

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

Virtual Town Hall
March 2, 2021

12:00 Welcome + Presentation

Question and Answer

1:00 Adjourn



Virtual Meeting – Housekeeping!

- All participants are muted upon entry.
- If you have a question, please **use the Q/A function** at the bottom of your screen to type your question.
- For those on the phone, we do want to hear from you. We will call on you by using the last 4 digits of your phone number and unmuting your line. If you do not have a question, please say so.
- We will answer as many questions as possible.
- All questions will be compiled into an FAQ document. The FAQ will be posted on www.hrpdcva.gov/portsmouth-chesapeakeJLUS
- The meeting will be recorded.

JLUS Team

Project Administrator



JLUS Partners



Project Consultants



What is a Joint Land Use Study?

- Collaborative process to address compatible use issues affecting the localities and the Navy
- Developed by and for the local community
- Supported by the Department of Defense (DoD) Office of Local Defense Community Cooperation (OLDCC)

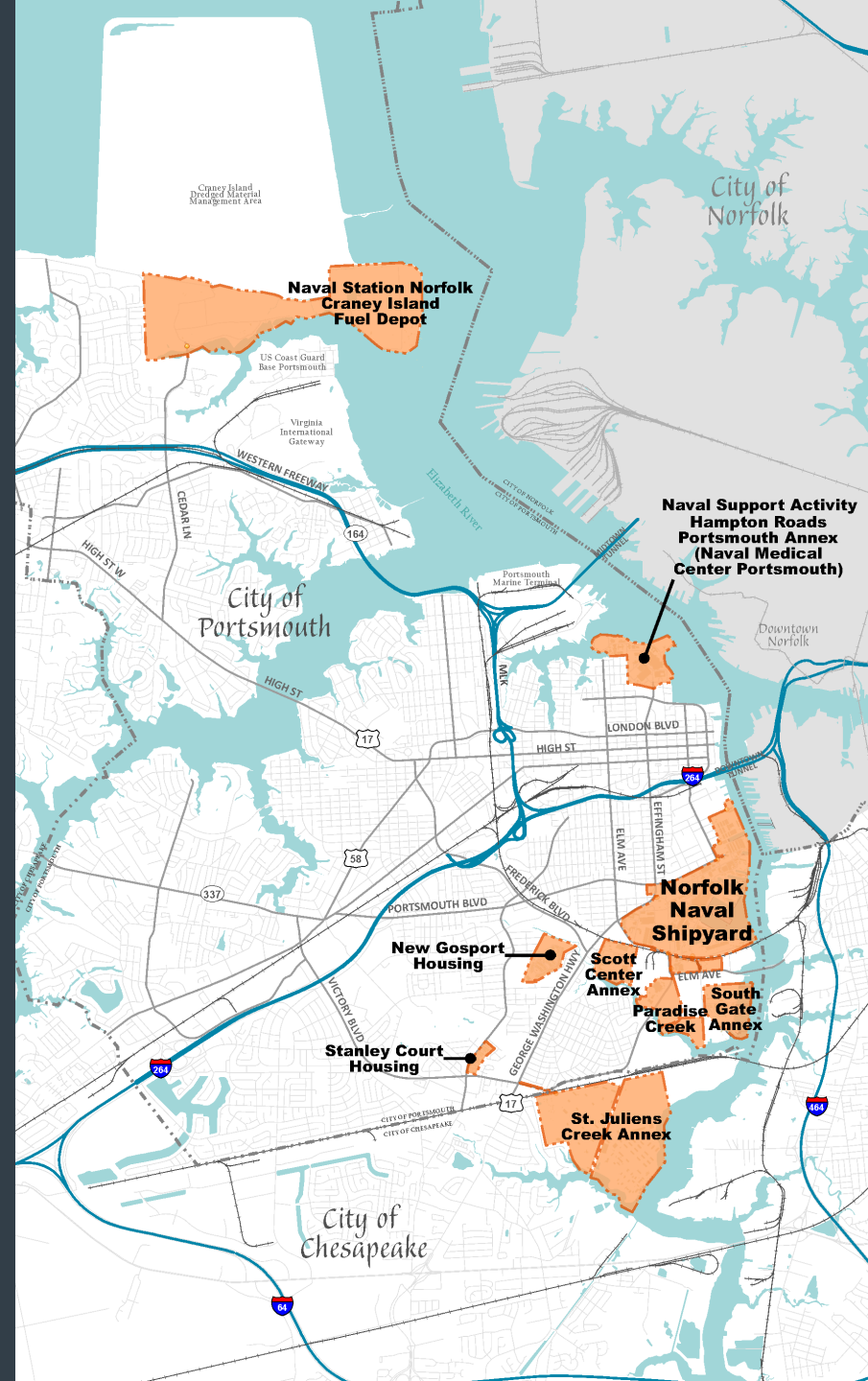
The Joint Land Use Study program is part of the Military Installation Sustainability program at OLDCC. The program is designed to provide technical and financial assistance to states and local governments to analyze and implement actions necessary to foster, protect, and enhance military installation sustainability.

<https://www.oea.gov/our-programs/military-installation-sustainability>

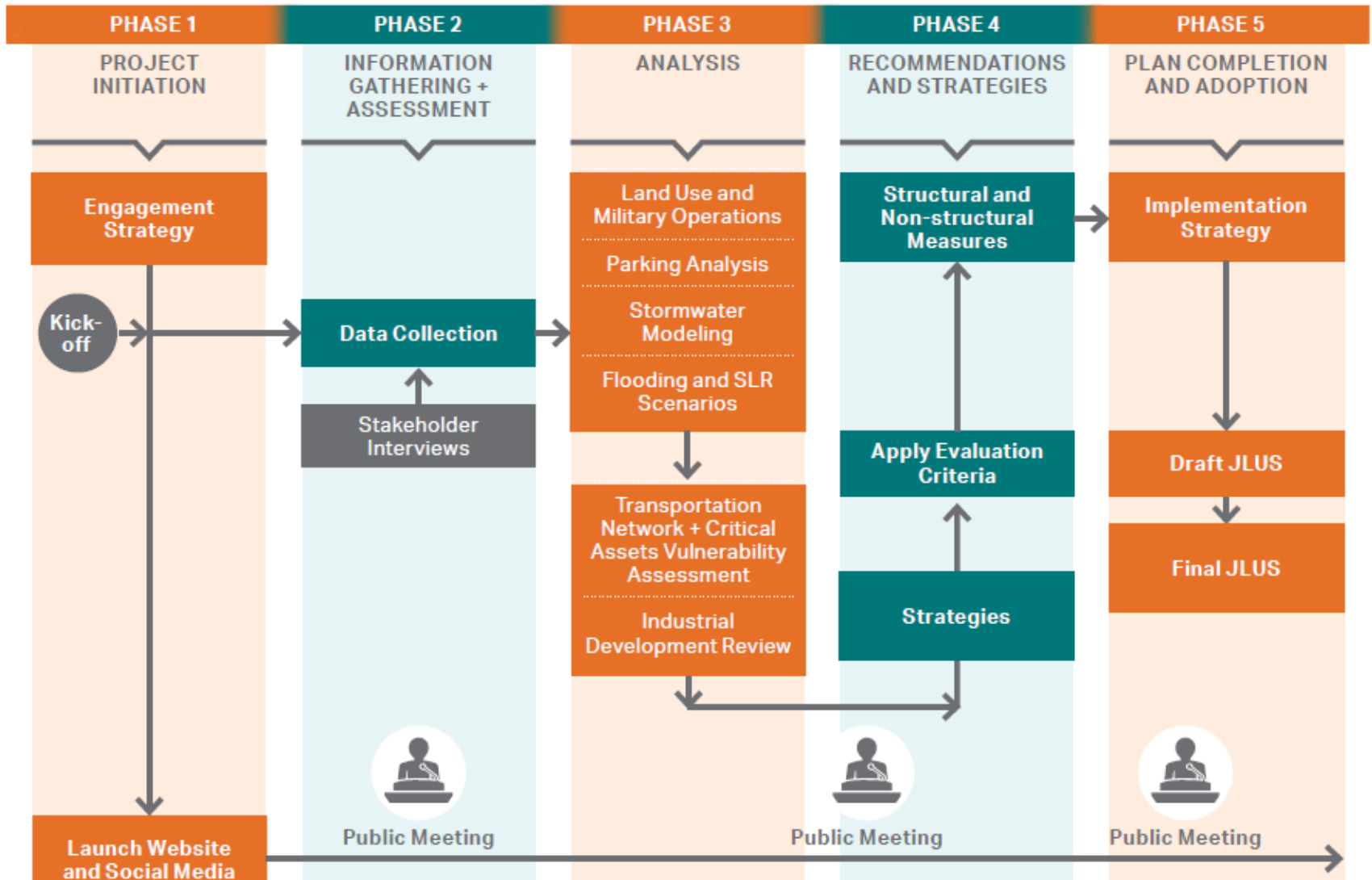
JLUS Study Area

- Portsmouth
- Chesapeake (north of I-64 approximate)
- Naval Station Norfolk – Navy Supply Systems Command Fleet Logistics Center Norfolk, Craney Island Fuel Depot
- Naval Support Activity Hampton Roads – Portsmouth Annex (Naval Medical Center Portsmouth)
- Norfolk Naval Shipyard and associated properties including
 - St. Juliens Creek Annex
 - South Gate Annex
 - Scott Center Annex
 - The Village at New Gosport
 - Stanley Court

The Hampton Roads Planning District Commission is the primary project sponsor



JLUS Process



Refinement of Key Issues



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.



