PORTSMOUTH, NH
WAYFINDING ANALYSIS

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merje

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INTRODUCTION

Cities, towns and communities of all sizes and aspirations understand that the reality of today's economy and the high level of competition for the public's attention demand a clear and distinctive identity. Wayfinding programs promote a city's identity, make it easier for visitors to find their way and enhance the visitor's experience. Through this wayfinding project the City of Portsmouth understands that communicating a consistent identity and message across a variety of design elements and technologies is a key factor in reaching cultural, economic and marketing goals.

Numerous plans and studies developed for the City have referenced the need for a wayfinding system. In addition, the business community, visitor sites, and cultural organizations and residents have all expressed a need for wayfinding that can both help travelers navigate efficiently to destinations and amenities (such as parking), as well as increase site visibility and help attract new visitors.

Despite Portsmouth's regional accessibility, the historical development patterns of the City create challenges for navigating Portsmouth. The City's compact downtown and complex local street network offer challenges to those new or unfamiliar to the community. Giving verbal directions can be a difficult task, based on the circuitous route one may have to take, even for a destination that may not be too far away.

In January of 2013, the City of Portsmouth contracted with MERJE to develop a comprehensive wayfinding plan that considers all forms of communication tools, including digital technology, maps and signage. The intent of the program is too reduce visual clutter and present a uniform and consistent system of elements that will guide visitors to various Portsmouth destinations.

The City of Portsmouth has established an open process for this project, through meetings with City staff, consultation with the Wayfinding Advisory Group, approving agencies, stakeholder interviews, and public input presentations. MERJE's task was to sort through the issues uncovered and to responsibly and respectfully integrate them into the analysis based on the firm's knowledge of wayfinding best practices, human factors, and design principles. We thank all the individuals who took the time and energy to share their ideas and perceptions with us. We deeply appreciate their participation, knowledge and enthusiasm.

OBJECTIVES & PHILOSOPHY

The City's wayfinding program shall provide consistent and attractive information to assist the traveling public to navigate efficiently to key destinations within the City. To achieve this, the planning process has identified the following vision, goals, and principles.

VISION

- The design shall be unique to this place and fit into the context of Portsmouth.
- The wayfinding program shall help create a positive first impression of Portsmouth that the city is organized, safe and caring.
- The program shall assist in marketing the City and help people discover the hidden jewels that make Portsmouth a unique destination.
- Identify ways that wayfinding can enhance and reflect the distinctive and creative character of the City.
- Utilize a variety of wayfinding tools.

GOALS

- Involve the public, local stakeholders and approving agencies throughout the process.
- Reduce sign clutter.
- Establish a level of consistency across all forms of communication and set standards for colors, patterns, graphics and terminology that will aid visitors.
- Assist the City in being a more accessible and easier to navigate place.
- Enhance multi-modal transportation efforts, including transit, bicycle and pedestrian, as well as auto.
- Support ability of visitors to park once and navigate efficiently to multiple destinations.
- Identify opportunities for Portsmouth to welcome its visitors, tell its story and enhance the visitor experience.
- Develop a design that reflects Portsmouth as a community.
- Develop a program that is flexible and easily maintained.

WAYFINDING PRINCIPLES

1. The system is intended for first-time visitors and residents alike.
2. First impressions and perception play an active role in determining the best route of travel.
3. The best route may not be the shortest or quickest.
4. Terminology must be kept short and easily understood.
5. Direct to the "front door" of a destination.
6. Departure routes are equally as important as arrival routes.
7. Promote economic development and the assets of the City of Portsmouth by making connections between destinations.
8. The system is for the entire City.

WAYFINDING TOOLS

An effective wayfinding program can reinforce a sense of place and promote the City of Portsmouth as an environment that is easy to navigate. The program will provide first-time and frequent visitors, as well as residents with clear and consistent information.

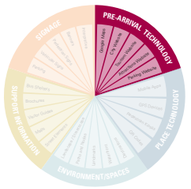
Elements will reflect the Portsmouth culture and attitude as an active, energetic and exciting place to be. This Portsmouth Wayfinding Analysis considers a variety of wayfinding tools: landscaping, lighting, street furniture, landmarks, gateway elements, signage, mapping, banners and public art, as well as related issues such as sustainability and integration of technology.

This analysis has been organized in the following manner.

- **PRE- ARRIVAL TECHNOLOGY**
  This is the information a person investigates prior to beginning their journey. It is also the first opportunity to present an identity for the system and encourage exploration.
- **PLACE TECHNOLOGY**
  Upon arrival these are touch points to engage the visitor. By presenting a variety of devices and interactive opportunities, the user can receive and explore information.
- **ENVIRONMENTS & SPACES**
  As we travel through a city there are physical cues that help guide us. Downtown Portsmouth, through its original plan, naturally provides many of these cues.
- **SUPPORT INFORMATION**
  A series of visual, physical and verbal tools can support a wayfinding system. This communicates a single voice and identity for the system.
- **SIGNAGE**
  Signage is the most visible element of a wayfinding system. All levels of signage must be considered to create a seamless journey.

PRIORITY X

Priorities for the implementation of the System are shown throughout the Sections at the bottom of the page with the priority shown in the small blue box.



PRE-ARRIVAL TECHNOLOGY

Google Maps Website

GPS Navigation

In addition to traditional mailed promotions, printed brochures and advertisements, there are a variety of technology tools that help us plan our trip. Each of these elements can be seamlessly tied together through the use of consistent information and the graphics and identity.

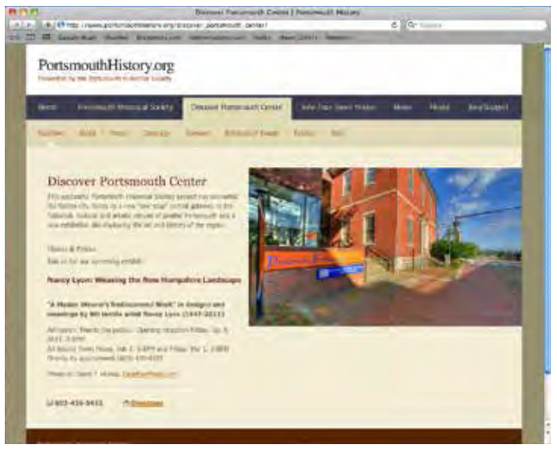
WAYFINDING WEB SITE AND INTERACTIVE MAP

In addition to the standard City website, there can be either a stand-alone or internal link to a wayfinding map. The wayfinding map can appear on the City website and / or the Chamber of Commerce website. Alternately, the information can be presented as a separate site to be managed and hosted either by the City or a local tourism partner.

A wayfinding interactive map allows for a more extensive inclusion of attractions and businesses into the overall wayfinding program. The accessibility and ease of an online map broadens the level of inclusion and helps to supplement physical wayfinding components.

Links to local hotels, attractions and recreational facilities are commonly included. The interactive map should allow users to click on a destination and receive direction. It is common practice for this map to be built on Google Maps and to use the power of the Google search engine to provide descriptive information as well as point-to-point directions to the destination.

The look and feel of the interactive map should reflect the overall identity of the City wayfinding program.



Discover Portsmouth Center
PortsmouthHistory.org website

Portsmouth Chamber of Commerce website

PRIORITY 1 Create a wayfinding-focused web portal that explains the wayfinding system and provides a [Google-powered] interactive map. The map will allow visitors to get point-to-point directions.

PLACE TECHNOLOGY

Smart Phone App

Example of text message map for Tampa Riverwalk, FL

GENERAL TRAVEL APPS

- City Maps
- My City Way
- Yelp
- My Local
- Open Table
- Kayak
- Park My Car
  (Parking Lot/Garage finder)

The integration of technology into the wayfinding program will support the City's innovative character. The incorporation of these devices and applications is now expected by tourists and residents alike. These wayfinding tools are a part of everyone's daily routine.

END-USER TECHNOLOGY

This is the utilization of technology where information is communicated to users through the visitor's device (smartphone, iPad or computer). This concept does not require the City to invest in hardware or infrastructure. The only investment is in development and ongoing maintenance. End-user technologies include the following:

SMART PHONE APP

The smart phone app would be a map-based location service for a variety of categories, including things to do, events, hotels, attractions, shopping, restaurants, college campuses, hiking trails, bicycle paths, parking lots, services, emergency points and any other point of interest (POI) in or near the City of Portsmouth. It would also allow, visitors to view/use other information about a POI, like a website or phone number.

FEATURES

- Map-based location services with GPS.
- Allows users to find attractions, restaurants, parking lots and other services within the City of Portsmouth.
- Local businesses share the best deals in town in real time to make sure visitors get the best prices during their stay.
- Locals and visitors alike utilize the events calendar and live entertainment schedules.
- Available in multiple languages.

Annapolis MD Walking Tour App

TEXT MESSAGE MAPS

Static orientation maps (at bus shelters, kiosks, or on signs) that include a "text message number". When keyed in, the user receives a return text message with information about the destination. This can be a short message about events, hours of operation, or the best place to park. This can be accomplished through a partnership with local telecommunications providers.

PRIORITY 2 Consider teaming with sponsors to develop a private/public partnership that would allow for the creation of parking, transportation and tourism mobile apps and text messaging integrated programs.

PLACE TECHNOLOGY (CONTINUED)

News from ABC's Times Square building comes via a curving, nine-ribbon electronic billboard with ticker-style headlines and live broadcasts, using 2.3 million LEDs.

Stand-alone Interactive Kiosks

Interactive element built into a Information Kiosk, Manned Kiosk (Market Square), or Bus Shelter.

POTENTIAL LOCATIONS FOR STAND-ALONE ELEMENTS

- Visitor Center
- Discover Portsmouth Center
- Market Square
- Districts/Parks
- Waterfront
- Parking Garage and Lots

The Comcast Experience Video Wall is the largest four-millimeter LED screen in the world. Spanning 83.3 feet wide by 25.4 feet high, the 2,100 square-foot video wall brings spectacular original programming to visitors 18 hours a day.

QR codes for different aspects of Portsmouth. These could be used on kiosks, brochures, interpretive panels, and maps, or as stickers for shopping bags, posters, etc.

Chamber of Commerce Visitor Map Brochure

QR CODES

QR Codes help visitors connect to specific information through scanning technology. Visitors scan codes using a free app on their mobile phones, and are promptly directed to online information about Portsmouth events, parking, dining or shopping.

Portsmouth is currently using QR codes in marketing materials, but we would like to see this tool used in other ways as well. Parking garages, pedestrian kiosks and interpretive panels are all places where QR codes can provide useful and engaging information for to make a visitor's experience easier and more complete.

FEATURES:

- Brochures, maps, posters, billboards, point-of-sale — the range of places where one can use a QR Code is almost infinite.
- Simple, intuitive and interactive, the QR Code enables immediate response and deeper engagement from visitors, providing a unique vehicle to influence in-the-moment behavior, and turn interest into action.
- With built-in tracking, metrics and analysis tools, QR Codes give cities access to data that can help them make effective decisions about their marketing expenditures.
- QR Codes are dynamic technology that let cities change campaigns at any time, enabling cities to react and evolve in real-time and deliver the most powerful outcomes.

STAND-ALONE ELEMENTS

These elements can vary from beacons of technology that are multifunctional to simple interactive touchscreens positioned in various visitor centered locations.

INTERACTIVE SCREENS, KIOSKS & MAPS: There are a multitude of products that can be utilized. This becomes a extension of the City website.

URBANFLOW KIOSK:
This particular product expands the idea of an interactive kiosk to include not only wayfinding information, but also local services, statistical data and citizen responsiveness information, making city data and local information totally transparent.

TECHNOLOGY / MEDIA ELEMENT:
The creation of a landmark element (wall or pylon) that can provide real-time information, news, event promotion, attraction videos and digital posters will help to establish a unique visual statement, as well as tourism information. The communication of this type of information may encourage people to stay longer and visit additional destinations. Typically located in an entertainment or retail district - this element may be considered in both interior and exterior conditions.

PRIORITY 1

Identify places where QR codes can incorporate parking information, COAST and Wildcat Transit routes, shopping and special event information.

This should include kiosks, interpretive panels, maps, and at transit stops.

LANDMARKS

Strawbery Banke Museum

Whale Mural

Prescott Park

North Church Steeple

"The Decks"

Market Square

Memorial Bridge

Sheraton Portsmouth Harborside

Landmarks are used everyday to provide direction; it can be as simple as "Make a left at the North Church" or as common as "Meet me at the Post Office".

In addition to providing directions, landmarks are also helpful for establishing a person's orientation, especially in an exterior environment, where architectural features, landscaping and physical elements help to position us in unfamiliar territory.

The City of Portsmouth offers many landmark features, including: iconic elements like the North Church Steeple, or Memorial Bridge; unique areas like Market Square or Strawbery Banke Museum; historic neighborhoods and cemeteries; as well as Prescott Park, "The Decks", and distinct landscapes like the South and North Mill Ponds and the Portsmouth Plains.

PRIORITY 1 Creating a set of icons to identify some of the larger landmarks in Portsmouth, such as the North Church steeple, "The Decks", Strawbery Banke Museum, and the Discover Portsmouth Center, will be helpful on maps for at-a-glance information. It will also benefit international visitors in the city.

PRIORITY 2 Consider identifying locations for landmark murals on the sides of buildings. These murals can tell a story, promote public art, and capture the character of the city.

SUPPORT INFORMATION

Market Square Kiosk

Hotel Staff Training

COAST Trolleys

Wildcat Transit

PRIORITY 1 Create a standard Tourism App for Portsmouth that will be used across many wayfinding tools.

PRIORITY 2 As more Tourism Apps are created, have QR codes displayed at hotels and all Visitor Centers and kiosks to download the Apps.

Whether information is communicated through technology, printed advertisements or a friendly face at a hotel, each element effects the experience of a visitor and offers the opportunity to communicate a consistent message, graphic language and helpful customer service.

TOOLS

WELCOME BROCHURE & ORIENTATION MAP

This traditional piece of communication can be used either as a pre-arrival tool or an on-site arrival promotion of the City. Simple and clear it provides the basic information about the city. The map helps the visitor to establish a cognitive map of the city layout prior to arriving. Only the highest level of destination and visitor information shall appear in this brochure. The design will reflect the overall wayfinding program through its use of color, pattern and identity.

PUBLIC TRANSPORTATION

COAST provides year round public bus and trolley service in the Seacoast New Hampshire region. The Portsmouth Trolleys have two routes, 40 and 41, providing service through Downtown Portsmouth, connecting the Newington Shopping Malls, Pease Tradeport, Transportation Center, Lafayette Road, and other jobs, retail and housing stops in the City.

Seasoned trolley service within the downtown also operates during the summer and on weekends in December.

The Wildcat Transit & Campus Connector provides a loop-route from the University of New Hampshire to Downtown Portsmouth, and shares a couple of key stops with COAST, including Woodbury Ave and Market Square.

HOTEL STAFF TRAINING

In communities where the economy is driven by tourism and overnight stays, it is common practice to host Hotel Staff Training programs once or twice a year. The current training provided by the Chamber of Commerce should continue to be a part of the educational process each year. This will provide the opportunity for tourism professionals to come in and discuss issues and topics that can improve customer service and help enhance the visitor's experience by making the city more friendly, welcoming and accessible.

Once the new wayfinding program is implemented, there are two forms of training that can be conducted related to the wayfinding program. The first is a simple brochure or hand-out that educates the hotel staff about the wayfinding program, provides a list of common terminology, explains the wayfinding philosophy and offers the preferred routes visitors should use. This can also be extended to shop owners, transportation workers, and government agencies

The second step is providing staff with a set of wayfinding tools, such as: pre-printed directions from their hotel to the most popular areas; or printed brochure/ orientation map; or a card that lists web sites.

The design team can assist with any of the wayfinding sessions or staff training, and there are a number of tourism companies that cover a variety of tourism training topics.

SIGNAGE

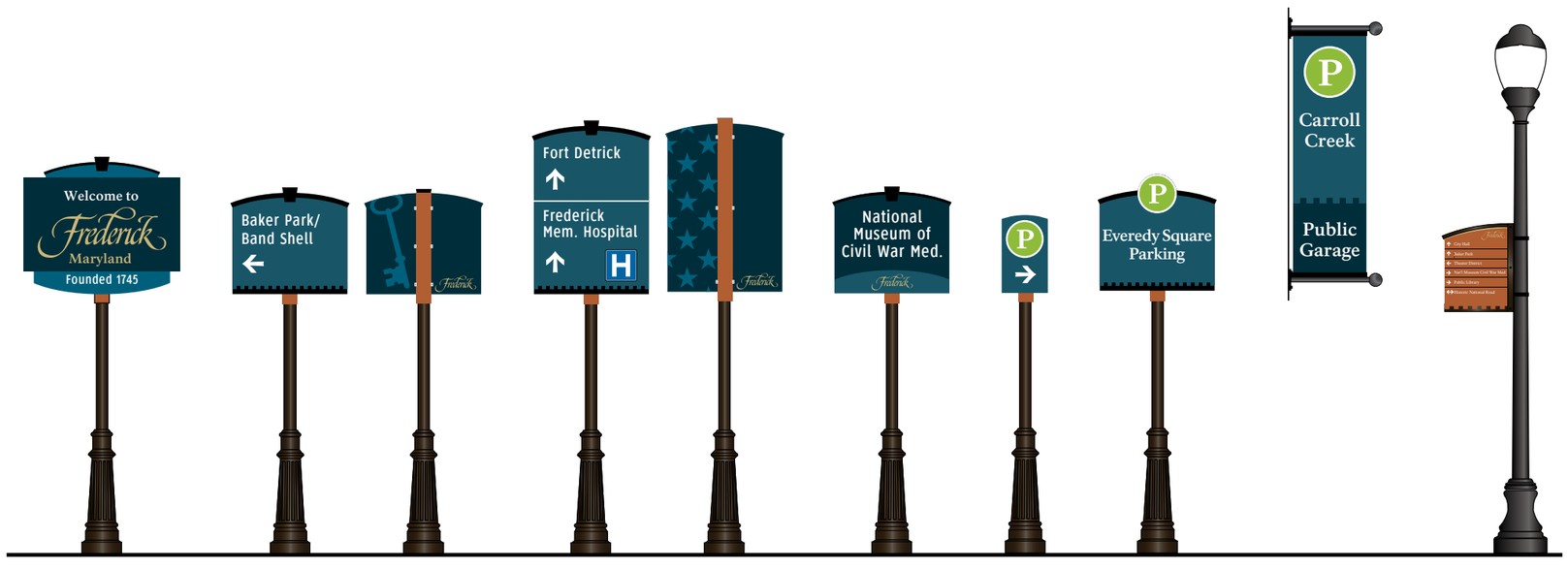
Vehicular Directional sign

Parking Garage ID sign

Parking Garage (directional) wall mural

Pedestrian Directional sign

3-Sided Kiosk



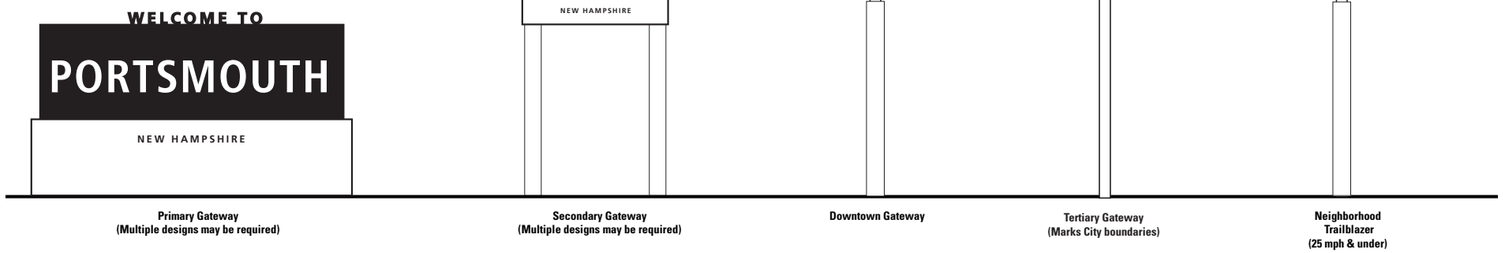
As you travel around Portsmouth, you cannot help but notice there are plenty of signs. What Portsmouth does not have, is a “sign system”. A comprehensive sign program provides a consistent and organized approach to presenting information and directing people to their destinations in a sequential and efficient manner.

