



TOWN OF KITTERY AND PORTSMOUTH NAVAL SHIPYARD **JOINT LAND USE STUDY**

DECEMBER 2019 - DRAFT APPENDICES - EXECUTIVE SUMMARY



WHAT IS A JLUS?

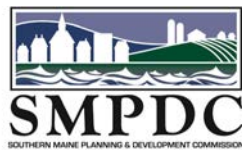
The Town of Kittery and Portsmouth Naval Shipyard Joint Land Use Study (JLUS) represents an opportunity for the Town of Kittery, Southern Maine Planning & Development Commission (SMPDC), regional jurisdictions, States of Maine and New Hampshire, and Portsmouth Naval Shipyard (PNSY) to strengthen their existing partnership, understand and address the issues impacting both the Navy and communities throughout the region, and establish a blueprint for mutually beneficial actions to support military readiness, and continued community growth and economic development.

Extensive public outreach and engagement occurred throughout the JLUS planning process. The JLUS Policy Committee and JLUS Working Group helped facilitate the JLUS planning process and development of the document. Each committee, together with affected stakeholders, participated directly with the project team to provide technical assistance, feedback, and decision-making.

A series of 24 Compatibility Factors were evaluated to identify and address issues that may have an adverse impact upon continued military operations at PNSY, or upon community growth and economic development

throughout the region. The compatibility analysis led to development of recommendations that include prioritized strategies and actions, responsible parties, timeframe, and possible funding sources to address identified compatibility issues. While Comprehensive, these recommendations should be considered a starting point for future studies, grant applications, and implementation actions to come.

The Town of Kittery and SMPDC sponsored the JLUS with funding support from the Department of Defense (DoD) Office of Economic Adjustment. The JLUS was created by the community and for the community.



Five communities, Three regional planning commissions, and several local, regional, and state organizations and agencies were active partners working with the Portsmouth Naval Shipyard and Town of Kittery on the collaborative planning effort:

POLICY COMMITTEE MEMBERS	WORKING GROUP MEMBERS	OTHER INTERESTED PARTIES
CAPT. DANIEL ETLICH	JACKIE JOHNSTON	BONNIE POTHIER
CAPTAIN DAVID HUNT	ADAM CAUSEY	ALEX PELCZAR
KURTIS KRUG	PAUL SCHUMACHER	DANNA EDDY
TREVOR THAYER	REBECCA GROVER	GARY HILDRETH
JEN BRICKETT	DAVE WALKER	KRISTOPHER TEIRNAN
DANA LEE	SCOTT BOGLE	
STEVE BURNS	COLIN LENZ	
LUCY ST. JOHN	CHRIS MANN	
DEANE RYKERSON	SAMUEL SCOTT	
JOHN BOHENKO	BOB CURRIE	
PETER STITH	DOT MORIN	
STEVE BUCK	DOUGLAS GREENE	
JIM NIMON	DYLAN SMITH	
MARK LAWRENCE	RAD NICHOLS	
TIM ROACHE	MICHAEL WILLIAMS	
JEN CZYSZ	JEN BRICKETT	
PAM TRINWARD	LUCY ST. JOHN	
MARGIT MYERS	BETH DELLA VALLE	
KENDRA AMARAL		

TOWN OF KITTERY AND PORTSMOUTH NAVAL SHIPYARD JOINT LAND USE STUDY

This study was prepared under contract with the Town of Kittery, Maine, with financial support from the Office of Economic Adjustment, Department of Defense. The content does not necessarily reflect the views of the Office of Economic Adjustment.

JLUS PROCESS AND PUBLIC OUTREACH

The JLUS process is designed to create a locally relevant document that builds consensus and obtains support from the various stakeholders involved. It becomes a roadmap for future studies, grant applications, and implementation actions. To achieve the JLUS goals and objectives, the process included a public outreach program with a variety of participation opportunities for interested and affected parties.

Two committees, comprised of municipal, regional, state, and federal representatives guided the development of the JLUS:

- A **Policy Committee** provided overall guidance and approval, meeting quarterly through 2019.
- A **Working Group** comprised of technical staff from each policy member organization met regularly throughout the course of the study to guide data collection, review findings, deliberate strategies, and review materials shared with the policy committee and the public.

From the beginning of the study, local and regional stakeholders were engaged to inform their constituents about the JLUS and involve them in understanding, addressing, and resolving the most important issues. Stakeholders include individuals, groups, organizations, and governmental entities interested in, affected by, or affecting the outcome of the JLUS findings and recommendations.

WHO WE SPOKE TO

COMMITTEES

- Policy Committee
- Working Group

STAKEHOLDERS

- Local Jurisdictions (counties and cities)
- Department of Defense (DOD) officials (including Office of Economic Adjustment representatives)
- Portsmouth Naval Shipyard
- Local, regional, and state planning agencies
- Local, regional, and state transportation agencies
- Local, regional, and state government representatives
- Military organizations
- Non-governmental organizations
- The general public (including residents and landowners)



HOW WE COMMUNICATED

MEETINGS

- Targeted roundtables
 - Transportation
 - Regional Governance
 - Planning
 - Kittery neighbors
- Stakeholder interviews
- Public open houses
- Shipyard visit

