# Hampton Roads Region – **Portsmouth and Chesapeake Joint Land Use Study (JLUS)**

## Topic: Transit and Access

# Introduction

A Joint Land Use Study (JLUS) is being prepared to address key issues that affect, or have the potential to affect, the cities of Portsmouth and/or Chesapeake, as well as the Navy's ability to conduct operations. The plan focuses on preventing future land use conflicts, addressing existing conflicts, and encouraging investment in the community that will support economic development and complement military activities.

This study is a cooperative effort among the Cities of Chesapeake and Portsmouth, the Commonwealth of Virginia, and several Navy installations in South Hampton Roads:

- Norfolk Naval Shipyard (NNSY);
- St. Juliens Creek Annex;
- Naval Medical Center Portsmouth (NMCP) ; and
- Craney Island Fuel Depot

The Hampton Roads Planning District Commission is the project sponsor.

# Introduction

Earlier in the process, policy makers, community leaders, and citizens identified issues and priorities of common concern, including roadway flooding, limited transit and access alternatives, overflow parking, and land use conflicts. **These slides focus on transit and access.**

Roadway Flooding

Future rainfall and tidal flooding will impact multiple roadways used to access the installations and sea level rise will compound flooding issues over time.

**Transit / Access**

Transit options for installation employees are limited and bus hours of operations, routes, and transfer processes are likely deterrents to use. Gaps in the pedestrian and trail networks can also discourage the use of other transportation modes.


**Parking**

Limited availability of parking within a reasonable walking distance leads some Shipyard employees to search for preferable alternatives. This leads to overflow parking in the neighborhoods around the Shipyard.

**Land Use**

Opportunities for more convenience, restaurants, or shopping near the installations exist. However, underlying environmental restrictions or local land use and zoning policies need to be considered.



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# Primary Transportation Issues

**Congestion**

- Critical corridors experience traffic delays
- As populations grow and flooding increases, congestion will become more prevalent

**Gate Access**

- Long lines at installation gates cause traffic to spill onto roadways, compounding traffic congestion

**Neighborhood Impacts**

- Vehicles sometimes use neighborhood streets as short-cuts to avoid congestion or gate delays

**Rail Crossings / Freight**

- At-grade crossings halt traffic along critical corridors

**Lack of Alternatives**

- Transit is not viewed as convenient
- Sidewalks and bike lanes have gaps that can discourage walking and cycling



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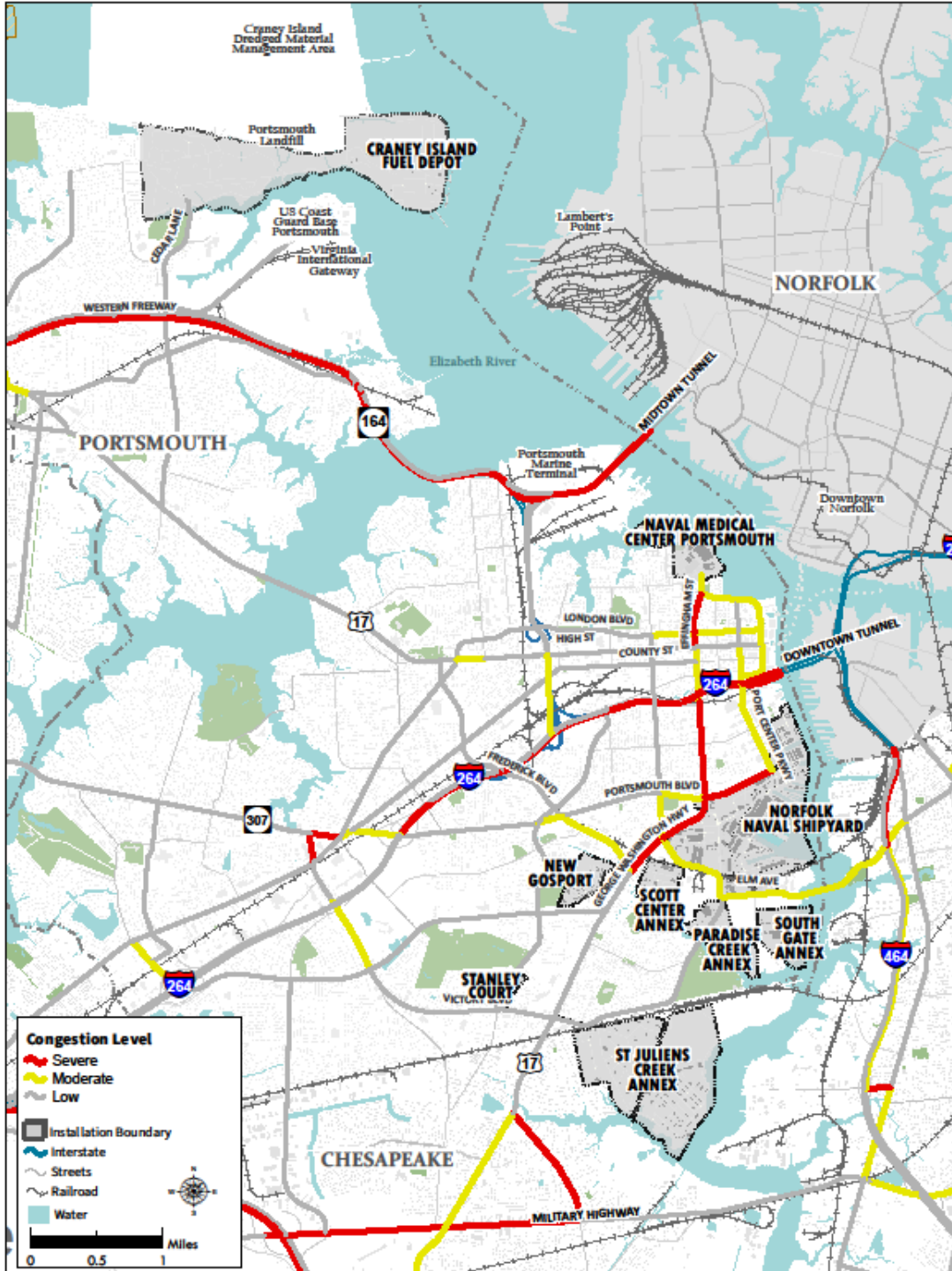
# Critical Corridors