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.



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.



Land Use and Utilities

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.



Coordination + Communication

Regional-level activities could have the potential to impact Navy operations.



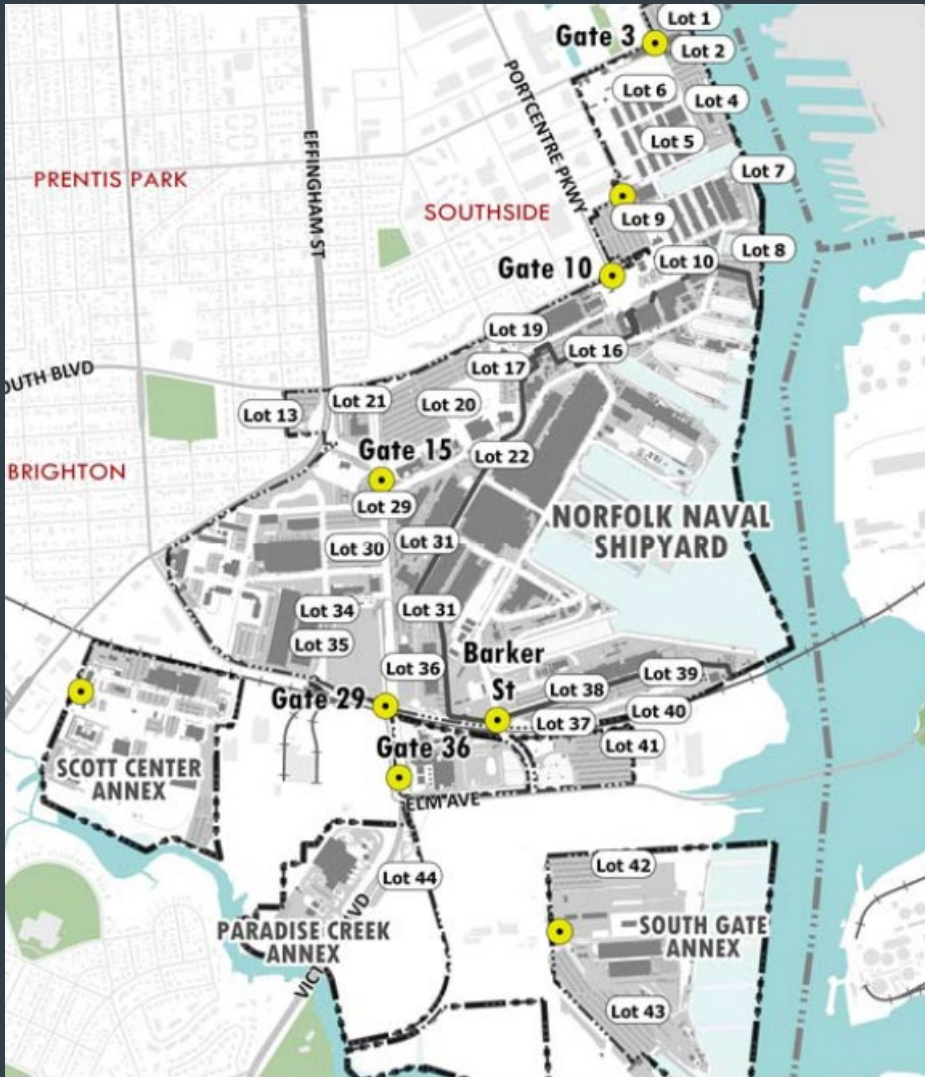
JLUS DRAFT Goals

- Future flooding impacts to the transportation network are mitigated
- Military installation resilience is strengthened
- Access to Navy installations is maintained and expanded
- Neighborhoods surrounding the installations are enhanced
- Redevelopment and reuse of land improve the local economy
- Policies and regulations manage growth and prevent conflicts
- Navy and locality relationships are strengthened

Parking

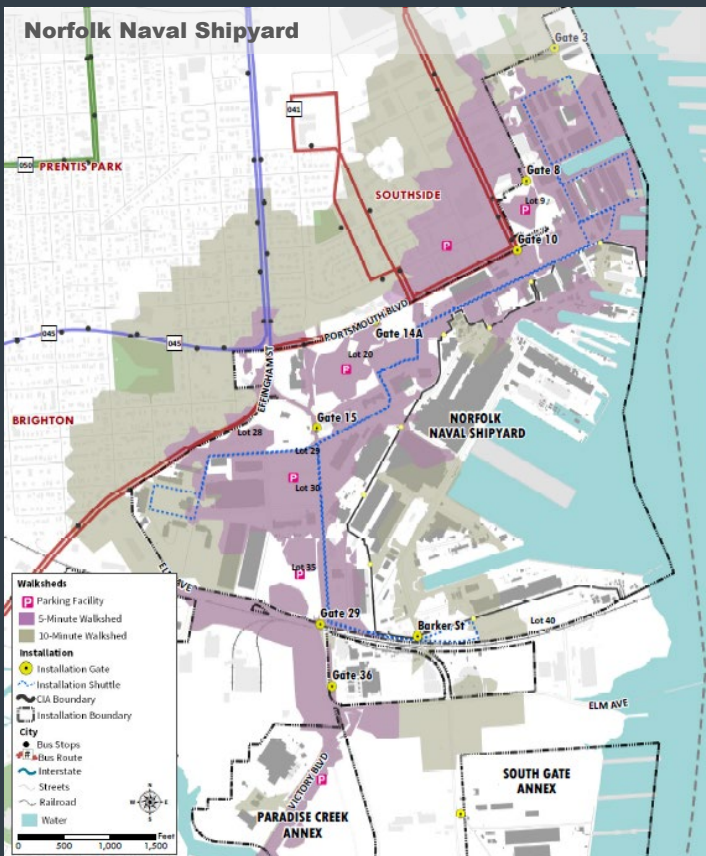
The location of parking affects behavior

- Approximately 20% of NNSY parking spaces are in remote locations of the installation or outside of the installation boundaries
- Parking in nearby neighborhoods is sometimes more “convenient” than options on the installation
- Future mission growth could increase parking demand and decrease parking supply

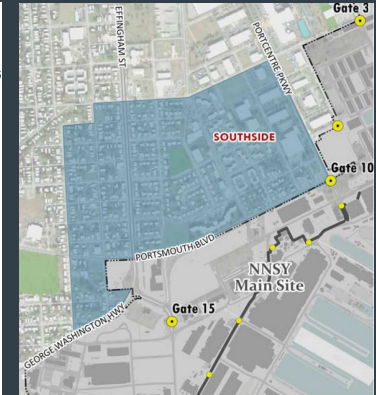
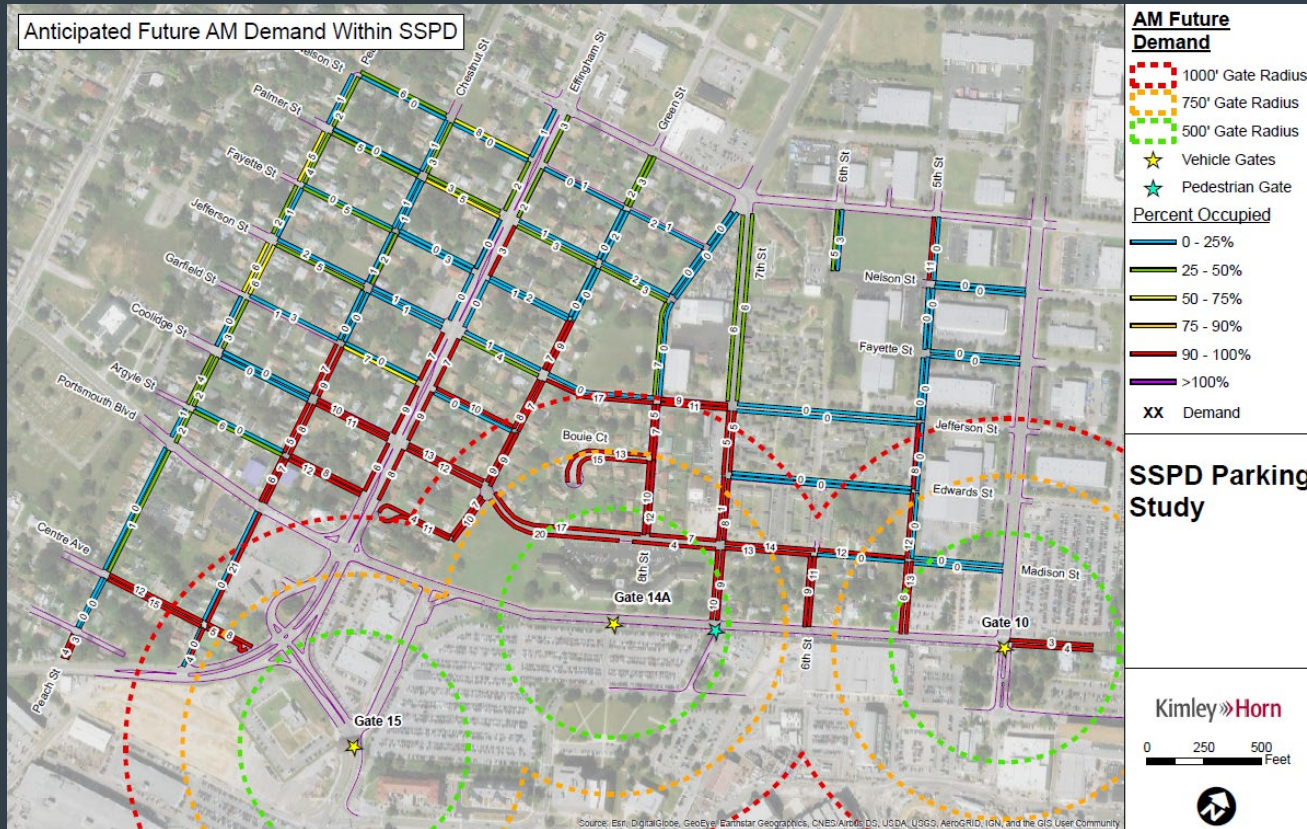