OTHER METHODS

- Project updates and fact sheets
- Project website
- Media articles
- Surveys





Public Open House - June 2019



Roundtable Session - March 2019



PNSY Pop-up - July 2019



Roundtable Session - March 2019

JLUS STUDY AREA

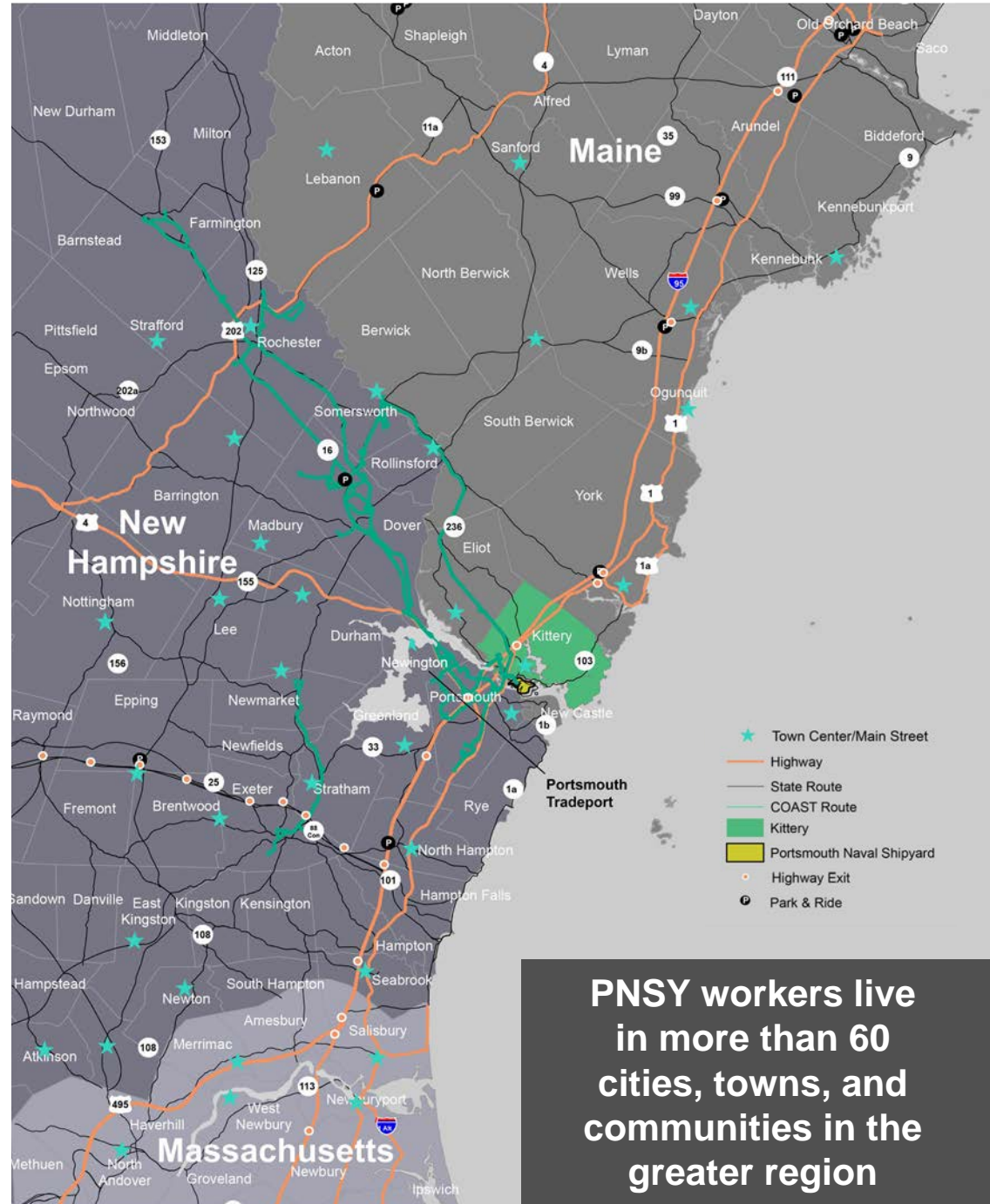
THE INSTALLATION

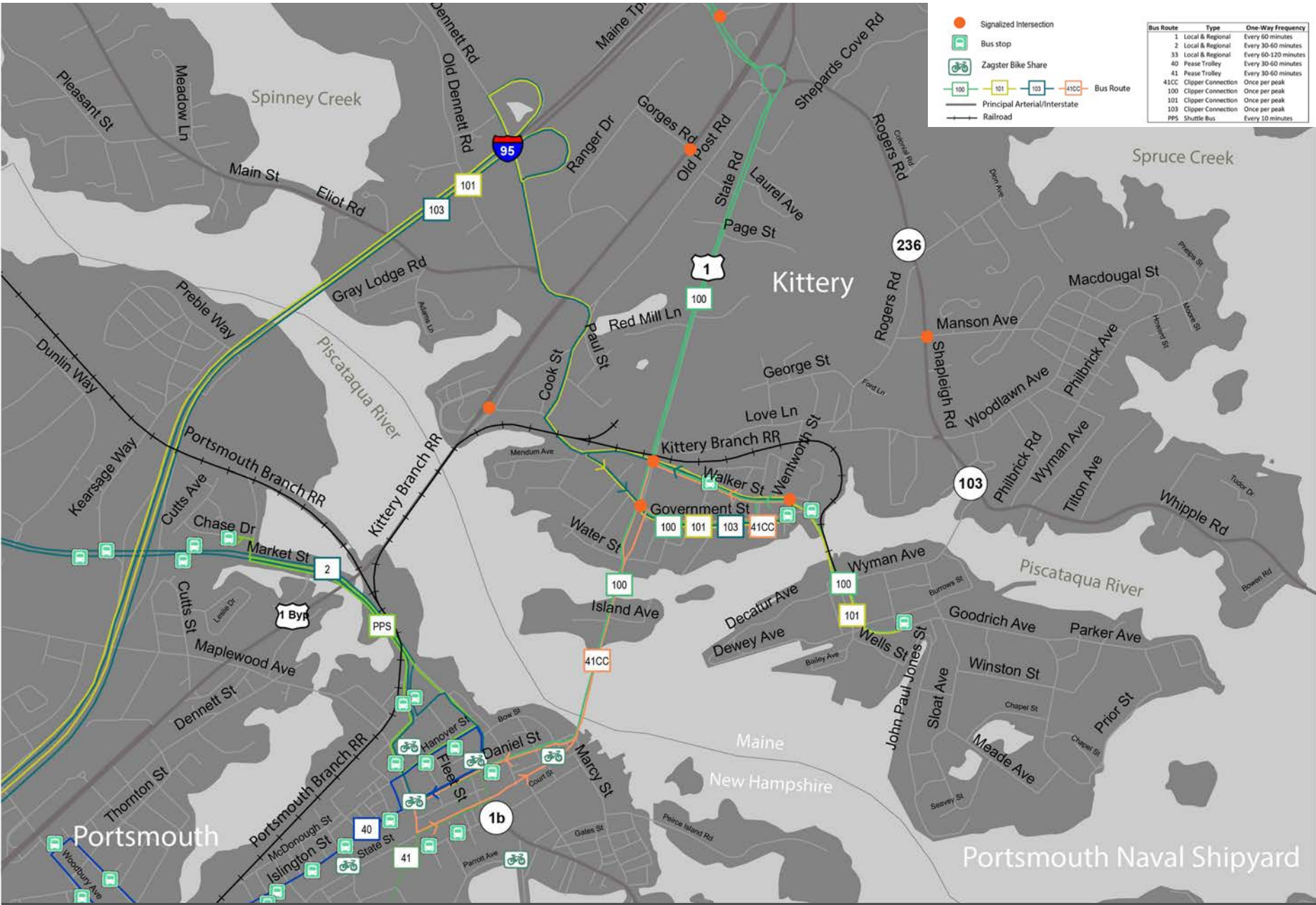
PNSY has been in operation since 1800 at its location 50 miles north of Boston. It is situated on Seavey Island in southeastern Maine on the Piscataqua River, bounded to the north by the Town of Kittery and to the south by the City of Portsmouth, New Hampshire. The installation is accessed by water from the Atlantic Ocean and by land via one of only two gate/checkpoint bridges landing in Kittery's Foreside neighborhood. The installation comprises 297 acres, including the main island, the two access checkpoints (Gate 1 and Gate 2), and housing both on (26 units) and off-site (approximately 200 units) located in Kittery.

The shipyard employs more than 7,000 full-time workers, in addition to approximately 2,000 contractors.

JLUS STUDY AREA

The study area includes all land near the shipyard that may impact current or future military operations, or be impacted by activities within the Town of Kittery and the region at large. While this includes the greater region from which workers commute on a daily basis, the town of Kittery and communities nearest to the PNSY are of primary focus, with a focused sub-area for more detailed analysis defined by the Route 1 roundabout (Memorial Circle) to the north of PNSY, the Maine Turnpike (I-95) to the west, downtown Portsmouth to the south, and Spruce Creek to the east.