Twelve critical corridors (shown in yellow) were initially studied based on their proximity and connectivity to a Navy installation.

- Effingham Street
- George Washington Highway
- Elm Avenue
- Port Center Parkway
- High Street
- London Boulevard
- County Street
- Portsmouth Boulevard
- Frederick Boulevard
- Victory Boulevard
- Western Freeway
- Cedar Lane

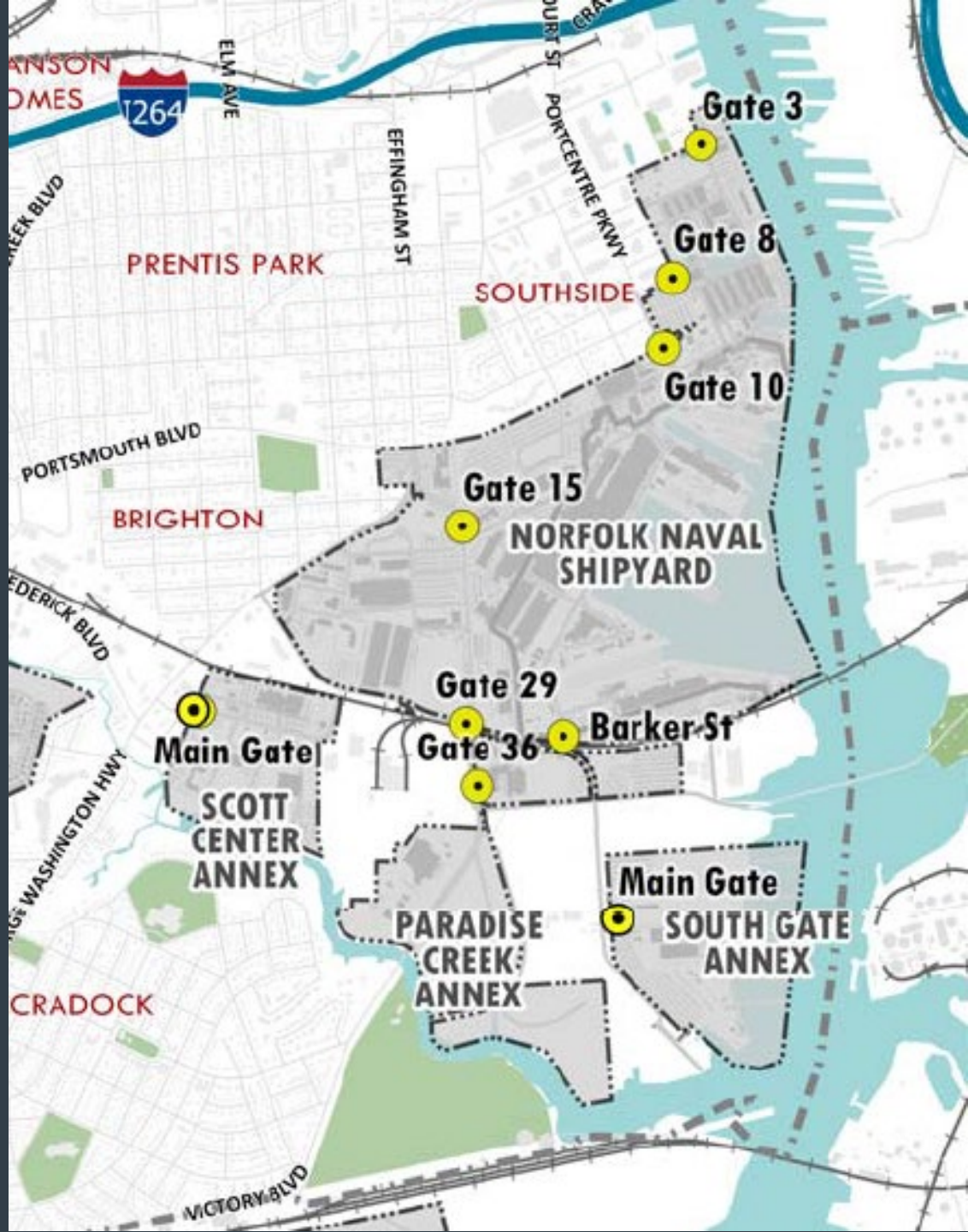
# Congestion

- Six of the critical corridors experience severe traffic congestion during morning or evening rush hour. Four roadway segments are within 1 mile of a Navy installation:
  - Effingham Street between Crawford Parkway and Frederick Boulevard
  - George Washington Highway between Victory Boulevard and the Chesapeake City Limits
  - Portsmouth Boulevard between Effingham Street and Port Centre Parkway
  - Port Centre Parkway between I-264 and Portsmouth Boulevard
- Congestion near an installation can impact both community mobility and access into the Naval Medical Center and the Shipyard
- Some morning rush hour congestion is partially caused by gate operations and capacity