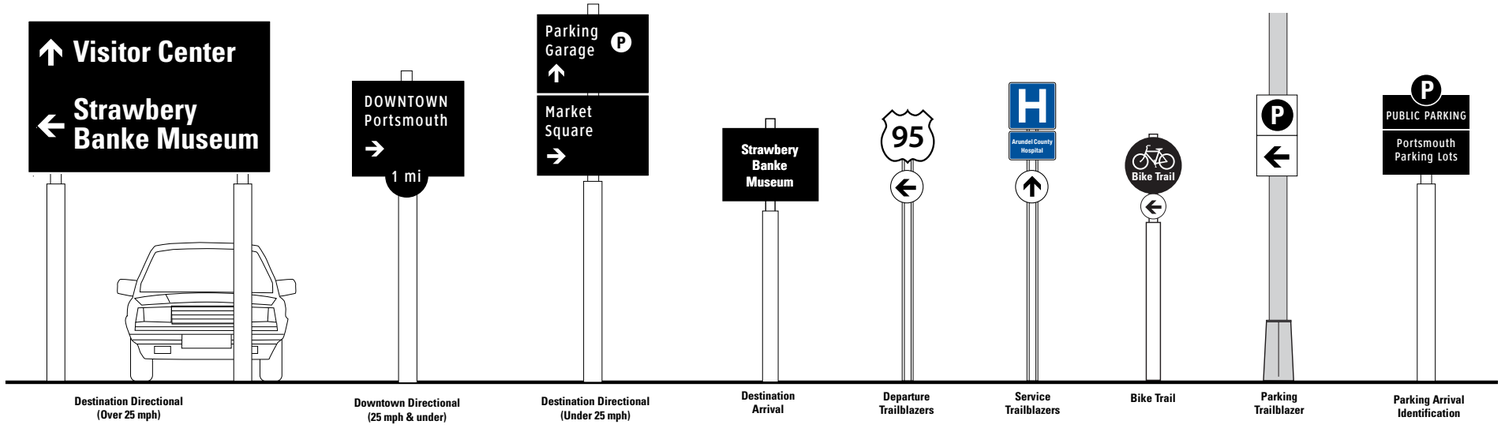
It is important to note, the intent of the Portsmouth Wayfinding Program, is NOT TO ADD to the signs that are currently in place, but to replace existing signs with a system that is coordinated and planned.

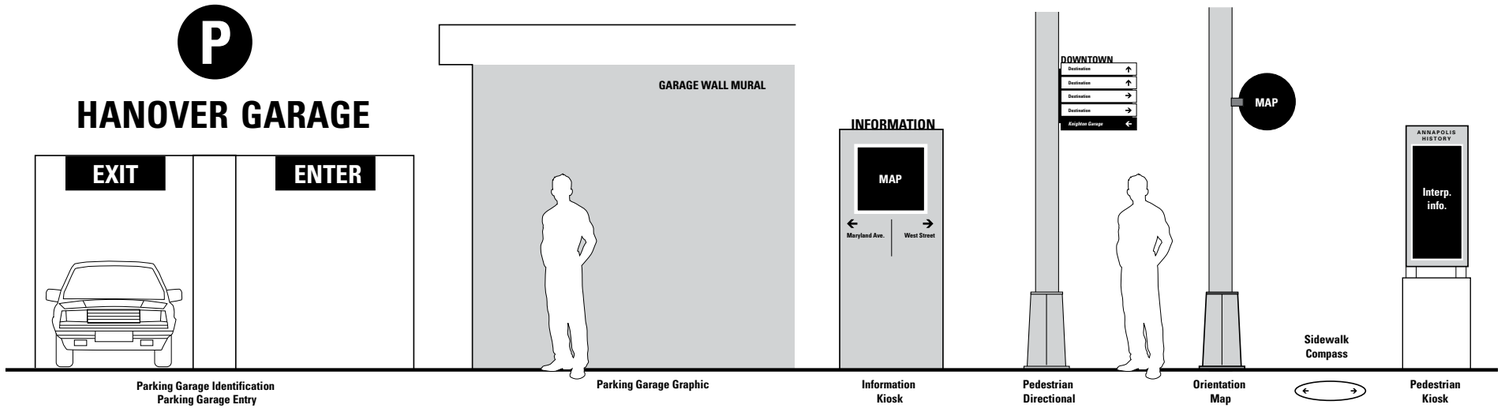
The sign system also helps to establish a unique identity through its use of colors, typefaces, patterns and other graphic and physical elements. It is important that the design be of its place and fit into the context of Portsmouth and its environment. Each element is designed for both its functional purpose as well as the conditions of its placement. Scale, legibility, daytime vs. evening conditions, accessibility and engineering requirements are all considered.

Planned wayfinding and signage systems also have the ability to be inclusive to a variety of local attractions and destinations. This is particularly important for the secondary destinations, as these destinations may rely on signs to build the public awareness of their location. Signs give validation that a destination is worth visiting, providing an opportunity for Portsmouth to promote its assets.

The sign drawings and photographs provided at left illustrate a successful sign system installed in the city of Frederick, Maryland.







GENERIC MENU OF SIGN TYPES

VEHICULAR

Highway & Primary Gateway
Identifies arrival to the City and incorporates the identity. One sign located at each primary gateway into the City limits.

Downtown Gateway
Identifies arrival to the Downtown and incorporates the identity.

Vehicular Directionals
Directs to City attractions.
- Maximum 3 listings per sign
- Maximum 2 lines per attraction
- Goal: 1 sign per city block

Parking Trailblazer
Directs to public parking areas.

Parking Identification
Identifies public parking lots.

Destination Arrival
Marks arrival to a destination.

PEDESTRIAN

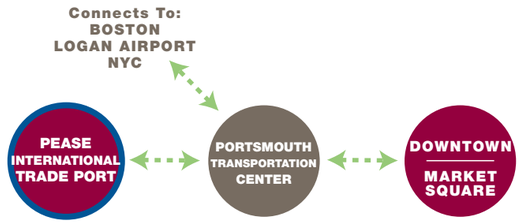
Pedestrian Directional
Directs to destinations within pedestrian zones. Located at intersections and/or street corners.

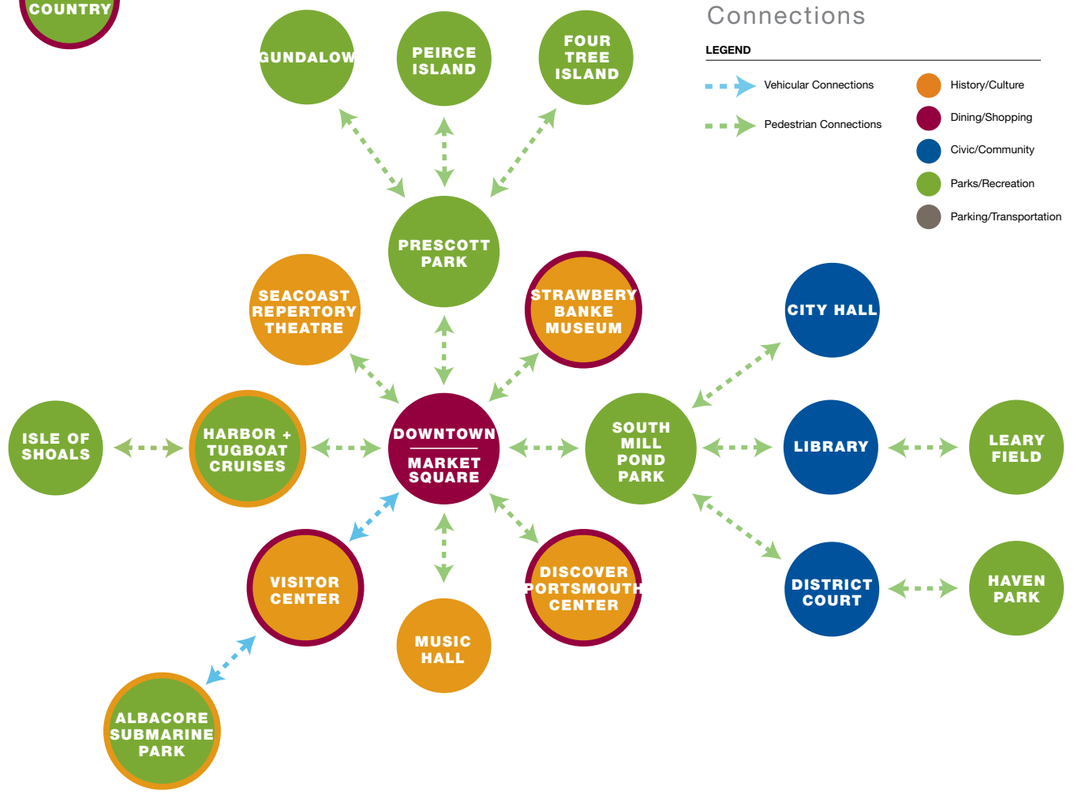
Information Kiosks
Located at key gathering points. Includes logo, maps, brochures, directions and other visitor information.

Interpretive Signage
Provides a graphic and written narrative on historical context, data and interesting facts regarding a site or destination.

Trail Signage
Identifies trails and directs to destinations within pedestrian zones. Located along trails and at intersections and/or street corners.

CONNECTIONS





Destination to Destination Connections

LEGEND

- Vehicular Connections
- Pedestrian Connections
- History/Culture
- Dining/Shopping
- Civic/Community
- Parks/Recreation
- Parking/Transportation

Wayfinding programs provide an opportunity to connect districts, destinations, and people. Whether the connections are intentionally provided by related attractions, a common visitor activity that links destinations, or passing encounter while exploring – these can be a powerful marketing tool, and an important wayfinding tool.

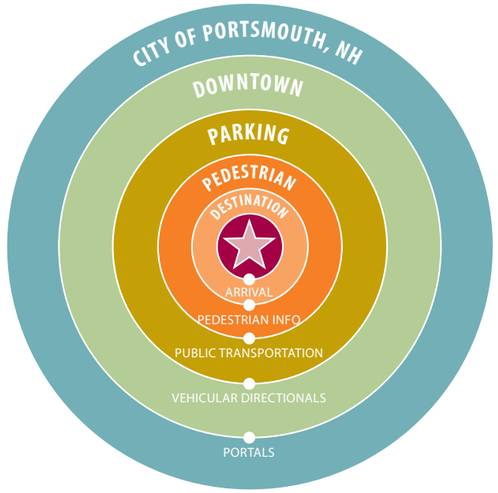
Promoting connections can encourage visitors to stay longer to fully experience the City. This connection strategy helps to improve the overall experience of a visitor, promoting a positive image, favorable word-of-mouth and social media effect. Ultimately, this can lead to return visits and increased over-night stays.

The diagram to the left provides a graphic hierarchy of some of the connections that have been identified in consultation with stakeholders. This information will help identify and reinforce routes between individual attractions and identify opportunities to promote destinations, activities and events through various graphic and electronic tools.

Creating connections between major destinations, parks and other attractions has the potential to:

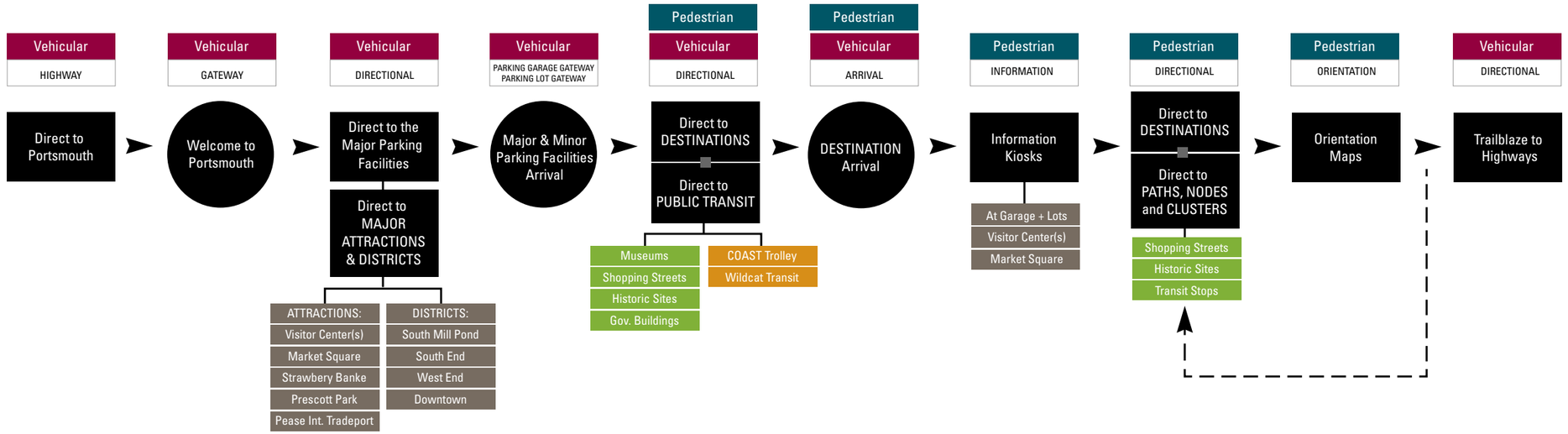
- Increase visibility of the City of Portsmouth amenities
- Boost attendance for smaller destinations
- Increase repeat visitation to the City and major destinations

SECTION 2: WAYFINDING & SIGNAGE ANALYSIS



WAYFINDING PROGRAM INFORMATION HIERARCHY

The sequence of information a user receives to help them find their way and the potential communication tools



The primary focus at these locations will be to coordinate terminology to create consistent messaging and provide a seamless journey for visitors as they transition from highway systems to the City of Portsmouth wayfinding program.	A gateway is a variety of elements which can be used to welcome visitors to the City of Portsmouth. These can include architectural elements, public art, lighting, landscaping, as well as signage.	Vehicular directional wayfinding elements will direct to major parking facilities and major attractions.	Wayfinding elements located at parking facilities welcome and orient the visitor, as well as identify the parking lots/garage.	At this scale, wayfinding will be oriented to both vehicles and pedestrians.	Wayfinding elements will be provided to indicate arrival points for destinations that may be difficult to locate or do not currently have adequate signage.	Located at key gathering points, kiosks function much like a directory at a shopping center and provide options for multiple types of information.	Generally double-sided and with up to 10 listings, pedestrian scale signs are smaller (not visible from a vehicle) and can direct to second tier destinations, paths, nodes or clusters.	A simple graphic map illustrates the general area. Focus is on 5 minute walk and can include more detailed information than an overview map. The map becomes standard artwork that can be used for print, web and other media.	Departure routes are equally important to arrival. These trailblazer signs provide clear pathways to the nearest roadway from the many destinations within the City of Portsmouth.

VEHICULAR HIGHWAY SIGNAGE: I-95

The wayfinding system should provide a seamless transition from state/federal highways onto City streets.

EXIT ROUTING

The figure on this page demonstrates how the current signs inform drivers to exit for various destinations from the interstate system. Gateways and vehicular signs should be placed at exits to introduce the Porstmouth Wayfinding System. The City's wayfinding system signs should pick up from there.

TERMINOLOGY

Linking the highway system and the City system can be greatly enhanced through the use of consistent terminology. Utilizing the same nomenclature from the highway onto the City wayfinding signs will build user's confidence in the system and reduce any potential confusion.

OBSERVATIONS:

The highway signage leading to Downtown Portsmouth from Interstate 95 does provide the necessary and appropriate information. North-bound 95 includes two sets of NHDOT signs informing drivers to depart the highway at Exit 7, as pictured below. South-bound 95 has one sign informing drivers to depart the highway at Exit 7 also, as pictured above left.

Existing NHDOT signage located on I-95 approximately 3/4 mile prior to EXIT 3.

Existing NHDOT signage located on I-95 approximately 1 mile prior to EXIT 3.

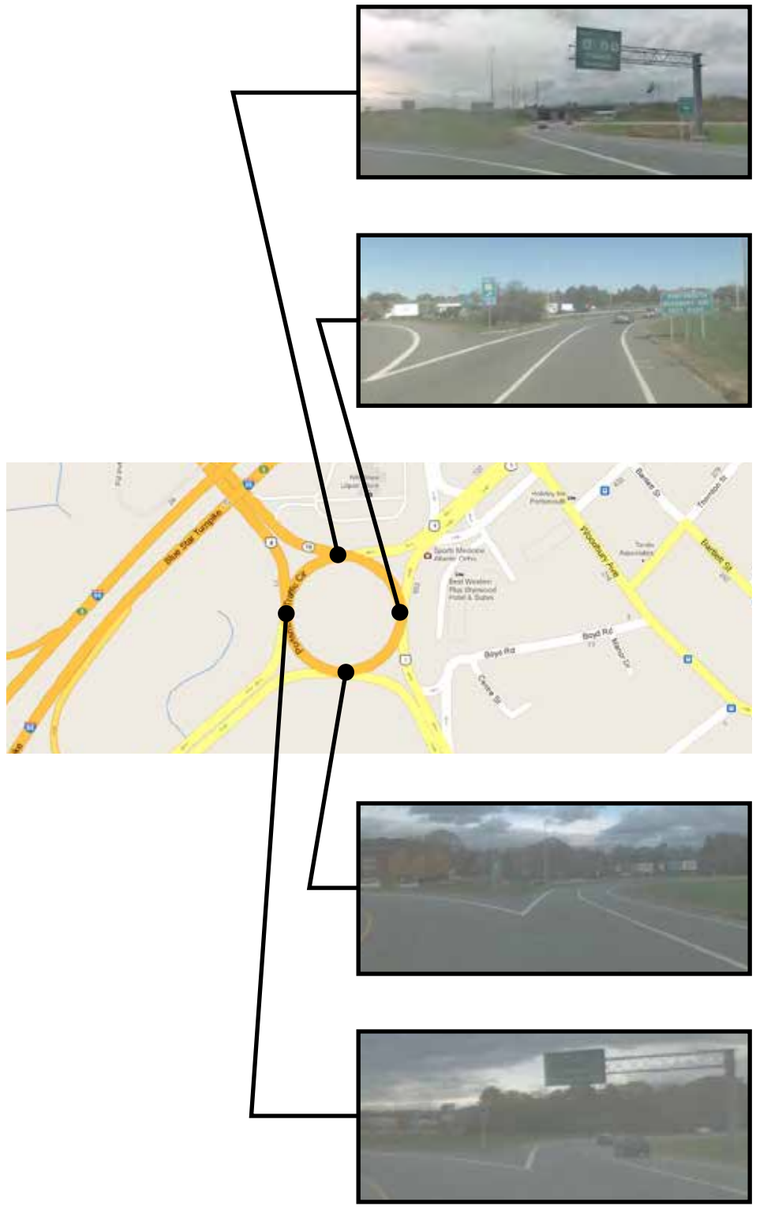
VEHICULAR HIGHWAY SIGNAGE: ROUTE 16

OBSERVATIONS:
The highway signage leading to Downtown Portsmouth from Route 16 (and Interstate 95 Exit 3) does provide the necessary and appropriate information to the Portsmouth Traffic Circle.