PNSY's location presents both challenges and opportunities in transportation choices

KEY FINDINGS

THE REGION IS GROWING WITH THE HIGHEST LEVELS OF GROWTH FURTHER INLAND

Between 2010 and 2017, populations have increased in most towns in the region surrounding PNSY, with Kittery, York and Portsmouth growing between 2-6%. The population of Kittery in 2018 was approximately 9,500.

Towns further west from PNSY have -- and are expected to continue to see -- the highest growth in the next 15 years. From 2010-2017, towns such as Eliot and Wells grew between 6 and 14%. These inland communities are not along the region's major highway and transit corridors.



Source: Woodland Commons

AVAILABILITY OF AFFORDABLE HOUSING IS CAUSING PNSY WORKERS TO MOVE FARTHER AWAY

The growth in housing cost is arguably the largest contributor to regional congestion impacts from the PNSY. While the majority of PNSY workers once lived within walking distance, Kittery housing prices today are not affordable for over 70% of its residents. Less than 7% of shipyard workers live in Kittery today, with thousands pushed to inland towns with lower housing costs, such as Sanford, Berwick and Rochester, NH.



ROADWAY CONGESTION IS IMPACTING LENGTHS OF COMMUTE TIMES FOR PNSY WORKERS

Nearest its two gates, shipyard traffic makes up the vast majority of cars in both the AM and PM peak periods on streets within the Town of Kittery, like Walker Street, Government Street, and Shapleigh Road. Outside Kittery, PNSY traffic is a notable portion of regional traffic on some roadways, particularly Rt. 236, though shipyard workers travel an hour or more before the peak hour of other regional traffic.



