

Other Strategies

Strategy #	Project Name	Project Lead	Project Partners	Project Description	Priority		
					Priority Ranking- PDC	Priority Ranking- VB	
<b>Advocacy</b>							
1	Develop a joint advocacy campaign to promote: 1) funding for the Defense Community Investment Program (DCIP) and requiring that proposed projects be identified in a Joint Land Use Study to be eligible for funding; 2) the use of criteria for DCIP funding that is consistent with project evaluation criteria used in the JLUS.	HRPDC	HRMFFA, Cities, Navy	The advocacy campaign should be an on-going effort to push for legislative changes and funding to support JLUS priorities. The DoD could provide letters of support where applicable/appropriate.	H		
2	Establish a Resiliency Day at the Virginia General Assembly to raise awareness and share information about JLUS project priorities and issues.	HRPDC	HRMFFA, Cities, Navy	A dedicated day would help elevate awareness about the issues facing the DoD in Hampton Roads and build support for JLUS priorities.	L		
3	Pursue regular joint briefings to the Joint Subcommittee on Coastal Flooding and other state entities to promote understanding of JLUS issues and priorities.	HRPDC	HRMFFA, Cities, Navy	Regular briefings would help elevate awareness about the issues facing the DoD in Hampton Roads and build support for JLUS priorities.	H	L	
4	Coordinate with state agencies, including the office of the Secretary of Veterans and Defense Affairs, to establish priorities for state advocacy to the federal government			Increased coordination would help elevate awareness about the issues facing the DoD in Hampton Roads and build support for JLUS priorities among state agencies.	H		
5	Pursue an amendment to the VDOT Smart Scale criteria to include sea level rise, flooding, and military readiness as factors for prioritizing projects for funding	HRTPO		This would help to prioritize projects that consider benefits to military readiness.	H	M	
6	Pursue an amendment to the Code of Virginia and the Virginia Residential Property Disclosure Act for mandatory disclosure requirements for flood hazard for real estate transactions (purchase and rental).	HRPDC		Military personnel moving into the area may be unfamiliar with flood risks when choosing a place to live. More information about the local risks as well as the resources available to support families after an event would help families make more informed decisions.	H	H	
<b>Coordination</b>							
7	Adopt a Memorandum of Understanding among JLUS partners to commit to working together to advance and implement JLUS priorities and establish a JLUS Implementation Committee as an outcome of the MOU.	HRPDC	Navy, Cities	The MOU will formalize a commitment to work together on JLUS priorities and to establish a structure for coordination and collaboration. *We will discuss a draft organizational structure on Day 2 of the workshop.	H		
8	Adopt a regional policy or standard for incorporating flooding and SLR into city department and Navy capital planning projects as a requirement to ensure that all projects adequately address flooding and sea level rise vulnerability, risk and adaptation. .	HRPDC		Adopting a regional policy or standard (as a minimum) would create a consistent approach to evaluating vulnerabilities and impacts of projects across departments. The process is intended to ensure all risks are considered and reduced and to ensure these factors are weighed in making funding decisions.	H	M	
9	Define, document, and communicate a Navy installation development review process for development projects that occur outside the the installation and trigger a navy review requirement. The process should define internal Navy review timelines, a data requirement checklist to enable the Navy's review, and points of contact at the Navy.		Localities	The checklist would clarify the necessary steps and required timeline for applicants to follow so that development proposals can be properly evaluated by Navy personnel. This is aimed at optimizing review times and reducing delays that often occur due to developers not understanding the Navy timeline requirements.	M	L	
10	Establish a dedicated Military Liaison position for the City of Virginia Beach.		City of Virginia Beach	This position will create a parallel role in the City like that provided by Norfolk's Military Liaison. The two liaisons can jointly work to advance JLUS priorities and improve coordination among the JLUS partners. This could be achieved via a new position or defined as a new role in an existing position.	H	L	
11	Coordinate on Navy access control point (gates) projects and establish Navy policy to consider transit as part of new and redesigned gate access projects.		Navy	Changes to gate locations and or design should consider future transit access opportunities so as to not preclude installation transit access in the future. Lanes that could be adapted to serve as an HOV or Bus/Transit lane, and siting for potential internal transit shuttle drop off/pick up stations should be considered as well.	L	H	
