3488337/Bronx-River-Greenway-Signage>

SIMILAR GREENWAY SIGNAGE SYSTEMS

Below are examples of greenway signage systems for trails and greenways similar to the Middlesex Greenway. These can serve as examples or case studies that identify common wayfinding practices for greenways.

Ohlone Greenway, San Francisco, CA

The Ohlone Greenway is a popular pedestrian/bicycle path that follows the BART tracks through several East Bay cities. At Baxter Creek Gateway Park in El Cerrito, the northern terminus of the greenway, we installed wayfinding signs as a model for the entire greenway, incorporating Safe Routes to Transit principles with city and trail identification.



Berkeley Lab, Berkeley, CA

With over one hundred buildings scattered around a steep, wooded hillside, the Lawrence Berkeley National Laboratory campus has always presented a challenge to visitors. Coordinated pedestrian and vehicular wayfinding has been implemented in key areas, along with a campus-wide building identification system.



Passaic River Blueway, Fair Lawn, NJ

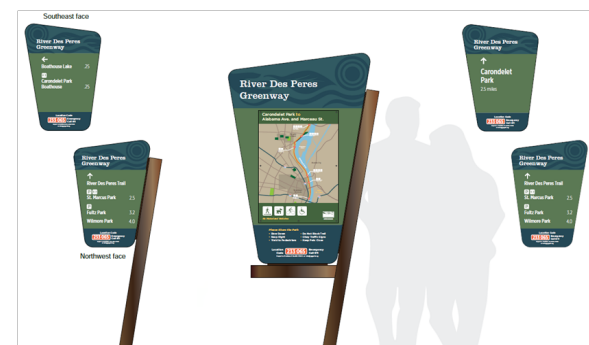
When fully implemented, launch sites on this canoe and kayak trail will be marked with large wayfinding maps. As part of the project, logos were created for the Blueway and for the sponsoring organization.



Great Rivers Greenway, St. Louis, MO

Corbin Design completed this comprehensive project for the Great Rivers Greenway wayfinding signage system. The design was improved to be more comprehensive, aesthetically more appealing, and to use fade-resistant colors.

Source: <https://greatriversgreenway.org/new-sign-standards/>



INTERVIEWS WITH SUBJECT-MATTER EXPERTS

As part of this preliminary research, interviews were conducted with subject-matter experts to provide insight and guidance on specific aspects of trail systems that could be important to consider when creating a guidance plan for the Middlesex Greenway Trail. The interviewees were:

- Eleanor Horne - Co-President, Lawrence Hopewell Trail
- Becky Taylor – Co-President and Founder, Lawrence Hopewell Trail
- Anya Saretzky – Project Manager, Rails-To-Trails Conservancy
- Dave Lustberg – Principal at Arterial, LLC

The interview questions were based on the following points:

- **Creating wayfinding systems:**
Questions focused on finding existing guidance systems that the trails might have used in creating their own plans. They were also focused on understanding the guidance plans created for these trails.
- **Design standards:** These questions focused on design standards that might have been used for these particular signs, including size and colors of the fonts and the sign boards.
- **Directing people from Road-to-Trail:**
These questions focused on what measures were used to direct people from road to the trails in vicinity.

On the next page is a summary of the key points and takeaways from these expert interviews that are most relevant to the Middlesex Greenway wayfinding initiative.



CREATING A WAYFINDING SYSTEM

A wayfinding system would help create a sense of direction for the users of the Middlesex Greenway and would also help increase awareness of the Greenway for those living in Metuchen, Edison, and Woodbridge. However, the variety of geographies and regulations across the Greenway area make creating a unified wayfinding system a challenge.

These opportunities and challenges can be seen in other greenway developments. For instance, in the Lawrence Hopewell Trail, the trail is 22 miles and passes through two townships with different ordinances for the use of signs. As Eleanor Horne described in her interview, it can be difficult to design a single system, since, for the Lawrence Hopewell Trail, any sign that had multiple logos is considered an advertisement and is therefore not allowed to be put up. This inter-municipality challenge might make it difficult to use the guidance system to promote the trail's usage in the township.



