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Wayfinding In Warrenton

Logan Ashby
Virginia Commonwealth University

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WAYFINDING IN WARRENTON

Logan Ashby
Master of Urban and Regional Planning Program
L. Douglas Wilder School of Government and Public Affairs
Virginia Commonwealth University
Spring 2021

Prepared For:

Department of Community Development, Town of Warrenton, Virginia

Prepared By:

Logan Ashby, Master of Urban and Regional Planning Candidate

Master of Urban and Regional Planning Program

L. Douglas Wilder School of Government and Public Affairs

Virginia Commonwealth University

Professional Plan Panel:

Dr. Meghan Gough, Capstone Coordinator & Primary Faculty Advisor

Urban and Regional Studies and Planning

Virginia Commonwealth University

James Smither, Secondary Faculty Advisor

Urban and Regional Studies and Planning

Virginia Commonwealth University

Denise Harris, AICP, Client Point of Contact

Planning Manager

Community Development Department, Town of Warrenton, Virginia

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Executive Summary

The Town of Warrenton is a historic community within Fauquier County, Virginia. Located 45 miles outside of Washington, D.C., the Town provides numerous recreational opportunities, shopping districts, museums, and dining options. To complement these historic and cultural amenities, Warrenton's Department of Community Development, sought research to help inform and establish a wayfinding system throughout the town. A wayfinding system can help connect people to places using the built environment and serves as an easily understandable visual guide. Establishing a wayfinding system will help the Town create a cohesive branding, achieve cohesive gateways, while also helping to establish the five character districts that were introduced in Plan Warrenton 2040. This study included a wayfinding audit, which helped to establish the existing conditions and recommend the following the goals:

1. Establish an advisory board to advise the Town on wayfinding decisions that support local business and visitor experience.
2. Create a sense of arrival into Warrenton and guide visitors to each district.
3. Enhance connections and modify wayfinding system throughout Warrenton.

By accomplishing these goals, Warrenton can be a well connected community with a strong sense of place that connects visitors to its numerous unique, vibrant and active districts and amenities.

PURPOSE BACKGROUND & APPROACH

PLAN PURPOSE

ABOUT THE PLAN

The Town of Warrenton is a historic community within Fauquier County. Located 45 miles outside of Washington, D.C., the Town provides numerous recreational opportunities, shopping districts, museums, and dining options. To complement these historic and cultural amenities, Warrenton's Department of Community Development, the Client, seeks research to help inform and establish a wayfinding system. A wayfinding system is an environmental navigational system that helps connect people to places and serves as an easily understandable visual guide. Establishing a wayfinding system will help the Town create a cohesive branding, achieve cohesive gateways, while also helping to establish the five character districts that were introduced in Plan Warrenton 2040.¹ Currently most of the gateways into the Town have different branding and certain areas around the Town are confusing for visitors to navigate. This research supports the goal of the Plan Warrenton 2040 to establish a wayfinding system that is simple, consistent, and intuitive for all modes of travel.¹

A walk audit completed in 2017 found that Warrenton lacked a cohesive wayfinding system throughout the Town and that visitors and residents find it difficult to know where major destinations are located.² This walkability audit led to the following recommendations:

1. Develop a wayfinding system that is consistent, simple and intuitive for all users with signage that directs visitors and residents along the preferred routes to local destinations.

2. Identify the best walking and biking routes to various destinations throughout Town.
3. Show destinations that are within walking and bicycling distance.
4. Remind motorists to expect pedestrians
5. Provide parking information
6. Remove old or outdated signage.

The audit also included general recommendations for the Town's gateways:

1. Include vertical elements to distinguish a gateway or transition with possible incorporation of public art.
2. Consider the installation of roundabouts or in-road features that can help slow motorists, serve as traffic control at intersections and serve as a visual gateway to the town.

This plan will assist the Town in the full implementation of a wayfinding system and identify areas of focus. The goal of this project is to provide the Town with information to help make Warrenton an easier and safer place to navigate for pedestrians and motorists.

WHAT IS WAYFINDING?

Wayfinding in simplest terms can be defined as a collection of sensory clues from the external environment that can help someone form a cognitive map of the built environment.⁶ Specifically, it refers to information systems that can guide people through a physical environment while enhancing their understanding and experience of the space. For urban settings, this is primarily concerned with signage and information systems to help pedestrians and motorists, with their own unique challenges, navigate the transportation system more effectively and safely.⁹

The theoretical base of this plan was influenced by Kevin Lynch's theoretical concepts proposed in his book, *Image of the City*.⁷ Kevin Lynch's theory laid out in *Image of the City*, ties into what makes a neighborhood, town or city, more pedestrian and "walkable".⁷ A good place is one that can be mentally mapped and has an easily remembered spatial orientation. Legible environments need to have an established identity, structure and meaning.⁸ This proposal argues that the Town can become a more legible place by incorporating a wayfinding system that allows residents and tourists to get around the Town more effectively.

Wayfinding also has roots in the New Urbanism movement, which can be defined as a planning approach that takes design elements from the past, to foster a sense of traditional neighborhoods. Examples of this can be seen in the transportation network as a strict grid pattern, narrow streets, and short blocks.⁸ Another notable aspect of what New Urbanism can represent is the aspect of each neighborhood having its own distinct neighborhood feel, including a commercial node that can

be within walking distance of residences.⁸ This design theory is relevant for this project for its emphasis on walkability. This design movement has a strong emphasis on walkable neighborhoods, which have amenities for residences to easily walk or bike to and with that are less automobile centric.

Wayfinding can occur at several different scales ranging from the urban, regional, or national level.¹⁰ When navigating a community, impressions and experiences of a community are important, and a wayfinding signage system can provide the visual cues that can be followed and understood by residents and visitors. When a community does not have efficient wayfinding signage it can cause visitors to feel discouraged and not take the opportunity to explore and discover the available opportunities. This absence of wayfinding elements can create an uninviting atmosphere which could cause visitors to lose interest, negatively impacting tourism, and economic activity.¹¹

BENEFITS OF WAYFINDING

Before breaking down the fundamentals of a wayfinding system, it is important to explore why a wayfinding signage system should be research and implemented. As mentioned previously, tourists and other visitors of a town or city will not have the same level of knowledge as residents of what activities (dining, shopping, recreation, etc.) that a community has to offer. For instance, research in Hawaii found that wayfinding signage had the most benefits to those who were classified as non-residents and had a significant impact on their route decision making.¹² Wayfinding signage can help a locality by highlighting its best amenities and increasing tourism to an area. A cohesive wayfinding system can also help to revive a localities image by having cohesive branding, which could help to attract visitors. A wayfinding signage system can help to differentiate the locality from surrounding towns and cities, allowing the opportunity to be unique, special, and desirable.¹³

Wayfinding signage systems also show evidence of encouraging active transportation. One third of the residents in the Hawaii study reported that the signage helped encourage them to walk and bicycle more.¹² Studies have also shown that a wayfinding system is more critical for pedestrians than to drivers because pedestrians are more sensitive when it comes to distance and more vulnerable to exceeding their physical limits.¹⁴

THE PROCESS

Research finds that a successful wayfinding system should be one that allows an individual to recognize their correct location at the start of their journey and fully understand when they have reached their desired location.¹⁵ Good wayfinding strengthens a navigator’s belief that they are going in the right direction and allows for them to orient themselves within the space.⁶ Wayfinding can be broken down into a four-step process, overviewed in Table 1.¹⁵

Table 1: Wayfinding Process. Adapted from Down and Stea, 1973.

Process	Description
Orientation	When a person finds out their current location with respect to nearby landmarks and the required destination
Route selection	Choosing a route that will lead them to the desired destination
Route control	Constant control and confirmation that the navigator is following the correct route
Recognition of destination	Realization that the navigator has reached the desired destination

ELEMENTS OF THE BUILT ENVIRONMENT

The framework of how the community is arranged is an important aspect of a wayfinding system. Wayfinding must work with the existing spatial arrangement of the community. Lynch’s research focused on the “mental mapping” aspect of the individual when navigating their environment and established five key physical elements, listed in Table 2. These elements relate to Warrenton directly.

The existing transportation network, including roads,

sidewalks, and trails, serve as the paths. The districts established in the Comprehensive Plan serve as Lynch’s definition of a district, with the immediate area around the districts serving as the edges. Nodes for Warrenton would be key intersections, such as Main Street and Alexandria Pike, with the courthouse serving as the “landmark” for this area.

Table 2: Lynch’s 5 Key Physical Elements ⁷

Paths	The routes that people use in order to reach a destination. These may include roads, walkways, paths, public transportations lines, etc.
Edges	The boundaries of distinct areas (districts). These are not usually physically moved down, as seen with paths, but have a visual difference than the surrounding areas. These can sometimes include physical barriers such as walls, water bodies, major roads, and other major dividers.
Districts	Large areas of a city or town that are uniform with a similar overall theme of character, that leave a strong mental impression. These can be also be used as a reference point as an individual move through them.
Nodes	Areas where there is a convergence of paths, or where edges meet. These are areas where there may be a higher level of concentration, such as street corners, intersections, and town squares.
Landmarks	These are external reference points and are generally specific objects such as signs, buildings, geographic features (hills). Landmarks are generally known in the specific district that they occur in.

WAYFINDING AND SIGNAGE

Signage is one of the most important aspects of urban wayfinding system. It provides a direct form of communication while conveying information about the surrounding environments.⁶ Signage is typically put into six basic sign types, as listed in Table 5 and illustrated in Figure 1. Directional and identification signs must be placed in critical areas such as nodes and decision points.¹⁶

¹⁸ Reassurance signs should be placed in areas beyond the

decision points to reassure the traveler that they continuing to go in the right direction.⁶ The signage system should be composed of well-contemplated design elements that take advantage of size, color, lettering and symbols.⁶ Typically, this type of information can be found in Manual on Uniform Traffic Control Devices (MUTCD), which lays out the design requirements to conform to regulatory measures.