However, the Portsmouth Traffic Circle does NOT provide a continuation of appropriate information to guide visitors to Downtown Portsmouth or major destinations. The lack of informative signs is probably confusing to visitors, unclear of which route to take, and creates more congestion for an engineered roadway designed to improve traffic flow.

The following page (2.4) illustrates signage recommendations for the Portsmouth Traffic Circle.

Highway signage directing to the tradeport, transportation center, and hospital were reviewed as well. Signage leading to these destinations provide the necessary and appropriate information.



Existing NHDOT signage at Portsmouth Traffic Circle.

Recommended signage replacement.

Recommended signage replacements.

Recommended signage replacement and addition.

Recommended signage replacement.

All signs illustrated above are NOT to scale. They have been illustrated larger for LEGIBILITY only.

VEHICULAR HIGHWAY SIGNAGE: PORTSMOUTH TRAFFIC CIRCLE

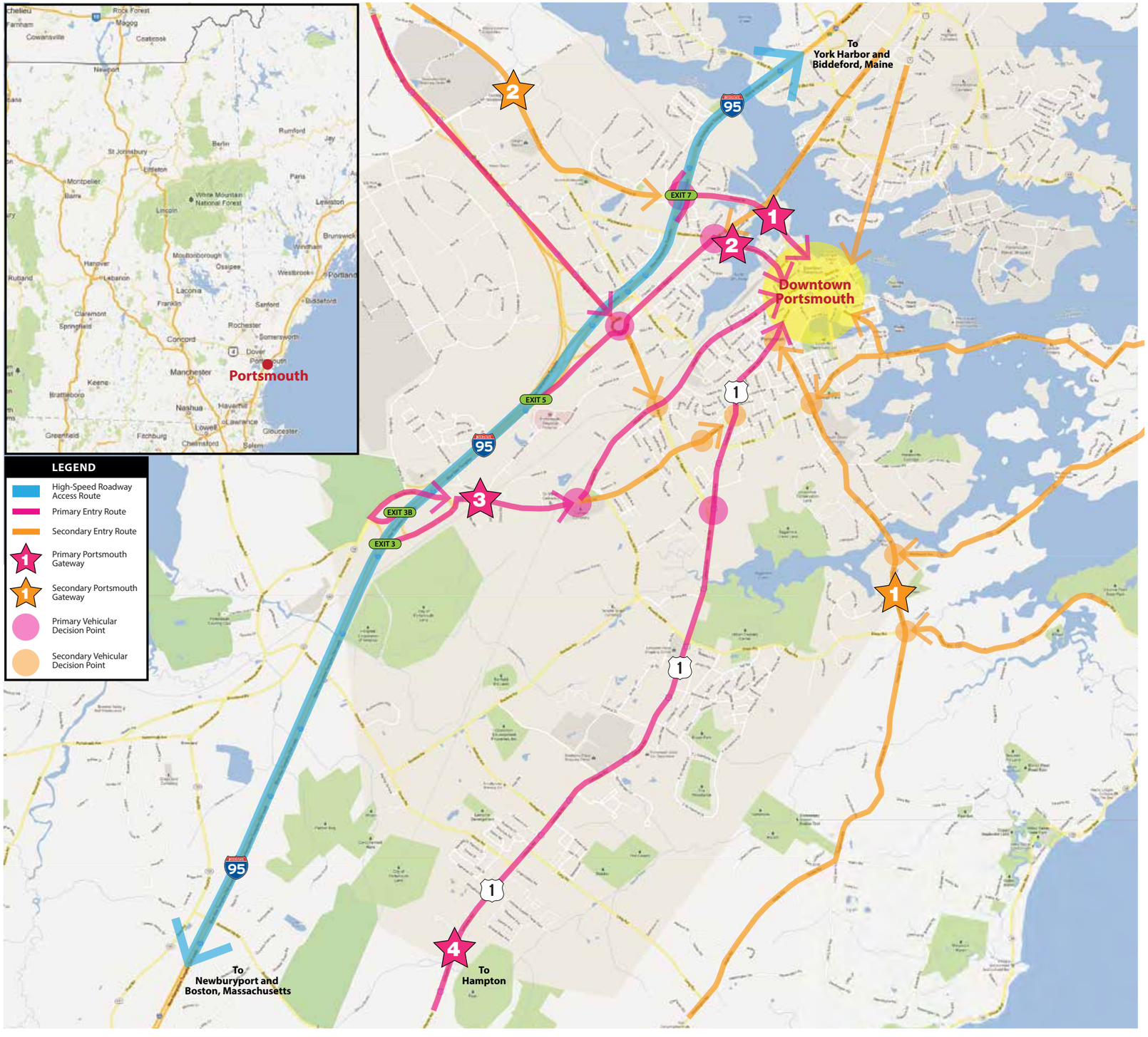
The illustrations on this page demonstrate some potential modifications to the signs at the Portsmouth Traffic Circle.

RECOMMENDATIONS:

1) On the right-hand side of the Circle, where roadways exit to destinations, the signs should indicate the appropriate exit route markers and the City or destination name with a right turn arrow. Currently only route markers are displayed.

2) On the opposite side of the roadway route exit along the perimeter of the Traffic Circle, the signs should indicate the choices for the driver at the next two (exits), with the appropriate route markers, and City or destination name, but with up-left arrows.

PRIORITY 2 Coordinate with NHDOT to update signage at Traffic Circle.



ARRIVAL AND GATEWAYS

Gateways vary in scale and complexity based on their location, context, and purpose. Gateways can welcome a visitor or they can simply mark the City's limits.

The excitement and anticipation a visitor has when arriving can be heightened by a gateway that lets them know they have arrived at a special place.

Gateways provide a landmark and can include signage, lighting, landscaping, architectural elements, and public art.

PRIMARY GATEWAYS
Primary gateways are located at the main points of entry.

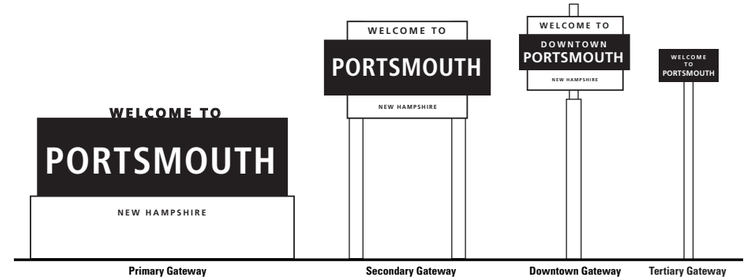
SECONDARY GATEWAYS
Secondary gateways are located along other routes into Portsmouth. These gateways may include similar elements as the primary at a smaller scale.

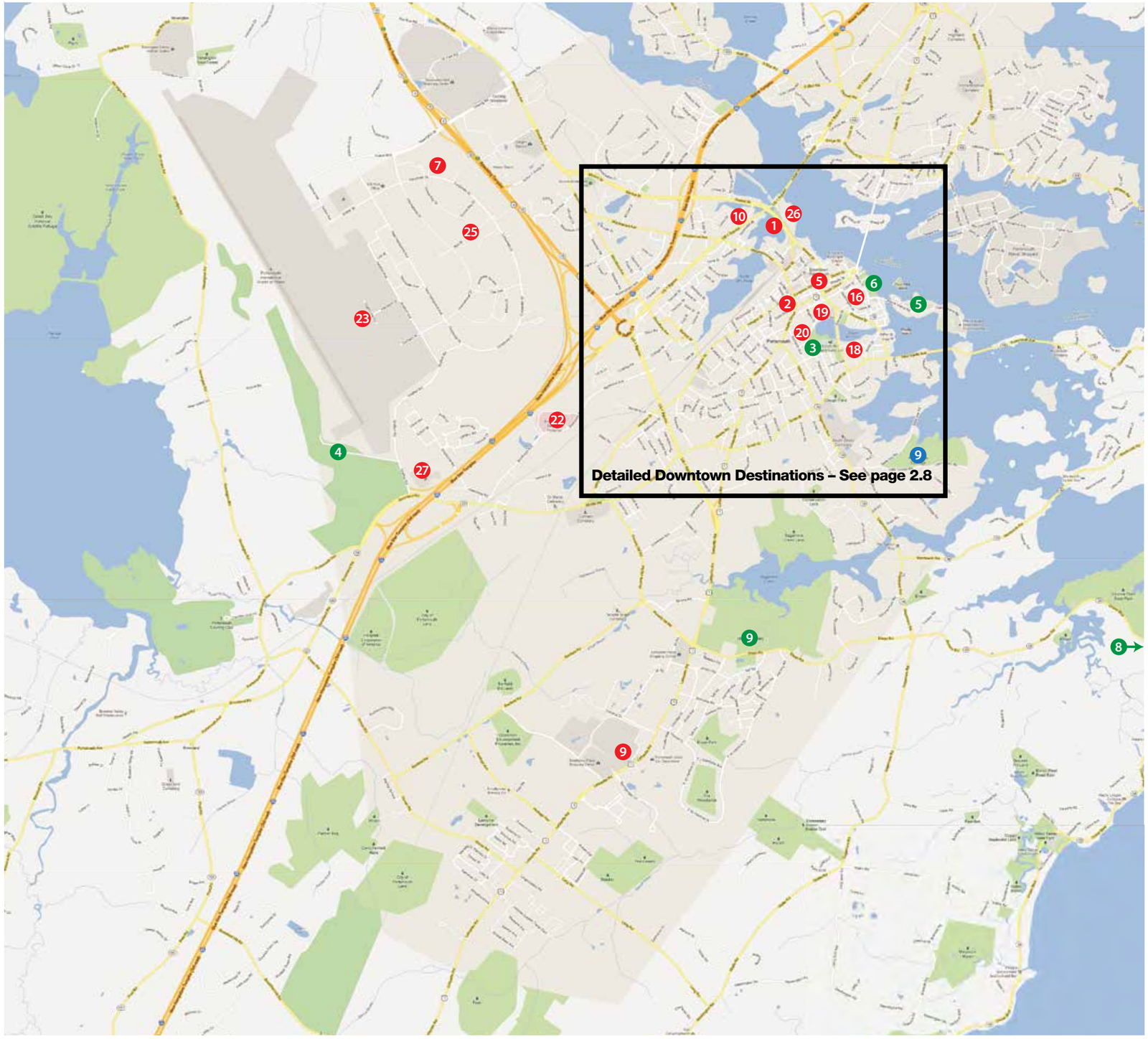
DOWNTOWN GATEWAYS
Downtown gateways are located at arrival points into Downtown Portsmouth. Typically space is limited, so these gateways may need to be designed at a smaller scale, vertical orientation, or attached to street lamp posts.

TERTIARY GATEWAYS
These are simple markers on the outskirts of the city designating the city boundaries.

WATERFRONT GATEWAY
Simple gateways or markers can be located at the City waterfront to welcome visitors arriving by water. This element should also orient the visitor and provide additional information.

GARAGE GATEWAYS
Wayfinding features in the parking garage are excellent opportunities to welcome the visitor who arrives by car, and help orient them to the City.





CITY-WIDE DESTINATIONS

Visitor Information
1. Chamber of Commerce (Visitor Center)
2. Discover Portsmouth Center

Major Attractions
5. Market Square (Downtown)
7. Redhook Brewery
9. Water Country

Museums / Cultural
10. Albacore Submarine Park
16. Strawbery Banke Museum

Government Offices / Services
18. City Hall
19. District Court
20. Library

Hospital
22. Portsmouth Regional Hospital

Transportation
23. Portsmouth International Airport at Pease
27. Transportation Center

Economic/Commerce
25. Pease International Tradeport
26. Port of New Hampshire

Parks / Recreation
3. Leary Field
4. Pease Public Golf Course
5. Peirce Island
6. Prescott Park
8. Beaches
9. Urban Forestry Center

Historic Homes / Buildings
9. Wentworth-Coolidge Mansion

DOWNTOWN DESTINATIONS

Visitor Information
1. Chamber of Commerce (Visitor Center)
2. Discover Portsmouth Center

Major Attractions
3. Gundalow
4. Harbor Cruises
5. Market Square
24. Isles of Shoals Steamship Company

Museums / Cultural
10. Albacore Submarine Park
11. Music Hall
12. Portsmouth Athenaeum
15. Seacoast Repertory Theatre
16. Strawbery Banke Museum
17. The Loft
28. 3S Artspace
29. PMAC

Government Offices / Services
18. City Hall
19. District Court
20. Library
21. Post Office

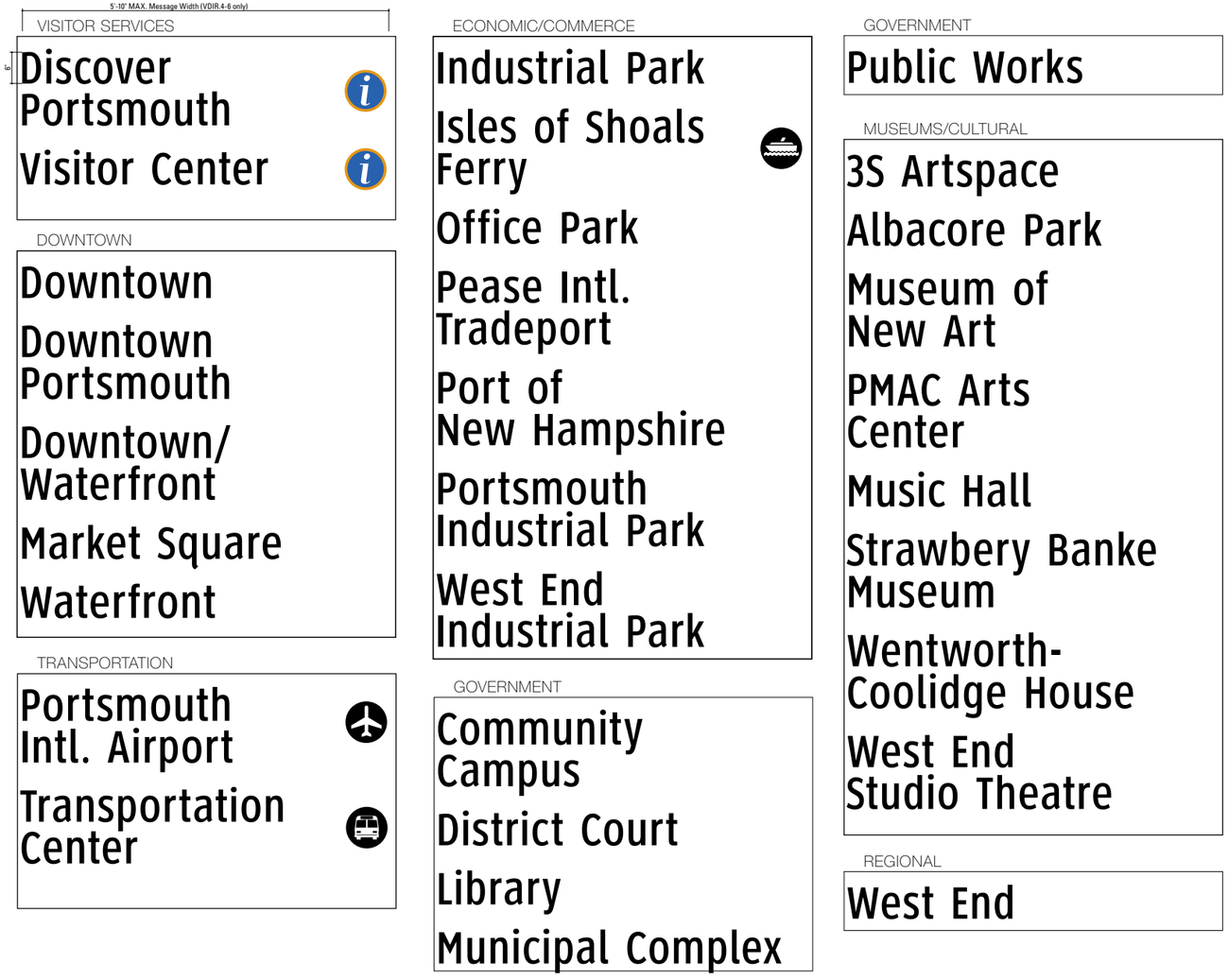
Economic/Commerce
26. Port of New Hampshire

Historic Homes / Buildings
1. Jackson House
2. John Paul Jones House
3. Langdon House
4. Moffatt Ladd House
6. Rundlet-May House
7. Tobias Lear + Wentworth-Gardner House
8. Warner House
9. Wentworth-Coolidge Mansion

Historic Churches / Temples
11. South Church
12. St. John's Episcopal Church
13. Temple Israel
14. North Church

Parks / Recreation
1. Four Tree Island
3. Leary Field
5. Peirce Island
6. Prescott Park

TERMINOLOGIES AND ABBREVIATIONS–VEHICULAR



The following is a list of destinations that shall be included on vehicular signage. Terminology presented represents the line length and abbreviations that are recommended to fit on a typical sign panel (width).

VEHICULAR SIGNAGE

Sign Panel Width: 7'-5" (89")
Character Height: 6"
Test Typeface: Clearview HWY-2
Qty. Lines per Listing:
- Goal = 1
- Acceptable = 2

Qty. Characters per Listing:
- Goal = 20 or less
- Acceptable = 24 max.