# Gate Access at Norfolk Naval Shipyard

- Morning rush hour congestion is partially caused by gate operations and gate capacity
  - **Port Centre Parkway:** Traffic backs up between Portsmouth Boulevard and Wavy Street
  - **Portsmouth Boulevard:** Traffic backs up between Port Centre Parkway and Chestnut Street
  - **Effingham Street:** Traffic backs up between Peach Street and Jefferson Street
  - **Elm Avenue:** Traffic backs up between Jefferson Street and the South Norfolk Jordan Bridge
  - **Victory Boulevard:** Traffic backs up for a quarter mile
- Future gate congestion is expected to increase due to increased mission and increased future flooding

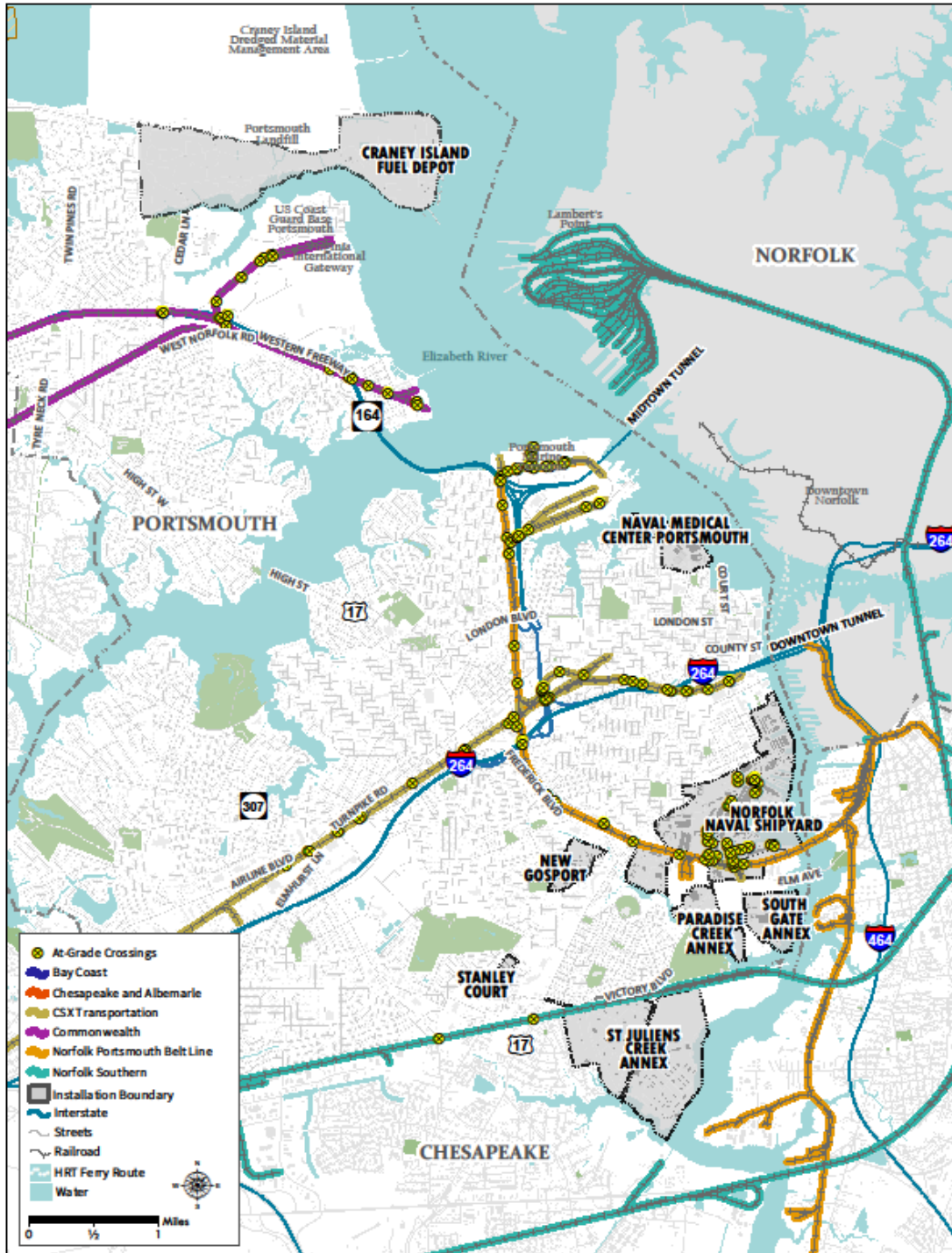


# Gate Access at Naval Medical Center Portsmouth

- Most traffic uses Gate 1; Gate 2 is only open during peak hours
- Gate congestion is heaviest in the morning
  - **Effingham Street:** Morning backups extend to London Boulevard
  - Once the gate access line reaches London Boulevard, traffic begins to use adjacent routes to either cut the line at Crawford Parkway or detour through the neighborhood to Gate 2
- Afternoon backups along Effingham Street are attributed to tunnel congestion
- Cut-through traffic (speeding and parking) is an issue for Park View residents