In response to the challenge of implementing signage across jurisdictions and as new trail segments are developed, the Morris Canal Greenway uses a flexible signage policy that includes both required and suggested design elements. According to Dave Lustberg: "For the Morris Canal Greenway, it is an extensive trail that spans 103 miles and crosses many municipalities, counties and jurisdictions. In addition, there are many great volunteers and stakeholders that work hard to implement signs in their areas. The circumstances vary greatly from stakeholder to stakeholder with things such as capacity, timing, funding, aesthetic preference, etc. Additionally, portions of the trail already have signs and other areas will be developed and installed in the years to come as funding is available. For this reason, it has to have a certain amount of flexibility since it is not feasible to expect all jurisdictions to adopt the exact same signs. We developed design guidelines that include elements that are 'prescriptive,' meaning that they have to be exactly as specified; and elements that are 'suggestive,' meaning that the guidelines specify the general standards such as fonts, materials, colors, and content, but the signs themselves have some flexibility in how they are designed. The Gateway Signs and Mile Markers are prescriptive and the Wayfinding and Informational/Interpretive signs are suggestive."

The Circuit, according to Anya Saretzky, does not directly maintain trails. However, they work with trail managers and use prescriptive sign templates for uniformity along trails.

DESIGN STANDARDS

Trail signs should be legible and clearly visible from a distance, particularly as seen through foliage. Signs should provide sufficient information while omitting distracting elements. According to the interviewed experts, the most important points to consider when designing sign boards are as follows:

Fonts: The fonts used must be crisp and clear (for instance, Century Gothic and Arial). It is important to not use intricate fonts as they may be confusing for readers. The size and color of the lettering should be legible from a distance.

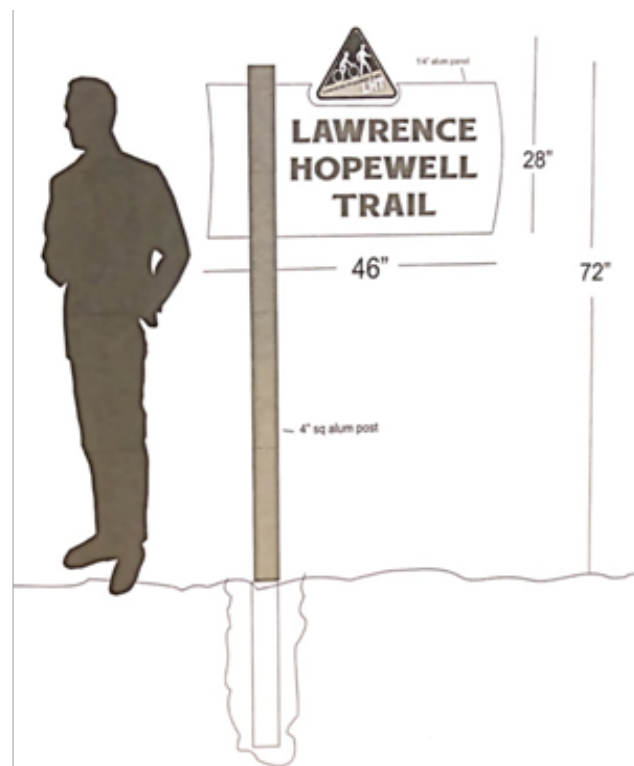
Size of boards: The board size should not be too large and must follow a protocol.

Material: It is important to select quality material for the boards to avoid the need for excessive maintenance. The possibly higher initial cost will be offset by the long-term savings in maintenance costs. It is also important to be mindful of wind and other natural elements, and to clarify whether the signs need professional installation or can be installed by volunteers.

For the Morris Canal Greenway, “the look and feel of the signs are derived from the history and character of the canal. The materials are industrial and rustic but do not mimic historic signs. They are intentionally contemporary. Fonts are selected based on clarity and legibility at a variety of distances. There are many standards that we reference for this information. For example, we avoid script or ornated fonts and prefer simple, clear and bold sans serif fonts,” says Dave Lustberg.

Directing Users from Road to Trail: The sign boards used on roads or highways have a completely different standard system for vehicle users. These boards need to be wider with large font sizes so that drivers can see the text from a distance and while traveling at high speeds.

Directions for the trail should be placed starting at least a couple miles prior to an entrance and should gradually guide the users to the trail. Becky Taylor from Lawrence Hopewell trail provided an example of how high a board should be for proper legibility.



