



PORPSMOUTH & CHESAPEAKE  
**JOINT LAND  
USE STUDY**

Hampton Roads Planning District Commission

**EXECUTIVE SUMMARY**

August 2021

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# EXECUTIVE SUMMARY

## Purpose

This **Joint Land Use Study (JLUS)** addresses several challenges and opportunities that currently affect or could affect in the future the cities of Portsmouth and Chesapeake in southeastern Virginia and several Navy installations in those communities. While both cities and the Navy have a commendable history of cooperation and support, the potential for new threats from sea level rise and flooding, combined with the anticipated growth of the Navy mission, will present new risks and challenges in the coming years.

Overall, the Department of Defense (DoD) is a major part of the local and regional economies. It is also the largest employer in Portsmouth.<sup>1</sup> The close proximity of the installations to the surrounding neighborhoods and the high degree of interdependency among the localities and the Navy serve as critical reminders of the importance of coordinated planning and alignment of priorities to support the long-term success of the Navy and the economic resilience of both cities.

The JLUS defines 36 Actions that relate to a specific task or project aimed at addressing the primary challenges and goals identified in the study. In many instances, the Actions define the first steps toward more technical planning, engineering analysis, and coordination that will be needed before an appropriate and site-specific design solution can be defined. In other instances, and where appropriate, Actions suggest potential infrastructure upgrades that could improve conditions.

## Summary of Challenges

The JLUS stands apart from other local planning processes because it brings together the military and the communities in a process focused on issues of mutual concern as well as opportunities that could offer benefits to the partners. The following primary challenges were identified and influenced the analysis and strategy development for the JLUS:

<sup>1</sup> Virginia Employment Commission, Portsmouth City Community Profile, Updated 5/20/21. <https://virginiaworks.com/Portals/200/Local%20Area%20Profiles/5104000740.pdf> Accessed 6/1/2021

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The Portsmouth and Chesapeake JLUS is a cooperative planning process among the Cities of Portsmouth and Chesapeake, the Commonwealth of Virginia, and the following:

- Naval Station Norfolk – Navy Supply Systems Command Fleet Logistics Center Norfolk, Craney Island Fuel Depot (referred to hereafter as Craney Island Fuel Depot)
- Naval Support Activity (NSA) Hampton Roads – Portsmouth Annex (Naval Medical Center Portsmouth)
- Norfolk Naval Shipyard (NNSY) and associated properties, including:
  - St. Juliens Creek Annex
  - South Gate Annex
  - Scott Center Annex
  - The Village at New Gosport
  - Stanley Court
  - Paradise Creek Annex

The Hampton Roads Planning District Commission (HRPDC) is the primary project sponsor.

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- **Access.** Military installations rely upon the local and regional transportation networks on a daily basis to carry thousands of personnel along regional and local corridors to installation gates. Congestion within close proximity of the installation gates can create neighborhood-level access impacts that is expected to increase with additional population and employment growth at Norfolk Naval Shipyard in particular. A coordinated approach is needed when considering changes to existing entry control points or modifications to existing local roadways so that impacts related to gate volumes, congestion, neighborhood safety, redevelopment, and future flooding are considered.
- **Roadway Flooding.** Flooding on roadways can disrupt or limit access to military installations and prevent military personnel from getting to work, which impacts mission readiness. Localized flooding impacts already occur in certain areas around NNSY and

reduce the functionality of certain gates. Future rainfall intensity and sea level rise will increase the extent and depth of flooding, further compounding installation access and congestion, as well as affecting access to community facilities that the military relies upon.

Eight scenarios were used to assess potential flood impacts on the roadway network and to simulate how flood impacts could affect congestion. The analysis showed that multiple corridors will be simultaneously affected with conditions lasting from a few hours to a day or more, and alternate routes used today to avoid tidal or storm-based flooding will not provide the necessary relief in the future because those routes will also be affected by flooding. Nearly all of the streets connecting NNSY to I-264, the Downtown Tunnel, and the Naval Medical Center Portsmouth area will be flooded to some degree in four of the eight flood scenarios evaluated, limiting installation access and the ability to travel to and from both NNSY and Naval Medical Center Portsmouth. In addition, the only access to Craney Island Fuel Depot will be impacted in isolated and relatively shallow flooding.