The location of parking affects behavior

- Walking from remote parking lots adds considerable time to an employee's commute and there is no shuttle between off-site parking lots (such as South Gate Annex or Paradise Creek Annex) and the Shipyard.
- At NMCP, most of the garage is reserved for patients and the remainder fills up fast.



Parking impacts the adjacent neighborhood



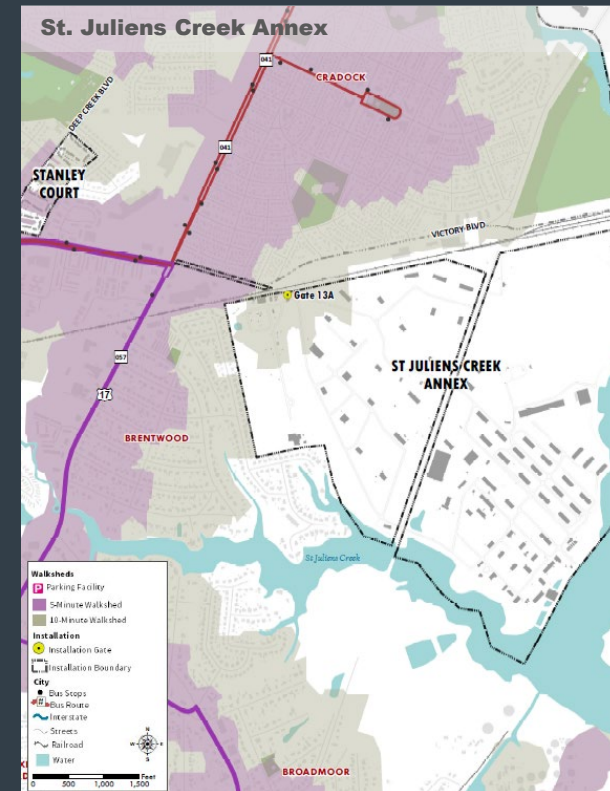
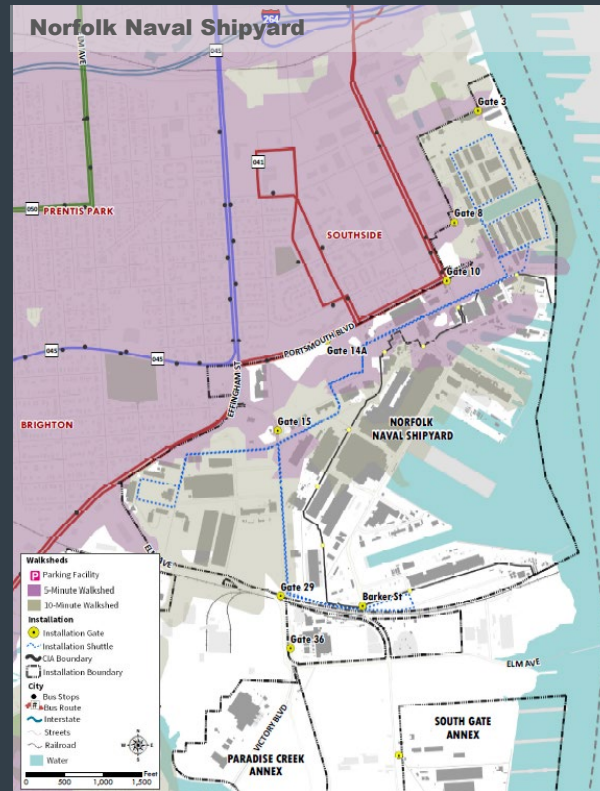
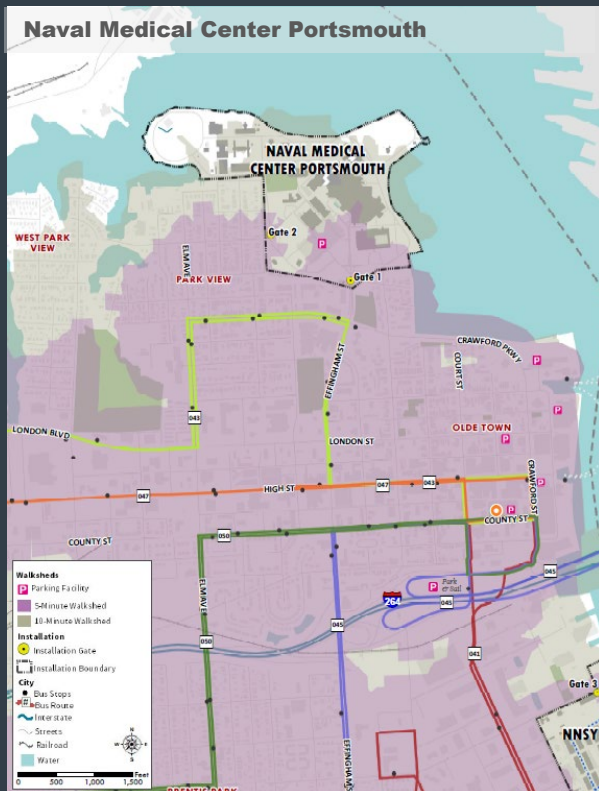
- The Southside Parking District next to the Shipyard regulates on street parking
- Blocks closest to the Shipyard fill up first and sometimes vehicles violate posted regulations
- An average of 250 shipyard employees/vehicles park in the neighborhood daily
- Shipyard growth will place increased pressure on parking supply and the neighborhood

Transit and Access



There are deterrents to using transit for commuting to an installation

- Shipyard and NMCP shifts times do not align with bus service operating hours.
- Bus wait times can be long, and many routes require a transfer. Riders must also factor in additional walk time from a stop to the workplace.

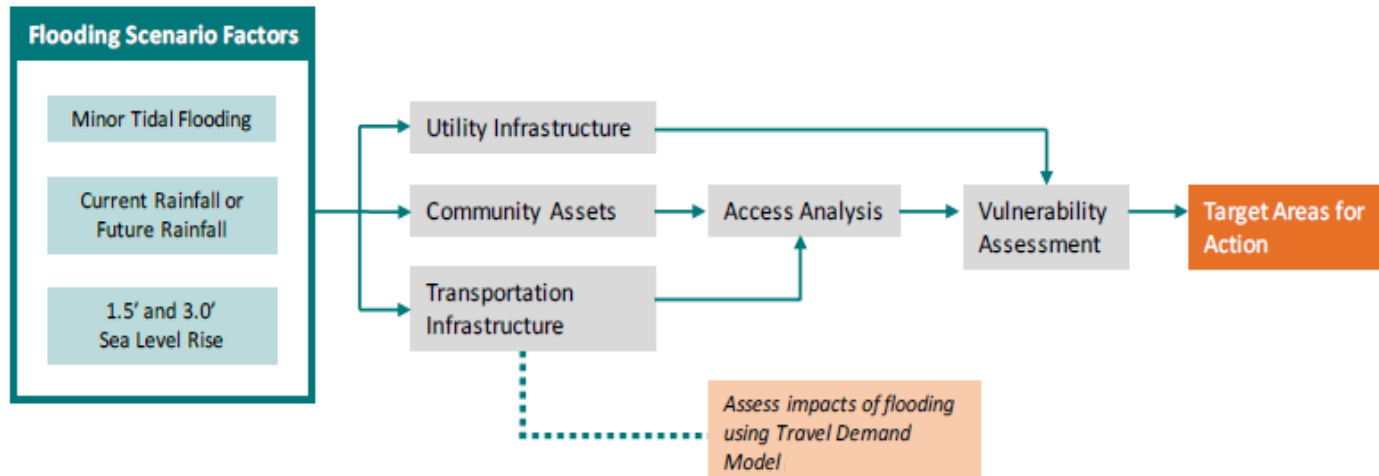


Roadway Flooding



Areas Vulnerable to Flooding

- The flooding analysis for the JLUS evaluated impacts from flooding that occur on a relatively frequent basis, i.e., with a relatively high chance of occurring in any given year, as opposed to a large storm event.
- This type of flooding can reduce or block access to Navy installation gates, disrupt emergency response activities in and around the installation, and affect ability of Navy personnel to get to work.
- The flood scenarios used a combination of high tidal water levels and rainfall conditions and cover a range of tidal and rainfall events that would cause varying degrees of flooding today and in the future.





