TOWN OF KITTERY + PORTSMOUTH NAVAL SHIPYARD JOINT LAND USE STUDY Stantec

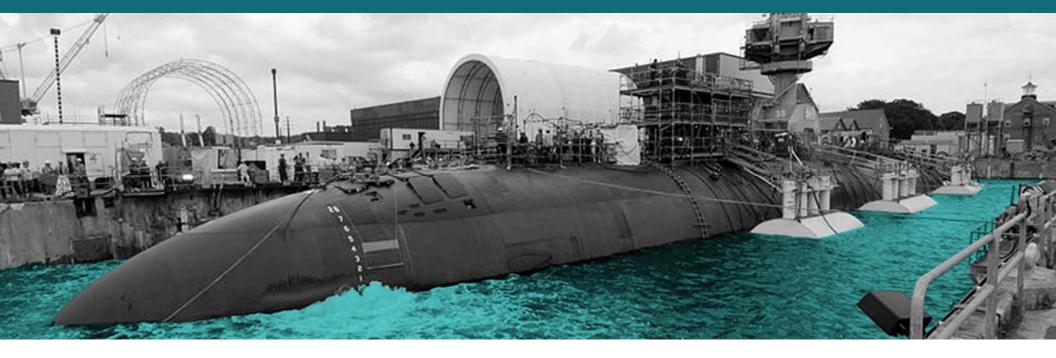








Kittery Town Council Meeting – February 24, 2020



Process Overview







OUTREACH

January 2019 PNSY tour



DRAFT



24 COMPATIBILITY FACTORS

PEOPLE, NATURAL RESOURCES, DEVELOPMENT.

Communication



Interaction amona military installations jurisdictions, and land, resource management agencies and conservation authorities equires communication regarding compatibility

Land/Air/Sea Spaces Air Quality



Adequate supply are necessary for the military to accomplish effective training, testing and operational missions. Military and civilian air operations can compete for limited air space. Shared resources impact future growth for all users

Threatened + **Endangered Species**



Federal and state listed species and their habitats may include areas such as wetlands and migratory corridors. The presence of sensitive biological resources may require special development considerations.

Air quality is regulated at the federal and state level. For compatibility, primary concerns are pollutants that limit visibility and potential non-attainment of air quality standards that may limit future changes in operations

> Marine Environment



Regulatory or permit requirements protecting marine and ocean resources can cumulatively affect the military's ability to conduct operations, training exercises, or testing in a water-based environment.

Public + Military Base Safety



Population growth in

surrounding areas.

coupled with adjacent

parks and recreation

eas can impact on the

safety of military

installations, either

intentional or

uninentional.

Federal state or local aws and regulations may have a direct or indirect effect on a military installation's ability to conduct current and/or future missions or limit the development potential into adjacent areas

Scarce

Natural Resources

Valuable natural

ources (oil, natural gas

minerals, water) which

may be located on

military installations,

aining areas or on public

lands used for military

operations can impact

land utilization and

military operations.

Quality + Quantity

Concern for adequate

water supplies of good

quality are available for

se by the installation and

surrounding communities

as the area develops.

Water supply for

agricultural and industrial

use is also considered.

Initiatives



The presence of cultural esources, may prevent or restrict development, or require special access by governmental regulatory authorities. Native American tribes or other

Cultural



entities.

Road Capacity/ Congestion



Roadway capacity lates to the ability of the existing network of freeways, highways, arterials, and other local roads to provide adequate mobility and access between military installations and their urrounding communities

Light and Glare



Man-made lighting may disrupt vision, Light sources and excessive glare from adjacent sidential/non-residential uses at night can impact the use of military night vision devices and air operations.

Local Housing Availability



An adequate supply of housing is needed to meet the existing and future demand of the military installation and of the region.

Energy Development



Energy development rom oil/gas, solar, wind, geothermal and/or biofuels, could pose compatibility issues related to glint/glare. vertical obstructions, or water quality/quantity. 7 KEY **AREAS OF CONCERN**



Fluctuations in climate nav include sea level ris acreased storm and tide urges persistent flooding heavy rainfall, drought vildfires, and can prese operational and plannic challenges.