Table 3: Signage Types

Directional Signs	Those typically found in cities and buildings and generally include arrows or symbols to “point” people in the right direction ⁶ .
Identification Signs	Signs that identify a destination, place or object ⁶
Reassurance signs	These signs signal a confirmation to the navigator that they are going in the right direction towards their destination ⁶
Safety signs	Signs that warn or encourage behavior to help keep the navigator and other individuals, such as pedestrians, safe ¹⁶ .
Regulatory	The least useful signage type in terms of wayfinding, but state establish rules in an area ¹⁷

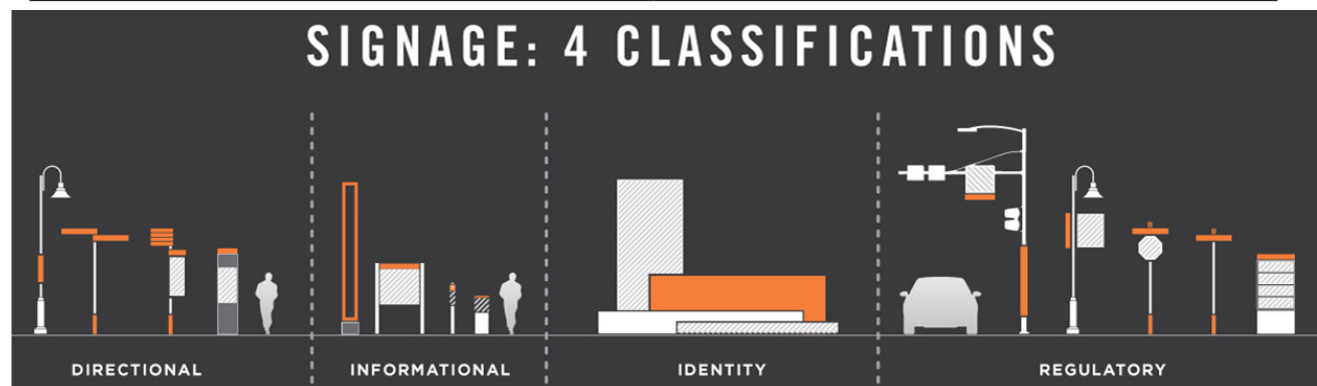


Figure 1: Signage Classification Examples

Source: <https://rsmdesign.com/what-is-wayfinding-part-3-wayfinding-is-more-than-just-signage>

APPROACH & METHODS

WAYFINDING AUDIT

Establishing the baseline of the existing signage and wayfinding system is also a crucial element for implementing a new and improved wayfinding system. This was accomplished via an audit on the existing wayfinding signage. This audit included a series of questions concerning the major decision points and along routes with multiple access points. Questions of the audit included:

- Are there elements of visual clutter?
- Are there existing directional signs?
 - Do they include arrows?
 - Is it easily legible?
 - Is it in a location that makes it easy for people to see?
- Is there signage directing people towards amenities, such as restaurants, retail, parking, and emergency services?

COMMUNITY SURVEY

Residents and businesses need to have a voice in term of the wayfinding signage system. Wayfinding signage can be broad in destinations or specific, depending if it is public or privately owned. In order to accomplish this, a survey should be developed that can be taken by residents, tourists, and merchants. Tourists are a crucial part of the survey, with research supporting that wayfinding signage is the most beneficial for tourists. This survey was developed in collaboration with the Town of Warrenton. Questions

for the survey included but were not limited to:

- What are your favorite destinations (restaurants, parks, neighborhoods, etc.)?
- What areas are currently confusing to navigate?
- Are there specific parks, recreational spaces, or other public areas that really stand out for Warrenton?
- Where are you traveling from to get to your destination (area of work, home, another town, etc.)?

The Town already has a distinguished design brand, but residents and business will also need to have a say in the types of wayfinding signage. A visual preference survey was also incorporated into the survey. See Appendix A, for a draft of this wayfinding survey.

IMPLEMENTATION

Finally, using the previously mentioned methods, a strategic list was developed to provide the Town with key locations where wayfinding signage will be the most beneficial and specific public amenities the signage should lead to. These recommendations are for future expansions of the wayfinding system, and includes areas that need active transportation improvements to keep the wayfinding system cohesive and improve safety.

EXISTING CONDITIONS

EXISTING CONDITIONS

INTRODUCTION

When establishing a wayfinding system, it is important to understand what the current conditions are regarding Warrenton’s transportation system. This section will cover what the current commuting patterns, crash data, signage, and pedestrian infrastructure that currently exists in Warrenton. This information will be used to establish what the current strengths and weaknesses are regarding wayfinding in Warrenton.

COMMUTING PATTERNS

Walking as a means of commuting within Warrenton is relatively low, consisting of only 1.5% of the population (Table 1). Public transportation as a means of commuting is also low comprising of only 0.8% of the population, as seen in the table below ³. As will be discussed, this data may suggest that active and public transportation within the Town is low possibly due to problems in the existing pedestrian infrastructure, such as narrow sidewalks, and obstructions in the sidewalks.

Table 4: Commuting Patterns ⁸

Warrenton Commuting Patterns	Number of Individuals	
Car, Truck, or Van	4,388	92.3%
Drove Alone	3,738	78.6%
Carpooled	650	13.7%
Public Transportation (Includes Taxicab)	40	0.8%
Walked	73	1.5%
Other Means	94	2.0%
Worked at Home	160	3.4%

BIKE AND PEDESTRIAN INFRASTRUCTURE

Warrenton has very minor gaps in the existing pedestrian transportation network, which makes it an ideal place for a wayfinding system. Most of the trail system is located on the outskirts of the Town (Figure 2 on following page). Existing pedestrian infrastructure is majorly dependent upon sidewalks. These sidewalks are primarily located along Main Street, within “Old Town” Warrenton, and along Walker Street, Shirley Avenue, and Falmouth Street. Most of the interior neighborhoods throughout the Town have sidewalk infrastructure. ¹

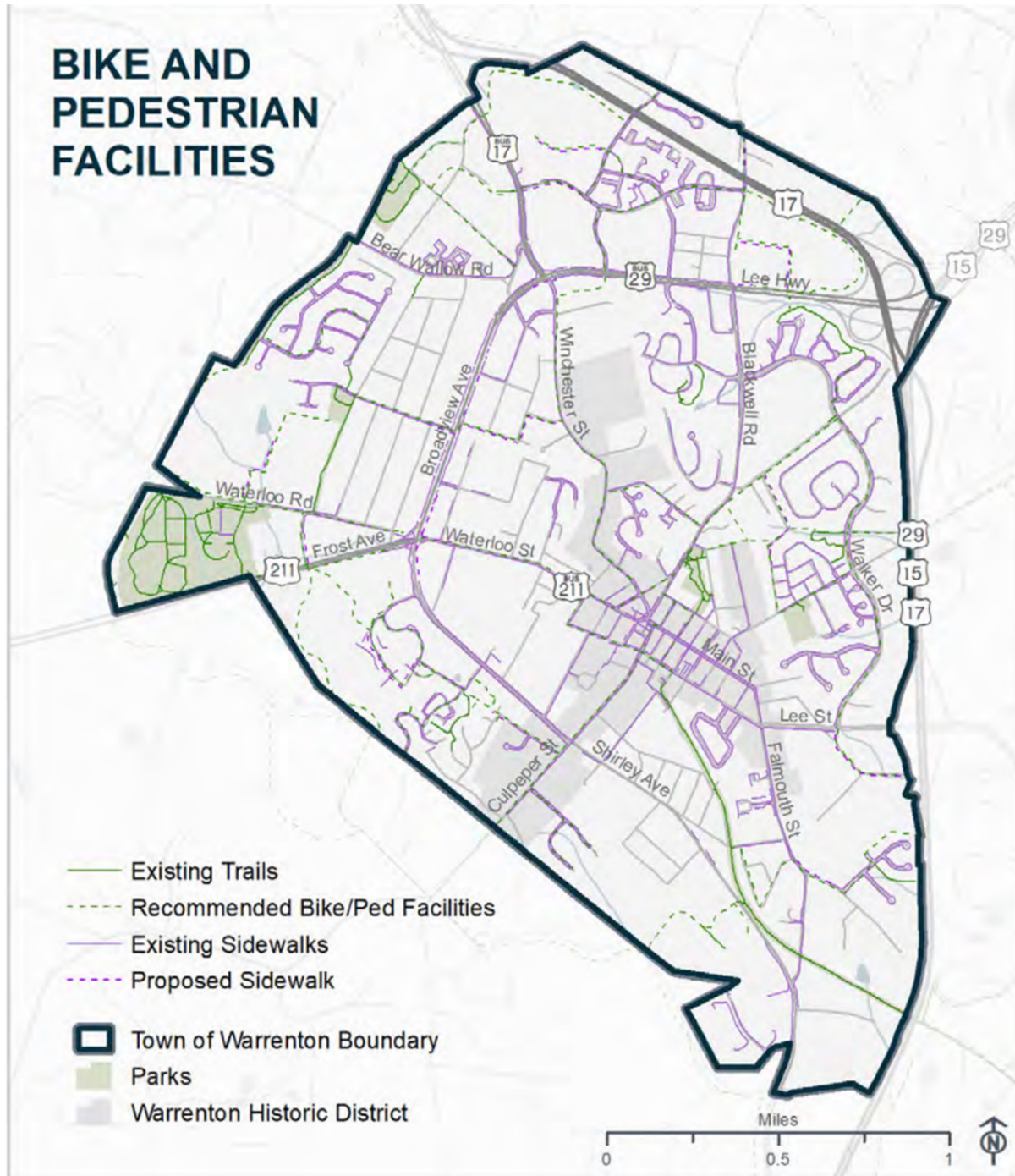


Figure 2: Bike and Pedestrian Facilities¹

EXISTING CONDITIONS

SAFETY

Most vehicular crashes occur along Lee Highway and Broadview Avenue. Most of these crashes happen along the intersection of Frost Avenue and Winchester Street (Figure 2).¹ This intersection is a hot spot for crashes potentially because it is where routes 29 and 17 meet and is a commercial area. There were sixteen pedestrians involved in crashes between 2013 and 2017, resulting in four fatalities (Table 2).⁴ These areas could benefit from wayfinding signage and active transportation infrastructure which could potentially influence traffic calming and improve pedestrian safety.⁵

This is important to wayfinding because it indicates areas where signage and street design could potentially have a traffic calming effect, by reminding drivers that they have entered a distinct neighborhood. Examples of this include having signage that states, “Welcome to Old Town, Please Drive Slowly”.