Source: Campanella

PNSY WORKERS ARE USING BIKING, WALKING, CARPOOLS AND TRANSIT TO GET TO WORK MORE THAN THE REST OF THE REGION

PNSY workers drive alone **10-15% less** than people in the surrounding region of Rockingham County, NH and York County, ME.

Nonetheless, the convenience of driving—especially given the dispersed supply of housing that workers can afford—makes the use of other modes somewhat limited. Transit routes to the shipyard are well-utilized, but insufficient transit coverage exists to capture more workers.



PNSY ECONOMIC ACTIVITY HAS SIGNIFICANTLY GROWN IN 20 YEARS BUT THE REGION IS OVERLY RELIANT ON ITS ECONOMIC CONTRIBUTION

In 2018, PNSY generated the largest single economic impact in southern Maine at \$882.6 million, of which 62% is civilian payroll. Approximately 10% of the Town of Kittery’s workforce is employed by PNSY. Additional impact comes from spending at Kittery business by military personnel and civilian jobs supporting the shipyard.

In an attempt to diversify the local job base, the Town has initiated efforts to promote business diversification through its primary economic development areas.



NEEDS FOR NEW, SKILLED WORKERS ARE INCREASING AS EXPERIENCED PNSY WORKERS RETIRE

Finding skilled workers has been a growing problem for the PNSY due to two primary trends. First, attractive high-technology employment options have grown outside of Maine, with young workers drawn to growing jobs centers like Boston and many other cities around the country. Second, local housing costs have grown dramatically, making many young workers leave the region for lower-cost parts of the country where similar or greater pay is possible.



COMPATIBILITY ANALYSIS

The goal of compatibility planning is to promote an environment where both community and military entities communicate, coordinate, and implement mutually supportive actions that allow both to achieve their respective objectives.

Compatibility, as it relates to military readiness, can be defined as the balance or compromise between community needs and interests and military needs and interests. A number of factors assist in determining whether community and military plans, programs, and activities are compatible or in conflict with each other. For the JLUS, 24 compatibility factors were analyzed, and a core set of 10 key issues.



HOUSING



REGIONAL COORDINATION



COMMUNICATIONS



ECONOMIC RESILIENCE



ENVIRONMENTAL



TRAFFIC AND TRAVEL SAFETY



CONGESTION



TRANSIT



PARKING



BIKING AND WALKING

The objectives of the PNSY, Town of Kittery and Southern Maine Planning and Development Commission are an important consideration as all partners of the JLUS look for opportunities to synchronize their efforts for the long-term benefit of the region.

PNSY MISSION

We are Portsmouth. Together we are honor bound to support and defend the Constitution of the United States. We do so proudly by maintaining, repairing and modernizing our Navy's submarines so that they can go in harm's way, defeat our enemies in war and return their crews home safely.

PNSY VISION

People love to work at Portsmouth. Their passion, dedication, innovation and unified effort ensure we will always be the Navy's Center of Excellence for submarine maintenance.

PNSY VALUES

We define Portsmouth every day through our service. With this service comes great responsibility; to our families, to each other, to our heritage, and to our Nation. We meet these responsibilities by living up to the values embodied in our Declaration of Excellence and the Navy's core values of honor, courage, and commitment.

VISION FOR KITTERY FORESIDE NEIGHBORHOOD (Kittery 2015-2025 Comprehensive Plan)

The Foreside is a thriving, historic neighborhood that includes Maine's earliest working waterfront. We envision a future for the Foreside that benefits the entire town by:

- Maintaining the historic, working-class character and scale of the Foreside;
- Preserving Foreside building stock by adopting a preference for creative or adaptive reuse of existing buildings;
- Ensuring the availability of integrated workforce housing in the Foreside;
- Encouraging walking and biking in the Foreside;
- Preserving the Foreside's working waterfront; and
- Protecting and expanding green space in the Foreside

VISION FOR SOUTHERN MAINE PLANNING AND DEVELOPMENT COMMISSION

The purpose of SMPDC is to strengthen local municipal self-government while combining total resources for meeting regional challenges beyond individual capacities; to serve as a mutual forum to identify, study, and bring into focus regional challenges and opportunities; provide organizational support to enable communication and coordination among governments and agencies concerned with regional issues and opportunities; to act as an advocate where membership directs; and to exercise such powers as the member municipalities may delegate.

PEOPLE-CENTERED ANALYSIS RESULTS & RECOMMENDATIONS

SUMMARY OF COMPATIBILITY ANALYSIS RESULTS

COORDINATION + COMMUNICATION



Military installations and agencies that oversee their jurisdictions should maintain open lines of communication for shared issues. PNSY and the Town of Kittery have informal communication channels established.

PUBLIC + MILITARY BASE SAFETY



Population growth and increased recreational activity near installations can lead to safety issues. PNSY has strong and defined boundaries both on land and in water for the protection of both parties, ensuring ongoing compatibility.

LEGISLATIVE INITIATIVES



Federal, state, or local laws and regulations may have impact on installation's ability to conduct missions because of development limitations. This is not applicable to PNSY and the Town of Kittery.