RECOMMENDATIONS:

1. Remove “Portsmouth” from destination listings.
   Example: “Portsmouth City Hall” becomes “City Hall”.

2. Use only commonly recognized abbreviations. Use consistent terminology and abbreviations throughout system.
   Examples:
   - Avenue = Ave
   - Center = Ctr
   - County = Cty
   - Historic = Hist

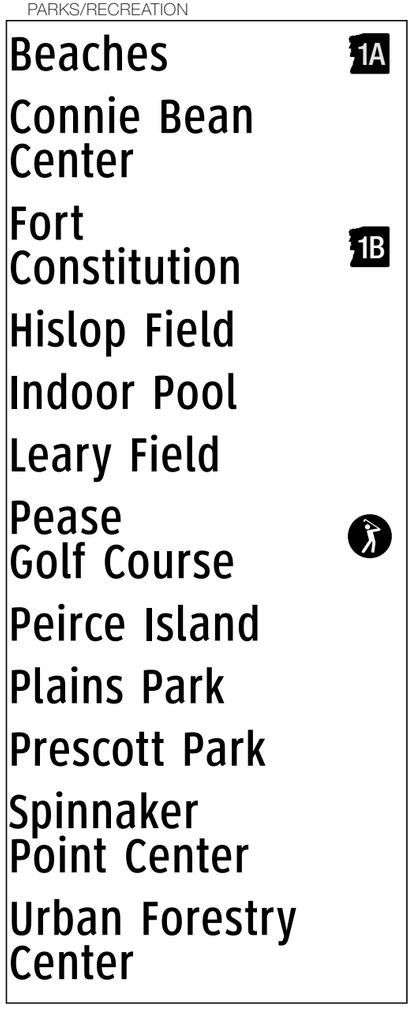
TERMINOLOGIES AND ABBREVIATIONS–VEHICULAR

PUBLIC PARKING

PUBLIC PARKING*

*NOTE: These two Lots will only have signage identifiying the the lot. They will have no directional signage.

PARKS/RECRETION



The following is a list of destinations that shall be included on vehicular signage. Terminology presented represents the line length and abbreviations that are recommended to fit on a typical sign panel (width).

VEHICULAR SIGNAGE

Sign Panel Width: 7'-5" (89")
Character Height: 6"
Test Typeface: Clearview HWY-2
Qty. Lines per Listing:
- Goal = 1
- Acceptable = 2

Qty. Characters per Listing:
- Goal = 20 or less
- Acceptable = 24 max.

RECOMMENDATIONS:

1. Remove “Portsmouth” from destination listings.
   Example: “Portsmouth City Hall” becomes “City Hall”.

2. Use only commonly recognized abbreviations. Use consistent terminology and abbreviations throughout system.
   Examples:
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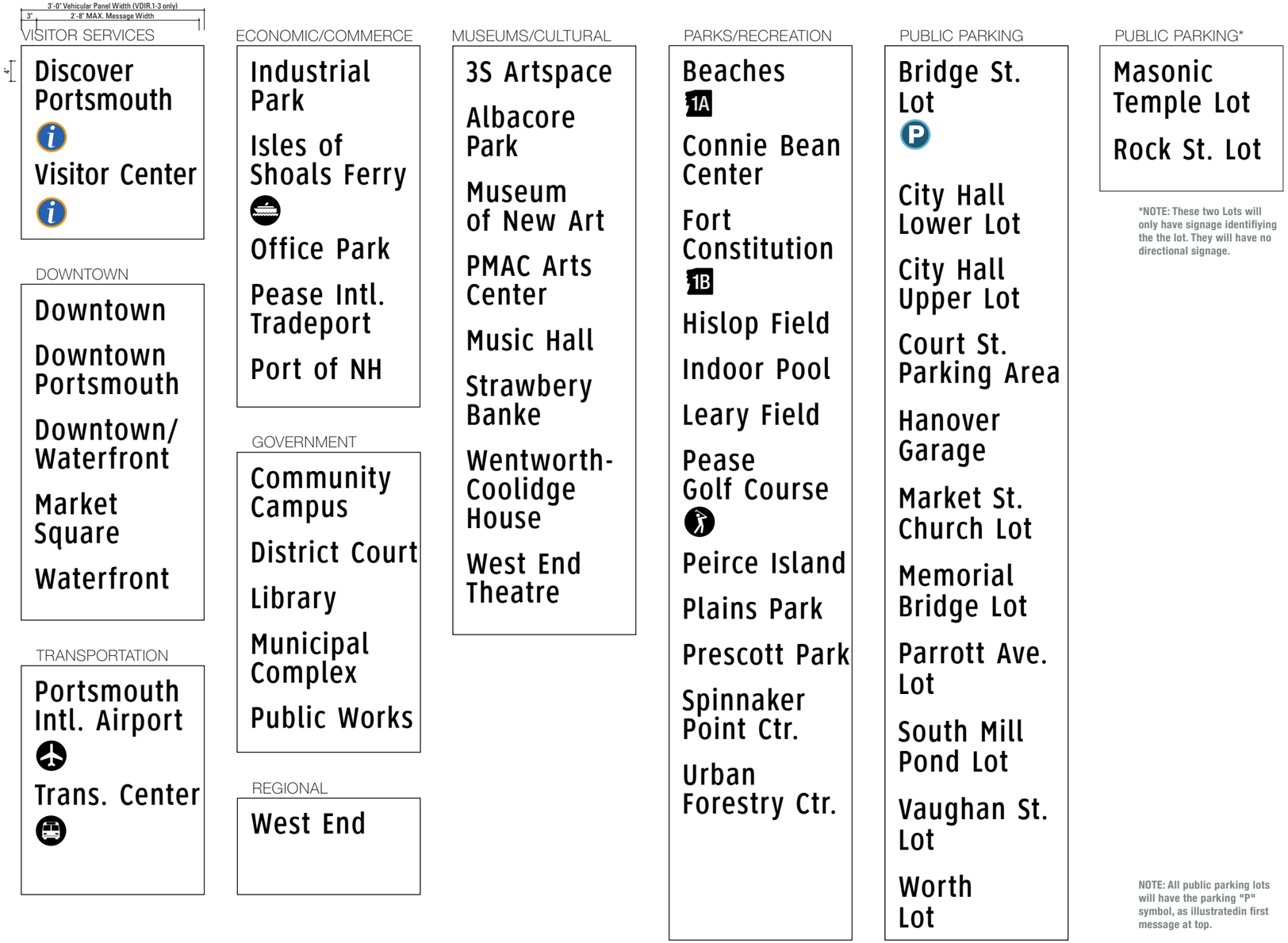
   - Center = Ctr
   - County = Cty
   - Historic = Hist

TERMINOLOGIES AND ABBREVIATIONS–VEHICULAR



*NOTE: These two Lots will only have signage identifiying the the lot. They will have no directional signage.

NOTE: All public parking lots will have the parking "P" symbol, as illustratedin first message at top.

The following is a list of destinations that shall be included on vehicular signage. Terminology presented represents the line length and abbreviations that are recommended to fit on a typical sign panel (width).

VEHICULAR SIGNAGE

Sign Panel Width: 3'-4" (40")
Character Height: 4"
Test Typeface: Clearview HWY-2
Qty. Lines per Listing:
- Goal = 1
- Acceptable = 2

Qty. Characters per Listing:
- Goal = 20 or less
- Acceptable = 24 max.

RECOMMENDATIONS:

1. Remove “Portsmouth” from destination listings.
   Example: “Portsmouth City Hall” becomes “City Hall”.

2. Use only commonly recognized abbreviations. Use consistent terminology and abbreviations throughout system.
   Examples:
   - Avenue = Ave
   - Center = Ctr
   - County = Cty
   - Historic = Hist

TERMINOLOGIES AND ABBREVIATIONS–PEDESTRIAN

MAJOR ATTRACTIONS

- Visitor Center
- Discover Portsmouth
- Gundalow Company
- Harbor Cruises
- Isles of Shoals Ferry
- Market Square
- Memorial Bridge
- Music Hall
- Prescott Park
- Strawbery Banke Museum
- Waterfront Decks

VISITOR INFORMATION

- Visitor Center
- Discover Portsmouth
- Market Square Kiosk

PUBLIC SERVICES

- Public Restrooms

NOTE: Symbol only may be applied to a few destinations (Hanover Garage, Prescott Park), rather than listing the message.

MUSEUMS/CULTURAL

- 3S Artspace
- African Burying Ground
- African American Center
- Albacore Park
- Athenaeum
- Museum of New Art
- Music Hall
- Music Hall Loft
- Players Ring Theatre
- Repertory Theatre
- Strawbery Banke Museum
- West End Studio Theatre

DESTINATION AREAS/DISTRICTS

- Downtown
- Market Square
- Waterfront
- Waterfront Decks
- West End

GOVERNMENT

- District Court
- Fire Station
- Municipal Complex
- Police Station
- Post Office
- Public Library

ECONOMIC/COMMERCE

- Harbor Cruises
- Isles of Shoals Ferry
- Port of New Hampshire

PARKS & RECREATION

- Connie Bean Center
- Four Tree Island
- Goodwin Park
- Langdon Park
- Leary Field
- Memorial Park
- Peirce Island
- Prescott Park

PUBLIC PARKING

- Bridge Street Lot
- City Hall Lower Lot
- City Hall Upper Lot
- Court St. Parking Area
- Hanover Garage
- Market Hanover Lot
- Market St. Church Lot
- Memorial Bridge Lot
- Parrott Ave. Lot
- South Mill Pond Lot
- Vaughan Street Lot
- Worth Lot

SHARED/LEASED PUBLIC PARKING

- Masonic Temple Lot
- Rock Street Lot

NOTE: Destinations in shaded-grey boxes will appear on map/info signs, but not on pedestrian directional signage.

HISTORIC HOMES/BUILDINGS

- Jackson House
- John Paul Jones House
- Langdon House
- Moffatt Ladd House
- Rundlet-May House
- Warner House
- Wentworth-Coolidge House
- Wentworth-Gardner House

HISTORIC CHURCHES/TEMPLES

- North Church
- South Church
- St. John's Episcopal Church
- Temple Israel

NOTE: Destinations in shaded-grey boxes will appear on map/info signs, but not on pedestrian directional signage.

NOTE: Destinations in ORANGE may appear as 2-line message on map/info signs.

The following is a list of destinations that shall be included on pedestrian signage. Terminology presented represents the line length and abbreviations that are recommended to fit on a typical sign panel (width).

PEDESTRIAN SIGNAGE

Sign Panel Width: 2'-0" (24")
Character Height: 1.25"
Test Typeface: Clearview HWY-2
Qty. Lines per Listing:
Goal = 1
NOT acceptable = 2
Qty. Characters per Listing:
Goal = 15 or less
Acceptable = 18 max.

The destination terminology and abbreviations shown here are PRELIMINARY and for discussion purposes only.

RECOMMENDATIONS:

1. Remove "Portsmouth" from destination listings.
   Example: "Portsmouth City Hall" becomes "City Hall".

2. Use only commonly recognized abbreviations. Use consistent terminology and abbreviations throughout system.
   Examples:
   Avenue = Ave
   Center = Ctr
   County = Cty
   Historic = Hist

EXISTING SIGNAGE EVALUATION

1

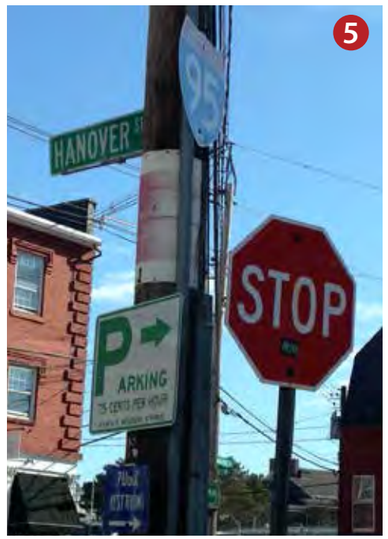
1

1

2

3

4



5

Observations for signage and wayfinding elements in Portsmouth:

1 Vehicular Directional Signage

- Do not locate vehicular directional signs on left-hand side of roadways, unless absolutely necessary to set-up a left turn for visitors.
- Signs mounted to existing utility poles caddy-corner to a vehicle stopped at an intersection are difficult to read and create confusion.
- There are often too many signs which makes it difficult to discern what is vehicular and/or pedestrian information.

2 Vehicular Directional Signage

- There are often too many signs which makes it difficult to discern what is vehicular and/or pedestrian information because of message size variations.
- Messages are too long.
- Signs have improper text size and inconsistent arrow styles.

3 Vehicular Directional Signage

- Within urban or congested areas, regulatory roadway signs and vehicular directionals signs should be located no less than 25 feet apart.
- In this location the Strawbery Banke and Parking trailblazer could have been combined as one sign and located 25 to 50 feet prior to the street sign.
- Street signs should have no vehicular signs attached to them. It is ok to include bicycle and pedestrian directional information.

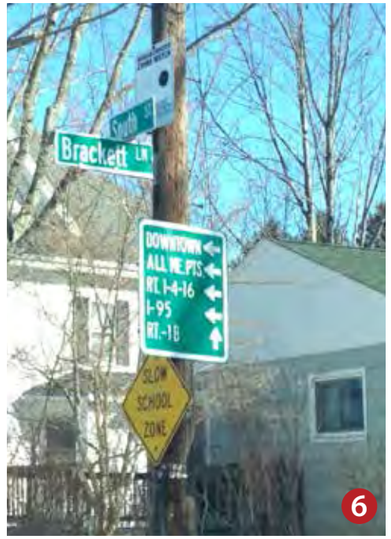
4 Sign Clutter

- All of the images on this page are examples of Portsmouth sign clutter issues.
- There are too many sign types applied to this utility pole; the Strawbery Banke sign should not be attached here and should be located on its on own pole in the vicinity.
- Roadway regulatory and street parking information may be combined, but all vehicular directional signs must be separate.

5 Parking Trailblazers

- It is very difficult to find this sign in the clutter of all others.
- It is very difficult to understand what type of parking this is; street? lot? or garage?
- It is very difficult to read the small text on the sign, which describes the cost of parking. The additional information is not necessary at this time.

EXISTING SIGNAGE EVALUATION (CONT.)



6

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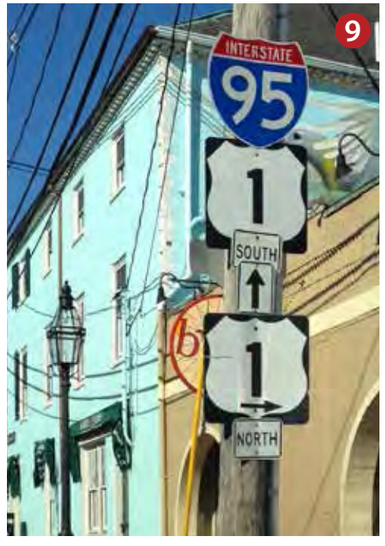


9

6 Vehicular Directional Signage

- No vehicular directional signs should be located across the street from a vehicular stop at an intersection. The sign must be located prior to the intersection so visitors can make an informed decision prior to stopping.
- There are too many messages on sign panel.
- The message copy height appears too small (its probably 3 inches), where 25 mph roadways now require 4 inch copy (according to MUTCD and FHWA standards).
- Messages are in the wrong order; straight-ahead first, then left, and right turn messages from the top down (according to MUTCD and FHWA standards).

7 Roadway Regulatory Signage

- It is understandable to have 2 stop signs at this intersection. However, the right stop sign should only have the “no right turn” sign panel, and the left stop sign should have the “left turn only” sign.
- The stop sign is located too close to the street light, adding to the visible clutter of signage in the downtown.
- The street light should not have the street name panels attached to it. These panels are not easily read by vehicles, nor pedestrians at this intersection.

8 Sign Clutter

- The same issues for the parking sign as described on the previous page (See bullet #3).
- The parking sign should have a right turn arrow.
- The pedestrian bus stop information should not be mounted to vehicular signage. The information is not meant to be read by visitors in their cars.

9 Roadway Regulatory Signage

- Highway and state route markers can be located on utility poles, but the supporting messages must be the appropriate size and order.
- The South and North message panels must be larger.
- The arrow on the lower Route 1 marker must be on a separate panel, same style arrow as above arrow, and located below the North message panel.
- The series of signs should be positioned at 7 feet from the bottom sign panel, and increased in height.

MUTCD TECHNICAL CRITERIA

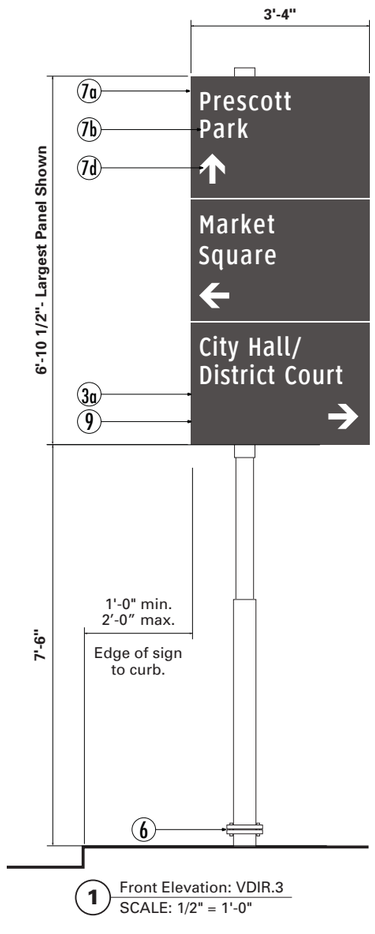
The Manual on Uniform Traffic Control Devices, or MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic. The MUTCD is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F.

VEHICULAR DESIGN REQUIREMENTS

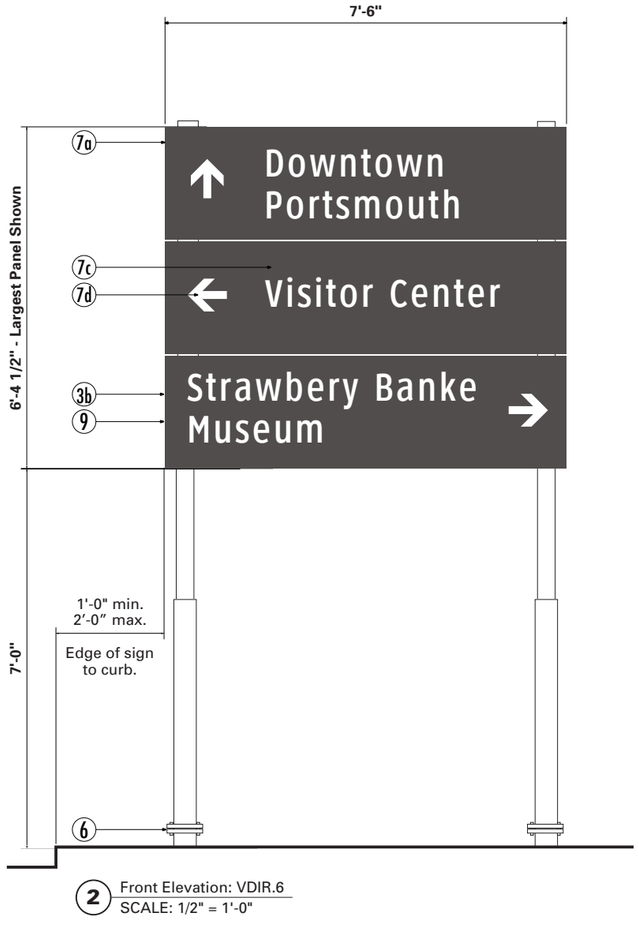
Section 2D.50 Community Wayfinding Signs describes the following criteria for the Portsmouth community wayfinding guide signs:

- Maximum of 3 listings per sign, with a maximum of 2 lines per attraction listing.
- Color contrast should be at least 70 percent between typeface and background.
- Type size to be 4 inches for signs in urban conditions with speeds of 25 mph or less, and 6 inches for signs on roadways over 30 mph.
- Clearview HWY typeface as approved by MUTCD and FHWA.
- Background and graphics to be CUSTOM Color - Printed High Intensity Prismatic Reflective Vinyl Sheeting, and comply with MUTCD section Table 2A-3.
- Signs must have a clearance of at least 7 feet off the ground and 36 inches lateral clearance to satisfy the Americans with Disabilities Act requirement.
- Minimum of 100 feet between signs.