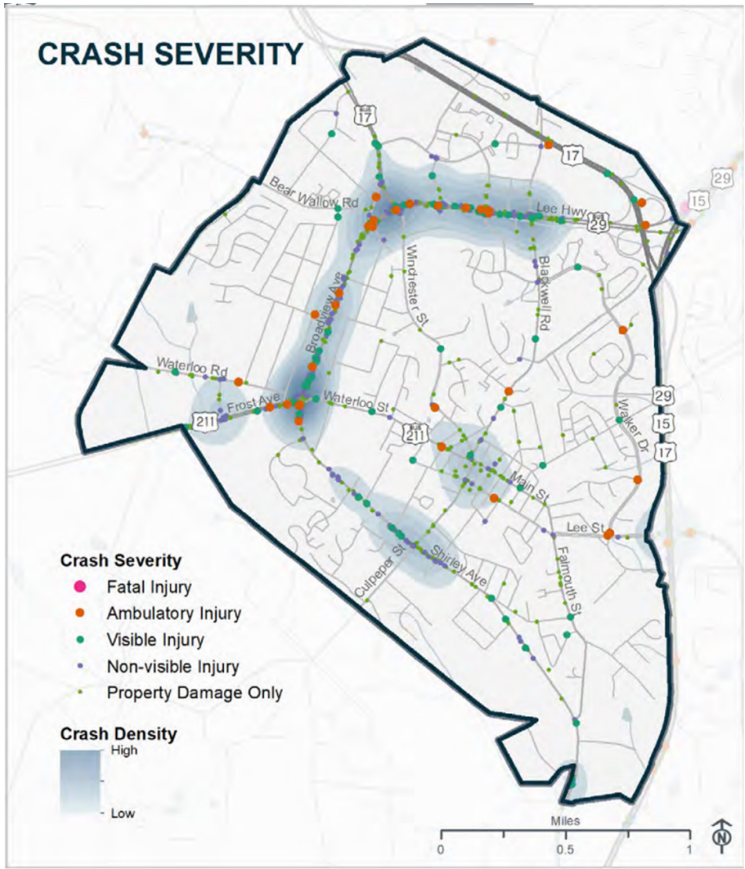


Figure 3: Crash Severity Map¹

Table 5: Pedestrian Involved Crashes

Year:	2013	2014	2015	2016	2017
Pedestrians Injured	3	2	3	3	1
Pedestrian Fatalities	0	0	0	1	3
Totals:	3	2	3	4	4

Source: VDOT, Interactive Crash Data Report (2013 to 2018)

EXISTING CONDITIONS

ZONING

Most of the commercial districts within the Town are along the main thoroughfares of Lee Highway, Broadview Avenue, and Shirley Avenue (Figure 4). The Central Business District is the heart of the Town, located in the Historic District. Most of the Towns residential areas consist of single-family homes, with a few multifamily and townhouse districts. The Town has parks that are well spread out, allowing for plenty of opportunities for residents to have access to recreational areas. The current zoning maps shows that the Town has plenty of potential to be more walkable. This is important to wayfinding because it helps establish what the current uses of the Town are and helps to identify key areas where wayfinding signage may be needed.

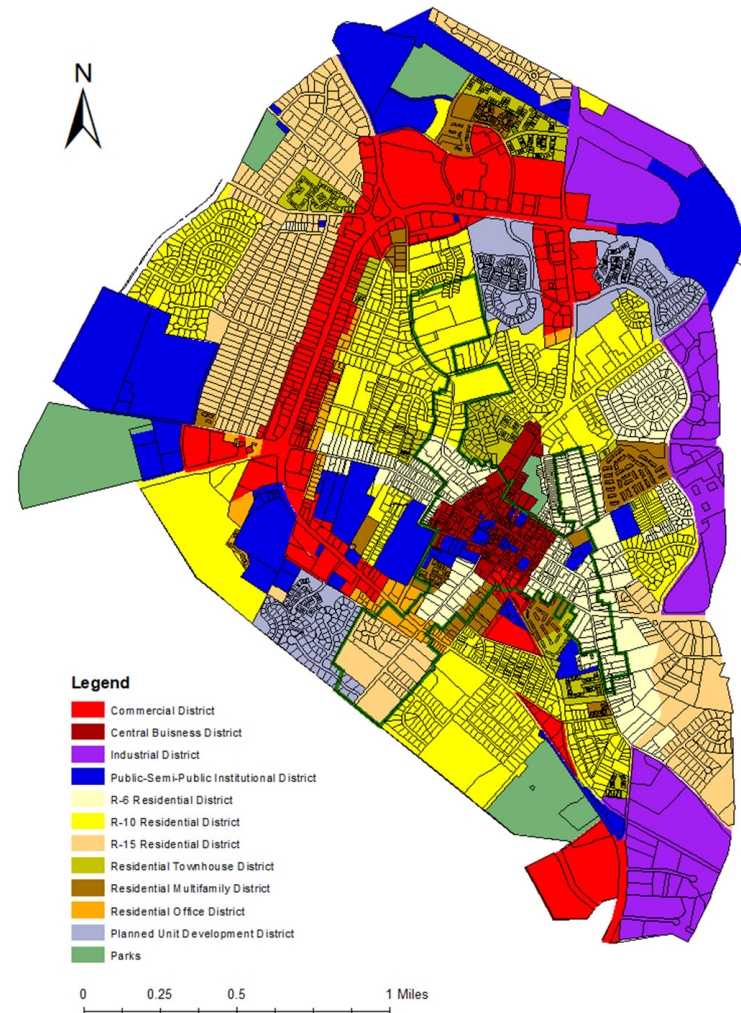


Figure 4: Current Zoning

EXISTING CONDITIONS

EXISTING SIGNAGE AND GATEWAYS

The gateways into Town currently lack consistent branding. They could benefit from having some street-scape features to clarify to visitors that they have arrived into the Town, acting as a gateway. These gateways have potential to enhance the Town from a place-making perspective. Street-scape features could also serve as a traffic calming device, letting drivers know that the road uses are changing and to expect more pedestrians, which could improve safety.



Figure 6: Old Town Gateway
From Google Maps Street View

The intersection of Main Street and Alexandria Pike have no existing signage to clarify a sense of arrival. This intersection provides an excellent opportunity to become a gateway into the Historic District and could also benefit from better urban design to calm traffic and establish place-making elements. Currently, there is a plan to establish a gateway at this key intersection. This also provides a great example of a landmark, which in wayfinding, is a noticeable feature, whether natural or built, that could establish a sense of location for people who are traveling, such as the courthouse (Figure 7).



Figure 7: Lee Highway Gateway.
Retrieved From Google Maps Street View

The signage on Meetze Road, going towards Old Town (Figure 8), is currently cluttered with numerous signs. Condensing the signage and implementing a cohesive design will make it easier for pedestrians and vehicles to navigate and to formalize the Town's image. This area also provides an opportunity to provide a gateway for the Historic Old Town District.



Figure 8: Meetze Road going into Old Town
From Google Maps Street View

EXISTING CONDITIONS

PILOT WAYFINDING PROGRAM

There is currently a pilot wayfinding program in the Historic District, an example of which can be seen in Figure 10. Iconography could be used to promote universal design principles, so those with hearing, reading or language barriers are able to understand the information and are able to navigate the Town just as effectively. Incorporating these principles could be a way for the Town to promote transportation equity.



Figure 9: Historic District Wayfinding Signage.
From Google Maps Street View

BRANDING

In 2019, the Town established an official branding, “Experience Warrenton”, which includes an established color scheme to be used in signage, tourism, and promotional materials for the Town. This color scheme will be used in the established wayfinding system (Figures 11 and 12).¹⁹



Figure 10: Wayfinding Brand Example.¹⁹



Figure 11: Signage Branding Examples ¹⁹

EXISTING CONDITIONS

SUMMARY

The analysis of the existing conditions of the Town found that although there is an existing pedestrian transportation network in the Town, it could still be improved by increasing the amount of connectivity. Various streets and intersections, particularly along Broadview Ave., could benefit from street-scape features that could have a traffic calming effect to increase safety. The Town has some gateways, to show visitors that they have officially arrived, but some are missing and are overall missing a cohesive design that reflects the established Town branding. The established character districts create an opportunity to really introduce and establish these districts with a wayfinding system that could help residents and visitors get around Warrenton easier.

FINDINGS

FINDINGS

INTRODUCTION

The following section describes the research that was performed in order to understand the existing wayfinding system that is in place and to identify existing gaps and areas which might cause confusion to visitors throughout Warrenton. This section also includes an introduction to the character districts proposed by Plan Warrenton 2040 ¹, to provide context on that shape the wayfinding system might take.

TOWN GATEWAYS

Currently, there are no cohesive gateways for all entrances into Town. All the gateway signage into Town varies in terms of design and brand style, which does not help establish a strong identity for Warrenton. However, current placement of gateways into Town are highly visible, and allow for an excellent placemaking opportunity.



Figure 12: Town Gateways (Left to Right): Meetze Road, Shirley Ave, and Route 211.

FINDINGS

CHARACTER DISTRICTS

The Town of Warrenton has established five character districts in the most recent comprehensive plan. This includes one overlay district, called the Makers District, which is located within the Greenway District.