Natural

Infrastructure Extensions + Capacity



installation by providing needed services (e.g. sanitary sewer treatmen

capacity and transportation systems). lowever, expansion may encourage growth in areas incompatible with missions.

Spectrum Impediment/ Interference



Frequency capacity is critical for maintaining existing/future missions Electronic signals can be impeded by structures or objects, and the inability to distribute or receive a particular frequency can be caused by the interference of a similar competing frequency.

Dust/Smoke/Steam



Dust, smoke and steam are compatibility issues if sufficient in quantity to impact flight operations le.a. reduced visibility or equipment damage). Examples include: fire (artillery exercises). ground disturbance (military operations), or industrial activities.

Noise and Vibration



The central issue is the impact and perceived impact on people. animals (wild and domestic) of unwanted levels of sound. Exposure to high noise levels can have a significant impact on the adjacent areas





Local jurisdictions comprehensive growth policy plans and zoning ordinances can be the most effective tools for avoiding or resolving ompatibility issues when the use of one property may impact the use of another (e.g. noise)

Safety Zones



The presence of seismic in areas where activity, floods and development should be climactic events from more restricted due to ther natural events may higher risks to public require special safety. Examples of such are potential accident onsiderations and should zones, weapons firing range safety zones, and be included early in the planning process. explosive safety zones.

Anti-terrorism/ Force Protection



The safety of personnel. facilities and information on installation from outside threats is paramount. The protection of the installation and its support facilities can impact off installation uses.

Vertical Obstructions



Verical obstructions by buildings, structures, such as cell towers and drilling rigs, or other features may encroach upon military operations, presenting a safety hazard to both the public and military personnel.

Stantec

SNAPSHOT- THE REGION

ECONOMY

- Over \$850M infused into local economy annually
- By comparison, Pease Tradeport combined regional wage impact is \$730 million

HOUSING

- There is a large gap between median home price \$345k and median income \$289k
- Based on price, 85-90% of homes in Kittery and Portsmouth are unattainable

GROWTH

 The region is expanding and growing outward as PNSY workers seek affordable places to live

SNAPSHOT- TRANSPORTATION

MODE-SHARE

- PNSY workers have the lowest drive-alone mode share in the region
- COAST ridership doesn't align with most worker origins

TRAFFIC PEAKS

- PNSY workers have minimal impact on highway traffic (I-95 & NH Rt. 4) but are a significant percentage of traffic on regional arterials (SR 236)
- Earlier arrival/departure hours help reduce impact

CONGESTION

- Workers contribute to congestion, however it is localized
- Local road networks have ample capacity to support volume

OUTREACH



ROUNDTABLES

5 groups with varied interests:

- Planning
- Governance
- Transportation
- Gate 1 Neighbors
- Gate 2 Neighbors

These discussions helped define the key issue areas to be analyzed in depth through further engagement efforts



OPEN HOUSE

The event had a good level of attendance from the public.

Priorities leaned heavily towards addressing:

- Congestion issues
- Improving transit options
- Utilizing Kittery Police to help improve travel safety



PNSY POP-UP

Many workers completed the survey on the spot.

Previously raised issues were also shared regarding:

- Contractor procedures
- Parking issues
- Lack of shift flexibility
- Efficiencies at the gates

Community



573
RESPONSES!

PNSY



2,000+
RESPONSES!

OUTREACH

PUBLIC AND PNSY SURVEYS

Questions were slightly adjusted for each group to address most relevant topics relating to transportation and parking



Community

Topics most frequently raised:

- Frustration with speeding vehicles and
- Frustration with congestion (being attributed to PNSY)
- Desire for more PNSY workers to carpool
- Desire for a new parking garage near PNSY
- Desire to investigate new transportation options including rail or ferry

PNSY

Topics most frequently raised:

- Desire for staggered work shifts
- Desire for a remote park and ride with shuttle service
- Frustration with efficiency of Gate procedures and limitations of open/close periods
- Desire for contractors to have separate access procedures/times and parking from regular employees
- Desire for a new parking garage near PNSY