Graphic Considerations - Submittal



1 Front Elevation: VDIR.3
SCALE: 1/2" = 1'-0"



2 Front Elevation: VDIR.6
SCALE: 1/2" = 1'-0"

General Notes:
The City of Portsmouth, New Hampshire, involved in the signage program shall enter into an agreement with the New Hampshire Department of Transportation (NHDOT) to assume all responsibility in the maintenance and management of the signs within the NHDOT Right-of-Way (ROW).

Numbers correspond to line items in the NHDOT guidelines for Wayfinding Signs along state maintained roads.

(3a) **Message Quantity 25 MPH**
Three Destinations Max.

(3b) **Messages Quantity 30 MPH +**
Three Destinations Max.

(6) **Footer**
Break-Away or Yielding in Design as detailed in NHDOT Roadway Standard Drawings or as approved by Federal Highway Administration (FHWA)

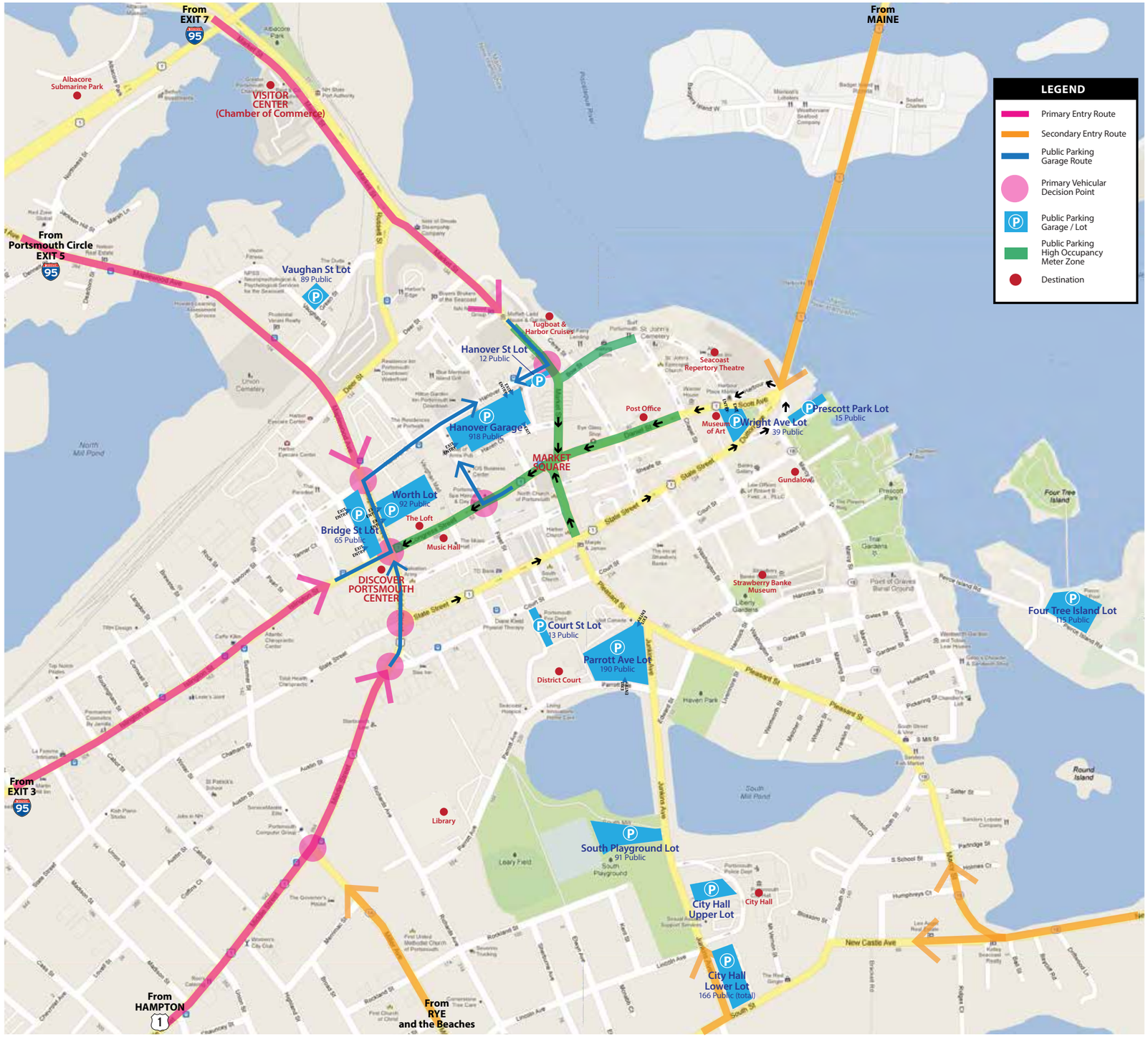
(7a) **Sign Panel Background**
Product: 3M High Intensity Prismatic Reflective Sheeting
Background: Custom Color

(7b) **Font for 25 MPH or less**
Style: Clearview 2W
Color: Standard - White
Size: 4"Copy Height

(7c) **Font for 30 MPH or more**
Style: Clearview 2W
Color: Standard - White
Size: 6"Copy Height

(7d) **Arrow**
Style: Standard
Color: Standard - White

(9) **Material**
Product: 3M High Intensity Prismatic Reflective Sheeting
Color: Standard White
Background: Custom Color
Arrow, Font, Rule Line: Standard White



DOWNTOWN PARKING STRATEGY

Portsmouth is in the unique position of having a number of historic assets with limited onsite parking. In Portsmouth, our goal is to direct visitors to parking facilities first, and then direct them to destinations via public transportation or by foot.

Directing visitors to parking facilities accomplishes two things. First, it allows visitors to find a space quickly in a safe, named facility they will be able to remember and find easily when they are ready to leave. The parking facility will also serve as an orientation point to where they are in the city, and show them how to get to their destination.

Second, it reduces the amount of traffic on Portsmouth's smaller downtown streets by limiting the amount of visitors looking for on-street parking spaces.

PARK-ONCE

A fully integrated parking strategy couple with a comprehensive pedestrian wayfinding system will promote a "PARK-ONCE" attitude, where visitors will find a primary parking facility, lot or space and then walk to multiple destinations. This in turn also supports the sustainable goals of the programming, by efficiently and quickly moving cars into parking.

RECOMMENDATIONS:
The diagram at left illustrates the primary and secondary routes into the downtown area, important intersection decision points, and public parking lots and high occupancy on-street parking locations.

Upon approach, visitors should be directed to parking areas through the use of the "P" trailblazing symbol. As a user arrives at a decision point or gets closer to a individual parking facility, direction will be given by specific garage or lot name within the vehicular directional messaging.

Additionally, parking trailblazers will help guide visitors to surface public parking lots, but not to metered street parking. These trailblazers will enhance the entire Downtown parking experience by giving people information about the number of options.

If visitors arrive at the destination before finding parking in either the garage or lots, signage should direct them from the destination to the closest parking.

PRIORITY 1 Install a coordinated parking system with a "PARK-ONCE" attitude, where visitors will use Vehicular Trailblazers to a Branded parking facility, lot or space and using pedestrian Signs and Maps to walk to destinations.

PUBLIC PARKING

ParkPortsmouth Link
Hanover Garage Parking Info Page

ParkPortsmouth Link
Downtown Street Parking Info Page

ParkPortsmouth Link
Parking Rates Info Page

Parking lot and garage signage is not consistent in the City, nor is the color and graphics.

Parking in any urban environment is always challenging. Wayfinding will not solve all parking issues, but can be part of the solution.

OBSERVATIONS and ISSUES:

The ParkPortsmouth website is an effort by the City to promote and inform visitors of the public parking available in Downtown Portsmouth. The ParkPortsmouth website is informative and easy to navigate.

ParkPortsmouth identifies the following garage and lots:

- Bridge St Lot
- City Hall Lower Lot
- City Hall Upper Lot
- Court St Lot
- Hanover Garage
- Hanover St Lot
- Market St Church Lot
- Memorial Lot
- Parrott Ave Lot
- South Mill Pond Lot
- Vaughan Street Lot
- Worth Lot

Currently, the City's parking directional signs are not consistent in presenting a clear path to guide visitors to parking areas. The confusion is lack of information about where signs lead visitors (e.g., to a garage, to lots, or to street parking). Parking signage is not consistent in graphics and color and messaging.

The wayfinding system should be directing to and identifying all public parking garage and lots in a consistent manner.

PARKING GARAGE / LOT NAMES

It is easier to locate parking garages and lots if they are named after the street they are located on. Currently, about half of the lots in Portsmouth are named in this manner. We recommend looking at ways to add address reference points to the remaining lot names, to aid in wayfinding and help visitors when they are trying to locate a specific lot.

PRIORITY 1 Adopt a Public Parking "P" Icon that is consistent in graphics and color, to ensure that all public parking lots and garage are signed to and identified in a uniform manner.

PRIORITY 1 Parking Lot names should be consistently identified based upon their street location.

PUBLIC PARKING
HANOVER GARAGE

High Hanover Garage - Viewing East down Hanover Street

High Hanover Garage - Viewing South down Fleet Street

Existing Conditions

Primary High Hanover Garage Entrance: Hanover Street

Existing Conditions

Secondary High Hanover Garage Entrance: Fleet Street

RECOMMENDATIONS FOR HIGH HANOVER GARAGE:

1) Currently the garage is identified as the High / Hanover Parking Facility. Rename the garage after the street with the primary entrance. Identify the facility as a Garage, it's a more accurate and common description.

2) Identify the garage as a Public Parking facility in the messaging. Also add a public parking symbol that is shared throughout the parking signage system.

3) All signage and graphics applied to the garage must utilize the colors, typography and graphic-style in the new Portsmouth Wayfinding and Signage System.

4) Add wayfinding to the interior of the garage at the elevator banks and garage exits. (See Section 2.19)

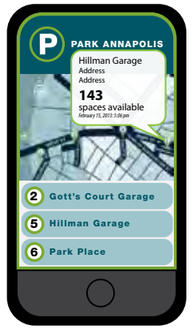
Illustrated to the left are a few proposed changes to the Hanover Garage that will help first-time and repeat visitors confidently choose to park in the garage, and trust the new parking system.

PRIORITY 1 Improvements to exterior of garage (as illustrated to the left).

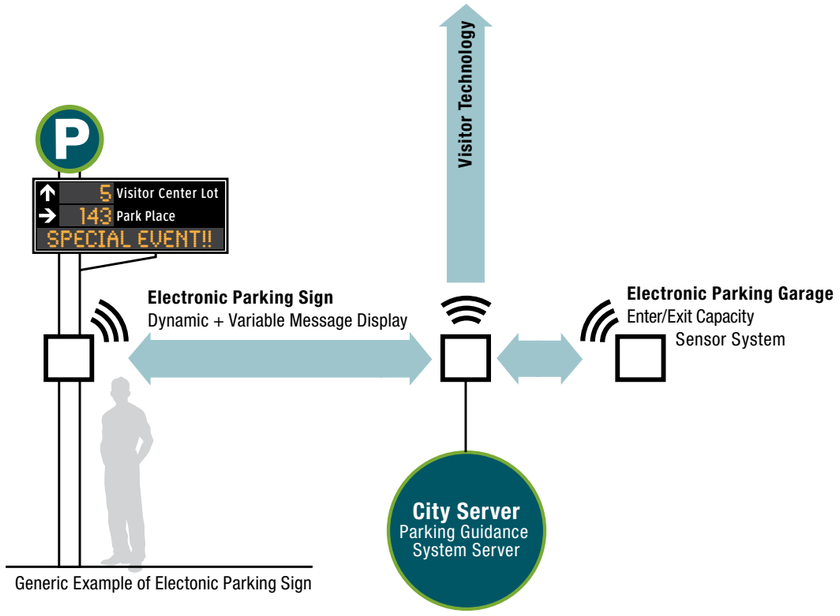
PRIORITY 2 Improvements to interior of garage (see sheet 2.19)

PUBLIC PARKING
REAL-TIME INFORMATION

Visitor Access
PARK ANNAPOLIS website



Visitor Access
PARK ANNAPOLIS mobile app



The cities of Annapolis, San Diego and Austin are considering real-time parking systems.

Examples of different types of real-time parking signage.

ELECTRONIC GUIDANCE SIGN PROGRAM

Dynamic variable message signs (VMS) are continuously updated, communicating to motorists the quickest and easiest route to the closest and most appropriate vacant space. The information can also help the City of Portsmouth collect data, monitor occupancy, and help with traffic congestion.

An electronic guidance system is a networked and integrated software solution that is able to manage all parking areas from a single source and connect to other intelligent traffic management systems, traffic cameras and transportation tools. The data gathered by the electronic systems can be distributed across websites and mobile applications so that visitors receive parking information prior to arrival in Portsmouth.

BENEFITS

Visitors would benefit greatly from knowing whether the garage is full in advance of their arrival. It would aid them in their decision about which parking area to head to.

Dynamic variable message signs would also be helpful with the many special events that take place in Portsmouth.

Communities where electronic messaging has been implemented have reported:

- Time to park was cut in HALF
- 3-5% increase in visits
- 5% increase in facilities attendance and positive PR
- 8% increase of utilization during peak times
- 3% increase in parking space capacity
- 56% reduction in vehicle carbon emissions
- 1-3% decrease in operating costs

CHALLENGES

Dynamic variable message signs are a very expensive addition to any wayfinding program and require a dedicated party to maintain and update the information feed. Aesthetically, these sort of signs may not often feel at home in a historic setting such as Portsmouth.

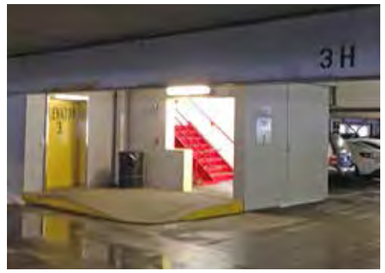
PRIORITY 1 The City should continue to investigate the use of real-time parking information along with the operational and financial feasibility of such a system. If implemented, the design of the structures and the accompanying graphics should remain consistent with the look of the Portsmouth Wayfinding and Signage design intent.

PUBLIC PARKING GATEWAY OPPORTUNITIES

Gateway graphics - Frederick, MD

Gateway graphics - Towson, MD

Gateway graphic examples in various public parking garages



Existing conditions in Hanover Garage

Existing conditions in Hanover Garage

Kiosk Orientation System - Fredericksburg, TX

Orientation Maps - Fredericksburg, TX

Existing conditions in Bridge St Parking Lot

GARAGE GATEWAYS

The public parking garage in Downtown Portsmouth is a gateway to the city for the visitor arriving by car. The elevator banks and garage exits are the first thing a visitor passes on their way to their destination. There are opportunities in the garage for large murals and welcoming messages and potential for providing additional information via kiosks, maps or signage.

PARKING LOT GATEWAYS

The public parking lots in Downtown Portsmouth are also a gateway to the city for visitors arriving by car. Exits adjacent to city sidewalks are the first thing visitors pass on their way to their destination. These are opportunities for kiosks or maps providing orientation, or additional information.

These elements can highlight:

- The History of Portsmouth
- Information Centers
- Portsmouth Attractions - Market Square, Albacore Park, Strawbery Banke Museum, and the historic homes and tours.
- The public transit systems.
- Connections to Pease International Tradeport
- Shopping areas
- Adjacent neighborhoods
- Surrounding communities, regional context.

PRIORITY 2 Interior improvements to Hanover garage; i.e. large murals, welcoming messages, orientation maps, etc.

PRIORITY 2 Opportunities for orientation and information improvements at parking lots.

PUBLIC PARKING WALL MURALS

Painted Wall Mural Example
Parking Garage (directional) wall mural in Downtown Frederick, MD.

Opportunity: wall mural directional on building facade, just prior to Hanover Street.

One potential wayfinding tool used in communities like Portsmouth with limited space for additional signage, are wall murals. These can create a striking impact and can dramatically transform a space, as well as inform visitors.

Most murals are painted directly on a wall surface. Some wall paintings are painted on large canvases, which are then attached to the wall.

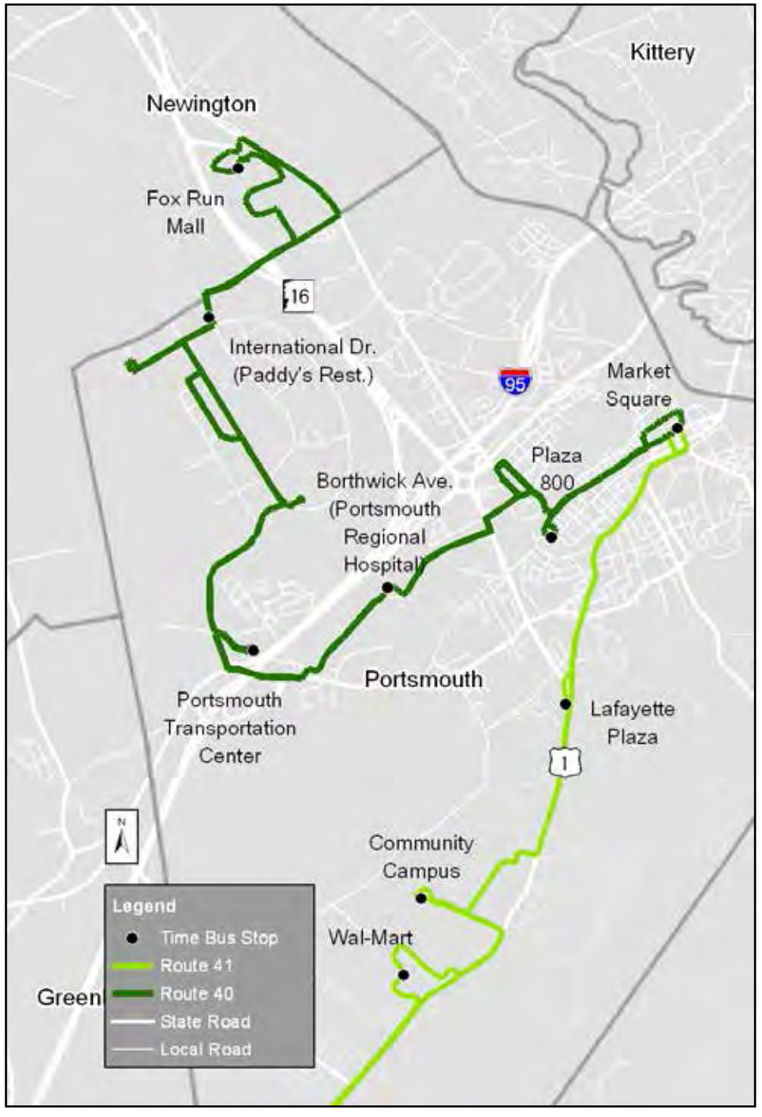
Illustrated to the left are a few proposed additions to existing walls in the Downtown area that could help first-time and repeat visitors confidently locate the parking garage. The proposed additions would be supplements to the wayfinding directional signs.