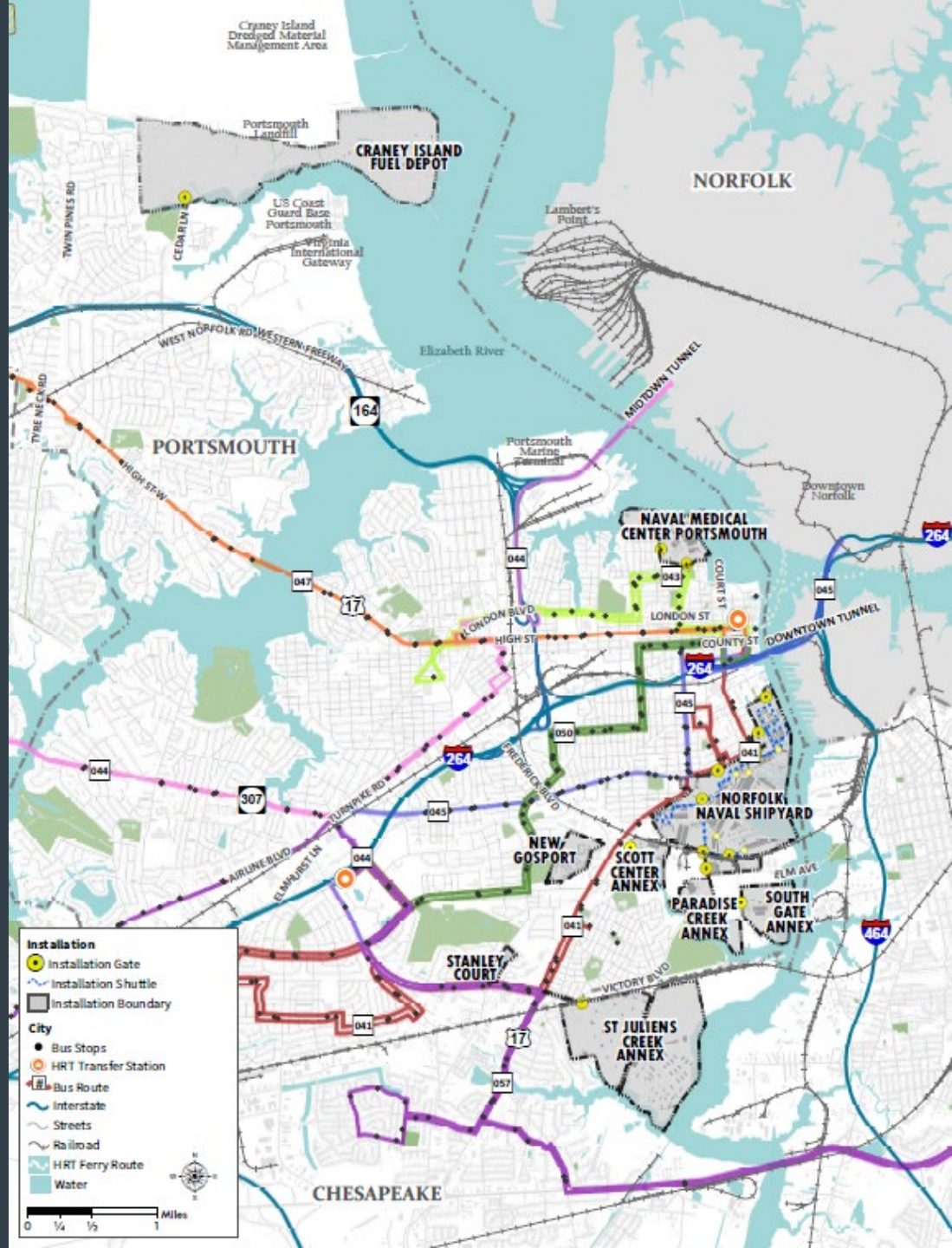
# Freight Activity

- Six providers operate in the JLUS study area
- There are 12 at-grade railroad crossings along critical roadways
- Freight activity is expected to increase adjacent to NNSY when tracks are upgraded to allow double stacking between NNSY and the I-264 interchange area (pending funding). This could increase conflicts near at-grade crossings:
  - Elm Avenue
  - George Washington Highway
  - Frederick Boulevard
- Longer train lengths (to an average of 120 cars) could cause added delays
- The Elizabeth River rail bridge is required to be left in the open position and can only be lowered for the passage of trains and for periodic maintenance. When the bridge is up, trains can sometimes queue back to the George Washington Highway crossing, blocking traffic.