Areas Vulnerable to Flooding

- Sea Level Rise values of 1.5 and 3.0 feet were based on HRPDC planning guidance
 - A present-day 24-hour rainfall total was defined as 6.2 inches.
 - A future 24-hour rainfall total was defined as 6.8 inches
- Hydrologic and hydraulic (H&H) models were used to simulate both the high river level associated with tidal flooding and the rainfall runoff needed to evaluate compound flooding.

Scenario #	Description
Tidal Flooding with No Rainfall	
1	No Rain, No Sea Level Rise
2	No Rain, Estimated 1.5-feet of Sea Level Rise
3	No Rain, Estimated 3-feet of Sea Level Rise
Tidal Flooding with Current Rainfall Levels	
4	Current Rainfall (6.2-inches over 24 hours), No Sea Level Rise
5	Current Rainfall (6.2-inches over 24 hours), Estimated 1.5 feet of Sea Level Rise
6	Current Rainfall (6.2-inches over 24 hours), Estimated 3 feet of Sea Level Rise
Tidal Flooding with Future Rainfall Levels	
7	Future Rainfall (6.8-inches over 24 hours), Estimated 1.5 feet of Sea Level Rise
8	Future Rainfall (6.8-inches over 24 hours), Estimated 3 feet of Sea Level Rise

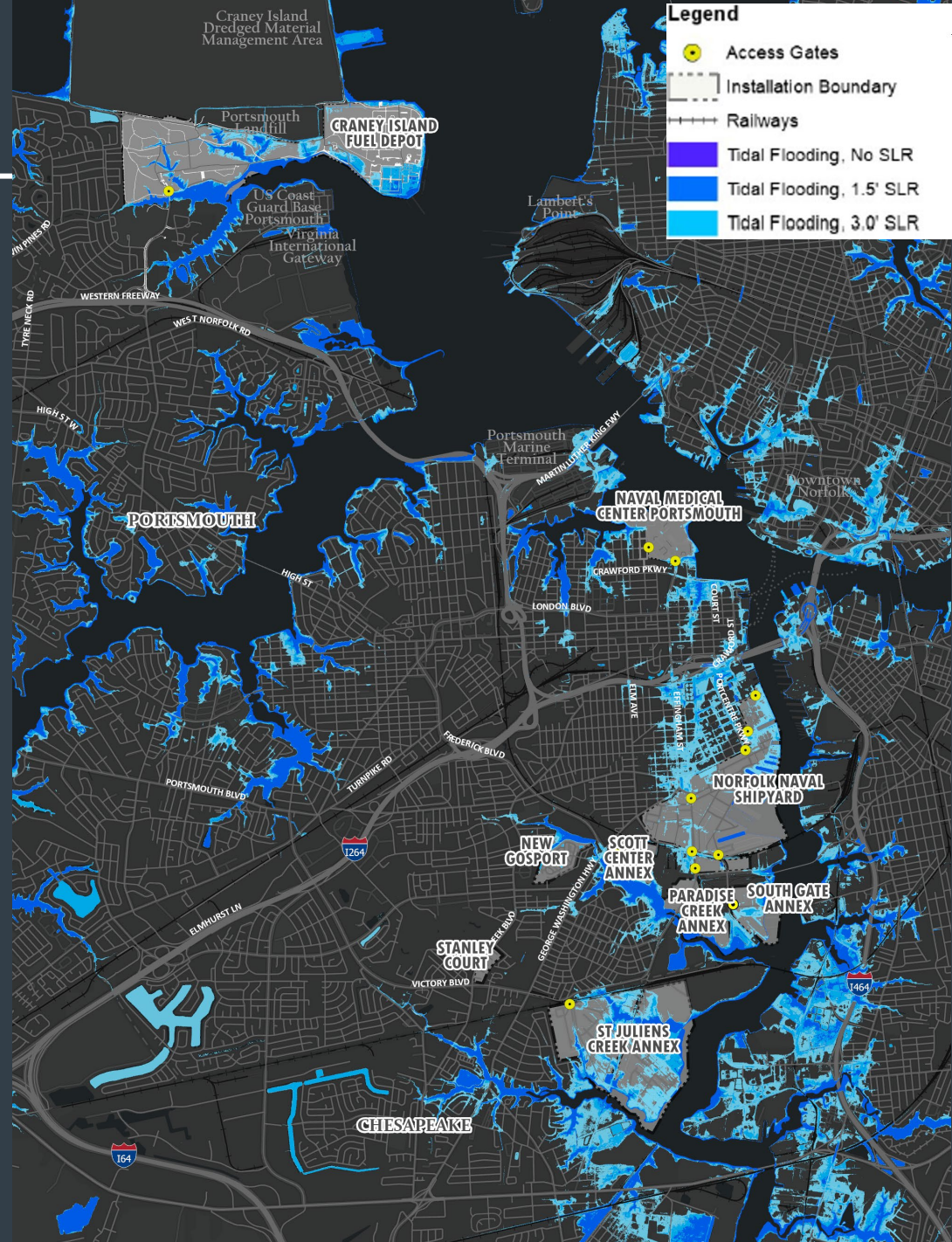
Note: The 1-year return period value of 2.8 feet NAVD88 is consistent with current stormwater infrastructure design practices in the JLUS partner cities and is similar to the minor tidal flooding level used in the Norfolk and Virginia Beach JLUS.



Estimated Flooding from Sea Level Rise (Scenarios 1, 2, 3)

- Areas along the shorelines will be impacted the most, including areas near the installations
- Heavily impacted areas include
 - Downtown Portsmouth
 - Park View
 - Effingham Street
 - Newtown/Southside
 - East side of Brighton/Prentis Park
 - Broadmoor
 - Woodland Terrace

- 1 No Rain, No Sea Level Rise
- 2 No Rain, Estimated 1.5-foot of Sea Level Rise
- 3 No Rain, Estimated 3-feet of Sea Level Rise

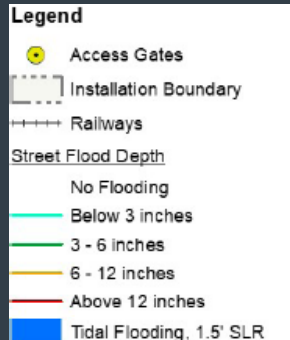




Roadway Flooding Near Craney Island Fuel Depot

Scenario #	Description
Tidal Flooding with Future Rainfall Levels	
7	Future Rainfall (6.8-inches over 24 hours), Estimated 1.5 feet of Sea Level Rise

The roadway segments potentially affected by flooding shown in color.