Painted Wall Mural Example
Graphic and colorful wall mural in Downtown Austin, TX.

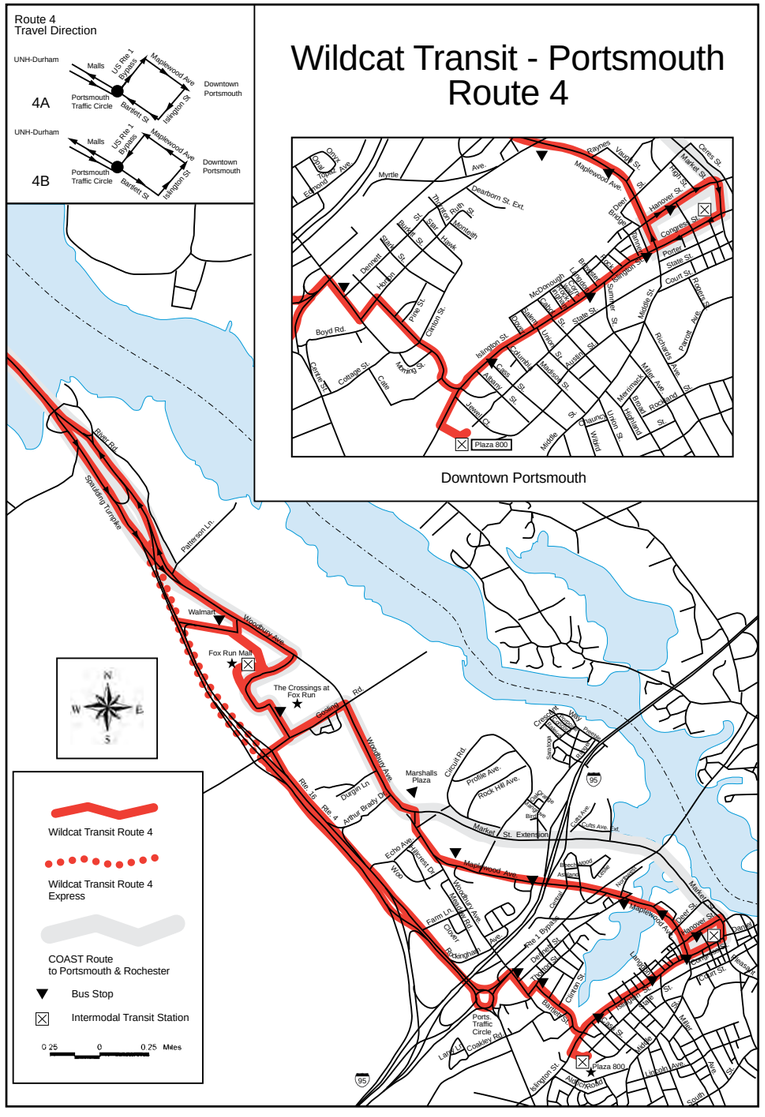
Opportunity: wall mural directional on building facade, at Fleet Street.

PRIORITY 2 Consider opportunities for wall murals directing to parking.

CITY WIDE TRANSIT ROUTES



COAST Transit Route

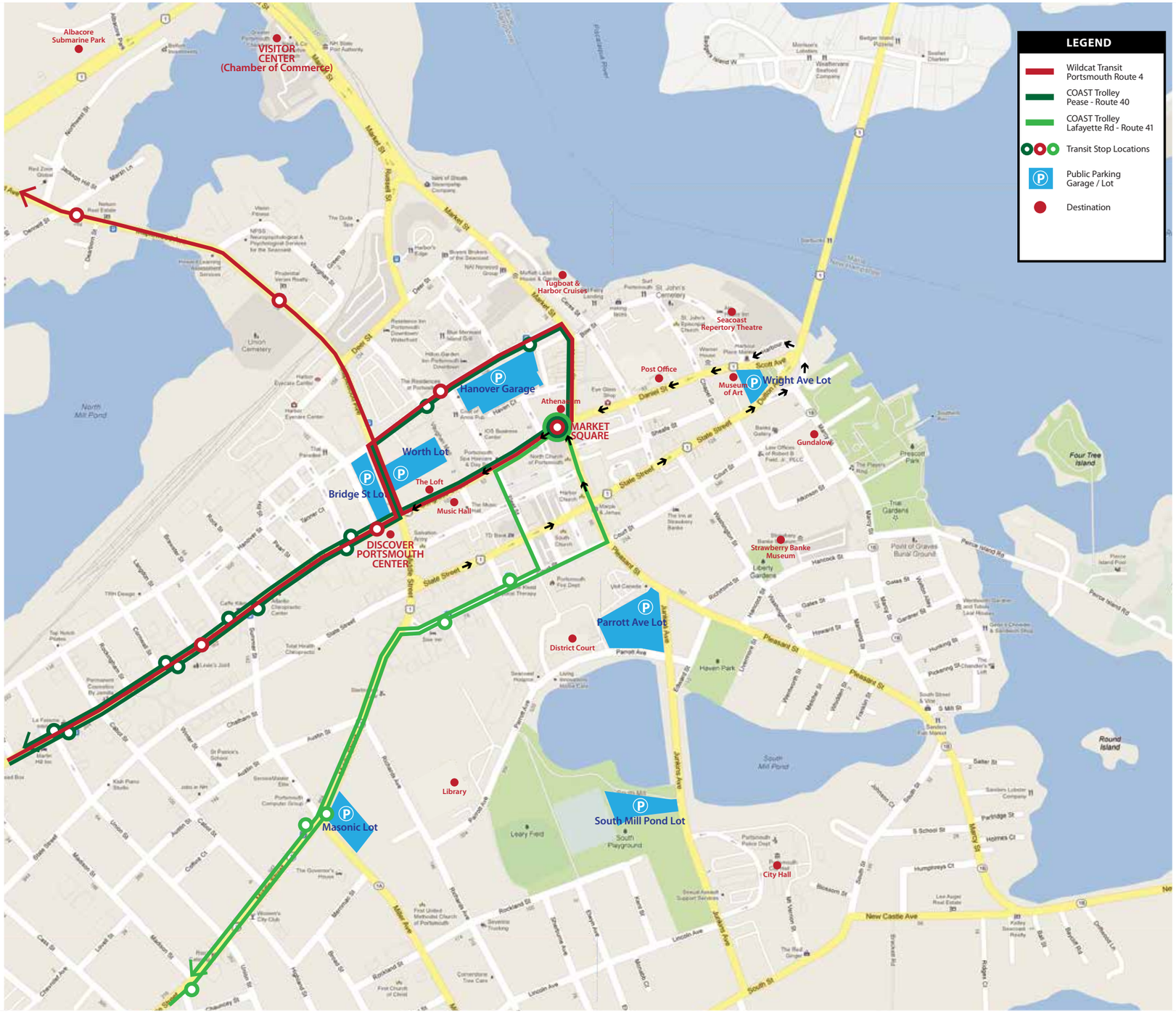


Wildcat Transit Route

PUBLIC BUS SERVICE

COAST provides year round public bus and trolley service in the Seacoast New Hampshire region. The Portsmouth Trolleys have two routes, 40 and 41, providing frequent service through Downtown Portsmouth, connecting the Mall, Pease Tradeport, Transportation Center, Lafayette Plaza, and other jobs, retail and housing stops in the region.

The Wildcat Transit Connector provides a loop-route from the University of New Hampshire to Downtown Portsmouth and shares a couple of key stops with COAST.



DOWNTOWN TRANSIT ROUTES

RECOMMENDATIONS:

1) Explore ways to reduce sign clutter by combining Transit information with the City's new pedestrian wayfinding signage.

2) Where those Transit stops share information with the City wayfinding signage, it is recommended a map is added with a "You-Are-Here" star and nearby attractions, possibly with distances to those attractions.

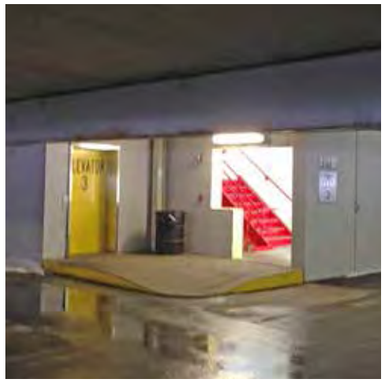
3) There is also opportunity for marketing and wayfinding efforts on the COAST Trolley itself, both on the interior and exterior. The trolley connects four districts/neighborhoods (Downtown, West End, South End, and Pease International Tradeport). Consider utilizing the trolley as a information hub for those areas. The districts/ neighborhoods could be placed on the COAST map, and information about those districts/neighborhoods could be displayed inside or on the exterior of the trolley.

4) The COAST and Wildcat Transit could also be better promoted on various City websites.

PRIORITY 1 Design and install pedestrian maps to co-exist with Transit information near key Pedestrian Stops within the Downtown.

PEDESTRIAN ARRIVAL

Pedestrian Arrival



Auto to Pedestrian Transition

COAST Trolley to Pedestrian Transition

Bicycle to Pedestrian Transition

Water to Pedestrian Transition

Water to Pedestrian Transition

In the downtown and neighboring areas, Portsmouth is a very walkable city. Major attractions are clustered together, and the streets linking those areas are lined with shopping, dining and art galleries that invite a pedestrian to linger on the way to their destination. The one-way streets and narrow roadways that can make driving in Downtown Portsmouth a challenge, make it more appealing for pedestrians. For this reason, the majority of signage and wayfinding information should be presented at the pedestrian level. There are several pedestrian arrivals points where wayfinding information will be available.

ARRIVAL POINTS

Pedestrians can arrive in Portsmouth in a number of ways and each provides unique conditions and requirements. In all cases, these arrival points should provide: identification, orientation, directional, real-time data, and general information. Types of pedestrian arrival points include:

NATURAL PEDESTRIAN ARRIVAL:
Simply walking into Downtown from an adjacent neighborhood, across a bridge, or from a recreational trail.

AUTO > PEDESTRIAN TRANSITION:
Parking garage and parking lots.

PUBLIC TRANSPORTATION > PEDESTRIAN TRANSITION:
Opportunities at COAST and Wildcat Transit stops for pedestrian information and maps.

BICYCLE > PEDESTRIAN TRANSITION:
Information can be provided at bike racks, bike trailheads, and at bike shops or rental locations.

WATER > PEDESTRIAN TRANSITION:
Information can be provided at the appropriate City docks.

PRIORITY 1 Coordinate with the City of Portsmouth renovation and upgrade initiatives for the Hanover Garage interior gateway elements. (reference sheet 2.19)

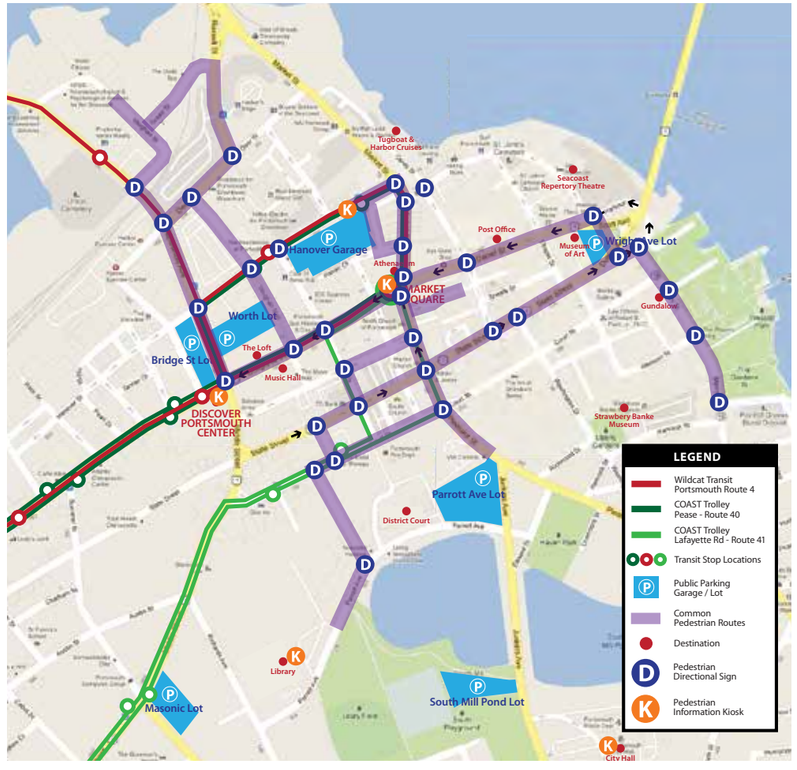
PRIORITY 2 Identify pedestrian gateway entrance locations from the City dock's, and waterways. Determine and design appropriate pedestrian-type signage.

PRIORITY 2 Provide information at bike racks, bike trailheads, and at bike shops or rental locations.

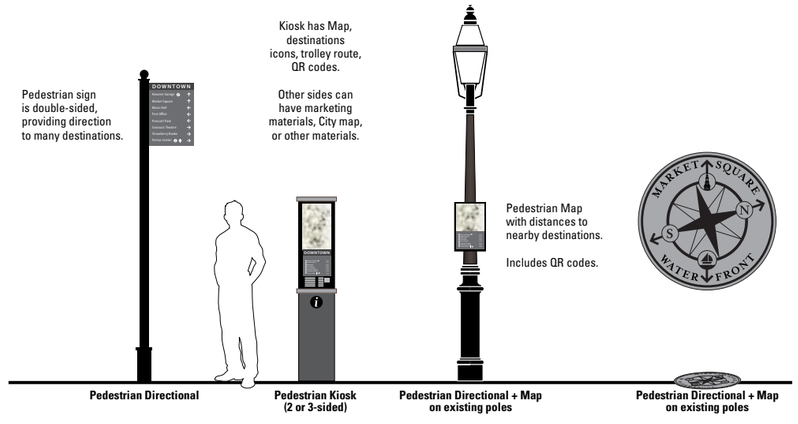
PEDESTRIAN GUIDANCE

Crosswalk Directional

Sidewalk Compass



Note: Review of individual site requirements (i.e. ADA clearances, sidewalk conditions, etc.) will be accomplished during the programming phase of this project, when exact placement for wayfinding elements are analyzed and chosen. The scope of this plan does not include a physical inventory of every existing pedestrian site condition in Portsmouth, but more of a identification of general opportunities, obstacles and best practices that can be used when determining the wayfinding tools information and placement.



The diagram illustrates the potential pedestrian circulation routes in the Downtown. A circulation plan like this can help guide locations for pedestrian directional signs and informational kiosks. The pedestrian wayfinding program for Portsmouth may include a variety of components; including different sizes and styles of directional signs and information kiosks. The primary function of the directional signs will be to help connect pedestrians from parking areas to the major destinations along a preferred pedestrian network.

GUIDING THE PEDESTRIAN

OPPORTUNITIES:

- Identify key nodes where important information can be communicated
- Use natural landmarks to provide orientation
- Use existing infrastructure (e.g. light poles) as mounting devices
- Incorporate inlaid sidewalk elements, or pavement markings
- Incorporate technology to provide more detailed information where necessary

CHALLENGES:

- ADA Clearance and Mobility Issues
- Lack of sidewalk infrastructure
- Gaps in pedestrian network, narrow sidewalks
- Safety Issues
- Areas of auto and bicycle conflict
- Unfriendly pedestrian intersections

TYPES OF PEDESTRIAN INFORMATION:

- Orientation
- District Identification
- Directional
- Informational
- Events and Promotions
- Real-Time Data (Public Transit, Community, etc.)

TYPES OF PEDESTRIAN WAYFINDING TOOLS:

- Orientation Maps
- Directional Signs
- Technology Elements
- Community Boards
- Landmarks / Public Art

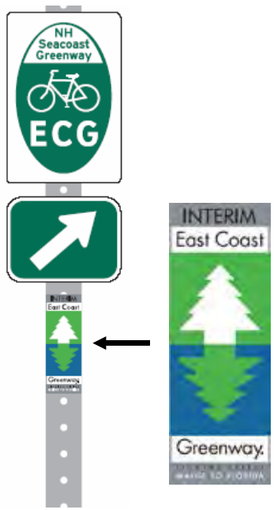
PRIORITY 1 Install Information Kiosks (static) at key visitor gathering areas. Kiosks would include maps, interpretive information and mobile technology - such as QR codes or text messages.

PRIORITY 1 Install Pedestrian Signage including maps and directional signs.

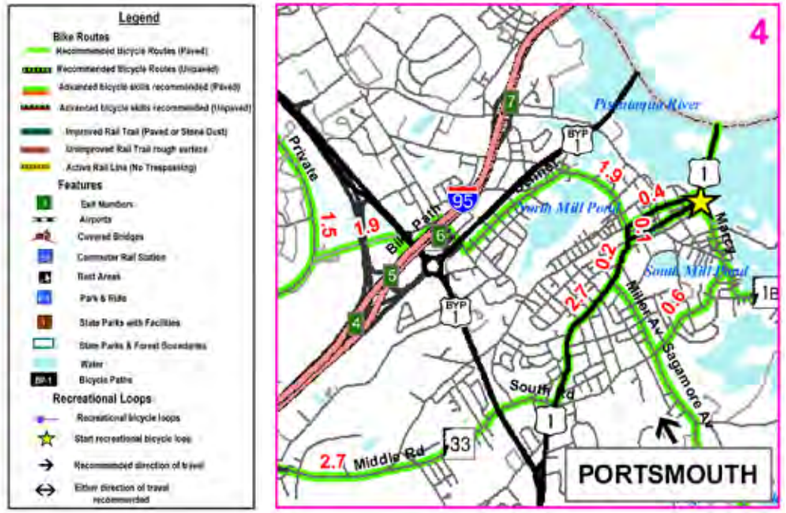
BICYCLE ROUTES

Gresham, OR
Examples of bicycle/pedestrian sign system components.

NACTO - Urban Bikeway Design Guide
The comprehensive 300+ page manual provides excellent guidelines for Bikeway signing and markings, including: Colored Bike Facilities; Shared Lane Markings; and Bike Route Wayfinding Signage and Markings System.



SeaCoast Bike Route Signage
Directional signage includes East Coast Greenway identification.



SeaCoast Bike Route Map
(Includes inset map of Portsmouth only, and legend)

BIKE ROUTE WAYFINDING

A bicycle wayfinding system consists of signing and pavement markings to guide bicyclists to their destinations along preferred bicycle routes. Signs are typically placed at decision points along bicycle routes – typically at the intersection of two or more bikeways and at other key locations leading to and along bicycle routes.

TYPES OF SIGNS

There are three general types of wayfinding signs: Confirmation signs, Turn signs, and Decision signs.