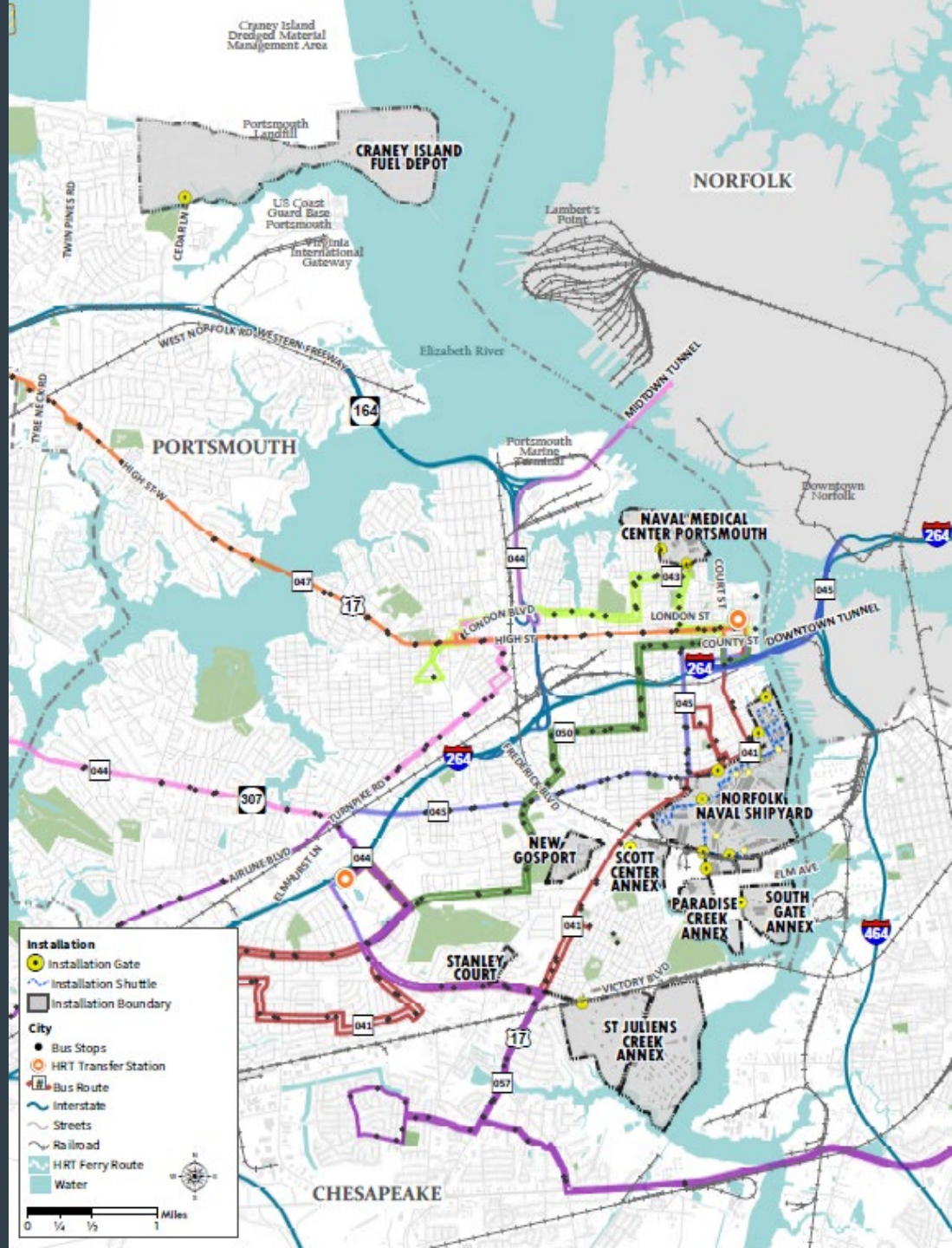
# Transit

- There are 33 Hampton Roads Transit (HRT) routes on the Southside, but only 4 directly serve an installation in the study:
  - Bus route 43 serves Naval Medical Center Portsmouth
  - Bus routes 41 and 45 serve the Shipyard
  - Bus routes 41 and 57 serve St Juliens Creek Annex
  - Craney Island is not served by transit
  - There are no MAX routes that serve the installations
- A 2012 survey indicated that 90% of respondents drive alone
- Approx. 83% of Norfolk Naval Shipyard employees work outside of Portsmouth and would require a bus transfer