REFERENCES AND CONTACTS

This section marks existing guidance plans and systems that could be used as a reference for the Middlesex Greenway Trail.

Niagara River Greenway Wayfinding Standards & Signage Manual

http://www2.erie.gov/environment/sites/www2.erie.gov.environment/files/uploads/GW_Standards%20%26%20Signage%20Manual%20NRG_01.05.15.pdf

http://www2.erie.gov/environment/index.php?q=NRG_Signage

Great Rivers Greenway

http://greatriversgreenway.org/wp-content/uploads/2015/11/GRG_StdManualPreso.pdf

Bronx River Greenway

http://bronxriver.org/puma/images/usersubmitted/file/BRG_Manual_08242012.pdf

University of Nebraska Lincoln Wayfinding & Signage Standards Manual:

https://fmp.unl.edu/fpc/Wayfinding_and_Signage_Standards_Manual_2009.pdf

Empire State Trail

http://www.ahettrail.org/wp-content/uploads/2017/10/2017.10.10_EST-Design-Guide.pdf

Trail Signage by iZone Imagine & Unity College

<https://drive.google.com/file/d/0B8y-hk82C141S3M2dVlhSnBmWEU/view>

Landmark Towns

<http://delawareandlehigh.org/wp-content/uploads/2015/05/Landmark-Towns.pdf>

Cloud Gehshan (Includes a number of trails and signage designs)

<http://cloudgehshan.com/work/by-client#parks-gardens>

Delaware & Lehigh National Heritage Corridor

http://delawareandlehigh.org/wp-content/uploads/2015/05/DL_Design_Guidelines.pdf

American Trails Association

<http://www.americantrails.org/resources/accessible/index.html>

Niagara River Greenway Wayfinding Standards & Signage Manual

http://www2.erie.gov/environment/sites/www2.erie.gov.environment/files/uploads/GW_Standards%20%26%20Signage%20Manual%20NRG_01.05.15.pdf

http://www2.erie.gov/environment/index.php?q=NRG_Signage

Great Rivers Greenway

http://greatriversgreenway.org/wp-content/uploads/2015/11/GRG_StdManualPreso.pdf

Bronx River Greenway

http://bronxriver.org/puma/images/usersubmitted/file/BRG_Manual_08242012.pdf

University of Nebraska Lincoln Wayfinding & Signage Standards Manual

https://fmp.unl.edu/fpc/Wayfinding_and_Signage_Standards_Manual_2009.pdf

Morris Canal Greenway Corridor Study

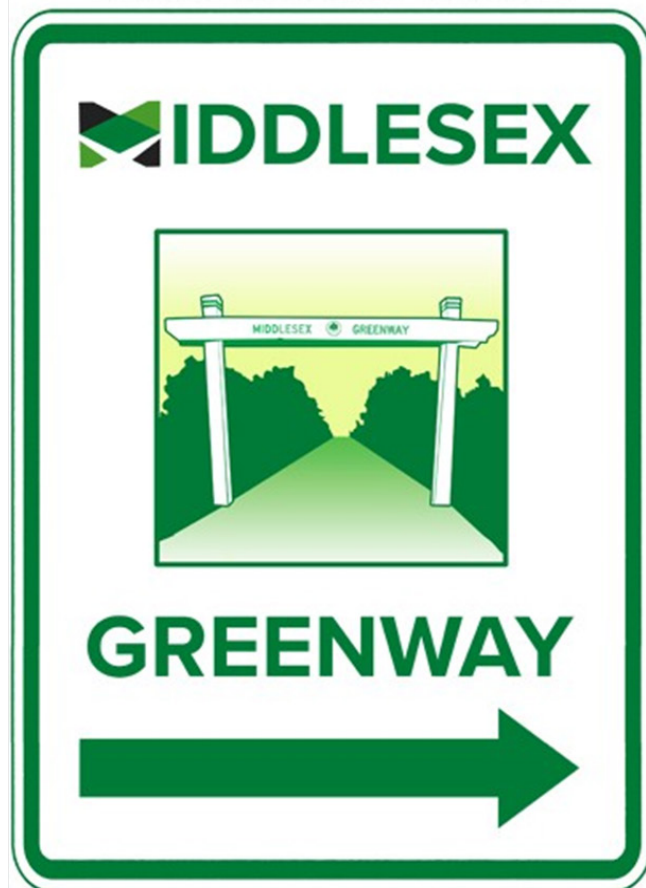
https://www.njtpa.org/getmedia/8afcb62e-befb-4e12-b62f-3f44559eaac0/180628_MCG_Final-Report_Entire.pdf.aspx