This analysis led to the identification of six priority corridors within the network that play an important role in military readiness, installation resilience, and overall effectiveness of the regional transportation network: Effingham Street, Portsmouth Boulevard, Victory Boulevard, Frederick Boulevard, George Washington Highway, and Cedar Lane. If these routes are impacted by flooding or otherwise impeded, operational inefficiencies and lost work time for the Navy will likely occur. Flooding will also affect emergency response activities and access to community services, limit or constrain neighborhood access, and limit or disrupt commerce and economic development in Downtown Portsmouth. A coordinated and comprehensive flood mitigation and stormwater management strategy is needed for each corridor that combines different infrastructure improvements and options for addressing long-term potential flood impacts.

- **Redevelopment Opportunities.** The Navy installations contribute to the industrialized nature of the Elizabeth River corridor. Both Portsmouth and Chesapeake view the river corridor south of NNSY as an important priority for economic development and tax revenue.

Opportunities for redevelopment along the river corridor include potential Enhanced Use Lease opportunities on underutilized land at South Gate Annex and St. Juliens Creek Annex (including extension of utilities to adjacent vacant land) and potential reuse opportunities at the Navy-owned Paradise Creek Annex. In addition, opportunities for compatible, mixed-use development, including restaurants or other services on underutilized or vacant land near the NNSY and Naval Medical Center Portsmouth gates, could help diversify land use around the installations, offer military personnel and visitors more options for meeting day-to-day errands, and support local economic development objectives.

Redevelopment can also present opportunities to improve safety, mitigate access conflicts, and expand connectivity between the cities and the installations along key corridors. Careful and coordinated management of growth and redevelopment on and adjacent to the installations will be needed between the Navy and cities to ensure that any changes or impacts associated with land use changes are jointly understood and any negative impacts mitigated.

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## JLUS Goals

The goals for the JLUS focus on reducing flood impacts to the transportation network, expanding access opportunities for getting to the installations, reducing impacts on neighborhoods, promoting compatible and managed growth and redevelopment that also benefits the local tax base, and fostering improved coordination among JLUS partners. There are seven goals:

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

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- **A Lack of Mobility Options.** There is currently a limited number of alternative transportation options for traveling to and from Navy facilities in the region as a whole, and bus ridership of Navy personnel is low. Bus service does exist in the study area; however, routes are long, transfers are challenging, and the hours of operation do not align with shipyard work shifts. Buses are not permitted to enter the installations, and there are no dedicated regional or express routes that serve the installations in either Portsmouth or Chesapeake. Bicycle and pedestrian infrastructure improvements both on and around the installations are also needed to provide additional safe options and to promote and encourage other modes of access to and onto the installations. Expanded transit options and improved bicycle and pedestrian infrastructure around the installations will also serve to enhance connectivity to local neighborhoods.
- **Managing Parking.** Convenient parking on NNSY and at the Naval Medical Center Portsmouth fills up quickly, especially parking lots that are located within a reasonable walking distance to large work centers. However, remote lots on the main shipyard and in nearby South Gate Annex typically remain

underutilized. As a result, parking spills into surrounding neighborhoods, which offer a more proximate parking location for employees than other lots, creating congestion and enforcement challenges for Portsmouth in and around the South Side Parking District. A block-by-block evaluation of parking trends in the South Side Parking District revealed that approximately 250 vehicles associated with NNSY were parking illegally daily in the district. The analysis also showed that redevelopment at the shipyard would result in a reduction of at least 1,500 parking spaces, which will potentially increase or double the number of employees parking in the South Side Parking District. Management of parking will require a multi-pronged approach that anticipates the impacts of mission growth, reduces parking-related impacts on neighborhoods, better optimizes and connects existing parking on the installations, and considers remote parking alternatives across the study area that are efficient and directly connect onto the installations.

## Recommendations

The JLUS recommends 36 Actions and 36 Practices and Policies. The Actions are organized into six types as shown in Table ES.1.

**Table ES.1** Types of Actions

Type		Description
	Parking	Parking strategies focus on managing parking both internal and external to the installations, including improving parking utilization and connectivity and pursuing remote parking alternatives in an effort to reduce impacts on adjacent neighborhoods.
	Multimodal	Multimodal strategies focus on expanding and improving transit to align with military personnel schedules and improving bicycle and pedestrian access in and around the installations.
	Flood Mitigation	Flood mitigation strategies identify approaches that could help mitigate flooding along corridors identified as critical for accessing the installations and providing important network functionality.
	Land Use and Development	Land use and development strategies target specific areas adjacent to the installations and recommend joint planning efforts to manage compatible growth, reuse, and redevelopment that considers both local and federal lands.
	Access	Access strategies focus on improving installation access points and enhancing directional signage and information to assist commuters and visitors.
	Utilities	Utility strategies focus on improving utility resiliency for the installations and local economic development opportunities.