Old Town District:

Old Town is the cultural and historical center of Warrenton. The comprehensive plan calls for the continued preservation of Old Town while also incorporating adaptive reuse projects to encourage more foot traffic and attract more tourism.



Figure 13: Old Town District¹

New Town Warrenton District

The New Town Warrenton District is one of the main entryways into Warrenton and is located right off Route 29. This district is a gateway district for visitors coming from neighboring Prince William County and visitors who come into town from Route 17, towards Winchester. The comprehensive plan calls for this district to be a high density, mixed use area, with a goal to develop more civic spaces.



Figure 14: New Town Warrenton¹

Experience Broadview Commercial District:

The Experience Broadview District currently has various strips of shopping malls and restaurants along the corridor, with single family housing adjacent to it. Plan Warrenton 2040 has a goal to add nodal develop by incorporating mixed use areas to transition into the surrounding neighborhoods and create a cohesive street frontage.¹



Figure 15: Experience Broadview District¹

FINDINGS

CHARACTER DISTRICTS

Health and Wellness District:

The Health and Wellness District is where the county hospital is located, along with several small clinics, and also includes grocery and shopping outlets. The comprehensive plans call for this district to anchor the hospital with more clinics and other health services while developing “housing options that promote aging in place”.¹



Figure 16: Health and Wellness District ¹

Greenway and Makers District:

The Greenway and Makers District serves as one of the major gateways into Warrenton. Currently it is zoned for commercial and industrial use. The comprehensive plan proposes this area continues with the existing zoning but also calls to incorporate more creative gateway elements, while adding connections to the existing greenway.¹



Figure 17: Greenway and Makers District¹

MAJOR DECISION POINTS

Within each district, there is at least one activity node, where there is a large commercial presence and there can be expected to be a higher traffic volume and pedestrian presence. The Town has six different intersections which are major decision points. These decision points are where travelers can decide which route would take them to their desired destination. Most of these decision points occur along the boundaries of the established character districts. The districts, activity nodes, and major decision points can be seen in the map shown on the following page (Figure 18).

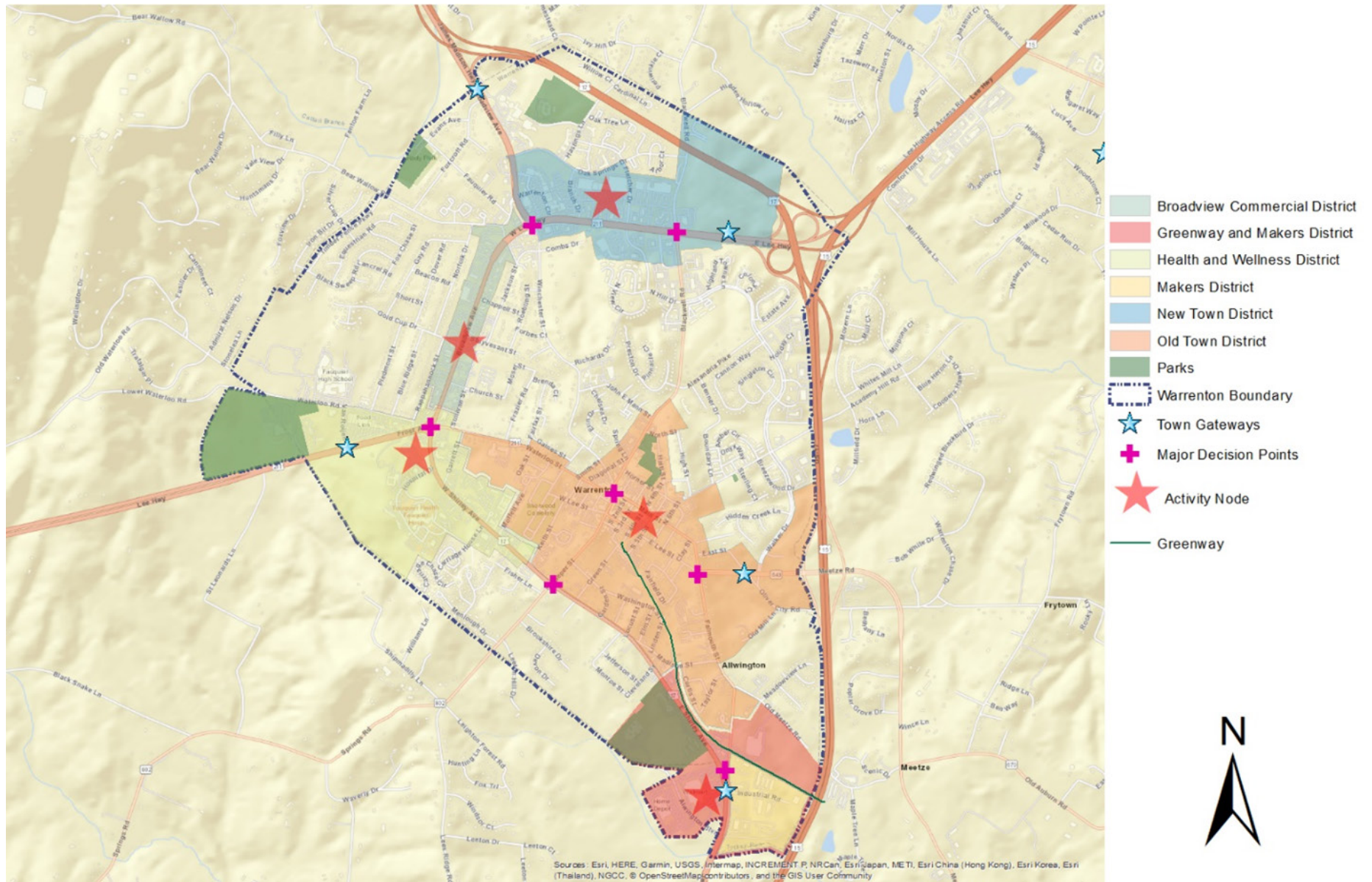


Figure 18: Decision Points and Activity Nodes

FINDINGS

OLD TOWN AUDIT

1. Currently, there are no easily identifiable **gateways** into the Old Town District. The gateway signage that does exist, lacks a cohesive theme, and could be easily missed by visitors (Figure 20).



Figure 20: From Left To Right. Historic District signage off Winchester St and Alexandria Pike. Main Street Signage off Meetze Rd

2. The Courthouse provides a **valuable landmark** that is easily recognizable to visitors of Warrenton. Old Town, as previously mentioned, has the greatest example of a wayfinding system that is in place as part of the wayfinding pilot program. The current sign located near the court house could potentially be too small to be easily read by drivers (Figure 21).



Figure 21: (Left to Right) Court House in Historic District and Existing Wayfinding Signage Example

3. Meetze Road leading towards Main St. in the Old Town District has multiple welcome signs and directional signage which could potentially confuse visitors (Figure 22). The Town should focus on reducing the amount of **visual clutter** in this area.

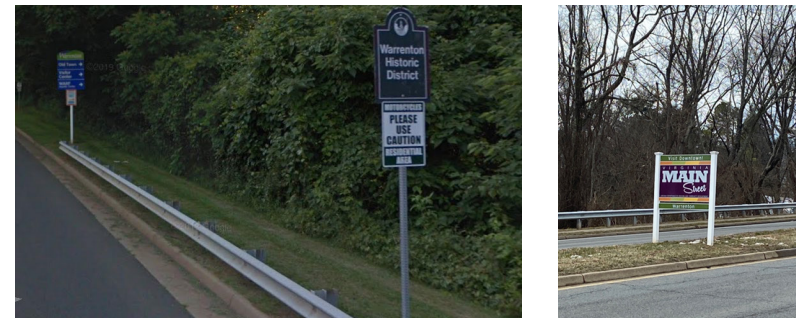


Figure 22: Multiple wayfinding signage along Meetze Road leading into Old Town can potentially confuse visitors.

FINDINGS

OLD TOWN AUDIT

4. The Greenway, a valuable recreational asset for the Town, is located on South Fourth St. in Old Town, currently has no directional signage from Main St. or East Lee street, which could prevent visitors from finding it easily. The greenway currently includes sculpture elements and is a great example of **placemaking**. The active transportation infrastructure also discontinues at Lee and Fourth Street where the entrance to the greenway is, causing a potential safety risk and reducing access to those with disabilities (Figure 23).



Figure 23: Left to Right, Greenway Train Tracks, Greenway Love Sign, and missing sidewalk network at entrance of greenway.

5. There is existing historical signage, such as the Civil War Trail signage in Old Town, as well as existing interpretive signage throughout Old Town at historical locations (Figure 24). There is an opportunity for this to be expanded to provide more **interpretive signage** throughout the District.



Figure 24: (Left to Right) Civil War Trail Indicator and existing interpretive signage

6. Currently, there is no signage along Winchester Street or Broadview Avenue directing visitors to Old Town. While the intersection of Lee Highway and Blackwell Road, as well as along East and West Shirley Avenue does have **directional signage**, it can be easily missed due to small format, that blends in with the surrounding landscape (Figure 25).



Figure 25: Directional Signage for Old Town off Shirley Ave.