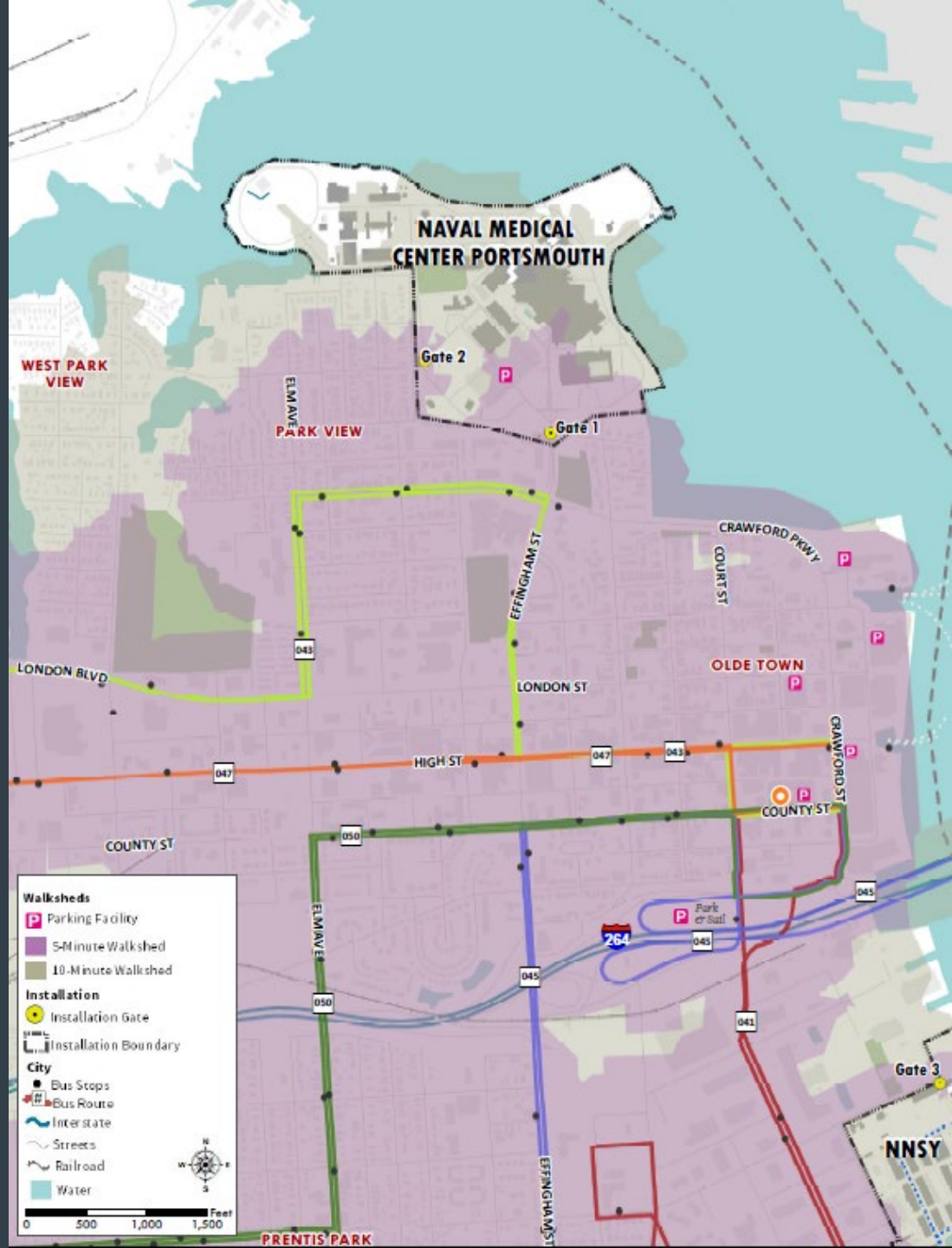
# Transit

- There are deterrents to using transit for commuting to an installation
  - NMCP and NNSY employees start arriving at 5:45am; bus service does not align with shift start times
  - Bus wait times can be up to an hour
  - Routes divert into neighborhoods which adds time to the route
  - Many routes require a bus transfer, increasing the total commute time



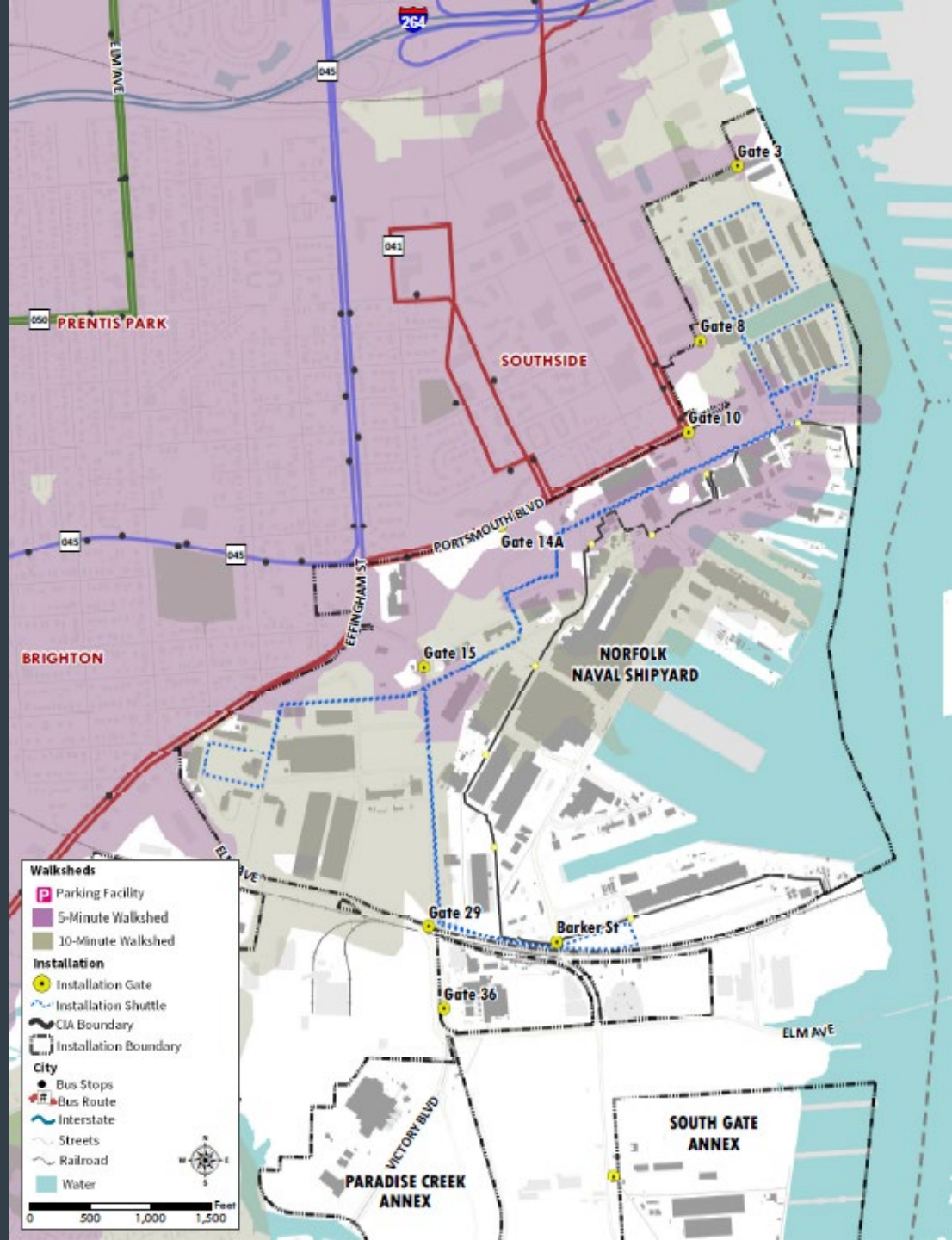
# Transit at Naval Medical Center Portsmouth