OUTREACH

SURVEY SUMMARIES



7 KEY COMPATIBILITY FACTORS → 10 STRATEGY TOPIC AREAS





























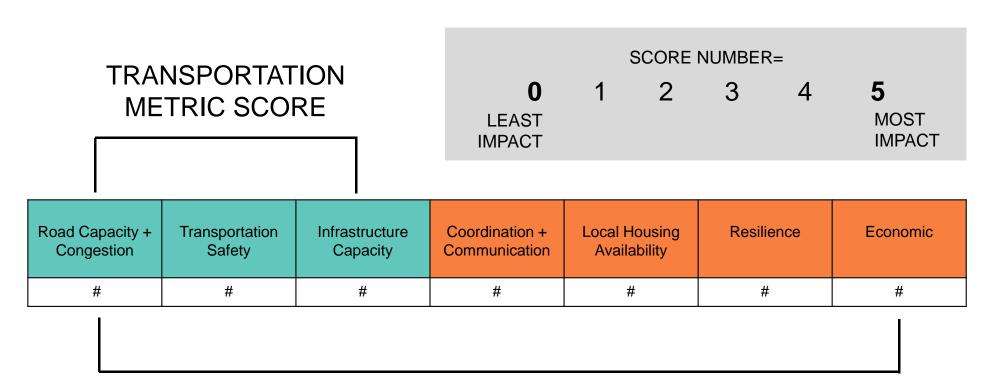






STRATEGY SUMMARY

COMPATIBILITY SCORES EXPLAINED



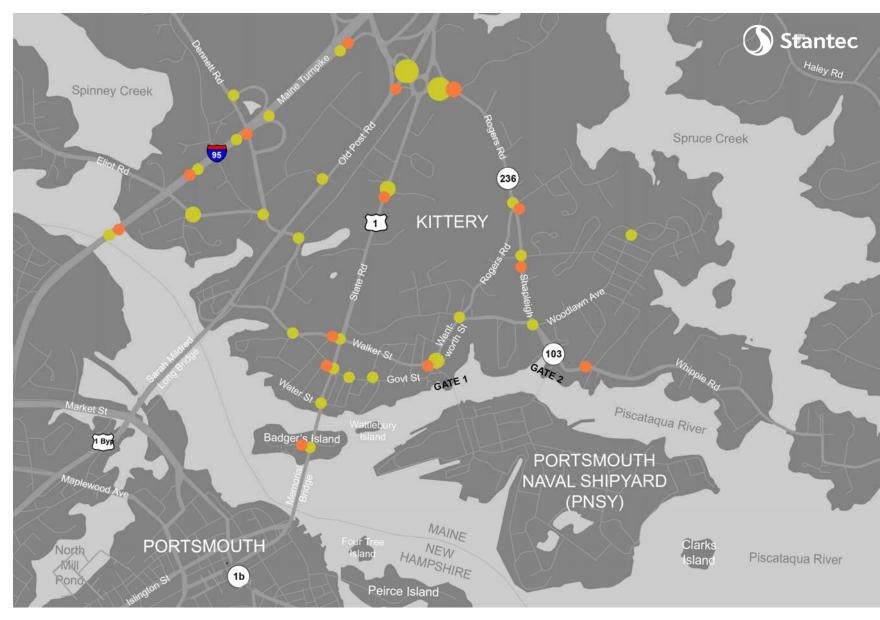
OVERALL METRIC SCORE

Crash Locations (2017-2019)

- Approaches to Rt. 1 traffic circle remain largest safety concern
- Otherwise, crash patterns are generally proportional to volume



Data Source: MaineDOT



A. TRAVEL + TRAFFIC SAFETY

CATALYTIC STRATEGY 1 1. WALKING AND BIKING SAFETY SIGNS



COMPATIBILITY SCORE



Transportation Metric Average



Overall Metric Average

CONTEXT

Gate-related congestion has particular impact on the safety of its nearest intersections. The closer people get to the gate, the greater the number of conflicts between cars, bikes, and pedestrians.