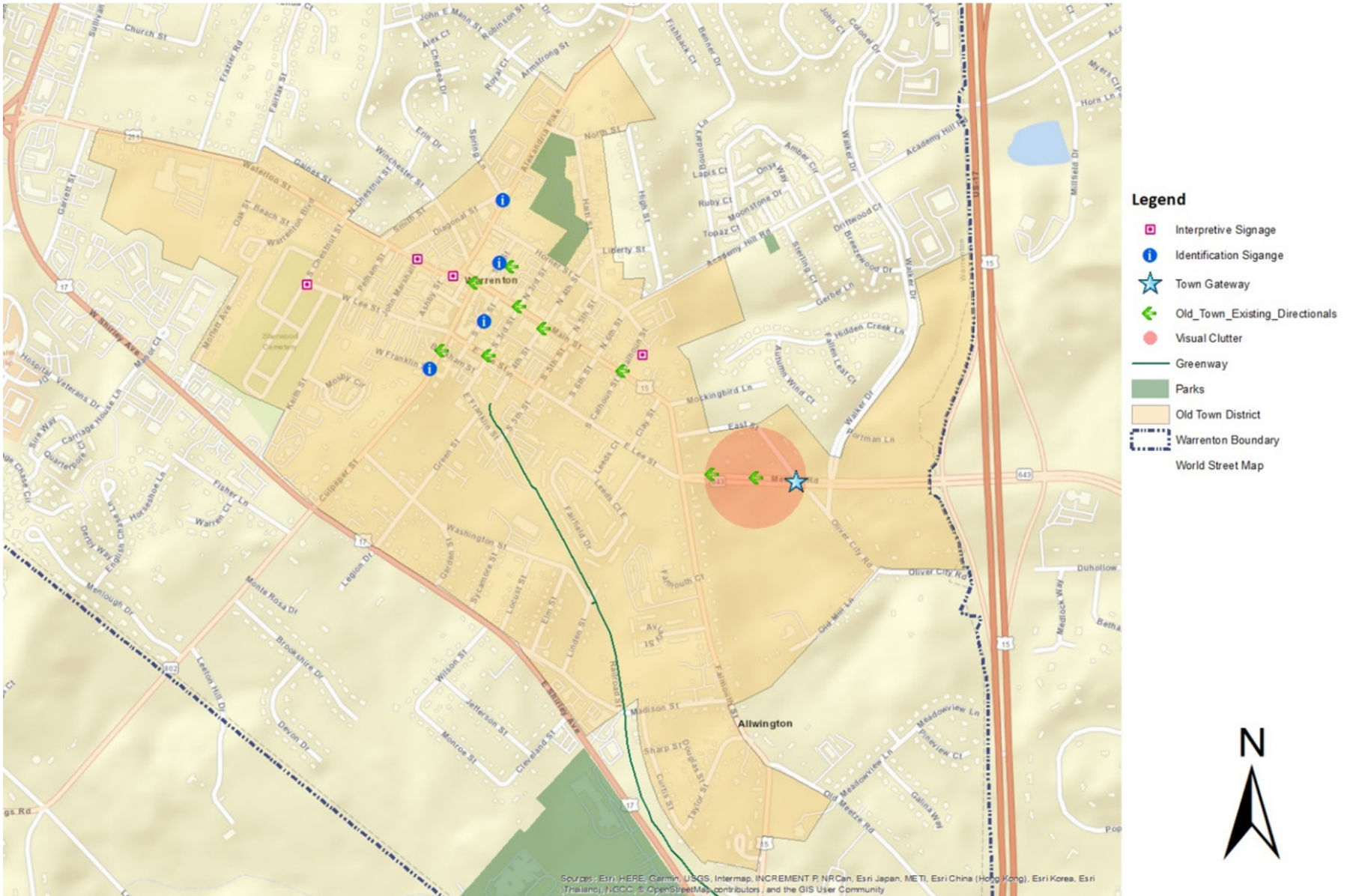


Figure 26: Existing Conditions Old Town

FINDINGS

New Town Warrenton Audit

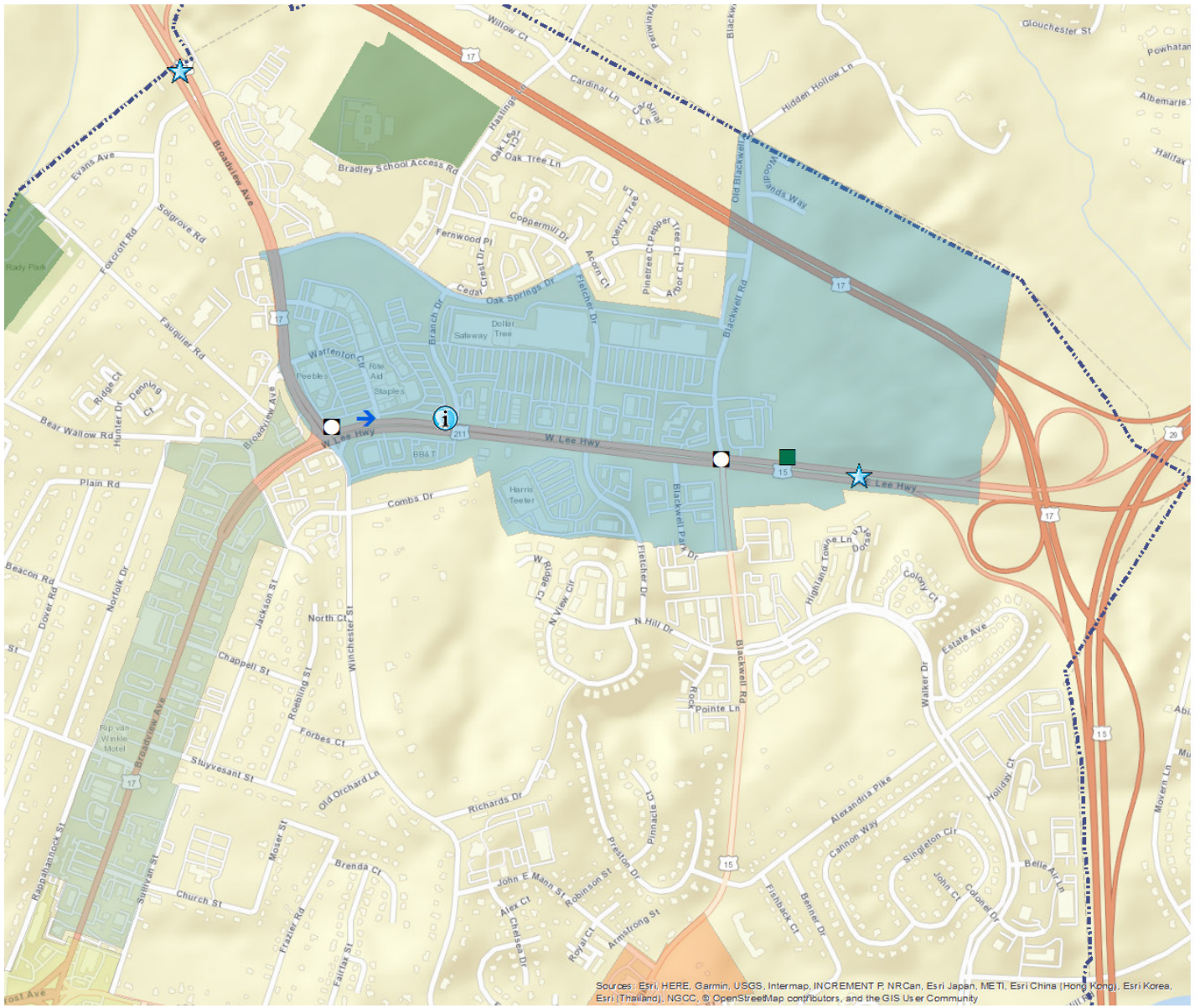
1. New Town Warrenton District has a well-connected sidewalk infrastructure in place. This district is a very walkable district with plenty of shopping and dining opportunities. Existing wayfinding signage in place is **primarily regulatory**, with existing wayfinding signage directing visitors to the Highland School, the Old Town District, the visitor center, and the civil war trail (Figure 27).
2. This district has two **major decision points**, the intersections of Lee Highway and Blackwell Road, which leads to the Old Town District or into New Town. The intersection of Lee Highway, Winchester Street, and Broadview Avenue, where visitors have the decision of going into Old Town, or to the other districts.
3. This district has no **directional signage** for the other districts, such as the Old Town District. The district would benefit from having signage at key intersections, such as those described above, to guide visitors to the Town's districts and amenities.



Figure 28: Existing Wayfinding Signage off Lee Highway



Figure 29: Lee Highway and Blackwell Road is a major decision point



- Legend**
- Directional for Highland School
 - Regulatory Directional
 - Route Signage
 - Signage for Visitor Center and Civil War Trail
 - Town Gateway
 - New Town District
 - Broadview Commercial District
 - Health and Wellness District
 - Old Town District
 - Parks
 - Warrenton Boundary