CULTURAL RESOURCES



The presence of cultural resources (including Native American resources) may prevent or restrict military development. However, no applicable resources have been identified within the JLUS study area.



SUMMARY OF RECOMMENDED STRATEGIES

REGIONAL COORDINATION ISSUES

CATALYTIC STRATEGY

- **Maximize Partnership Opportunities to Attract Funding** -- Regions that work collaboratively attract greater state and Federal assistance.

SUPPORTING STRATEGIES

- **Increase Participation at Regional Committees and Board Meetings**
- **Initiate Quarterly Meetings between Regional Planning Commissions (RPC's)**

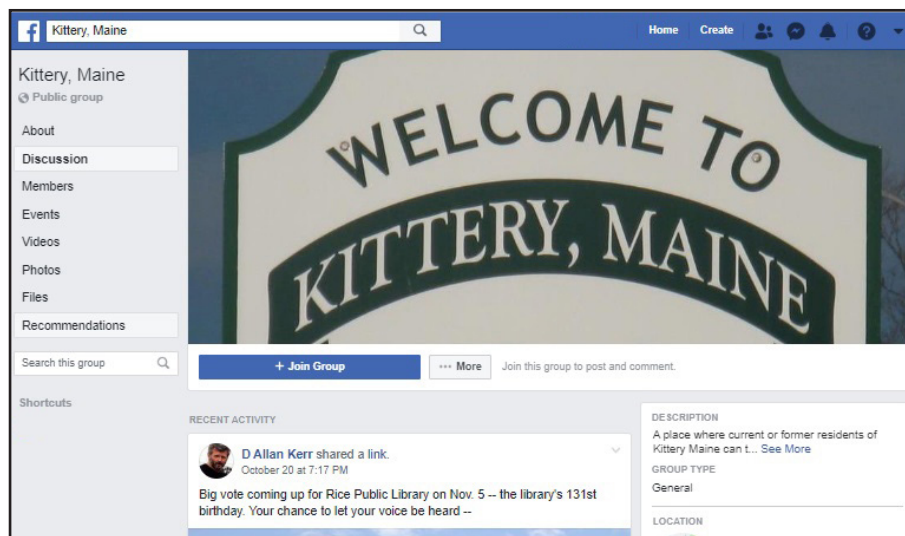
COMMUNICATION ISSUES

CATALYTIC STRATEGY

- **Develop PNSY- Town of Kittery Communications Plan** Formalizing the good lines of communications that exist today preserves them for the future.

SUPPORTING STRATEGIES

- **Maximize Opportunities to Engage the Public Through Social Media**
- **Form A Reverse-911 Procedure**



Preserving regional communications platforms for the future is essential.



Members of both JLUS committees should continue their coordination.

NATURAL RESOURCE ANALYSIS RESULTS AND RECOMMENDATIONS

SUMMARY OF COMPATIBILITY ANALYSIS RESULTS

NATURAL RESOURCE FACTORS

SCARCE NATURAL RESOURCES



Valuable natural resources (oil, natural gas, minerals, water) which may be located on military installations can impact land utilization and military operations. There are no identified resources on land dedicated to PNSY.

RESILIENCE



Sea level rise and other events resulting from climate fluctuations may present operational and planning challenges. Various studies show that there may be existing vulnerable areas that require further mitigation efforts.

THREATENED SPECIES



Threatened species and their habitats may require special development considerations for PNSY. There are currently adequate procedures in place for protection of species that may be impacted by PNSY activity.

MARINE ENVIRONMENT



Regulatory or permit requirements protecting marine and ocean wildlife may impact the military's ability to conduct water-based operations, training exercises, or testing. No current issues have been raised that impact PNSY's capabilities.

LAND/AIR/SEA SPACES



Adequate supply is necessary for the military to accomplish effective training, testing and operational missions. Current PNSY land constraints have resulted in the pursuit of off-base development, as needed. On-base development is planned efficiently as possible.

AIR QUALITY



To achieve operations safely, air quality with the lowest level of pollutants possible (as Federally and State-regulated) is required. Current conditions do not pose a threat to operations or to the health of PNSY and the public.

WATER QUALITY + QUANTITY

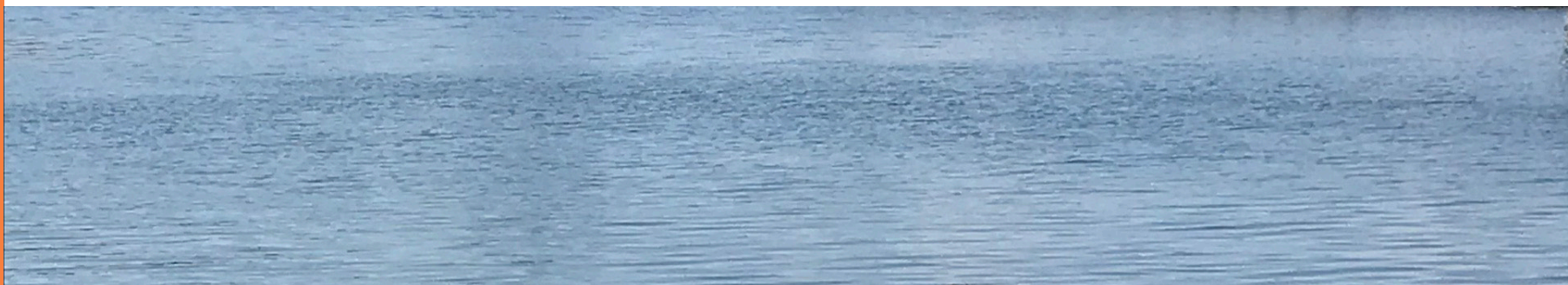


Adequate supply of good quality water should be available for use by the installation and surrounding communities as the area develops. There are currently very limited freshwater resources in the Town of Kittery, which PNSY is also reliant upon. Additional long-term measures to secure water supply should be explored.