## Priority Actions

Evaluation criteria were established to assess the overall importance of each action by defining how well each action addresses the JLUS goals and reduces risk to or improves military readiness. The criteria consider DoD Mission and Personnel Readiness, Transportation Network Connectivity, Community Benefits, and Economic Resiliency. A stronger emphasis was placed on Mission and Personnel Readiness and Economic Resiliency criteria by giving each criterion in those categories a weighted multiplier of 2, while all other criteria were unweighted.

Based on the evaluation criteria, scores ranged from 5 to 17 points. All 36 Actions are presented by overall score in the report. To help clarify level of priority within the large list of Actions and provide direction for implementation, the actions were further assigned into Tiers, as shown in Table ES.2.

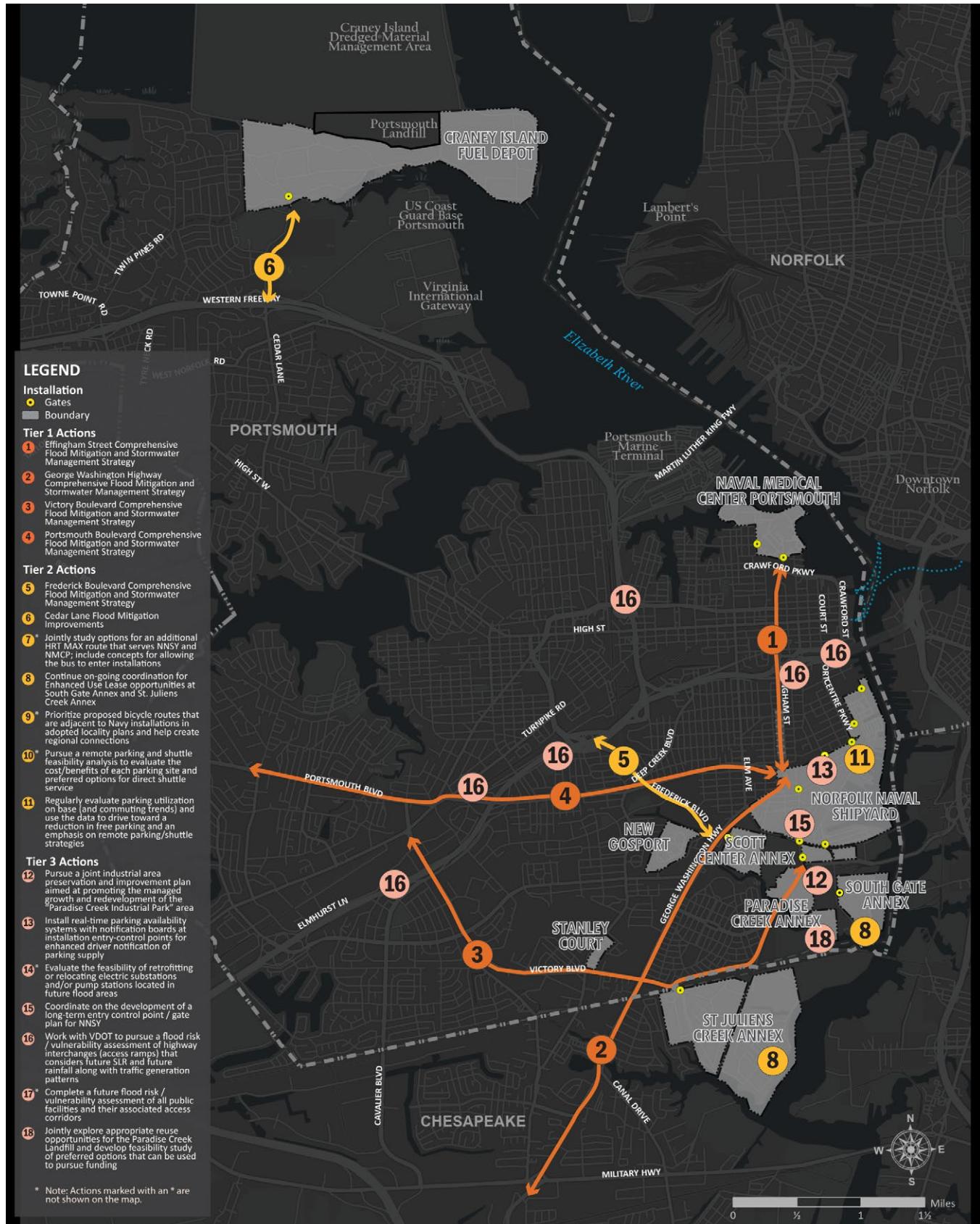
The four highest-scoring JLUS Actions (Tier 1) are comprehensive flood mitigation and stormwater management strategies for Effingham Street, George Washington Highway, Victory Boulevard, and Portsmouth Boulevard. Figure ES.1 maps the locations of the Tier 1 through 3 Actions. (Tier 4 strategies are not mapped). Actions within Tiers 1 through 3 are described in more detail in the report and include information about lead and supporting partners, potential funding sources, timeframe, and estimated cost.