ATTACHMENT B: PROPOSED MIDDLESEX GREENWAY SIGN PORTFOLIO





Middlesex County Greenway Waypoint Sign



Color Palette



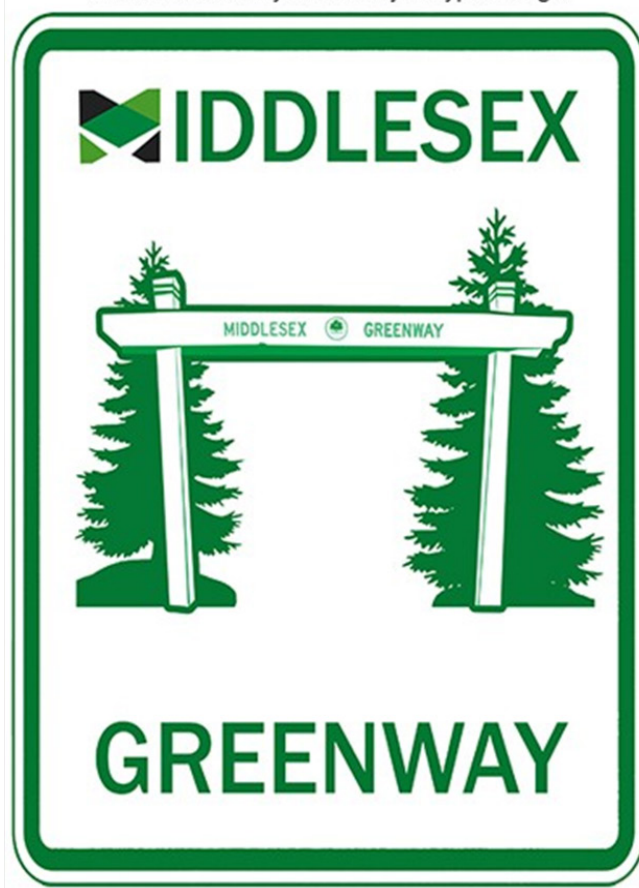
Typography

PROXIMA NOVA BOLD
Size Used: 76

Icon



Middlesex County Greenway Waypoint Sign



Color Palette



Typography

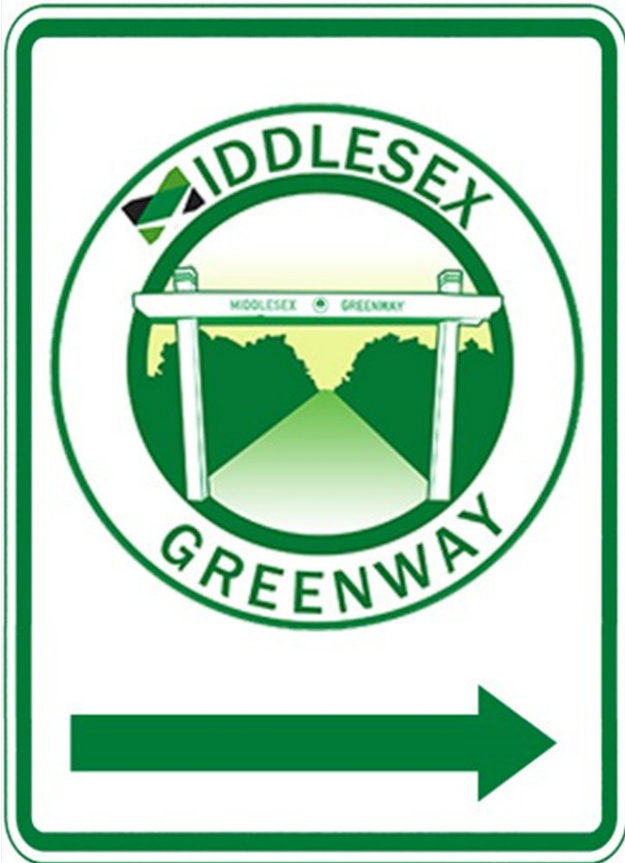
PROXIMA NOVA BOLD
Size Used: 76

Icon





Middlesex County Greenway Waypoint Sign



Color Palette



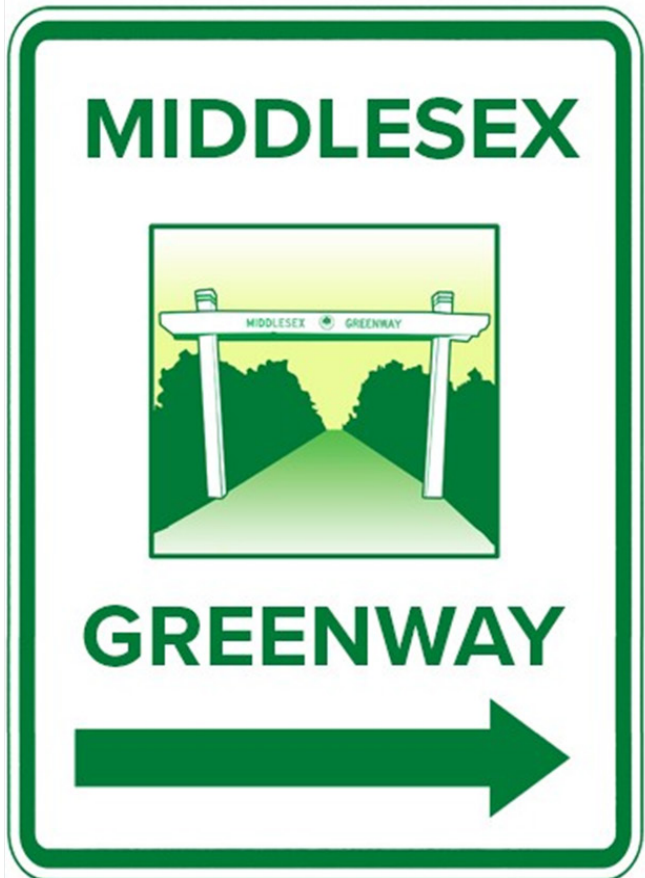
Typography

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Size Used: 76