12	Support the development a formal MOU between the Navy and VA Port to define coordination protocols for addressing ship to shore gantry cranes		Navy	VA Port, FAA	The movement towards larger/higher gantry cranes by the Port suggests a need for a more formalized process to ensure the Navy is considered early in the process to avoid any operational impacts.	H	
13	Develop a stormwater systems maintenance MOU for each installation and respective locality to define ongoing roles and responsibilities for routine maintenance of ditches, culverts, and other drainage components that span locality/Navy jurisdiction.	HRPDC			A model MOU could be developed that could serve as a template for each installation. The MOU should define data sharing, frequency of maintenance, access, monitoring, and permit coordination. The intent of this effort is to ensure consistent maintenance of drainage systems that span private/city/federal lands and to leverage all available resources to achieve improved performance.	H	H
14	Use the Directors of Utilities Committee convened by HRPDC to have the utilities provide regular updates on infrastructure upgrades. Define clear communication protocols and points of contact between local utilities, private providers (Dominion, VA Natural Gas), and the Navy to improve coordination on projects and expedite action during emergency events.	HRPDC			Collaboration occurs on a project level basis and overall getting information from utilities and providers can be challenging. The roundtable is a great opportunity to share information about projects that affect the DoD (as well as other customers) .	M	H
15	Through the JLUS implementation committee structure, provide briefings to review results of current drainage and SLR studies. Such studies may offer additional project partnering opportunities that could also be considered as JLUS priorities.	HRPDC			Current studies like the Virginia Beach Drainage Study and SLR study will result in potential projects that could help address issues identified in the JLUS. It will be important to assess the technical outcome of such studies and others in the future, and review the results for potential partnering opportunities to address identified JLUS concerns.	M	M
16	Invite City Managers, Councilmembers, and department heads to an annual briefing about Navy installation real property priorities and to identify those actions which require coordination and support.		Navy		The Navy should brief localities about overall mission changes and provide an update on real property projects so that the localities and utilities can ensure infrastructure support is in place. Sharing information may lead to the identification of other opportunities for joint funding.	M	already have
17	Establish coordinated emergency management and evacuation policies across localities modeled after Virginia Beach's approach and formalize joint installation/Locality emergency management teams. Ensure DoD invited to the Regional Emergency Management Technical Advisory Committee.		Localities	Navy	Virginia Beach and the Navy meet regularly and coordinate on emergency management activities both inside and outside the fence. The VB model should be considered as a regional model for coordination that could be strengthened if formalized. Formalized emergency management teams in both localities could formalize coordination on issues like evacuation and post disaster response.	M	H
18	Hold annual meeting on beach replenishment work underway on Chesapeake Bayfront areas to identify potential opportunities for collaboration and cost savings.				Coordination among the cities, Navy and USACE could benefit all parties.	M	
<b>Outreach/Education</b>							
19	Develop outreach materials for DoD personnel about the flood risks in the area; incorporate into city programs (Know your Watershed) and Navy briefings to families; disseminate through Fleet and Family Services (target military spouses).		Navy	Cities	DoD personnel moving into the area may be unfamiliar with flood risks when choosing a place to live. More information about the local risks as well as the resources available to support families after an event would help families make more informed decisions.	H	H
20	Update the Military Readiness Survey (HRTPO) to address issues related to flooding and sea level rise and how these issues affect overall access to work and other services.		HRTPO		These questions can help provide a better understanding of direct impacts associated with flooding and how it affects mobility.	M	H
21	Disseminate information about relevant infrastructure projects that are happening outside the fence, in proximity to the installation, to military personnel on base, including the expected localized impact, extent and duration of impact, and benefits (could be accomplished through existing outreach mechanisms or a new program administered by the PAO office).		Navy	Cities	This strategy is aimed at getting more information out to all ranks about projects (i.e. water line replacement) that could affect mobility.	M	H
22	Develop and distribute communications booklet/manual that identifies points of contact at the cities and Navy on various issues.				This booklet will facilitate more efficient coordination across local and federal agencies at the staff level.		