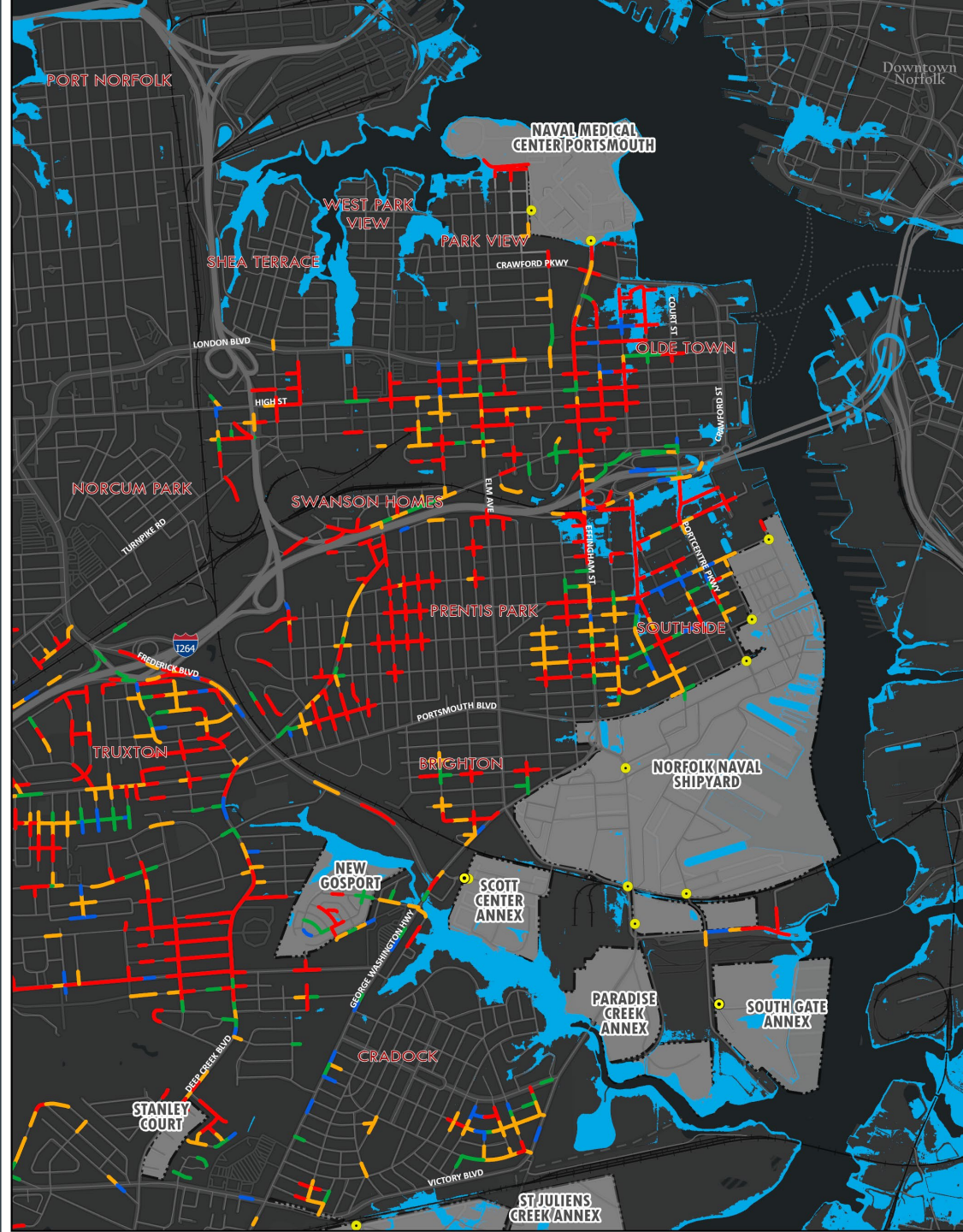
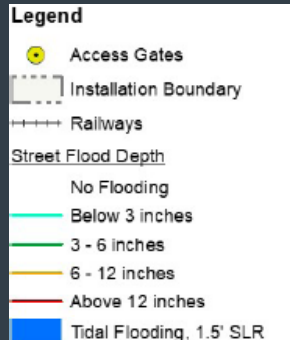




Roadway Flooding Near NMCP and NNSY

Scenario #	Description
Tidal Flooding with Future Rainfall Levels	
7	Future Rainfall (6.8-inches over 24 hours), Estimated 1.5 feet of Sea Level Rise

The roadway segments potentially affected by flooding shown in color.





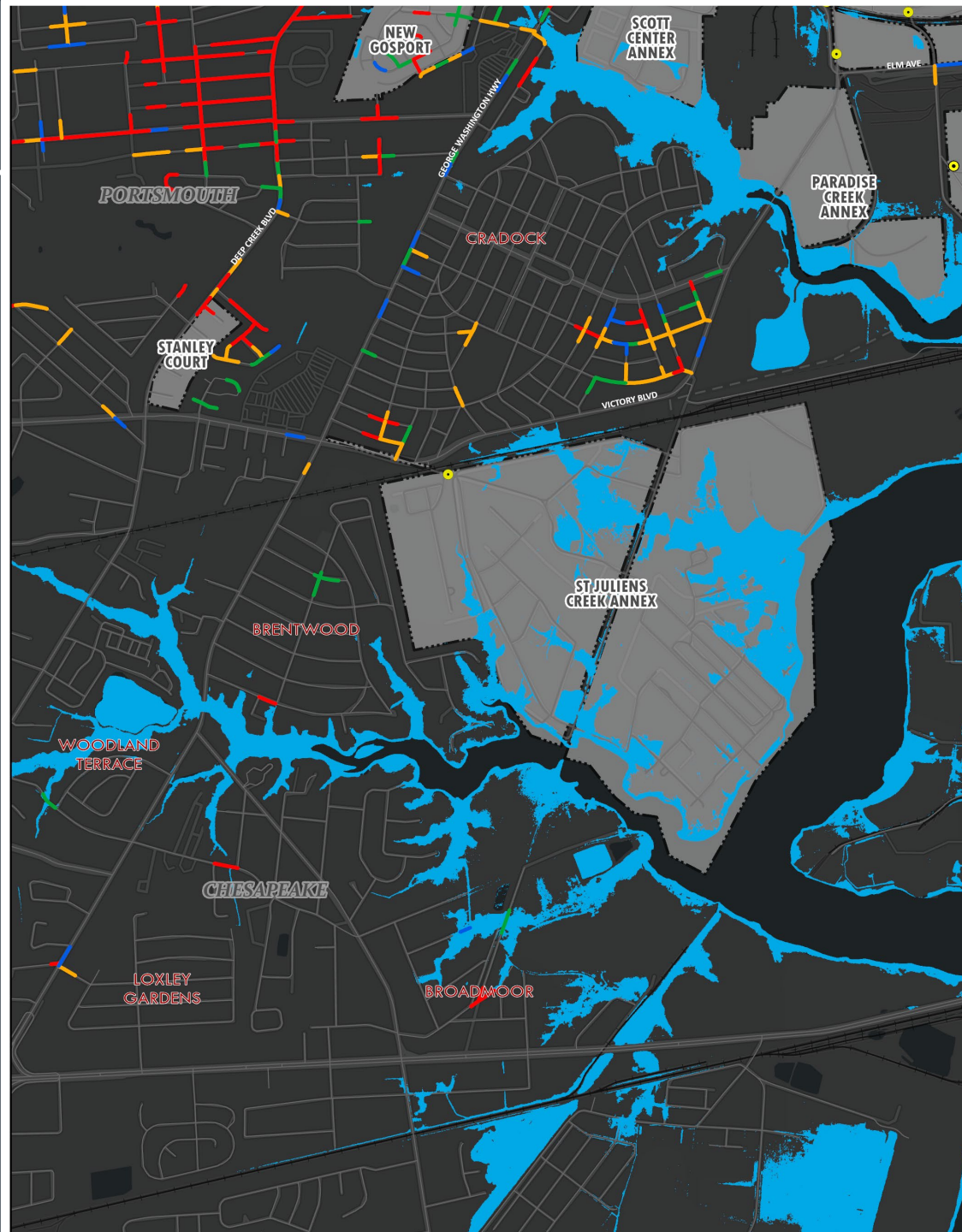
Roadway Flooding Near St. Juliens Creek Annex

Scenario #	Description
Tidal Flooding with Future Rainfall Levels	
7	Future Rainfall (6.8-inches over 24 hours), Estimated 1.5 feet of Sea Level Rise

The roadway segments potentially affected by flooding shown in color.