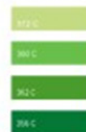
Icon



Middlesex County Greenway Waypoint Sign



Color Palette

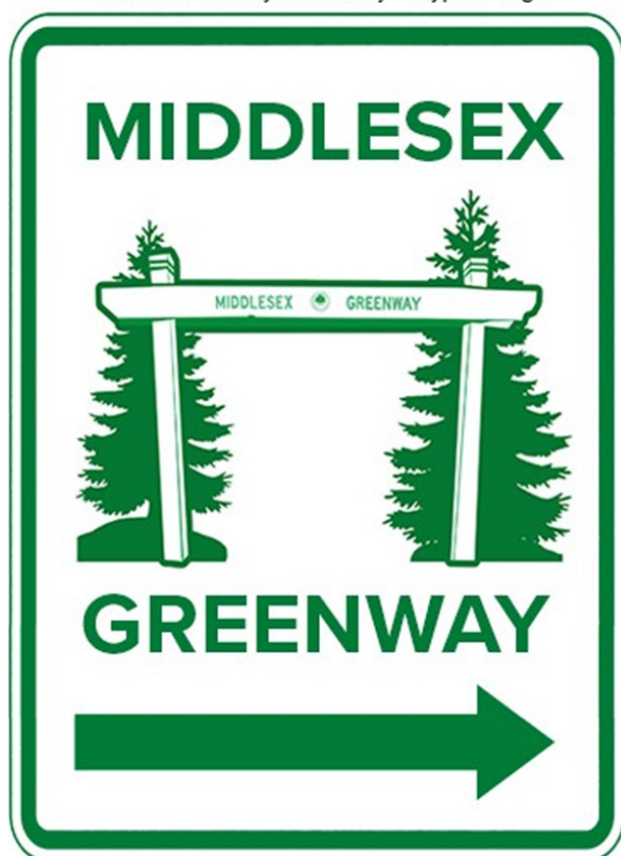


Typography

PROXIMA NOVA BOLD
Size Used: 76



Middlesex County Greenway Waypoint Sign



Color Palette



Typography

PROXIMA NOVA BOLD
Size Used: 76



Middlesex County Greenway Waypoint Sign



Color Palette



Typography

PROXIMA NOVA BOLD
Size Used: 76

ATTACHMENT C: PROJECT FILM SCRIPT AND VIDEO LINK

WHAT IS THE MIDDLESEX GREENWAY?