- HRT buses do not enter Naval Medical Center Portsmouth
- Transit riders must walk from the bus stop to an installation gate and to their place of work, which adds more time
  - The time to walk between the nearest bus stop and primary workplaces at the Medical Center is often greater than 5-minutes



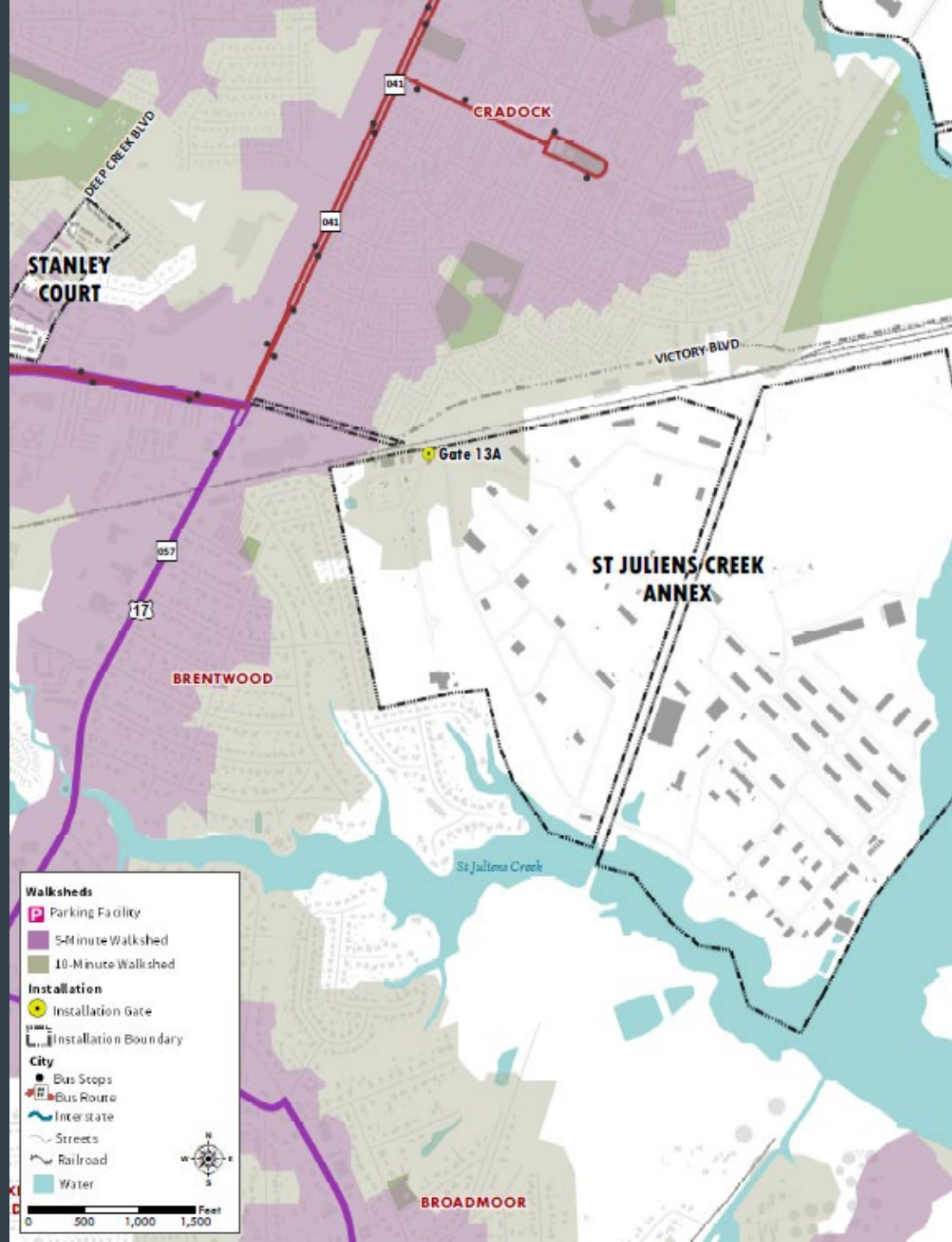
# Transit at Norfolk Naval Shipyard

- HRT buses do not enter Norfolk Naval Shipyard
- Transit riders must walk from the bus stop to an installation gate and to their place of work, which adds more time to their commute
  - The time it takes a person to walk between the closest bus stops and many workplaces on the Shipyard is often greater than 5- to 10-minutes.
- The Shipyard's internal shuttle has low ridership
  - The shuttle does not leave the base
  - The route has 21 stops and only stops at buildings (not gates)