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Policy / Development Regulations						
23	Define a projected future flood hazard area based on modeled future SLR conditions (to at least 2065) and in consideration of all sources of flooding, and produce regulatory maps to show the design flood (include all repetitively flooded areas outside FEMA Special Flood Hazard Area (SFHA)).	HRPDC		This puts in place additional requirements aimed at reducing risk for those living and working in the region. This strategy would expand the current flood hazard area to include areas that would be impacted under a future SLR condition by current/increased storm events. Each locality could adopt consistent standards to promote a regional approach to this concept. These standards should apply to all structures (include any higher standards such as freeboard, cumulative substantial improvement and/or prohibition on breakaway walls). Once in place locally, the JLUS partners could lobby the General Assembly and multiple state agencies to incorporate similar standards into the Virginia Uniform Statewide Building Code.	H	H
24	Adopt Building Code-Coordinated flood ordinances that reference the Virginia USBC for all flood design requirements, and incorporate concepts of Design Flood and Flood Standards for increased coastal resilience.	Cities		FEMA has approved the use of the International Code series for meeting almost all of the NFIP requirements for participating communities. By relying on the VUSBC for flood design standards and adopting building code-compatible floodplain ordinances, communities reduce redundancy and inconsistencies between the two regulations. Incorporation of the Design Flood Elevation concept outlined above would be automatic and easily enforced with a simplified flood ordinance at the local level that adopts the design flood, and refers users to the VUSBC for structure flood standards. The local ordinances would continue to include any other higher standards.	L	H
25	Modify Virginia Beach Comprehensive Plan, Zoning Ordinance and variance requirements to align land use, density, height restrictions, open space requirements, setbacks and other building restrictions to limit density of future development or post-disaster redevelopment in areas where flood risk is highest now and in the future.	Virginia Beach		Encourage new development in areas where flood risk is minimal or manageable in the future (similar to Norfolk's Coastal Resilience Overlay and Upland Resilience Overlay).	L	H
26	Modify Zoning Ordinances and implement administrative policies to include repetitive flood losses in the definition of "substantial damage," thus making the National Flood Insurance Program's (NFIP) Increased Cost of Compliance coverage available after a damaging flood event to bring structures into compliance with current flood design standards.	Cities			L	M
27	Modify Zoning Ordinances and implement administrative policies to cumulatively track improvements and repairs to flood-prone structures over a 10-year period, thus triggering earlier compliance with current flood design standards.	Cities			L	M
28	Institute a city-wide policy to consider risks associated with flooding and SLR as part of any area plan update.	Cities		This would institutionalize the consideration of flood risk across multiple city departments.	M	EXISTS
29	Develop an Engineering + Construction Bulletin (similar to NAVFAC Sea Level Change Framework) to define requirements for addressing future SLR conditions. To promote regional consistency, the standards should seek consistency with the minimum local requirements recommended in #5.	Navy		Because the DoD does not yet have a policy on incorporating SLR or Design Flood Elevation in the planning and construction of its facilities, a draft Engineering Construction Bulletin (ECB) could be developed to summarize the recommended approach for including SLR considerations during planning, design, and construction. The former Sea Level Change Framework is based on rescinded standards so it would need to be updated.	H	H
30	Pursue training for asset managers, planners and others that would be responsible for implementing the NAVFAC regional standard aimed at incorporating sea level rise and flooding into military planning and construction projects.	Navy		The Navy does not have a mandated process or requirement to consider SLR in project design and development. Strategy #5 recommends a regional standard/criteria. A push for internal funding to support the required training for navy personnel is recommended.	M	
Technology and Data						