Legend

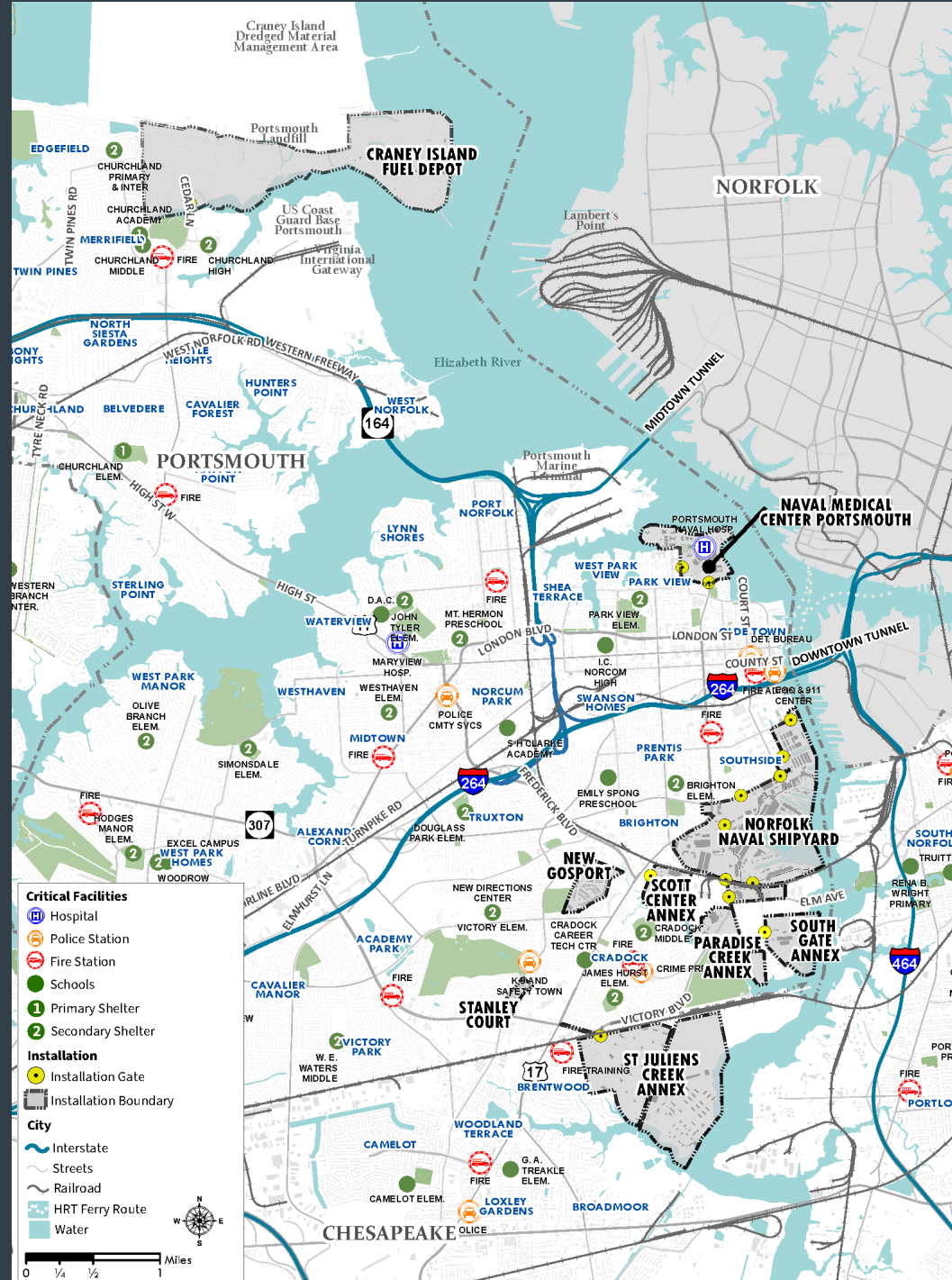
- Access Gates
- Installation Boundary
- Railways
- Street Flood Depth
 - No Flooding
 - Below 3 inches
 - 3 - 6 inches
 - 6 - 12 inches
 - Above 12 inches
 - Tidal Flooding, 1.5' SLR





Community Facilities Flood Exposure Analysis

- 113 community facilities were evaluated to determine if the facility is exposed to flooding under Scenario 3.
- Facilities evaluated include fire and police stations, emergency shelters, schools, emergency operations centers and Portsmouth City Hall
- The following facilities were identified as potentially impacted with 3' of sea level rise:
 - Portsmouth City Hall
 - Portsmouth EOC and 911 Center
 - Naval Medical Center Portsmouth
 - Westhaven Elementary School
 - Fire Station #8 on George Washington Highway (Deep Creek)
 - Edwin W. Chittum Elementary School





Impact of Flooding on Installation Accessibility

- An analysis was done to understand the impacts that anticipated future flood conditions could have on vehicle operations (i.e., congestion).
- This analysis provided a more detailed understanding about how trips are affected and how traffic responds to flooded roadway conditions based on existing roadway capacity.
- The 2045 Hampton Roads Long Range Travel Demand Model (TDM) was used to model capacity reductions due to anticipated future flood conditions and to report the resulting traffic operational metrics for further consideration.



▲ Image Source: *Virginian Pilot*



Impact of Flooding on Installation Accessibility

- Gates 1 and 2 at NMCP are expected to become inaccessible (as well as critical corridors that serve NMCP)
- Several NNSY gates will become inaccessible
- Cedar Lane at Craney Island Fuel Depot will be inaccessible under the scenarios with 3' SLR.
- Victory Boulevard from NNSY to George Washington Highway open to traffic during all modeled scenarios.

Summary of model results related to installation access			Future Flooding Scenario			
			No Rain		Future Rainfall (6.8-inches over 24 hours),	
Installation	Area	Location	1.5 feet SLR #2 (Baseline)	3.0 feet SLR #3	1.5 feet SLR #7	3.0 feet SLR #8
NMCP	Gates	Gates 1 & 2	●	✗	✗	✗
	Effingham St	North of London Blvd	●	✗	✗	✗
		London Blvd to I-264	●	●	✗	✗
	Elm Ave	North of London Blvd	●	✗	✗	✗
		London Blvd to I-264	●	●	✗	✗
NNSY/ St. Juliens Creek Annex	Gates	North Gates (3, 10, 10B, 14A)	●	✗	✗	✗
		Main Gate (15)	●	✗	●	✗
		Southern Gates (29, 36)	●	✗	●	✗
		Scott Center Annex	●	●	✗	✗
		St. Juliens Creek Annex	●	●	●	●
	Elm Avenue	George Washington Hwy to Victory Blvd	●	✗	●	✗
	Victory Boulevard	NNSY to George Washington Hwy	●	●	●	●
		George Washington Hwy to I-264	●	●	✗	✗
Craney Island	Gate	Cedar Lane	●	✗	●	✗

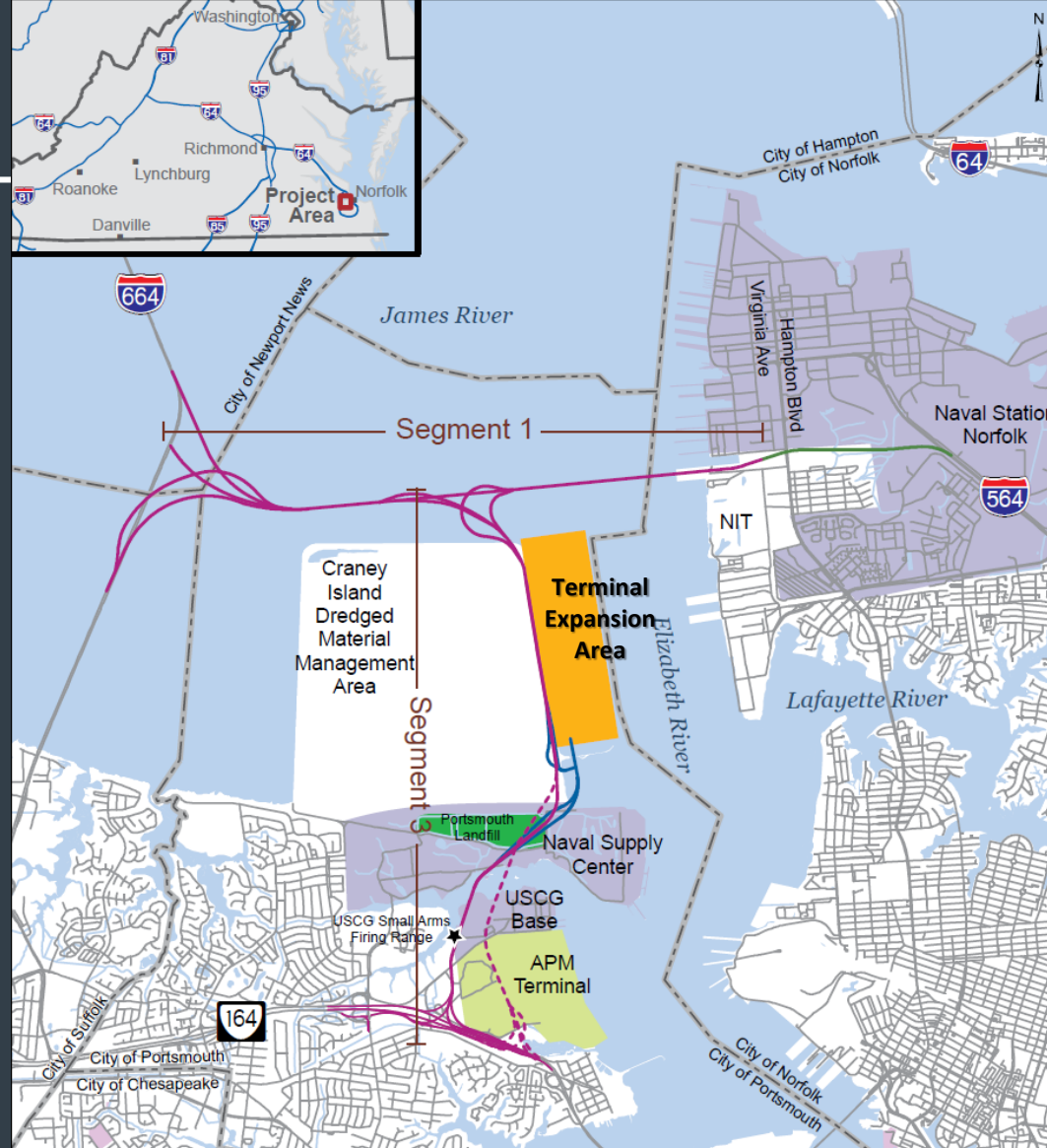
● Accessible Roadway
✗ Flooded Roadway

Land Use + Utilities



Regional Land Use Activities

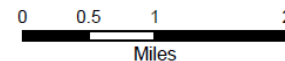
- The proposed eastward expansion of the Craney Island Dredged Material Management Area (CIDMMA) and the future Craney Island Marine Terminal could have significant impacts to Navy operations and the City's landfill
- Proposed infrastructure (rail and roads) required to support the expansion could directly impact operations at Craney Island Fuel Depot, the US Coast Guard base, and the Portsmouth Landfill.