SCORE ANALYSIS

- Slower vehicle speeds lead to improved safety
- Improvements encourage more walking & biking

SAMPLE ELEMENTS

- Curb extensions
- Lane narrowing
- Parking chicanes
- Yield signing & markings
- Raised devices

PRIMARY RESPONSIBLE PARTY

Town of Kittery

FULL

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
2	5	2	1	1	1	2

SUPPORTING STRATEGIES

2. INCREASE SPEED + SAFETY ENFORCEMENT



3. WALKING AND BIKING SAFETY SIGNS

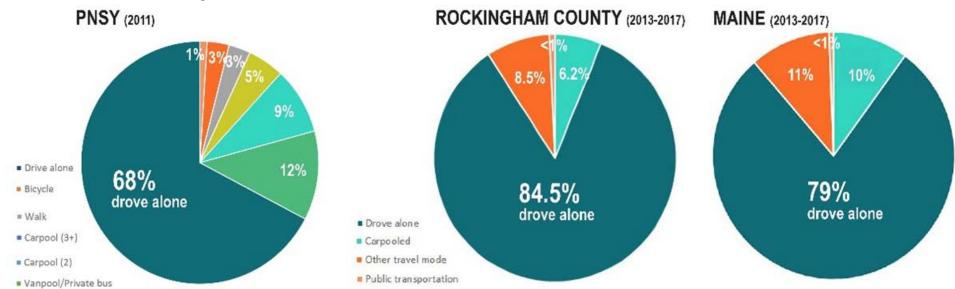


4. CLEAR TRUCK ROUTE SIGNAGE



Commute Mode Shares

 PNSY workers have the lowest drive-alone mode share in the region





B. CONGESTION

CATALYTIC STRATEGY 2

5. EXPAND CAR/VANPOOL PRICING INCENTIVES



COMPATIBILITY SCORE



Transportation Metric Average



Overall Metric Average

CONTEXT

PNSY employees currently have higher participation in car/vanpooling than national averages but paying a cash subsidy to all participants (not just drivers) could increase numbers further.

SCORE ANALYSIS

- Cash or other incentives to rideshare participants encourages a shift from single-vehicle commuting
- Less single vehicles on the road lead to reduced congestion during peak periods

SAMPLE ELEMENTS

- Expand TIP offerings
- Utilize modern software programs
- Consider cash-equivalent perks

PRIMARY RESPONSIBLE PARTY PNSY

FULL

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
2	2	5	2	1	1	1



SUPPORTING STRATEGIES

6. STAGGERED WORK SHIFTS/ TELEWORK OPTIONS



9. GATE EFFICIENCY SOLUTIONS



7. TRAFFIC SIGNALS NEAR THE GATE



10. CONTROLS ON CONTRACTOR PARKING AND ACCESS



SEACOAST

8. BUS-ONLY LANE ALONG WALKER STREET

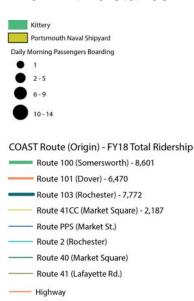


11. REAL-TIME GATE ACTIVITY
ALERTS



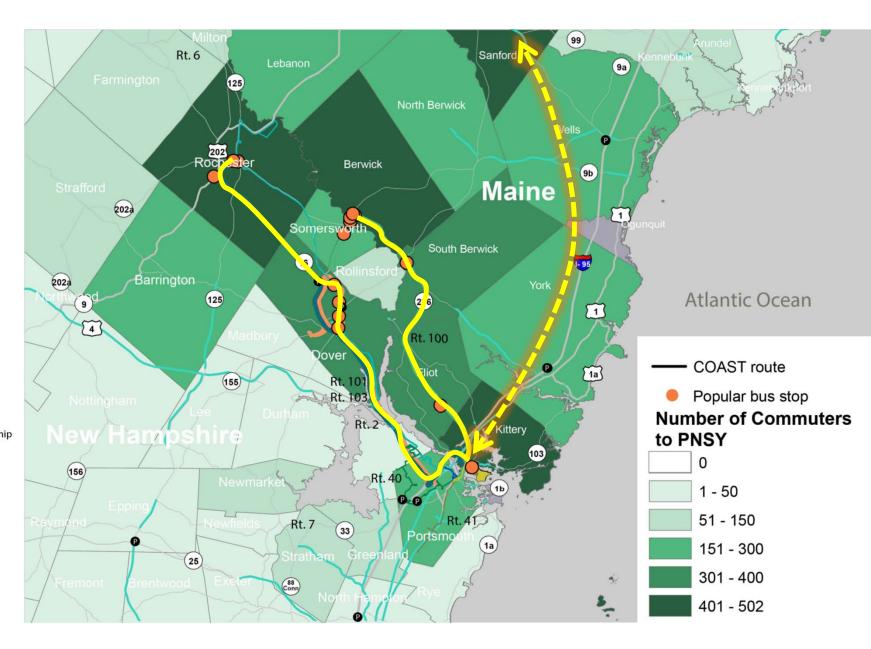
COAST Ridership by Route and Stop (2018)