Figure 30: New Town Audit

FINDINGS

BROADVIEW AUDIT

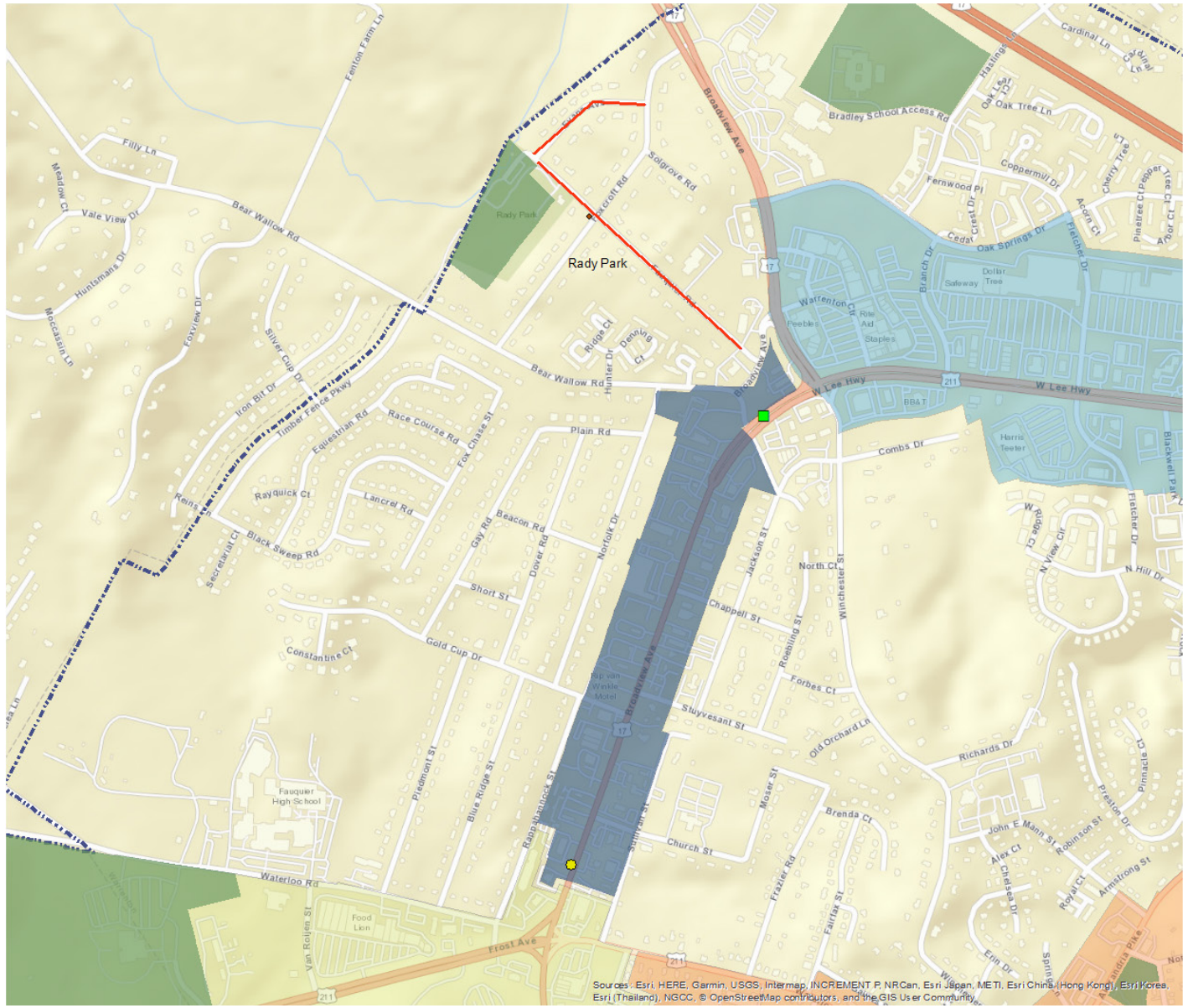
1. There are few direct connections within the Experience Broadview District, but there are currently no **directional signs** along Broadview Avenue, with signage limited to just regulatory, state routes and regulatory signage to neighboring towns and cities.
2. Rady Park, located near the Broadview Avenue District, provides a great recreational resource, but there is currently no directional signage to help visitors to Warrenton discover it. Fauquier Road and Evans Avenue currently have no sidewalk infrastructure in place which would help make Rady Park more accessible via **active transportation** (Figures 31 and 32).
3. The Broadview Avenue District is surrounded by residential neighborhoods, with shopping destinations along the main corridor. This area currently lacks signage to remind drivers and pedestrians to travel safely, and could benefit from having **safety signage** in place, or other **traffic-calming initiatives**.



Figure 31: Rady Park



Figure 32: Fauquiere Road leads directly to Rady Park, but currently has no sidewalk to safely connect pedestrian to the park.



- Legend**
- Existing Directionals for Other Localities
 - Existing Route Signage
 - SidewalkMissing
 - Broadview District
 - Parks
 - Greenway and Makers District
 - Health and Wellness District
 - New Town District
 - Old Town District
 - Warrenton Boundary



Figure 33: Broadview Audit

FINDINGS

HEALTH AND WELLNESS DISTRICT AUDIT

1. Existing signage in the Health and Wellness District is **primarily regulatory signage** providing directions to neighboring towns and cities as well as Shenandoah National Park.
2. There is existing wayfinding signage along Frost Ave, directing people towards the Old Town District, as well as public amenities such as the library and farmers market. The existing signage does not have a **cohesive theme** and there is a potential concern of **visual clutter** on Frost Ave, heading towards Shirley Avenue. (Figures 34 and 35).
3. The Warrenton Aquatic and Recreation Facility (WARF) (Figure 36) is a major recreational destination in the Town which provides plenty of **recreational activities** for residents and visitors. There is currently no **directional signage** to direct people from the main routes to easily find the WARF using the built environment.



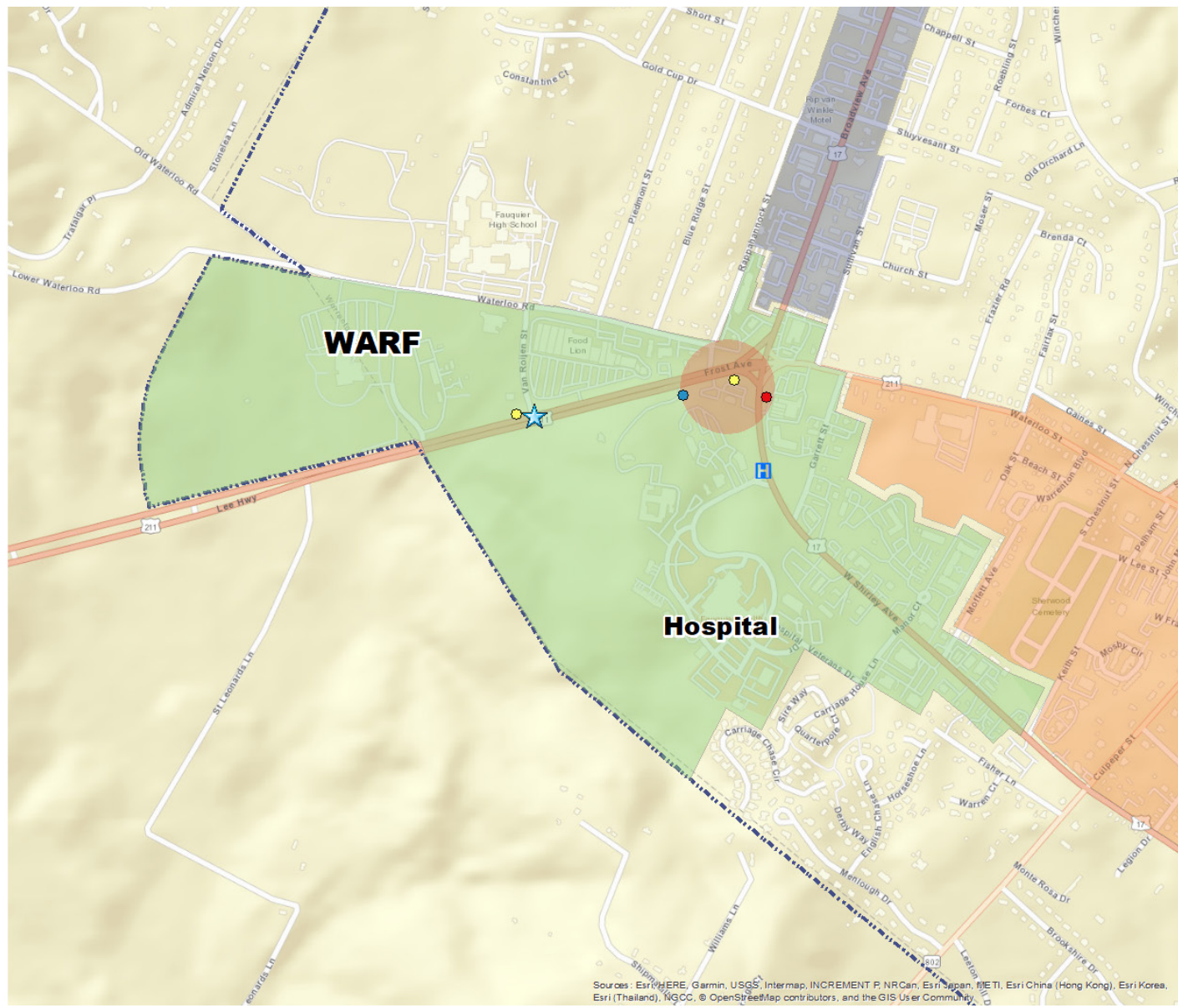
Figure 34: Regulatory Wayfinding off Frost Ave.



Figure 35: Wayfinding off Frost Ave



Figure 36: WARF



- Legend**
- Existing Regulatory
 - Existing Wayfinding
 - Old Town Directional
 - Existing Wayfinding
 - H Hospital Sigange/Gateway
 - ★ Town Gateway
 - Visual Clutter
 - Health and Wellness District
 - Broadview Commercial District
 - Old Town District
 - Health and Wellness District
 - Warrenton Boundary