Legend

- HRCS CBA 9 - Segments 1 & 3
- VA Port Authority Craney Island Interchange
- Planned I-564 Connector
- Craney Island Expansion Area
- - - Original Alignment of Segment 3
No Longer Under Consideration

Figure 1: Project Location Map

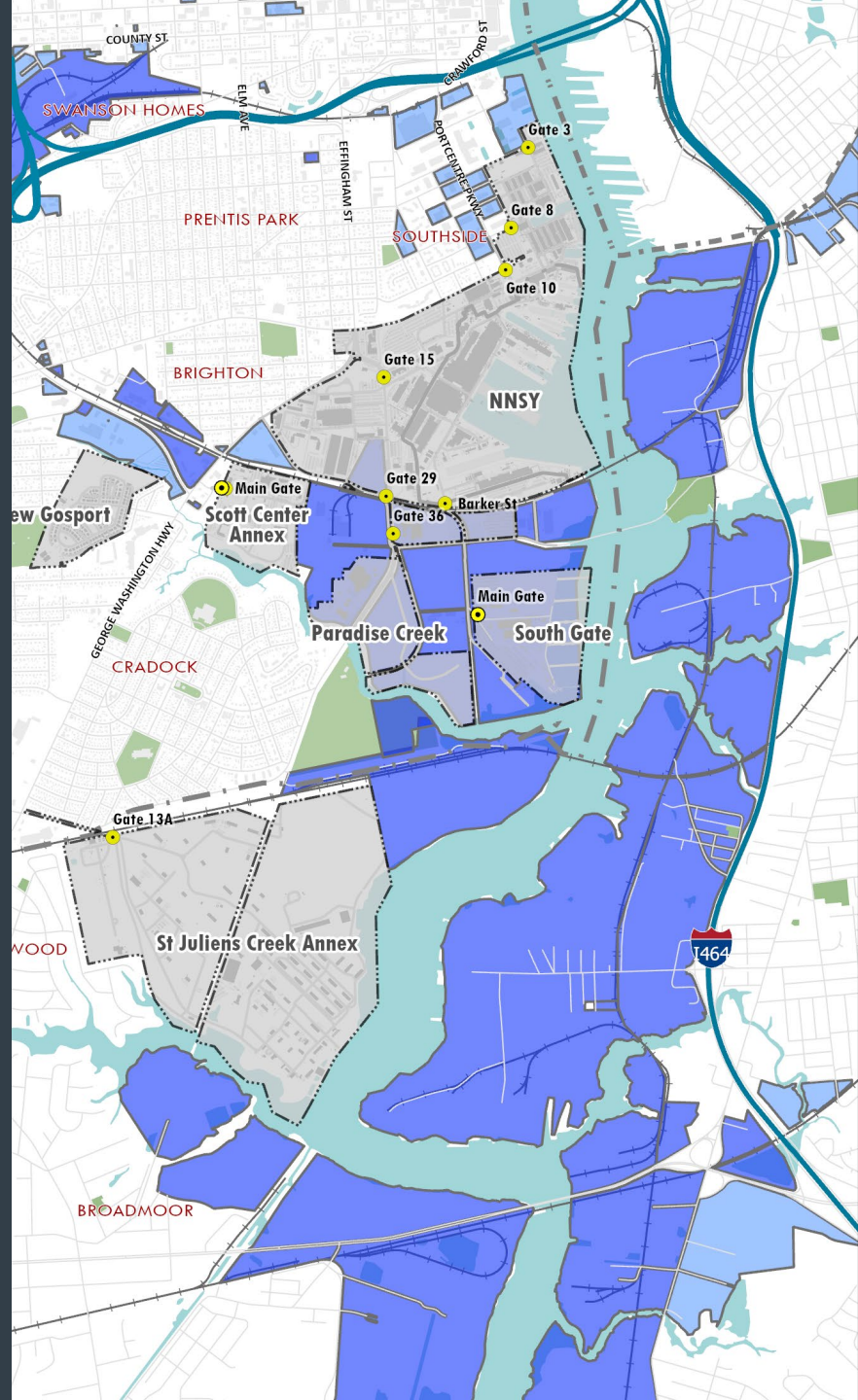




Waterfront Industrial Development

- The Southern Branch of the Elizabeth River supports industrial and military activities with unique deep-water access.
- This industrial corridor is an important priority for economic development for both cities
- Access and circulation in this area is challenged and the number of properties, landowners, and rail crossings could complicate redevelopment opportunities
- Future redevelopment and increased terminal activities increase the need for management and coordination to avoid or minimize impacts to Navy DOD facilities and activities.

► Industrially zoned properties on the banks of the Elizabeth River





Norfolk Naval Shipyard Growth

- Mission growth is expected to occur as NNSY increases the number of carriers and/or submarines in the shipyard at one time.
- Development on-site could displace surface parking, creating a need for more offsite parking or more efficient on-site parking.

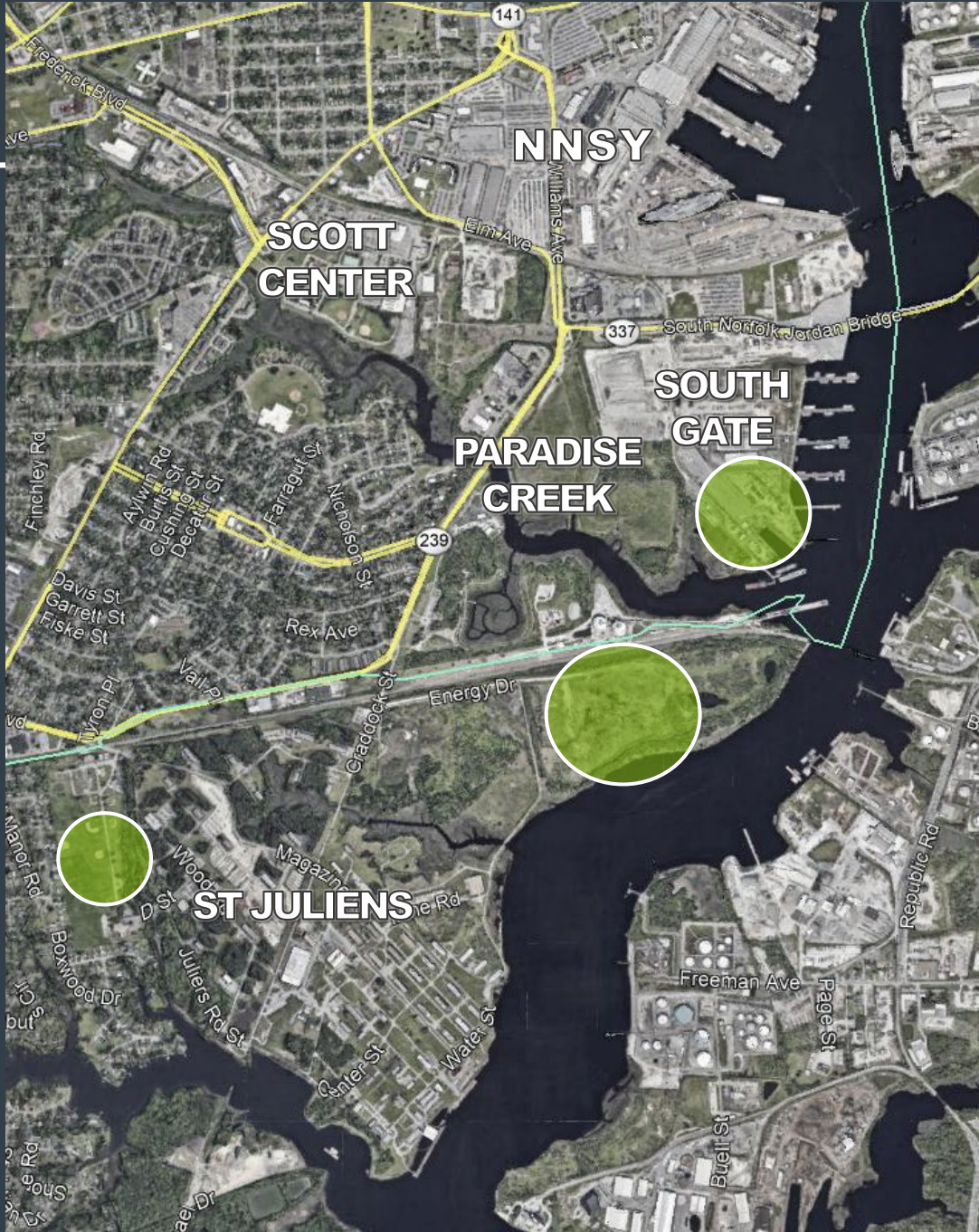
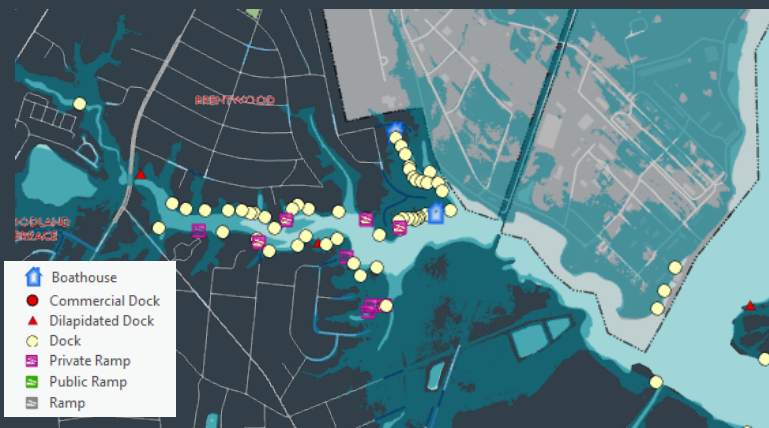