The overall scores reflect the relative importance of each Action in meeting the JLUS goals. However, prioritizing actions for implementation will require the consideration of other factors such as, but not limited to, estimated project cost, funding availability, and the level of required coordination. These factors affect the level of effort that could be required to move a strategy forward at any given time. Some strategies will be more costly and complex than others and will, therefore, require more time to implement, while other strategies may be advanced more swiftly as a result of lower costs and availability of existing resources. In addition, funding availability may shift how strategies are prioritized, in order to take advantage of special opportunities, such as federal or state grant programs.

**Table ES.2** Recommended JLUS Strategies by Tier

	Priority Ranking	Score Range	# of Actions	Ranking Color
Tier 1	High	15–17	4	
Tier 2	Medium	12–14	7	
Tier 3	Low	10–11	7	
Tier 4		< 10	18	 (Not mapped)

**Figure ES.1** Tier 1-3 JLUS Actions



## Policies and Practices

The 36 recommended policies or practices included in the JLUS aim to improve collaboration, coordination, and project execution and are not limited to one geographic area. A number of practices are already in place that support coordination among Portsmouth, Chesapeake, and the Navy that can serve as a foundation for partnering on issues of mutual concern in the future or could be expanded and strengthened to address other priority issues or opportunities. The policies and practices, as shown in Table ES.3, are intended to improve collaboration among JLUS partners, advocate for the advancement of local and regional priorities, strengthen policies and regulations for long-term community resilience, and leverage technology and data sharing to support decision-making.

A few sample strategies from the Policy and Practices recommendations are included below. The full list of policies and practices is available in the report.

- Adopt a Memorandum of Understanding (MOU) among JLUS partners to commit to working together to advance and implement JLUS priorities.
- Develop guidance for multijurisdictional projects that would define a formal coordination mechanism to ensure all affected parties are sufficiently engaged and consulted in the project.
- Continue to explore and pursue funding opportunities through the DoD Defense Community Infrastructure Program (DCIP) and Defense Access Road (DAR) Program.

- Develop regional guidance for integrating tidal and rainfall scenarios into local and regional transportation planning so that the information can be used in future scenario planning.
- Incorporate future climate conditions (rainfall, SLR) into locality comprehensive plan updates and area plans so that land use policy, growth management strategies, and siting of public facilities (schools, fire, police) consider future conditions for flooding.
- Consider the formation of a regional industrial lands task force to support the development of guidance for reducing risk along the Southern Branch of the Elizabeth River.
- Define geographic information system (GIS) data-sharing protocols, requirements, and points of contact at the cities and the Navy to support cross-jurisdictional technical studies, analyses, and project execution.

The planning horizon for the JLUS is approximately 50 years. The recommended actions, policies, and practices are intended to provide a roadmap for action that can begin today and focuses on the next 10 to 15 years. The implementation steps defined for each of the Tier 1 through 3 strategies provide direction for the JLUS partners on how to begin. The recommended actions, policies, and programs should serve as an implementation framework for the study partners. The JLUS process has aimed to establish an ongoing dialogue that should continue after the study is completed to help with implementation and continue to address ongoing and emerging issues.

**Table ES.3** Types of Policies and Practices

Type		Description
	Planning Coordination and Outreach Strategies	Coordination and outreach strategies are largely targeted at strengthening and formalizing coordination and communication between the JLUS partners, other regional stakeholders, and the public.
	Advocacy	The advocacy strategies are aimed at influencing state, federal, and regional actions in support of JLUS priorities.
	Policy and Development Regulations	Land use policies and development regulations are important tools for managing long-term compatible growth and development of a community.
	Technology and Data	Data sharing and technology can support decision-making and cross-jurisdictional coordination.

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# **JOINT LAND USE STUDY**