CONFIRMATION SIGNS

These signs indicate to bicyclists that they are on a designated bikeway. They also help make motorists aware of the bicycle route. Signs include distance and time, but do not include arrows. Placement occurs about every 2 to 3 blocks along bicycle routes.

TURN SIGNS

Turn signs indicate where a bikeway turns from one street onto another street. They can also be accompanied by pavement markings. These signs include destinations and arrows. Placement occurs on the near-side of intersections where bike routes turn, i.e. where the street ceases to be a bicycle route or does not go through.

DECISION SIGNS

These signs mark the junction of two or more bikeways and inform bicyclists of the designated bike route to access key destinations. These signs include destinations and arrows. Distances, and travel times are optional but recommended. Placement occurs on the near-side of intersections in advance of a junction with another bicycle route and along a route to indicate a nearby destination.

TYPES OF DESTINATIONS

Wayfinding signs can direct users to a number of different types of destinations, including the following:

- On-street bikeways
- Commercial Centers
- Public Transit Centers and Stations
- Civic/Community destinations
- Local or regional parks and trails
- Hospitals
- Bridges

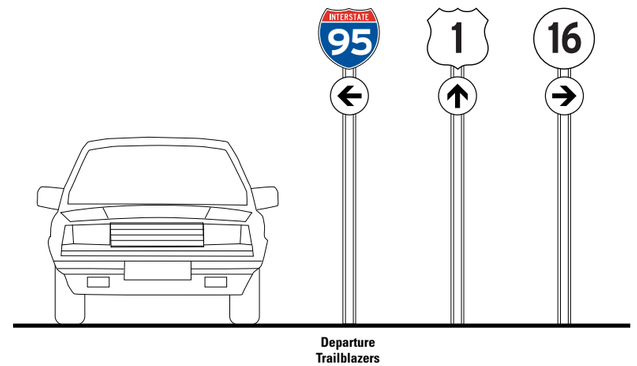
PRIORITY 2 Include design standards for bike route wayfinding in the City's wayfinding system.

DEPARTURE ROUTES

The map illustrates the various potential departure routes for visitors from Downtown Portsmouth.

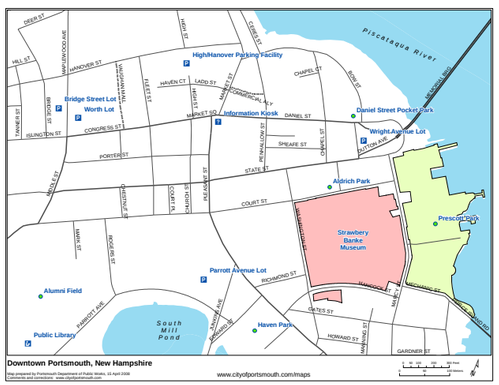
Departure routes are equally as important as arrival routes and when possible they should be the same.

This is not always the case because of one-way streets, no left turns, and other traffic regulatory issues. Any additional interstate trailblazer signs should be coordinated through the New Hampshire Department of Transportation (NHDOT).



PRIORITY 2 Supplement existing signage, and fill in gaps for major departure routes.

ORIENTATION MAPS



Downtown Portsmouth Map
Currently found at the City of Portsmouth website

Downtown Portsmouth Map
Current printed map available at various hotels

A successful wayfinding program includes a variety of tools and presents information in different forms. Orientation maps, whether they are printed in a brochure, displayed on signage, or provided in a digital format, are a common wayfinding tool. The use of consistent terminology and display of map artwork across a range of mediums builds trust in the program and gives the user confidence that the information being presented is accurate and up-to-date.

In Portsmouth there are a variety of maps provided by different organizations, each with their own graphic language and purpose. The base information included on these maps is not necessarily consistent including boundaries, landmark references, street labels and destination names and locations.

As with many cities, Portsmouth is constantly evolving; the accuracy of maps and updating the information is a common issue. The City has a wealth of local map data and a skilled Geographic Information Systems (GIS) staff that could provided up-to-date city base maps. A single source base map can then help control the consistency within the system and provide guidelines to third-party vendors and partners. This will also help in maintaining the information over time for changes or new maps that need to be created.

The City can then centralize, share and disperse consistent and accurate information to its visitors and partners. It is recommended that the City establish an administrative process for the management of the map system information along with a communications plan to inform the various partners and third party vendors of the availability of the map artwork.

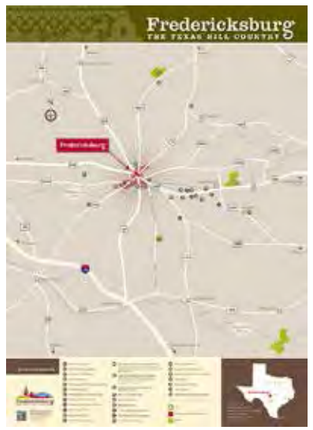
BASE MAP DESIGN CONSIDERATIONS:

- Signs with maps should typically be located at key gathering areas and along paths of pedestrian travel.
- All static mapping on signs shall be “heads-up” oriented and include a “you are here” indicator.
- Maps should be created in formats that easily allow consistent translation across a variety of wayfinding tools and visual requirements.

Typical map formats include:

- Brochures (printed/paper)
- Kiosks (static–printed/dHPL)
- Kiosks (static–illuminated/dHPL)
- Signage (static–printed/dHPL)
- Websites (computer screens)
- Hand-held device (interactive)
- Video Screens (interactive)
- Bus stops (vinyl graphics)
- Wall Murals (vinyl graphics)

Good examples of an orientation mapping system



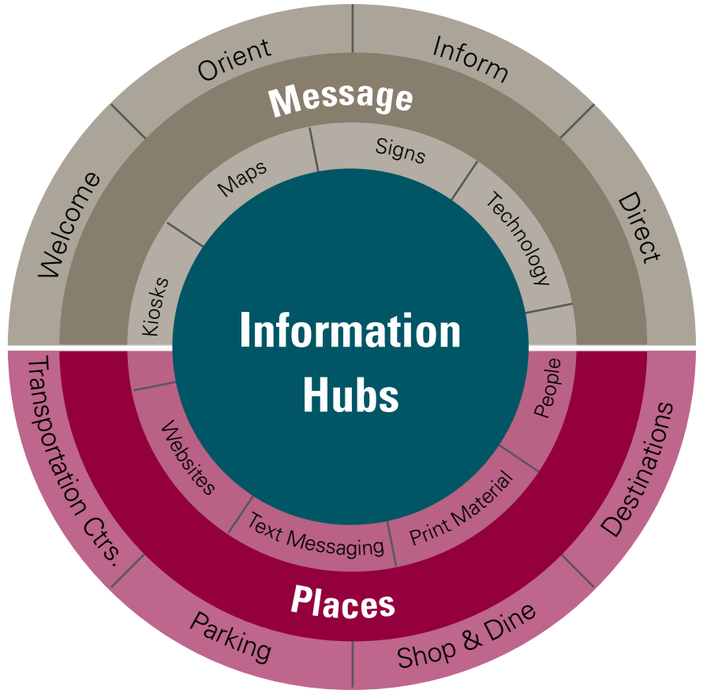
Fredericksburg TX regional map

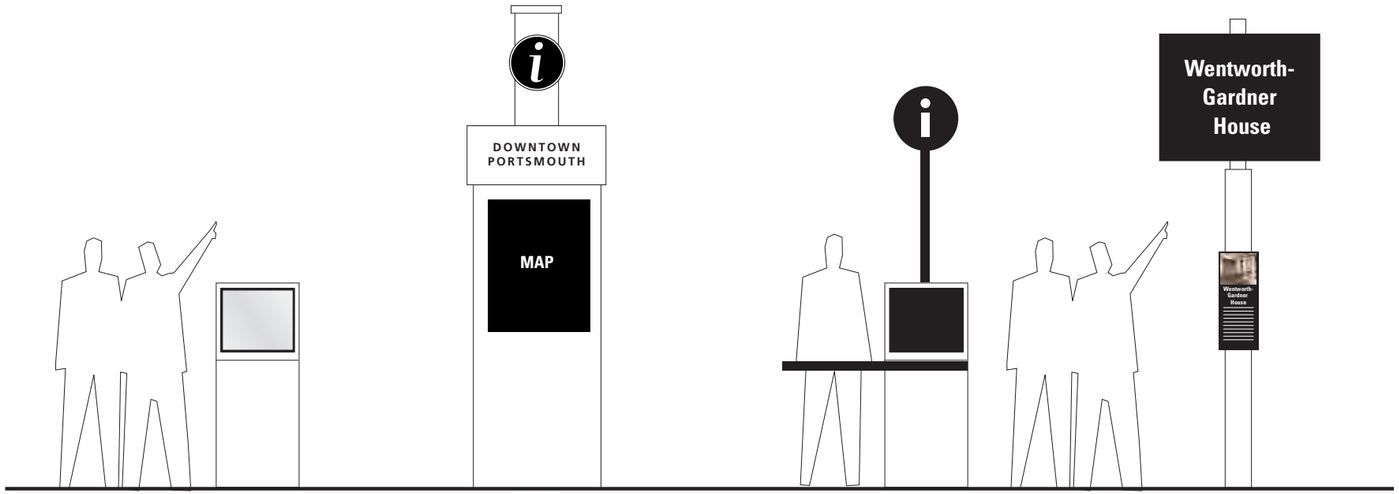
Fredericksburg TX downtown map

Fredericksburg TX shopping/dining map

PRIORITY 1 Create a new orientation basemap to be used on websites, tourism App, in brochures, and for kiosks and orientation signage.

INFORMATION HUBS





INTERACTIVE STATION

Contains downloadable content, internet access, reservation making capability, printable information, shopping and dining, etc.

POSSIBLE LOCATIONS:
- Downtown
- City Dock
- Visitor Centers
- Civic/Community

Chamber of Commerce

INFORMATION KIOSK

Contains orientation map, directional information, text messaging/internet links, interpretive information, shopping and dining, etc.

POSSIBLE LOCATIONS:
- City Dock
- Visitor Centers
- Shopping Streets
- Parking Garage and Lots
- Civic/Community

Discover Portsmouth Center

MANNED KIOSK

Professional greeter provides personal contact and info, printable information, brochures, maps, shopping and dining, etc.

POSSIBLE LOCATIONS:
- Market Square Kiosk
- Parking Garages

Market Square Kiosk

INFORMATION PANEL

Contains text messaging/ internet links, interpretive information, destination information and advertising

POSSIBLE LOCATIONS:
To be determined

PRIORITY 2 Locate a kiosk on the waterfront; either Prescott Park docks, or the Harbor and Tugboat cruise area.

PRIORITY 3 Identify pilot areas and install various hub elements.
Areas to consider include: Parking Garage and Lots and Visitor Centers.

CRITERIA FOR INCLUSION

The Wayfinding System for the City of Portsmouth is designed to serve the needs of all travelers. Level 1 of the system is focused on the motorist and is City-wide in scope. Level 2 is focused on pedestrians, primarily within the Downtown area.

Because a Wayfinding and Signage System's effectiveness is dependant on clarity and simplicity of messaging, guidance on which destinations to include in the system is critical.

Provided below is a two-step process for determining whether or not a particular destination should be included within the City of Portsmouth Wayfinding System. Individual destinations failing to be eligible under Step 1 will not be considered for inclusion. Destinations MUST qualify under both Steps 1 and 2 to be listed on associated wayfinding system signage.

STEP 1: ELIGIBLE CATEGORIES

Destinations must fall under one of the following categories and meet the criteria established for this system.

Color Codes Used:

- Destination types shown in green are those that currently exist in Portsmouth.
- Destination types shown in black are listed in the event that such a facility may locate here in the future.
- Destination types shown in red are prohibited from being signed within this system.

Note: Each eligible destination is designated as applicable to a particular level of the Wayfinding System. Level 1 = Motorist signage; Level 2 = Pedestrian signage.

COMMERCIAL ATTRACTIONS

Arboreta and Botanical Gardens: A place where a wide variety of live plants are cultivated for scientific, education, and ornamental purposes, often including a library, a herbarium, greenhouses, laboratory spaces, and open grounds. These are facilities with a reasonable guarantee of permanence, and where adequate labeling of plants is common and proper documentation of the collection takes place. Must have facilities that are open to the general public.
Permitted: Level 1 & 2

Brewery: A licensed site which shall be open to the general public for tours, tasting and sales, a minimum of 1,500 hours per year, and provide an educational format for informing visitors about beer and beer processing.
Permitted: Level 1 & 2

Unique Natural Areas: A naturally occurring area or site of interest to the general public. May include water features or special geologic formations.
Permitted: Level 1

Commerce Park: A group of commercial manufacturing facilities, at least 25 acres in size, recognized and signed as a commerce park by the local authorities.
Permitted: Level 1

Indoor Entertainment Facility: A unique permanent indoor entertainment facility of at least 75,000 sq. ft. The facility shall include multiple devices for entertainment and an educational or museum component.
Permitted: Level 1

Roadside Farm Market: A stationary retail sales establishment operated by one or more farmers for the purpose of selling farm and food products directly to consumers. Operations by which the consumer harvests their own farm or food products shall be considered roadside farm markets.
Such facilities are not eligible for signage under this system.

Winery: A licensed site, which produces a maximum of 200,000 gallons of wine per year. Sites shall maintain a minimum of 3,000 vines or 5 acres of vineyard; be open to the general public for tours tasting and sales, a minimum of 1,500 hours per year, and provide an educational format for informing visitors about wine and wine processing.
Permitted: Level 1

Zoos, Zoological Gardens, Animal Parks and Aquariums: A place where animals, reptiles or fish are kept, often-in combination with indoors and outdoors spaces. Must have facilities, which are open to the general public.
Permitted: Level 1 & 2

COMMUNITY DESTINATIONS

Business Districts: An area which is officially designated as a business district by local officials.
Permitted: Level 1 & 2

Courthouses/Government Buildings: A public building, structure or complex used by a federal, county, state or municipal government for the purpose of convening official legal activities and that is open to the public.
Permitted: Level 1 & 2

Military Bases: A facility operated by the State or Federal government for training or support of military troops or for inventorying and warehousing military equipment.
Permitted: Level 1

Shopping Centers - Regional: A group of 30 or more shops, retail stores, and/or restaurants with at least one major department store functioning as an anchor. Such centers are under the ownership of one landlord exercising unified control over the premises or center. The goods or services shall be readily available to shoppers without the need for scheduling appointments or return trips. Ample parking according to the City's Zoning Code must also accompany such a destination.
Such facilities are not eligible for signage under this system.

Shopping Centers - Strip: A group of 5 or more shops, retail stores, and/or restaurants usually constructed along a major arterial or other heavily traveled road.
Such facilities are not eligible for signage under this system.

Shopping Centers – Neighborhood: A group of 15 or more shops, retail stores, or restaurants usually concentrated within a neighborhood, often at a corner, that functions as the node or nucleus of the neighborhood(s) surrounding its location.
Such facilities are not eligible for signage under this system.

Shopping Districts: A group of 30 or more shops, retail stores, or restaurants usually grouped along a street or within a neighborhood typically spanning two or more contiguous blocks.
Permitted: Level 1 & 2

CULTURAL / INSTITUTIONAL

Arenas: Includes stadiums, auditoriums and civic or convention centers.
Permitted: Level 1 & 2

Art Studio: A permanent working artist studio of at least 2,500 square ft., offering artistic demonstrations that bring visitors to the facility. The facility must offer at least three artistic based activities, eligible activities include, demonstrations of specialty techniques, tours, free educational lectures. The art studio shall be open to the public and readily available to tourists, without the need for scheduling appointments or return trips. The studio must meet all safety and maximum occupancy requirements.
Permitted: Level 1 & 2

Churches: A building used for public worship or spiritual gatherings of its visitors.
Such facilities are not eligible for signage under this system.

College or University: An educational institution that is nationally accredited and grants degrees.
Permitted: Level 1 & 2

Courthouses/Government Buildings: A public building, structure, or complex used by a Federal, County, State or municipal government for the purpose of convening official legal activities.
Permitted: Level 1 & 2

Health Center: A health care center operated by a government entity that is open to the public.
Permitted: Level 1 & 2

Libraries: A repository for literary and artistic materials, such as books, periodicals, newspapers, recordings, films, and electronic media, kept and systemically arranged for use and reference. Operated either by the City, County, or by a non-profit organization. Video outlets (i.e. Blockbusters, Hollywood Video, etc.) do not qualify under this definition.
Permitted: Level 1 & 2

Museums: A facility in which works of artistic, historical, or scientific value are cared for and exhibited to the general public.
Permitted: Level 1 & 2

Religious Site: A shrine, grotto or similar type site, which is of a unique religious nature. The facility must have a minimum average of 50 visitors per day on the busiest day of the week.
Such facilities are not eligible for signage under this system.

Schools - Elementary: An institution for the instruction of children or people under middle-school age. Regular public, military, or charter school facilities are not eligible for signage under this system.
Such facilities are not eligible for signage under this system.

Schools – Middle/Junior & Senior High Schools: An institution for the instruction of children or people beyond elementary grades and under college age. A middle/junior or senior high school must provide an outdoor athletic field or swimming facility or other indoor athletic facility routinely visited by teams from outside the county to qualify for signage along a major arterial road under this system. The school must otherwise meet NHDOT requirements for signage to be included under this system.
Such facilities are not eligible for signage under this system.

Specialized Schools: Any facility for the performing arts, exhibits, or concerts, which meets the age criteria for Middle/Junior and/or Senior High Schools (as defined above) and that has a minimum occupancy capacity of 200 people that is open to the public. The school must otherwise meet NHDOT requirements for signage to be included under this system.
Such facilities are not eligible for signage under this system.

Theatres, Performing Arts, and Concert Halls: Any not-for profit facility used for the public's enjoyment of the performing arts that has a minimum occupancy capacity of 200 people and associated parking.
Permitted: Level 1 & 2

HISTORICAL / ARCHITECTURAL

Historic Site: A structure or place of historical, archaeological or architectural significance listed on or eligible for listing on the National or State Register of Historic Places or otherwise designated by the NH Division of Historical Resources (DHR). The site must be accessible to the general public and provide a place where visitors can obtain information about the historic site.
Permitted: Level 1 & 2

Historic District: A district or zone listed on or eligible for listing on the National Register of Historic Places or otherwise designated by the NH DHR. Historic districts shall provide the general public with a single, central location such as a self-service kiosk or welcome center where visitors can obtain information concerning the historic district.
Permitted: Level 1 & 2

RECREATIONAL

Beaches, Piers & Waterfronts: Areas with access to and views of significant waterways, which are recognized by the City as having significant recreational or cultural value and are open to the public a minimum of 180 days per calendar year.
Permitted: Level 1 & 2

Boat Launch: A public facility for the docking or launching of boats.
Permitted: Level 1 & 2

Canoeing and Kayaking: Public areas with established canoeing or kayaking facilities. Individual private attractions are not eligible for signage.
Permitted: Level 1 & 2

Golf Courses: A facility open to the public and offering at least nine (9) holes of play. Miniature golf courses, driving ranges, chip and putt courses, and indoor golf shall not be eligible.
Permitted: Level 1

Hiking and Biking Trails/Routes: Areas designated for recreational hiking, biking, walking, etc. which are publicly accessible, and owned and maintained by either the City, State, Federal Government, or non-profit organizations. Signs will only be installed at locations that direct to an established trailhead with parking facilities.
Permitted: Level 1 & 2

Marina: A public facility for the docking of boats, as well as embarking and disembarking from watercraft. Parking for motor vehicles must be located nearby.
Permitted: Level 1

Parks – National, State, Regional and Forests: An area so designated and under the jurisdiction of the state or federal, or non-profit organization with facilities open to the general public.
Permitted: Level 1 & 2

Parks – City: An area so designated and under the jurisdiction of the City with facilities open to the general public and with enough amenities that its appeal is broader than a particular neighborhood or singular district. Required amenities include a restroom and public parking.
Permitted: Level 1 & 2

Parks – Neighborhood: An area so designated and under the jurisdiction of the City with facilities open to the general public and with amenities that its focus is on a particular neighborhood or singular district.
Such facilities are not eligible for signage under this system.