NATURAL FEATURES



The likeliness of natural events, such as floods, may require special development considerations and should be included early in the planning process. There are currently procedures in place for PNSY facilities that may be vulnerable.



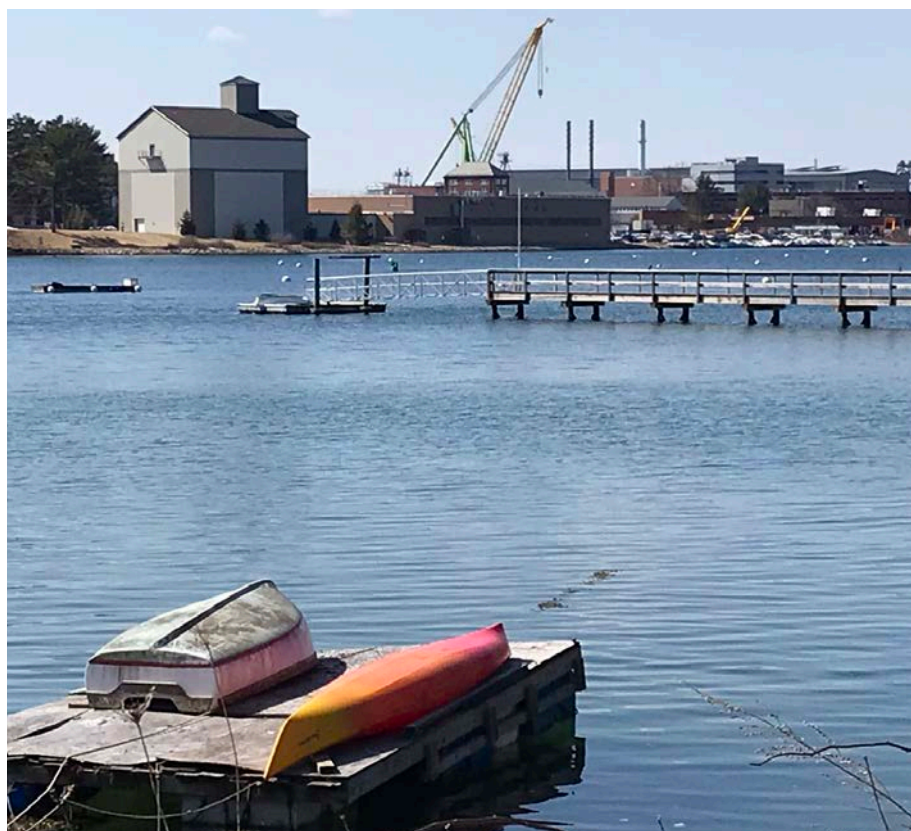
SUMMARY OF RECOMMENDED STRATEGIES ENVIRONMENTAL ISSUES

CATALYTIC STRATEGY

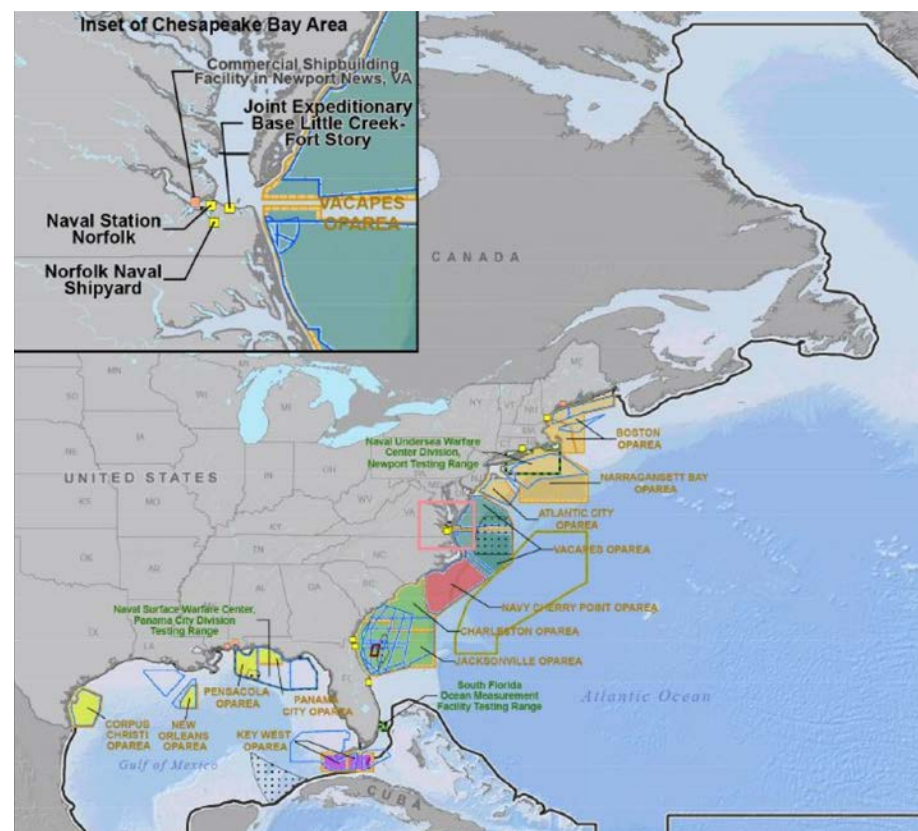
- **Explore Community - Military Resilience Partnership**
While Climate Forecasts May Vary, Any Unanticipated Flooding Can be Costly to PNSY and the Region.