- Ridership doesn't align with most worker origins
- Ridership drops off with distance



State Route

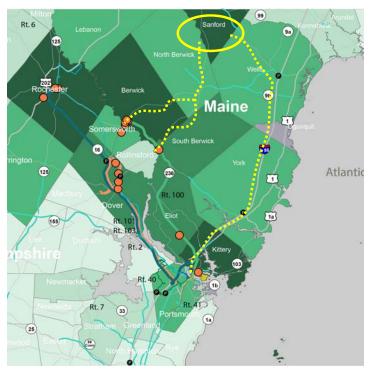
Data Source: COAST







CATALYTIC STRATEGY 3 12. EXTEND REGIONAL TRANSIT



COMPATIBILITY SCORE





Transportation Metric Average

Overall Metric Average

CONTEXT

Sanford is one of a handful of regions with highest density of PNSY workers yet isn't included in existing transit routes that service PNSY. Areas near Sanford also host other large employers, with built-in potential demand for transit.

SCORE ANALYSIS

- Single-person vehicles reduced as more people have transit options
- Congestion is moderately reduced with less vehicles
- Parking demand is also reduced on base and in downtown Kittery

SAMPLE ELEMENTS

- Transit study
- Identify funding partners
- Launch pilot service

PRIMARY RESPONSIBLE PARTY

The Region

FULL

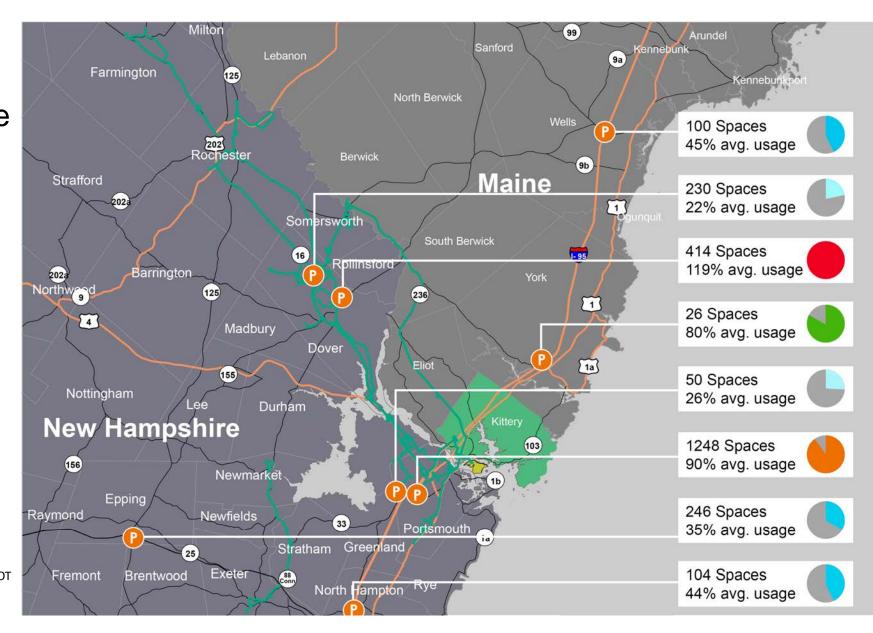
Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
3	2	5	2	1	1	1

Park and Ride Lots with Average Usage (2018)

 2,418 available park and ride spaces within 17 miles



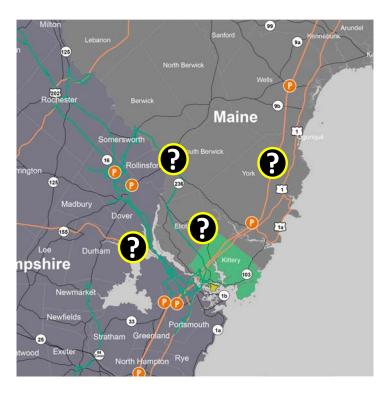
Data Source: NHDOT, MaineDOT







CATALYTIC STRATEGY 4 13. NEW REGIONAL PARK & RIDES



COMPATIBILITY SCORE





Transportation Metric Average

Overall Metric Average

CONTEXT

Roughly 1,250 parking spaces are available at 8 formal park and ride lots near PNSY; however only 2 are used at or near capacity.