The Middlesex Greenway is a 3.5 mile linear park rail trail that is a part of the Middlesex County park system. The trail is an amazing resource that is regarded as both a regional and a local destination. The Greenway is picturesque and has iconic trail heads to let you know when you have arrived.

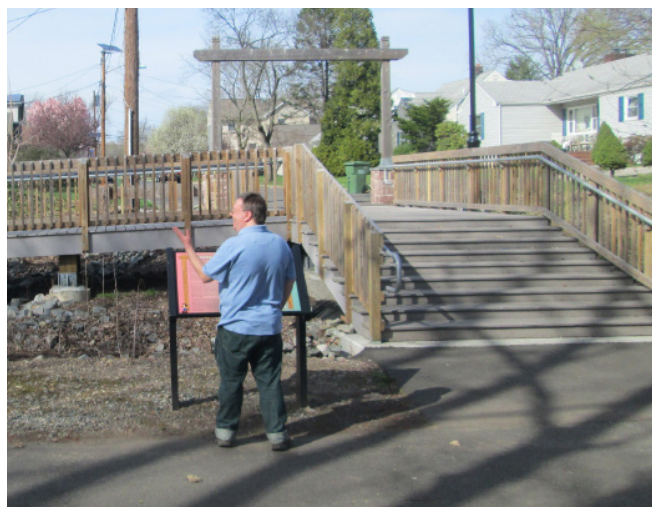
THE PROBLEM

While the Greenway is an important asset, you can literally be driving a couple hundred yards away from the trail and have no idea that it's there. While the greenway has clear signage directing you to places off of the trail, it has none directing you towards the trail heads from the local roads. Neighborhood streets along the way are indistinct from the ones that provide access to the trail and there is no way to know which trail heads are ADA accessible vs. inaccessible so that trail users can make informed decisions about how they can get to the best access point to suit their needs.

THE SOLUTION

The Middlesex Greenway is missing a critical element that is already standard practice in the Middlesex County park system and around the country: wayfinding. Wayfinding is important because it can help orient users to the Middlesex Greenway. If you were to look at the Roosevelt County Park, less than a mile away from the closest greenway access point, you would see that it has typical best practices in wayfinding that could readily be applied to the Middlesex Greenway.

Entry points are clearly defined with signs that let users know they are at a park entryway. Once you get into the park you are directed to the many amenities that the park has to offer. Wayfinding is found directing you towards the park, for internal circulation, as well as destinations of interest outside of the park. Lastly, the county has allowed branded East Coast Greenway signs to be mounted in the



park directing people towards that trail, but lacks wayfinding to the Middlesex Greenway, a linear park that is a part of the Middlesex County park system.

Many parks and greenways use wayfinding techniques to let users know where and how they can access public resources. Best practices on wayfinding indicate there is a broad design envelope for signs. It is really up to the community, or stewards of the trail, on how they want their signs to look.

Several potential logos and best practices on wayfinding have been developed to help inform a process to begin wayfinding for the Middlesex Greenway. Potential signs could be very basic or could range to something that is more branded and stylized. The look and feel of wayfinding signs should fit with Middlesex County wayfinding design practices and branding that have already been established.

As a starting point, directional signs should be installed on all of the side streets that provide immediate access to trail entrance points. This effort could then be expanded to become a part of a greater wayfinding plan. The greater plan could provide guidance to local destinations near the trail and connect to the regional trails in the area, such as the East Coast Greenway. Fortunately, these are simple and obvious solutions that can help people access this amazing county resource, the Middlesex Greenway.

“Middlesex Greenway: Wayfinding - The Missing Connection” can be viewed on Vimeo at: <https://vimeo.com/273390441/c735778cef>





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