Figure 37: Health and Wellness Audit

FINDINGS

GREENWAY AND MAKERS DISTRICT AUDIT

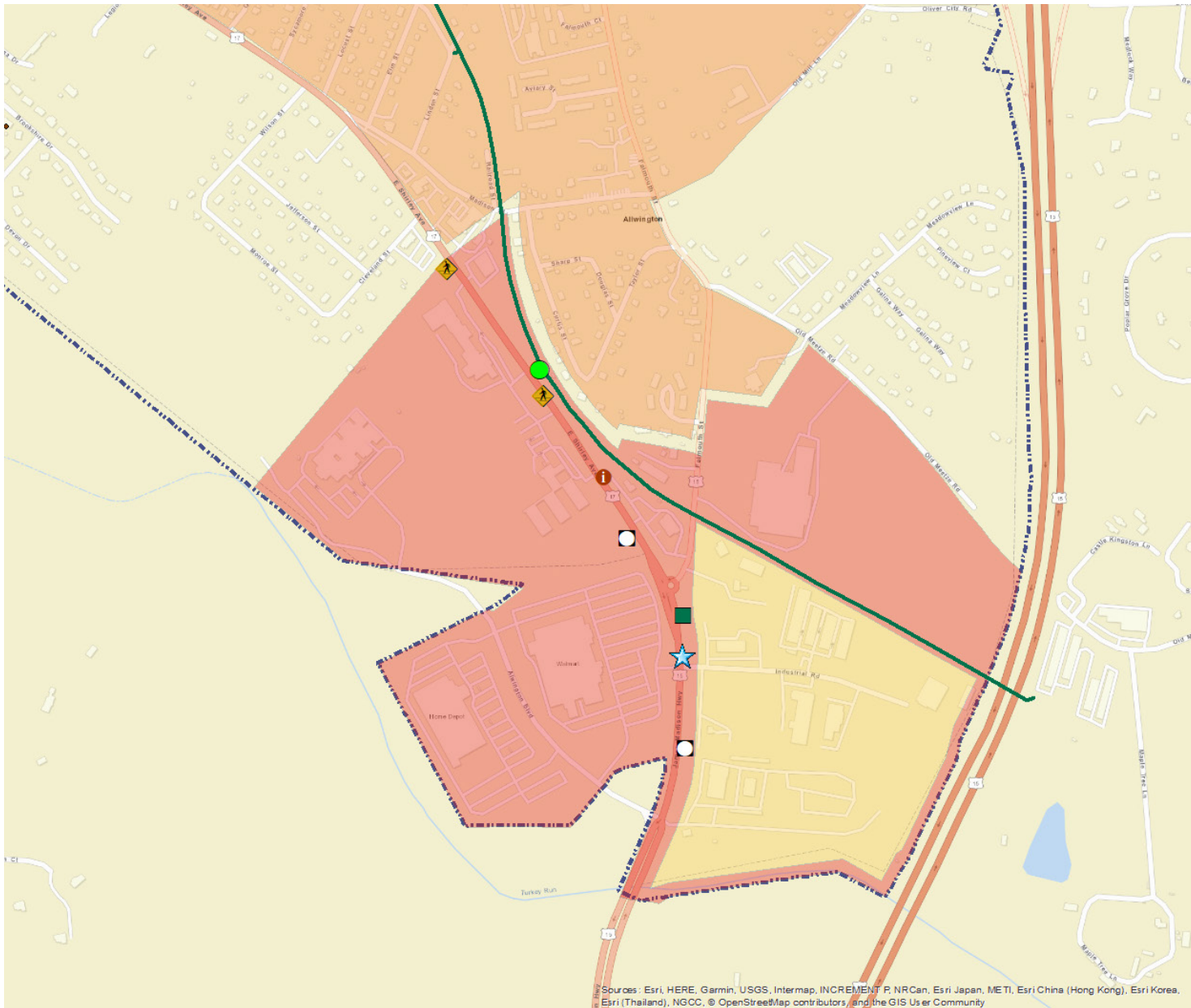
1. The Greenway and Makers District is primarily a commercial and industrial district with mainly regulatory signage. This district also has existing **safety signage** in place, near the public middle school.
2. There are examples of existing wayfinding signage in the Greenway and Makers District, with directional signage to the hospital as well as signage to Old Town. The greenway has an entrance in this district off East Shirley Avenue, while there is pedestrian safety signage, there is currently no **identification signage**, that is easily seen from the street, to indicate that the greenway can be accessed from this route.



Figure 38: Regulatory Wayfinding off Frost Ave.



Figure 39: Wayfinding off Frost Ave



Legend

- Greenway Entrance
- i Old Town Signage
- Regulatory Directional
- Route Signage
- School Safety Signage
- ★ Town Gateway
- Greenway
- Greenway and Makers District
- Makers District
- Old Town District
- Warrenton Boundary



Figure 40: Health and Wellness Audit

PLANNING THE WAYFINDING SYSTEM

Vision

Warrenton can be a well connected community with a strong sense of place that connects visitors to its umerous unique, vibrant and active districts and amenities.

Planning the Wayfinding System

Wayfinding in Warrenton responds to the assets and gaps that currently exist in Warrenton's existing wayfinding network. The analysis provided in the previous section found that while there are existing landmarks, amenities and wayfinding signage in place, there are steps the Town can take to to increase the experience visitors have while in Warrenton. This plan establishes three main goals that the Town should focus on in order to address existing gaps and enhance the navigational experience of Warrenton. The goals outlined in this plan build on Plan Warrenton 2040 ¹, emphasizing a more cohesive and dynamic experience for residents and visitors.

GOALS AND STRATEGIES

Goal 1: Establish an advisory board to advise the Town on wayfinding decisions that support local business and visitor experience.

Objective

1.1 Collaborate with key stakeholder groups.

Strategies:

1.1.1: Collaborate with community leaders and business associations on the wayfinding system. This can help ensure that the wayfinding system is implemented strategically, and has strong community support.

1.1.2: Develop a signage decision matrix in collaboration with community leaders and business associations. This decision matrix will help to clarify what should or should not receive signage, and what level of detail signage should have.

Objective

1.2 Solicit feedback from residents of Warrenton and visitors to get an understanding what existing problems there are in Warrenton from the individual experience.

Strategies:

1.2.1: Disburse a wayfinding survey to residents and visitors of Warrenton to identify existing issues in Warrenton and design preferences. This survey will help to clarify what types of signage and placemaking elements that would be the most beneficial.

1.2.2: Conduct community meetings regarding a wayfinding system in Warrenton to receive comprehensive public input.



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GOALS AND STRATEGIES

Goal 2: Create a sense of arrival into Warrenton and guide visitors to each district.

Objective

2.1 Construct distinctive gateways leading into Warrenton to foster a sense of arrival.

Strategies:

2.1.1: Replace existing Town gateways with signage that has a color scheme that is in accordance with the already established Town Branding Guidelines. While these should be similar to one another, there is also opportunity to make them unique in regards to which district they are located in.

2.1.2: Design Town Gateways to have artistic elements, such as planting designs or sculptural elements, to help establish a unique identity for Warrenton, and foster a strong sense of place and arrival for visitors.

2.1.3: Collaborate with residents, landscape architects, and urban designers on the design of the gateways. This process could be started off and enhanced through a wayfinding survey.



Figure 41: Example of District Gateway
Source: <https://i.pinimg.com/originals/66/49/72/664972124848321549532475c2c296a96c5c.png>



Figure 42: Example of Town Gateway
Source: <https://spark.sdsds.com/page/0/3C7M/>

GOALS AND STRATEGIES

Goal 2: Establish a sense of arrival into Warrenton and guide visitors to districts and amenities.

Objective

2.2 Create unique gateways leading into each Warrenton's districts.

Strategies:

2.2.1: Replace existing district signage with signage that reflects the Town's branding. This can help to ensure that there is consistent branding throughout the Town, which can help to unify the implemented wayfinding signage system.

2.2.2: Ensure that each district sign has its own unique identity. This can aid in wayfinding by allowing people to easily recognize which district they are traveling in or have arrived at.



Figure 43: The intersection of Main Street and Alexandria Pike provides an excellent opportunity for a gateway into the Old Town Historic District.



Figure 44: Example of District Gateway. This type of gateway allows for visitors to see that they have arrived to the district, while also establishing a strong sense of place.

GOALS AND STRATEGIES

Goal 3: Enhance connections and modify wayfinding system throughout Warrenton.

Objective

3.1 Install directional signage leading pedestrian and drivers to Warrenton's districts and major amenities.

Strategies:

3.1.1: Add pedestrian and vehicular signage at major decision points to direct people to districts and major amenity destinations such as public parks and the Warrenton Aquatic and Recreational Facility (WARF).

3.1.2: Include reassurance signage along routes with multiple intersections to provide clarification to visitors that they are heading towards their intended destination.

3.1.3: Install identification signage at public destinations such as the WARF, greenway, library, and public parks.



Figure 45: Example of Directional Signage

Source: Warrenton Brand Guidelines

Objective

3.2 Address existing active transportation connectivity issues and safety issues to ensure that amenities are friendly via multi-modal travel.

3.2.1 Connect active transportation network in the Old Town District to the Greenway along South Fourth street. This can help visitors and residents access this recreational asset more safely. Ensuring that the sidewalk network connects to this will also allow those with physical disabilities access the Greenway more easily.

3.2.2 Connect active transportation network to Rady Park along Fauquier Road and Evans Avenue.

3.2.3 Add safety signage along routes with a heavy pedestrian presence and minimize visual clutter at intersections.

GOALS AND STRATEGIES

Goal 3: Enhance connections and modify wayfinding system throughout Warrenton.

Objective

3.3 Update the existing wayfinding system to unify Warrenton's identity by ensuring all wayfinding signage is similar in design.

Strategies:

- 3.3.1 Replace existing directional wayfinding signage with new and updated signage similar in theme to the Town's branding.
- 3.3.2 Enhance existing identification signage at the entrance of public destinations to have a similar theme to the Town's branding.

Objective

3.4 Modify wayfinding system to conform with updates in the transportation network and new developments.

Strategies:

- 3.4.1 Add to wayfinding system when updating the pedestrian and bicycle network, such as new multi-modal trails, bike lanes and public transit stop.
- 3.4.2 Add and update wayfinding system as new developments are constructed and more amenities become available.



Figure 46: Example of how Warrenton's Wayfinding System should be cohesive, and similar in theme to its Brand Guidelines ¹⁹

Implementing the Plan:

The goals, objectives, and strategies proposed by this plan, require multiple stakeholder groups to collaborate. Stakeholder groups are key aspect of implementing a wayfinding system with non-profits, and economic development organizations typically developing and managing wayfinding programs.¹⁹ These stakeholder groups often include: ¹⁹

Steering Committee: Assists in decision making throughout the planning, design, and implementation process.

Task Forces: Specialized groups to focus on narrow topic areas, such as approvals, financing, design, and maintenance.

Government Officials: Government and civic officials are a major aspect towards the implementation of a wayfinding system. Government officials are responsible for securing financial support, encouraging community action, and issuing approvals for design and final implementation locations.¹⁹

For the following implementation table, abbreviations were used to indicate the responsible parties:

SC: Steering Committee, TF: Task Forces, and GO: Government Officials

Goal 1:
 Establish an advisory board to advise the Town on wayfinding decisions that support local business and visitor experience.