31	Support use of the Hampton Roads Geospatial Exchange Online ( <a href="http://www.hrgeo.org/">http://www.hrgeo.org/</a> ) as regional portal to share modeling data and projections, sensor networks and data, GIS data, streamline access to technical studies, share scripts and codes, and test aps for improving information dissemination. The portal is intended to help build a consistent approach to data use related to resiliency issues.	HRPDC		Use of a regional centralized data portal could streamline access to datasets and information. The portal should incorporate detailed modeling that has been done in the localities so that it can be used to assess regional impacts. This platform should aim to include Navy data (as appropriate). A higher education partner could provide support to this concept.	H	H
32	Define GIS data sharing protocols, requirements, and points of contact at cities and Navy to support cross-jurisdictional technical studies, analyses, and project execution	Navy, Cities		Data sharing can ensure that navy drainage infrastructure is understood and factored into analyses that are being done in the localities. Protocols and requirements can help institutionalize collaboration and communication.	H	H
33	Establish regional protocols (local govt and Navy) for collecting and recording damage from flood events to allow consistent reporting and analysis.			Flood complaint data details are recorded differently in each locality. A consistent approach to collecting and recording information is needed to enable the data to serve as an input to technical analyses.	H	M
34	Expand the Storm Sense program across the region and include DoD, VA Port facilities, and private utility providers (Dominion, VA Natural Gas) and pursue long term funding for maintenance and operation.	City of Norfolk		The goal is to have a comprehensive network of sensors that can be used to predict conditions and to support analysis of trends.	H	M
35	Adopt a regional-serving alert system that incorporates flood warning information and explore new technologies to pilot warning systems. Ensure system includes and works with DoD and VA Port systems.			The alert system can be promoted consistently across the region to reinforce a source for all of those working, living and visiting the region.	H	M
Transportation						
36	Develop on-installation shuttle networks that feed into the (expanded) regional transit system to ensure transit is viable option for DoD personnel.	Navy	HRT	On-base shuttle systems will be required to make transit a viable option for Navy personnel. The systems should be evaluated in coordination with HRT and the respective locality to ensure all access options are considered.	L	H
37	Develop a Navy Challenge program to reduce private occupancy vehicle usage (marketing, incentives) with the goal of instituting tougher restrictions on POV parking in the future as transit becomes more accessible and convenient. This program should be coordinated with other ride share and commuter service options.	Navy		A reduction in POV usage can help reduce roadway and gate congestion and reduce on-base parking challenges. While instituting parking restrictions may be challenging, it could help to drive demand for transit and support for more mobility options.	L	M
38	Implement electronic signage on-base to warn Navy personnel about flooding conditions and roadway impacts before they enter the roadway network.	VDOT	Navy, City of Norfolk	Signage would warn drivers about roadway conditions while still on base so they can identify an alternate route. The system could be tied into a broader regional alert system.	H	
Ships/Boats						
39	Establish a no-wake zone in Little Creek Harbor to reduce security threats of high speed recreational boating entering an operational area.	USCG	Navy	High speed boat traffic entering the harbor is a safety threat to JEB Little Creek. A no-wake zone coupled with enforcement could help deter high speed movements. This strategy would need to include a public outreach and education campaign.	M	
40	Modify the Dam Neck firing range extent into the navigational channel so that it improves safety, reduces intrusion into navy operating area, and reduces down time of the range.	USCG	Navy	Any modifications to the range would need to ensure that no negative impacts are generated on Navy training operations. The goal is to reduce the amount of downtime on the range related to non-navy activity/ship movements.	M	
Access Studies						
41	Evaluate options to address those neighborhoods where access to community assets could be affected by flooding and SLR. Table 6.1 of the Phase 3 analysis identified the top 5 assets affected based on the three SLR scenarios evaluated.	Cities		Each sub area tab includes recommendations for those facilities directly affected by flooding and SLR that are located in the sub area. This strategy addresses access more broadly; constrained access conditions can affect level of service, life safety responses, and disrupt day to day activities for DoD personnel. Community access should be a factor in all future community asset planning.	M	H