SUPPORTING STRATEGY

- **Ensure Compatibility of Alternative Energy Projects**



As a waterfront installation, PNSY has regularly dealt with potential flooding, but extreme events pose greater challenges



Off-shore wind projects projects can provide needed renewable energy, but military operations must be understood during planning.

DEVELOPMENT RELATED RESULTS AND RECOMMENDATIONS

SUMMARY OF COMPATIBILITY ANALYSIS RESULTS

DEVELOPMENT FACTORS

LAND USE



Federally-owned land is not subject to local zoning or land development regulations, but adjacent land uses may impact continued military operations or pose a public safety issue. There are no existing incompatibilities with adjacent lands in Kittery. However the limited land available to PNSY for any expansion to accommodate future operations may impact its overall mission.

LIGHT + GLARE



Light sources on or adjacent to the installation may impact installation neighbors or certain installation. Thanks to open lines of communication over the years, any negative lighting impacts have been immediately corrected.

LOCAL HOUSING AVAILABILITY



Adequate housing supply in a variety of options and prices is essential to support the growing PNSY workforce. Housing should be available near the installation, when possible. There is significant disparity between available supply in Kittery and what workers are able to afford. A number of solutions should be investigated.

ENERGY DEVELOPMENT



Energy developments from oil/gas, solar, wind, geothermal and/or biofuels could pose compatibility issues related to vertical obstructions or water quality/quantity. No definitive energy developments with potential impact on PNSY have been identified.

SPECTRUM INTERFERENCE



Frequency capacity is critical for maintaining existing/future missions. Electronic signals can be impeded by structures, or objects, or competing frequencies. No sources which could cause potential interference have been identified in the area surrounding PNSY.

DUST/SMOKE/STEAM



If sufficient in quantity, emissions may reduce visibility during flight operations or cause equipment damage (including from artillery exercises or industrial activities). There are no known activities or facilities at or near PNSY which may cause a compatibility issue.

NOISE + VIBRATION



Noise generated from operations on PNSY as well as from its traffic may have impact on people in adjacent areas of the community as well as animals. PNSY generates varying levels of noise and vibration; however measures are in place to help mitigate their impact, and open lines of communication between PNSY and the Town of Kittery are kept to address any issues.

SAFETY ZONES



Areas which support PNSY activities that may pose higher risks to public safety (both on land and in water) should be restricted to development. For PNSY's island location, water safety zones are defined as well as procedures to maintain security and public safety.

ANTI-TERRORISM/FORCE PROTECTION



PNSY personnel, facilities and its secure information require protection from outside threats, ranging from cyber-threats to protection during external emergency events to encroachment of PNSY boundaries through development. PNSY indicates no existing or planned development along the coastline poses a security threat, and other procedures are in place to manage its overall security.

VERTICAL OBSTRUCTIONS



Obstructions by buildings or structures such as cell towers may encroach upon sightlines required by the installation. PNSY's mission does not include flight operations and there are no existing structures that have been identified as causing a potential incompatibility.

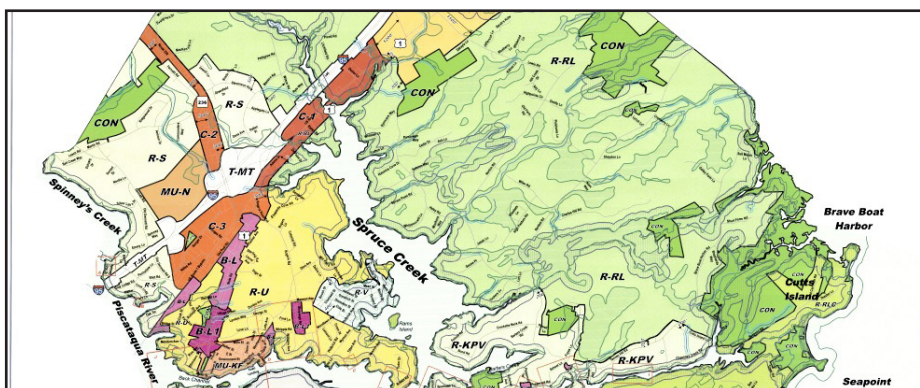
SUMMARY OF RECOMMENDED STRATEGIES HOUSING ISSUES

CATALYTIC STRATEGY

- **Increase Housing Affordability Through Rezoning**
Incentivizing the development of local workforce housing helps reduce regional traffic

SUPPORTING STRATEGY

- **Develop Mixed-Income, Multi-Family Housing Program**



Recent zoning changes encourage workforce housing, but more incentives are needed.



Denser housing is only affordable with the right incentives for developers.