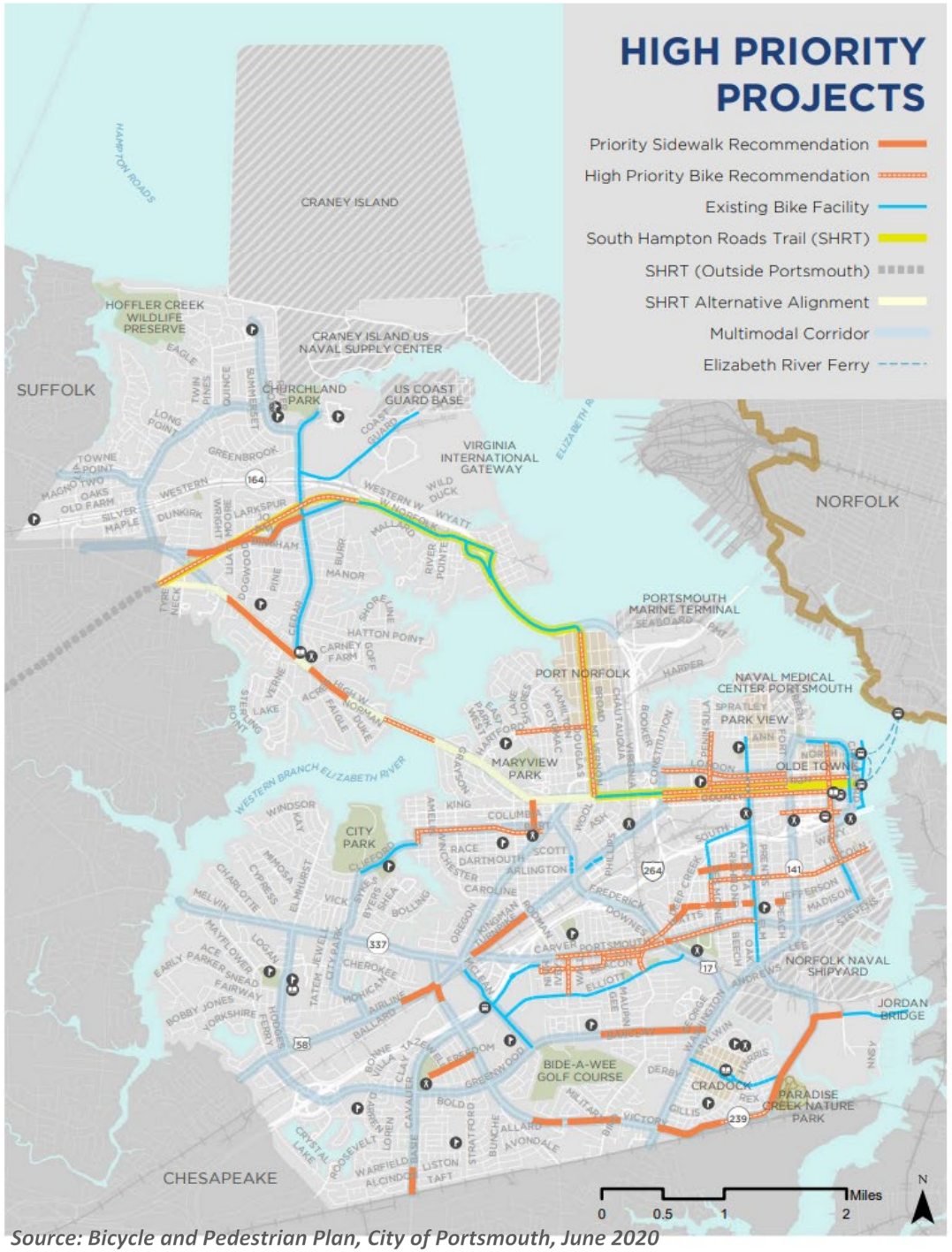
# Transit at St Juliens Creek Annex

- HRT buses do not enter St Juliens Creek Annex
- Transit riders must first walk from the bus stop to the installation gate and then to their place of work, which adds more time
  - The walking time between the nearest bus stop and the installation gate is more than 5-minutes
  - The walking time between the nearest bus stop and nearly all work centers St Juliens Creek Annex is greater than 10-minutes



# Pedestrian and Bicycle Infrastructure

- A review of existing bicycle and pedestrian conditions was undertaken with a focus of conditions near and connecting to the installations
  - Portsmouth's Bicycle & Pedestrian Plan (2020) identifies priority projects – aimed at improving connectivity near the installations (see image)
- Several roadways near the installations do not have a sidewalk on at least one side:
  - Parkview Avenue adjacent to NMCP
  - Portions of George Washington Highway
  - Portions of Portsmouth Boulevard
  - Portions of Elm Avenue, both sides
  - Portions of Victory Boulevard, both sides
- The Jordan Bridge's shared use path does not connect to a sidewalk or another bike facility




*Source: Bicycle and Pedestrian Plan, City of Portsmouth, June 2020*