▲ The USS George W Bush in drydock at Norfolk Naval Shipyard.
Source: navsea.navy.mil



Waterfront Redevelopment

- There is interest in establishing an Enhanced Use Lease (EUL) for parts of South Gate Annex and potentially areas on St. Juliens Creek Annex that are underutilized.
- Access to a deep-water shipping channel, utilities, adjacency to industrial activities are strengths in this vicinity
- The Navy is current evaluating EUL options.



Coordination + Communication



Coordination and Communication Can Be Strengthened

- There are well-established mechanisms in place to promote coordination between Portsmouth, Chesapeake and the Navy
- Navy Community Plans and Liaison Officers (CPLO) at each installation are primary points of contact
- Cities have multiple points of contact
- Several regional projects are underway or in progress that will require increased coordination
- Other issues that would benefit from increased coordination:
 - Transit
 - Recreation
 - Emergency response
 - Railroad growth
 - Parking coordination and enforcement

Strategy Development

Strategy Types and Criteria

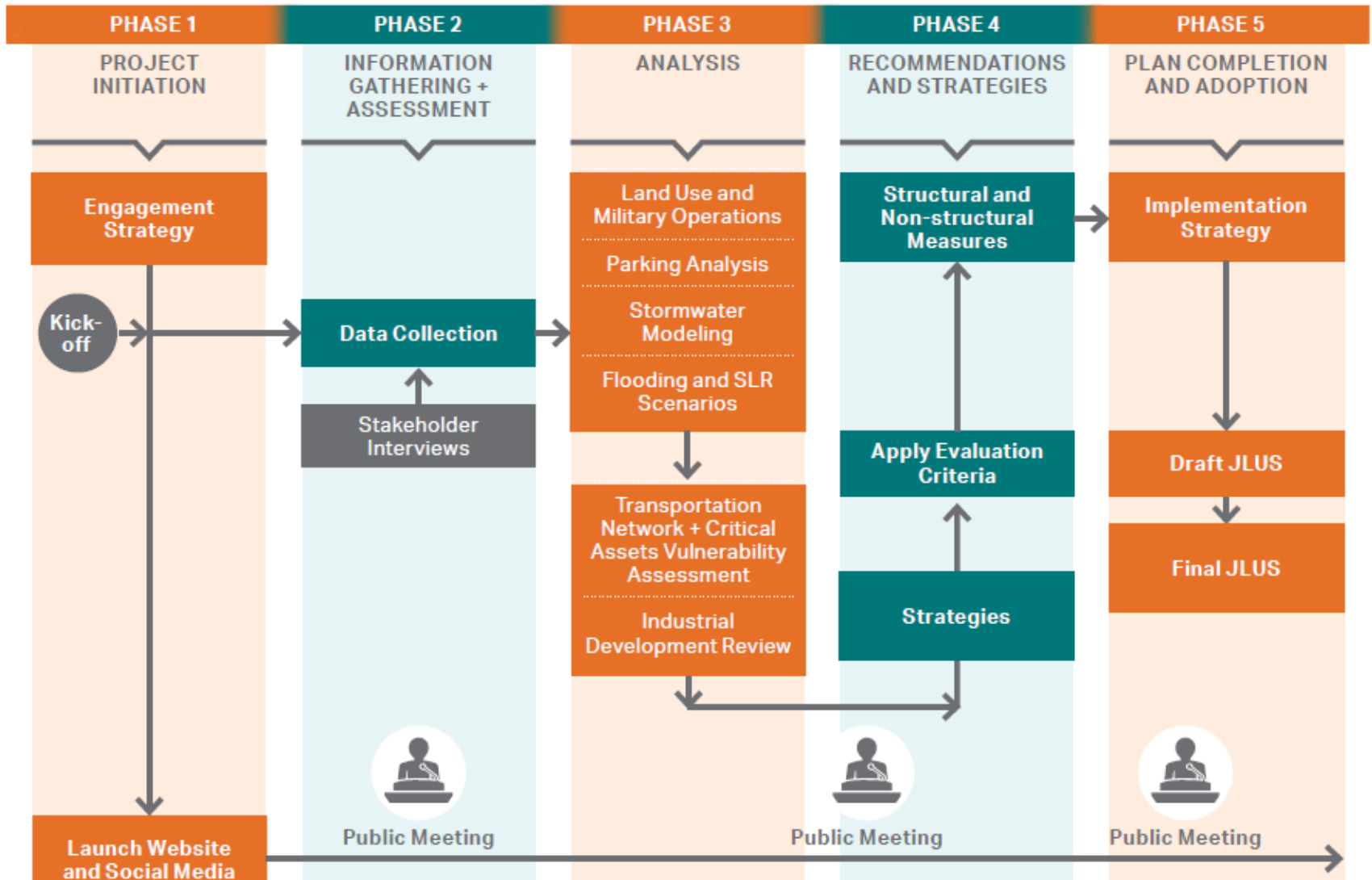
Strategy Types

- Flood Mitigation
- Access and Parking
- Land Use and Utilities
- Policies
- Coordination and Communication

Criteria

- DOD Mission and Personnel Readiness
- Transportation Network Connectivity
- Community Benefits
- Economic Resiliency

Next Steps





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Portsmouth-Chesapeake Joint Land Use Study Project Overview

The Hampton Roads Region – Portsmouth and Chesapeake Joint Land Use Study (JLUS) is a joint effort between Portsmouth, Chesapeake, the Hampton Roads Planning District Commission, and several U.S. Navy installations in South Hampton Roads. Navy facilities in Portsmouth and Chesapeake face several impacts from the surrounding communities, including transportation impacts (such as congestion, existing and planned capital improvements, facility access, gate security, and rail operations), stormwater management, waterway management, land use conflicts, and residential, commercial, and industrial encroachment impacts. Nuisance and storm surge flooding can have major impacts on Navy operations by obstructing access and damaging local infrastructure on which military facilities rely. This study will help identify specific conditions and develop mutually beneficial recommendations to address these issues.

Project Partners

- HRPDC
- Portsmouth
- Chesapeake
- Commander, Navy Region Mid-Atlantic
- Naval Station Norfolk, Craney Island Fuel Depot
- Naval Support Activity Hampton Roads, Naval Medical Center Portsmouth
- Norfolk Naval Shipyard
- Virginia Office of the Secretary of Natural Resources
- Virginia Office of the Secretary of Veterans and Defense Affairs

Joint Land Use Studies eNews

PRESS RELEASE: HAMPTON ROADS REGION – NORFOLK AND VIRGINIA BEACH JOINT LAND USE STUDY AVAILABLE FOR PUBLIC COMMENT
May 30, 2019

PRESS RELEASE: HRPDC Hosts Public Meeting About Resiliency Issues Near Norfolk and Va Beach Navy Facilities
April 23, 2018

[View All News](#)

Joint Land Use Studies Documents

Norfolk-VaBeach Joint Land Use Study Draft
June 2019
June 7, 2019 - Report

Portsmouth-Chesapeake JLUS Technical Committee
May 13, 2019 - Agenda

Portsmouth-Chesapeake JLUS Policy Committee
May 13, 2019 - Agenda

Opportunities for Input



Your attendance will automatically add you to our stakeholder list



Visit the Project Website for updates and to submit comments via an online form



Email Ben McFarlane, Senior Regional Planner
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www.hrpdcva.gov/portsmouth-chesapeakeJLUS