ECONOMIC RESILIENCE

CATALYTIC STRATEGY

- **Encourage Mixed-Use Development to Diversify Economy**
More local services and destinations for shipyard workers strengthens the local economy while reducing peak traffic loads.

SUPPORTING STRATEGIES

- **Explore Commercial Spin-Off from PNSY** **Man-ufacturing**
- **Integrate JLUS Findings Into the Next Comprehensive Economic Development Strategy (CEDS) Update**
- **Tap Into PNSY Contracting to Support Small Business**

Image Source: Woodland Commons

TRANSPORTATION RELATED RESULTS AND RECOMMENDATIONS

SUMMARY OF COMPATIBILITY ANALYSIS RESULTS

INFRASTRUCTURE CAPACITY



Extension and maintenance of infrastructure (including bridges that provide access to PNSY) should support consistent vehicle access long-term as well as support capacity from anticipated growth and development. However, long-term construction work may cause particular travel and access interruptions. While there are no projected extension or maintenance works on roads and bridges leading to PNSY that would have a potential impact, upcoming regional roadwork may lengthen commute times.

ROAD CAPACITY + CONGESTION



Local and regional capacity and congestion may impact whether PNSY workers are able to efficiently carry out their work. Particular locations in Kittery have been identified that are prone to daily congestion at peak travel periods for PNSY workers. Various approaches for reducing congestion (both on the road and programmatically) should be considered.

TRANSPORTATION FACTORS

SUMMARY OF RECOMMENDED STRATEGIES

BIKING AND WALKING ISSUES

CATALYTIC STRATEGY

- **Improve Appeal of Biking/Walking With Bumpouts, Signals, Bike Lanes, etc.**
Local congestion threatens those walking and biking, but simple improvements can make Kittery safer and more attractive for commuting without a car.

SUPPORTING STRATEGIES

- **Road Diet on Route 103 and Love Lane to Accommodate Bikes and Pedestrians**
- **Establish Protected Bike Lanes on Bridges that Connect to Kittery**
- **Expand Bikeshare Program to Kittery**
- **Launch Park and Pedal Program From Nearby Park and Ride(s)**
- **Improve Bike Awareness Education**

TRAVEL AND TRAFFIC SAFETY ISSUES

CATALYTIC STRATEGY

- **Traffic Calming Near Gates 1 and 2**
efforts to slow shipyard traffic in nearby neighborhoods will improve safety and compatibility with nominal impact to worker access.

SUPPORTING STRATEGIES

- **Increase Police Enforcement**
- **Improve Driver Warning Signage for Pedestrians and Bicyclists**
- **Improve Signage for Designated Truck Routes**

CONGESTION ISSUES

CATALYTIC STRATEGIES

- **Extend Transit to Sanford**
Expanding successful existing vanpool, carpool, and transit networks will reduce vehicle traffic, helping all commuters

SUPPORTING STRATEGIES

- Investigate Opportunities for Staggered Shifts and Remote Working
- Add Traffic Signals or Turn Lanes at Woodlawn/Shapleigh Intersection
- Add A Bus-only Lane Along Walker Street
- Improve Gate Efficiency (e.g. Expand Hours, Increase Personnel)
- New Procedures for Contractor Access and Parking
- Provide Real-Time Feed of Gate Vehicle Activity

TRANSIT ISSUES

CATALYTIC STRATEGIES

- **Establish New Regional Park and Rides**
Multiple creative regional solutions can create a network of shared travel options accessible from regional park & rides.

SUPPORTING STRATEGIES

- Coordinate With Other Employers For Shared Options
- Broaden Education/Advertisement of Transit Incentive Programs
- River Ferry Between A Dover Park and Ride and PNSY

PARKING ISSUES

CATALYTIC STRATEGY

- **Develop Local Park and Ride and Explore Using Rail Spur for Gate 1 Access**
A nearby park & ride facility can reduce gate traffic delays by conveying workers on shuttles a short distance-- potentially along the local rail spur.

SUPPORTING STRATEGIES

- Incentivize Landowners to Formalize Park and Ride Agreements
- Create New, Off-Yard PNSY Parking Within Walking and Shuttle Distance

Three JLUS documents are available to the public, elected and appointed officials, and the military for educational and communication purposes. These documents are as follows:

JLUS EXECUTIVE SUMMARY BROCHURE

The JLUS Executive Summary Brochure can be used as a quick reference to explain the purpose of a JLUS and provides an overview of the JLUS compatibility factors, their analysis and recommended strategies.

JLUS REPORT

The JLUS Report presents an overview of the JLUS planning process, purpose and objectives of the study and the recommended Implementation Plan. The report presents a concise description of the following:

- JLUS project study area
- Population profile and economic overview of PNSY, the Town of Kittery, and the general region
- Summary of the analysis of 24 identified compatibility factors within 10 key issue areas
- Set of recommended strategies and action items to mitigate or prevent incompatibility

JLUS FACT SHEETS

The JLUS Fact Sheets provide a brief summary of progress at various stages of the study, including highlights of data and early analysis, key findings, status of the project timeline, and explanation of the intended team approach and next steps.

This study was prepared under contract with the Town of Kittery, Maine, with financial support from the Office of Economic Adjustment, Department of Defense. The content does not necessarily reflect the views of the Office of Economic Adjustment.

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