Sports Facilities: Regional (multi-jurisdictional) facilities such as minor league and little league baseball fields and school recreational fields.
Permitted: Level 1

Water Recreational: Areas designated for water skiing, wake boarding, jet skiing, or motorboats.
Permitted: Level 1

Private Recreational facilities: Recreational facilities that are owned and maintained by a private entity but open to a community of over 20,000 members/property owners can be included in the system, if the facility accepts walk-in guests from nonresidents and nonmembers. Facilities must comply with other requirements of this section.
Permitted: Level 1 & 2

TOURIST SERVICES

Bed and Breakfast Establishments/Boarding Houses: A private residence located that contains ten (10) or fewer bedrooms used for providing overnight accommodations to the public, and which breakfast is the only meal served and is included in the charge for the room.
Such facilities are not eligible for signage under this system.

Hotels & Motels: A facility with at least 75 rooms for lodging.
Such facilities are not eligible for signage under this system.

Restaurants: An establishment where food and drink are prepared, served and consumed on premise and provided by waiter service. This category includes drive-through or franchised sit-down service.
Such facilities are not eligible for signage under this system.

Visitor Information Centers: A facility where the primary purpose of its operation is to provide information and tourist supportive services. Adequate parking must be provided to support such center.
Permitted: Level 1 & 2

TRANSPORTATION

Airports: A public use facility licensed by the NHDOT for landing and takeoff of aircraft, and for receiving and discharging passengers and cargo.
Permitted: Level 1 (Campus signage is the responsibility of the destination.)

Heritage Roads, Historic Routes and Trails: A road, trail, or route designated by NHDOT, United States Department of the Interior, or other Federal agency as being part of a national or state recognized historic or heritage park/trail system.
Permitted: Level 1 & 2

STEP 2: CRITERIA RANKING TEST

The criteria ranking test's purpose is to determine whether or not a particular destination qualifies for listing within the City's Wayfinding System. To determine the destination's qualification it must be ranked using the objective criteria outlined below.

If a destination has passed the test for Step 1, then it qualifies for being examined under Step 2: the Criteria Ranking Test.

A minimum score of **55** is needed to be signed as a destination as a part of the City of Portsmouth Wayfinding and Signage Project.

1. SIZE OF ATTRACTION

An attraction should report the total number of full time employees or full time equivalent for part-time employees, during the attraction's peak season. For example, an employee who works 50 percent of a normal full-time employee should be counted as .5. Non-profit attractions can count volunteer staff, using the same method of equivalent calculation.

Number of Full-Time Employee Equivalents

101+	25
51-100	20
11-50	15
<10	10

SCORE ___

2. ADEQUATE ROAD SYSTEM

Paved Access Road/Entrance with clearly visible entrance signing	10
Unpaved Access/Road Entrance with clearly visible entrance signing within 200 feet of entrance	5
Unclear Entrance with sign not clearly visible within 200 feet of entrance	0

SCORE ___

3. ADEQUATE PARKING FACILITIES

Sufficient parking based on the Institute of Transportation Engineers Standards for Parking Generation, 2004 for the acceptable ratio of attraction attendance capacity and parking spaces on a paved area.	15
Sufficient parking based on the Institute of Transportation Engineers Standards for Parking Generation, 2004 for the acceptable ratio of attraction attendance capacity and parking spaces on an unpaved area.	10
Only legal on-street parking or off street parking in public lots or garages within ¼ mile of the attraction.	10
Insufficient parking on attraction property based on the Institute of Transportation Engineers Standards for Parking Generation, 2004, for the acceptable ratio of attraction attendance capacity and parking spaces.	5
No parking	0

SCORE ____

4. SEASONAL OPERATION

Open 12 months per year	20
Open at least 6 months per year	15
Open less than 6 months per year	5

SCORE ____

5. HOURS OF OPERATION

Open 56 or more hours per week	20
Open between 40 and 56 hours per week	10
Open less than 40 hours per week	5

SCORE ____

6. ATTRACTION OF REGIONAL SIGNIFICANCE AS IDENTIFIED BY STAKEHOLDERS/CITY

National Recognition	20
Regional Recognition	10
Local Recognition	5

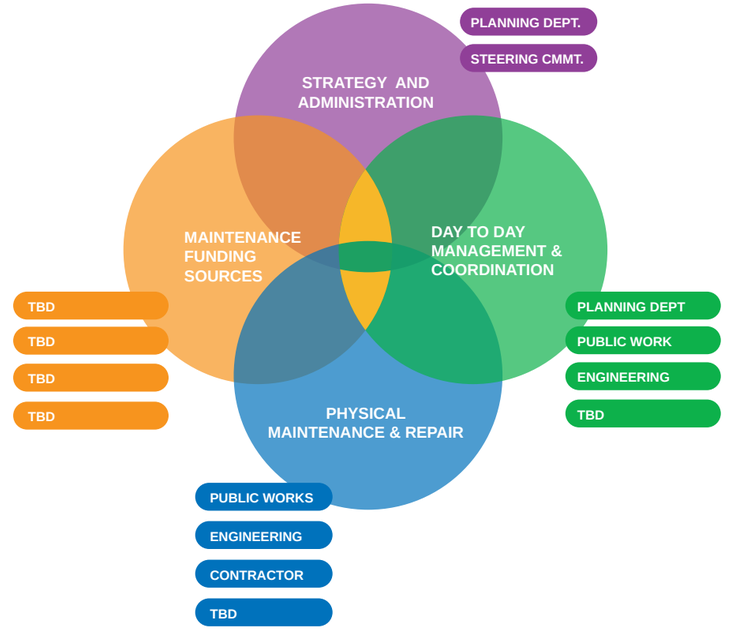
SCORE ____

The minimum score to qualify is 55. **GRAND TOTAL** ____

MANAGEMENT AND MAINTENANCE

Sign Longevity	0-4 Years	5-9 years	10-15+ years
Design and Planning	Design: General Evaluation of positive and negative aspects of the system. Planning: City In-house maintenance based on new request and circulation/destination updates.	Design: General Evaluation of positive and negative aspects of the system. Planning: Contract with a consultant to analyze major changes to the City and necessary system adjustments. 1 or 2 updates possible during this time period.	If the system has not been analyzed since implementation, a major updating is likely to be needed. Outside consultants will be required to review and inventory the system, as well as make suggested changes based on new circulation, destinations, etc.
Vandalism	Annual cleaning/repair. Stickers and graffiti are most common. Cleaning solvents and Goo-Gone are typical products utilized.	Parts replacements and full sign replacement as needed. Cleaning solvents and Goo-Gone are typical products utilized.	Parts replacements / full sign replacement as needed. Cleaning solvents and Goo-Gone are typical products utilized.
Cleaning Schedule	Annual Cleaning	Annual Cleaning	Annual Cleaning
Management / Administration	Weekly coordination transitioning to quarterly coordination between City and fabricator during year 1 and 2. Day-to-day monitoring of the system, based on the City's observations, safety issues and citizens reports.	Annual coordination between City and fabricator. Day-to-day monitoring of the system, based on the City's observations, safety issues and citizens reports.	Annual coordination between City and fabricator. Day-to-day monitoring of the system, based on the City's observations, safety issues and citizens reports.
Breakaway Product: Transpo	Maintenance Free - Covered under Warranty for 3 years.	Maintenance Free - consider general review as part of yearly inspection process.	Maintenance Free - consider general review as part of yearly inspection process.
Reflectivity Life Span: 3M High Intensity Diamond Grade	Covered under warranty for 5-8 years Covered under warranty for 3 years.	Covered under warranty for 5-8 years. Reflectivity may be effective beyond the warranty period. Individual signs may require sheeting to be replaced during this time period.	Reflectivity becomes less effective, if not previously replaced. 10 – 15 years is the maximum lifespan.

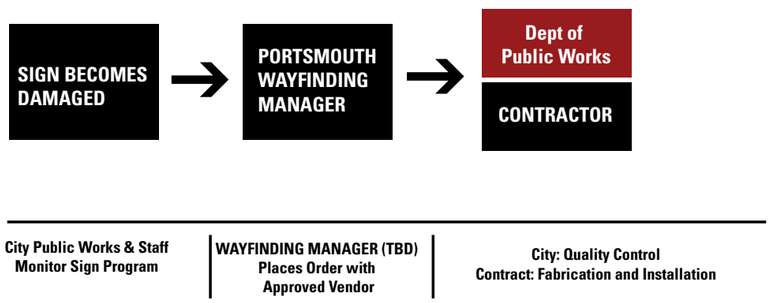
Sign Longevity	0-4 Years	5-9 years	10-15+ years
Custom Color Life Span: 3M High Intensity Diamond Grade	Color generally maintained beyond warranty period, depends on direction sign panel is facing.	Fading may begin depending on the direction sign panel is facing. Individual signs may require sheeting to be replaced during this time period.	Fading occurs, if not previously replaced. 10 -15 years is the maximum lifespan.
General Materials: Aluminum Sign Panels & Posts	Specifications require 5 year fabricator warranty for workmanship. General wear-and-tear maintenance required	General wear-and-tear maintenance required.	General wear-and-tear maintenance required.
Painted Surfaces	Covered under manufacturers warranty. General maintenance and touch-up will be required.	Warranty expires. Typically color holds up beyond warranty period. Fading may begin depending on the direction sign panel is facing. Individual signs may require individual parts to be replaced during this time period.	Fading occurs – based on direction sign panel is facing – 10 – 15 years is the maximum lifespan to expect.
Sign Panels / Fasteners	Specifications require 5 year fabricator warranty for workmanship. General repairs and replacement due to auto incidents or vandalism. Inspect welds and fasteners for connection integrity.	Quantity of repairs increases, if not maintained previously. Inspect welds and fasteners for connection integrity.	Consider full inventory of system and repairs based on consistency of maintenance and up-keep over the years.
Brackets/ Fins / Details	Specifications require 5 year fabricator warranty. General repairs and replacement of parts due to auto incidents or vandalism. Inspect welds and fasteners for connection integrity.	Quantity of repairs increases, if not maintained previously. Inspect welds and fasteners for connection integrity.	Consider full inventory of system and repairs based on consistency of maintenance and up-keep over the years.
Concrete Footers	Maintenance free. Inspect structural integrity – similar to any construction project.	Maintenance free. Inspect structural integrity – similar to any construction project.	Maintenance free. Inspect structural integrity – similar to any construction project.



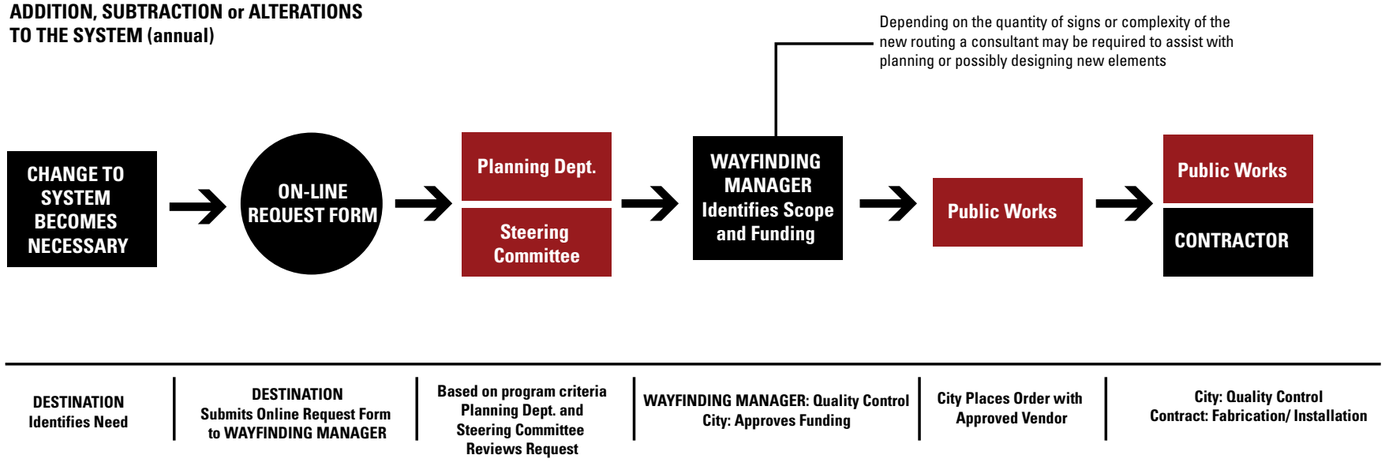
MANAGEMENT AND MAINTENANCE

CITY OF PORTSMOUTH WAYFINDING PROGRAM MAINTENANCE FLOW CHART

DAY-TO-DAY MAINTENANCE PROCESS FOR REPAIR OR REPLACEMENT OF EXISTING SIGNS



LONG TERM MAINTENANCE PROCESS FOR ADDITION, SUBTRACTION or ALTERATIONS TO THE SYSTEM (annual)



After approval of a sign design, the City of Portsmouth will seek approval for sign routes, final sign locations, and an ongoing maintenance and management plan. With the approval of these standards the City will have approval for the full installation of signs.

MANAGEMENT

Management
The establishment of a governing body that oversees the funding, maintenance and expansion. A project manager must be assigned the responsibility of the day to day management of the system.

Maintenance Funding and Contracts
Maintenance should be a shared responsibility between the City and the programs Stakeholders.

Average annual maintenance budget is 10% - 15% of the total project construction cost.

Annual Budgets
Generally 10% - 15% of the total phasing cost should be established for annual maintenance of the system.

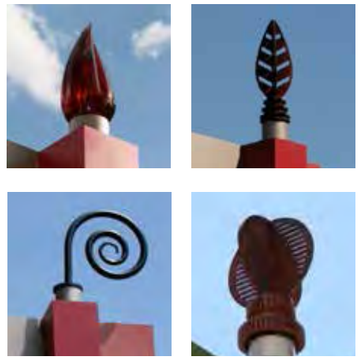
Initial “attic stock” of parts should be included in the base bid of each phase of the project.

By purchasing materials and parts in a large quantity the City will reduce its overall costs. Attic stock can include poles (painted), sign panels (painted/no lettering), brackets finished and painted, and other parts.

SUSTAINABILITY
MATERIALS AND PROCESS

3m High Intensity
Reflective Sheeting

Downtown Phoenix
Reflective Sheeting



Asheville, North Carolina
Local Artisans

Solar Panel

Miami Beach, Florida
Solar Power Gateway

Tampa Riverwalk, Florida
Solar Power Kiosk

Wayfinding programs can offer the opportunity to reduce the negative impacts that the built environment and transportation can have on our planet.

Wayfinding can have a positive effect on our environment.

Promote Multi-Modal Transportation
Wayfinding programs promote the use of alternative transportation methods by communicating information that encourages the use of bicycle paths, pedestrian walkways and public transportation. Wayfinding programs help to support the use of these transportation means by making them accessible, user-friendly and promoting their availability.

Efficiency in Transportation
In an effort to reduce traffic, wayfinding programs help people find their way quickly and efficiently to their desired destination, whether it is a major attraction or a hard to find parking garage. Less time traveled equals less time searching which reduces the carbon foot-print left by the vehicle.

MATERIALS AND PROCESSES
The design of the wayfinding program shall meet our modern needs and preserve to the greatest degree possible the finite resources of our planet. The wayfinding program may consider a variety of “green” materials and processes, as well as administrative efforts that promote “local” inclusion.

Solar Power
Solar panels can provide power to the illuminated signs such as gateways and information kiosks. In Tampa, solar-powered kiosk units consume only 2.05 kilowatt-hours (KWh) per month at a cost of 20 cents – in comparison to $72 per month if the units were powered with tradition fluorescents.

Green Materials / Reflective Sheeting The manufacturing process for 3M High Intensity Reflective Vinyl, reduces VOC emissions by 97 percent and energy consumption by 72 percent, compared to the standard engineer grade vinyl sheeting products typically used in the past.

Local Construction
Some municipalities are awarding extra points to local qualified fabricators during the bid process to help keep the projects local and reduce the need for shipping large portions of the project across the country as well as supporting local businesses.

Some clients are “buying local” by engaging community artisans, who can produce finials and other sign components locally. These local initiatives also support the local economy.

MEASUREMENTS

A series of measurement tools will be put into place to evaluate and analyze the effectiveness of the resulting wayfinding system. This includes improvement in navigation, customer satisfaction and the economic return on investment.

PRE-PROJECT SURVEYS

Conducted at the Visitor Center, Chamber of Commerce, and other destinations, this survey establishes a baseline for measurement by conducting customer satisfaction surveys, requesting information regarding parking, navigation around downtown, use of technology and overall experience. An initial phase of this survey was completed during the development of this Wayfinding System and will continue for the next several months (on-going).

EARLY SUCCESS

Early success can be measured by similar customer satisfaction surveys, post installation of pilot systems. Surveys can be conducted as early as 2 months after the pilot projects are completed and will continue for 4-6 months. Questions will be tailored to specific destinations and the specific wayfinding elements that have been put into place.

LONG-TERM MEASUREMENTS

Upon a substantial completion of the wayfinding system, follow-up customer satisfaction information can be gathered.

In addition there is tourism and transportation data that can be analyzed and associated with the wayfinding system. Understanding that wayfinding is a component of an overall strategy it can be separated into results that may be attributed directly or indirectly to its effectiveness.

Some of this information currently exists and is tracked by either the City, a local association, such as the Visitors Center, or an individual destination.

DIRECT OUTCOMES:

- Visitation at secondary destinations
- Parking lot occupancy rates
- Repeat visitation
- Mobile App downloads
- Visits to the Visitor or City website
- Increase in on-street parking revenue

INDIRECT / SUPPORT:

- Over-night stays (CVB)
- Hotel occupancy
- Tourism spending (CVB)
- Marina occupancy
- Reduction in traffic congestion
- Retail / Restaurant occupancy rates

THE DIRECT AND INDIRECT OUTCOME SHALL SUPPORT THE FOLLOWING PROJECT OBJECTIVES:

A. Promote Portsmouth as a friendly, easy-to-navigate environment, with a wide range of outdoor activities.

B. Enhance multi-modal transportation efforts, including auto, bicycle and pedestrian.

C. Support a Park-Once philosophy.

D. Enhance the pedestrian experience.