Objective 1.1: Collaborate with key stakeholder groups.				
<i>Strategy 1.1.1: Collaborate with community leaders and business associations on the wayfinding system.</i>				GO, TF
<i>Strategy 1.1.2: Develop a signage decision matrix in collaboration with community leaders and business associations.</i>				GO
Objective 1.2: Solicit feedback from residents of Warrenton and visitors to get an understanding what existing problems there are in Warrenton from the individual experience.				
<i>Strategy 1.2.1: Disburse a wayfinding survey to residents and visitors of Warrenton to identify existing issues in Warrenton and design preferences.</i>				GO, SC
<i>Strategy 1.2.2: Conduct community meetings regarding a wayfinding system in Warrenton to receive comprehensive public input.</i>				GO, SC

<p>Goal 2: Create a sense of arrival into Warrenton and guide visitors to each district</p>	<p>Objective 2.1: Establish distinctive gateways leading into Warrenton to foster a sense of arrival.</p>				
	<p><i>Strategy 2.1.1: Replace existing Town gateways with signage that has a color scheme that is in accordance with the already established Town Branding Guidelines.</i></p>				GO, SC, TF
	<p><i>Strategy: 2.2.2: Design Town gateways to have artistic elements, such as planting designs or sculptural elements, to help establish a unique identity for Warrenton, and foster a strong sense of place and arrival for visitors.</i></p>				GO, SC, TF
	<p><i>Strategy 2.2.3: Collaborate with residents, landscape architects, and urban designers on the design of the gateways. This process could be started off and enhanced through a wayfinding survey.</i></p>				GO, TF
	<p>Objective 2.2: Create unique gateways leading into each of Warrenton’s districts.</p>				
	<p><i>Strategy 2.2.1: Replace existing or create district signage with signage that reflects the Town’s branding.</i></p>				GO, SC, TF
	<p><i>Strategy 2.2.2: Ensure that each district sign has its own unique identity.</i></p>				GO, SC

Goal 3:

Enhance connections and modify wayfinding system throughout Warrenton.

Objective 3.1: Install directional signage leading pedestrian and drivers to Warrenton’s districts and major amenities.

<p><i>Strategy 3.1.1: Add pedestrian and vehicular signage at major decision points to direct people to districts and major amenity destinations such as public parks and the Warrenton Aquatic and Recreational Facility (WARF).</i></p>				GO, SC, TF
<p><i>Strategy 3.1.2: Include reassurance signage along routes with multiple intersections.</i></p>				GO, SC, TF
<p><i>Strategy 3.1.3: Install identification signage at public destinations such as the WARF, greenway, library, and public parks.</i></p>				GO, SC, TF

Objective 3.2: Address existing active transportation connectivity issues and safety issues to ensure that amenities are friendly via multi-modal travel.

<p><i>Strategy 3.2.1: Connect active transportation network in the Old Town District to the Greenway along South Fourth street.</i></p>				GO, SC, TF
<p><i>Strategy 3.2.2: Connect active transportation network to Rady Park along Fauquier Road and Evans Avenue.</i></p>				GO, SC, TF
<p><i>Strategy 3.2.3: Add safety signage along routes with a heavy pedestrian presence and minimize visual clutter at intersections.</i></p>				GO, SC, TF

<h1>Goal 3:</h1> <p>Enhance connections and modify wayfinding system throughout Warrenton.</p>	Objective 3.3: Update the existing wayfinding system to unify Warrenton’s identity by ensuring all wayfinding signage is similar in design.				
	<i>Strategy 3.3.1: Replace existing directional wayfinding signage with new and updated signage similar in theme to the Town’s branding.</i>				GO, SC, TF
	<i>Strategy 3.3.2: Enhance existing identification signage at the entrance of public destinations to have a similar theme to the Town’s branding.</i>				GO, SC, TF
	Objective 3.4: Modify wayfinding system to conform with updates in the transportation network and new developments.				
	<i>Strategy 3.4.1: Add to wayfinding system when updating the pedestrian and bicycle network, such as new multi-modal trails, bike lanes and public transit stop.</i>				GO, SC, TF
	<i>Strategy 3.4.2: Add and update the wayfinding system as new developments are constructed and more amenities become available</i>				GO, SC, TF

References:

1. Town of Warrenton, Virginia. (2020). Plan Warrenton 2040. https://warrentonplan.com/wp-content/uploads/2020/07/2020_07_02_Town_of_Warrenton_Draft_Comprehensive_Plan_smaller.pdf
2. Town of Warrenton, Virginia (2017) Walkability Audit <https://cms.revize.com/revize/warrenton/17.9.25%20Final%20Walkability%20Audit%20Report.pdf>
3. ACS 2018 Estimates. (n.d.). Social Explorer. Retrieved August 30, 2020, from https://www.socialexplorer.com/tables/ACS2018_5yr
4. Virginia Department of Motor Vehicles. (n.d.). Interactive Public Report. Retrieved October 21, 2020, from <https://www.treds.virginia.gov/UI/Reports/Public/InteractiveReport.aspx?ReportPath=/Interactive%20Crash%20Reports/Interactive%20Report>
5. Virginia Department of Transportation. (n.d.). Traffic-Calming-Guide-For-Neighborhood-Streets. Retrieved October 20, 2020, from <http://www.virginia.gov/programs/resources/Traffic-Calming-Guide-For-Neighborhood-Streets.pdf>
6. Farr, A. C., Kleinschmidt, T., Yarlagadda, P., & Menderes, K. (2012). Wayfinding: A simple concept, a complex process. *Transport Reviews*, 32(6), 715–743. <https://doi.org/10.1080/01441647.2012.712555>
7. Lynch, K. (1960). *The image of the city*. MIT PRESS.
8. Ford, L. R. (1999). Lynch revisited: New urbanism and theories of good city form. *Cities*, 16(4), 247–257. [https://doi.org/10.1016/S0264-2751\(99\)00023-2](https://doi.org/10.1016/S0264-2751(99)00023-2)
9. What is Wayfinding? (2014, March 23). <https://segd.org/what-wayfinding>
10. Miller, H. J. (1992). Human Wayfinding, Environment-Behavior Relationships, and Artificial Intelligence. *Journal of Planning Literature*, 7(2), 139–150. <https://doi.org/10.1177/088541229200700202>
11. Koo, J. (2017). *Effective Navigation through Your Community: Wayfinding and Signage Systems for Communities*. University of Kentucky, College of Agriculture, from <http://www2.ca.uky.edu/agcomm/pubs/LA/LA4/LA4.pdf>
12. Keliikoa, B. L., Packard, M. Y., Smith, H., Kim, I., Akasaki, K., & Stuplebeen, D. A. (2018). Evaluation of a community wayfinding signage project in Hawai'i: Perspectives of pedestrians and bicyclists. *Journal of Transport & Health*, 11, 25–33. <https://doi.org/10.1016/j.jth.2018.09.008>
13. Murphy, P., & CEO. (2019, August 15). *Rebranding a City Starts With Wayfinding—Here's Why*. GNU Group. <https://www.gnugroup.com/resources-rebranding-city-starts-with-wayfinding-heres-why/>
14. Vandenberg, A. E., Hunter, R. H., Anderson, L. A., Bryant, L. L., Hooker, S. P., & Satariano, W. A. (2016). Walking and Walkability: Is Wayfinding a Missing Link? Implications for Public Health Practice. *Journal of Physical Activity & Health*, 13(2), 189–197. <https://doi.org/10.1123/jpah.2014-0577>
15. Downs, R. M., & Stea, D. (Eds.). (1973). *Image & environment: Cognitive mapping and spatial behavior* (pp. xxii, 439). AldineTransaction.
16. Apelt, R. (2008). *Wayfinding in the Built Environment*. 99.
17. What is Wayfinding? Part 3: Wayfinding is More Than Just Signage · RSM Design. (n.d.). Retrieved October 21, 2020, from <https://rsmdesign.com/news/what-is-wayfinding-part-3-wayfinding-is-more-than-just-signage>
18. Tzeng, S.-Y., & Huang, J.-S. H. (2008). Spatial Forms and Signage in Wayfinding Decision Points for Hospital Outpatient Services. *Journal of Asian Architecture and Building Engineering*, 8(2):453-460. https://www.researchgate.net/publication/245440963_Spatial_Forms_and_Signage_in_Wayfinding_Decision_Points_for_Hospital_Outpatient_Services
19. *Urban Wayfinding Planning and Implementation Manual*. (2013). Sign Research Foundation and International Sign Association. <https://signresearch.org/urban-wayfinding-planning-and-implementation-manual/>

APPENDICES

Recommended Initial Wayfinding Survey

1. Which of the following applies to you:
 - a. I am a resident of Warrenton
 - b. I live in Fauquier County
 - c. I am a Visitor
2. What is your main route to get into Warrenton? (Check those that apply)
 - a. Route 29 Coming in from the North_____ Coming in from the South_____
 - b. Meetze Road Exit
 - c. Route 17 Coming in from the North_____ Coming in from the South_____
 - d. Route 211 Coming in from the West
 - e. Other:
3. If Warrenton were to implement a consistent wayfinding signage system based on the Town's branding, how important would the following signage types be? (rank in order of importance, 1 being most important, and 7 being least important)
 - Gateway Identification Signs
 - Vehicular Directional Signage
 - Pedestrian Directional Signage
 - Bike/Trail Signage
 - Interpretive Signage
 - Safety Signage
 - Placemaking Elements

Recommended Initial Wayfinding Survey Cont.

4. A signage & wayfinding system will be designed to point to destinations within Warrenton. How important do you find the following categories of destinations to be? (Rank the following categories in order of importance. 1 being the most important and 4 being the least.)
 - Government (e.g. municipal buildings, courts, services)
 - Health (e.g. Hospital, Free Clinic)
 - Shopping/Dining
 - Cultural (e.g. Historical District, Museums, Visitors Center)
 - Recreational (e.g. parks, trails, etc)
 - Public Parking

5. What destination (place or area) in Warrenton is the most difficult to find? (Open Answer)

6. What do you think are the biggest challenges are for navigating Warrenton? (Open Answer)