Overwhelming number of survey respondents voiced desire for a park and ride closer to PNSY.

SCORE ANALYSIS

- Convenience of park and ride locations incentivizes some people to rideshare and reduces congestion
- Parking demand is reduced on base and in downtown Kittery

SAMPLE ELEMENTS

- Identification of compatible locations
- Coordination with land owners
- Creation of funding / leasing program

PRIMARY RESPONSIBLE PARTY

The Region

-ULL

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
3	2	5	2	1	1	1





SUPPORTING STRATEGIES

14. REGIONAL EMPLOYER

PARTNERSHIPS FOR TRANSIT

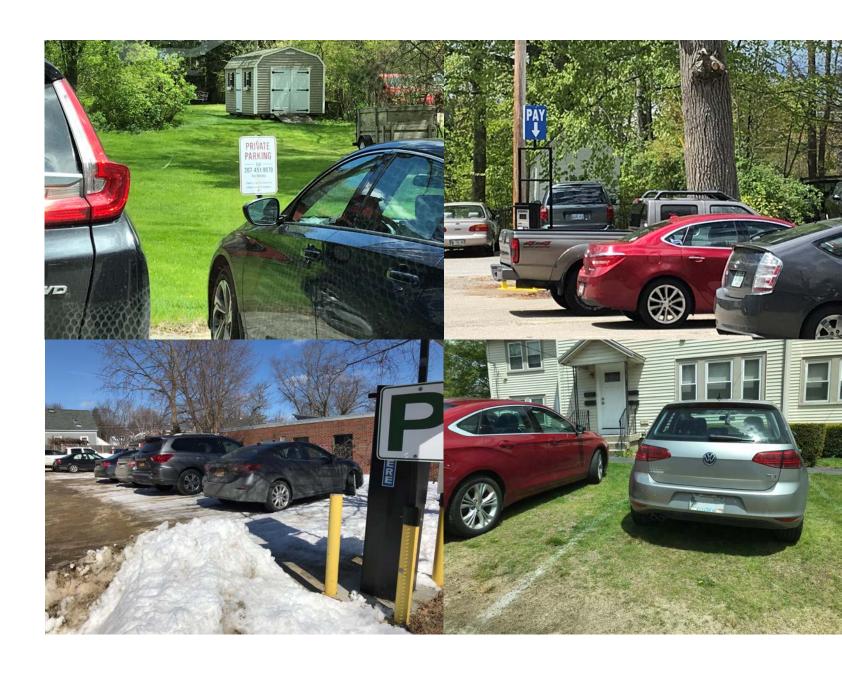
15. EXPAND COMMUNICATION OF THE 16. COMMUTER RIVER FERRY **NAVY'S TIP PROGRAM**







Congested off-shipyard private parking





CATALYTIC STRATEGY 5 17. RAIL SPUR PARK AND RIDE



COMPATIBILITY SCORE



Transportation Metric Average



Overall Metric Average

CONTEXT

The rail spur leading to PNSY is utilized very infrequently but its right-of-way does provide opportunity of an already-established direct route that could support additional pedestrian/biking infrastructure.

SCORE ANALYSIS

- Location incentivizes greater use of park and rides and reduces congestion
- Parking demand on-base and in downtown Kittery is reduced

SAMPLE ELEMENTS

- Identify landowners & feasibility
- Coordinate with railroad
- Develop pro formas
- Begin negotiations

PRIMARY RESPONSIBLE PARTY

Town of Kittery and PNSY

-ULL MFTRIC

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
3	2	3	2	3	1	3



SUPPORTING STRATEGIES

18. INCENTIVIZE PARK AND RIDE 19. NEW, OFF-YARD PARKING FACILITY LANDOWNERS



21. ADJUST DOWNTOWN PARKING PRICING



22. INCREASE PARKING ENFORCEMENT DOWNTOWN



20. DOWNTOWN KITTERY PARKING MAP

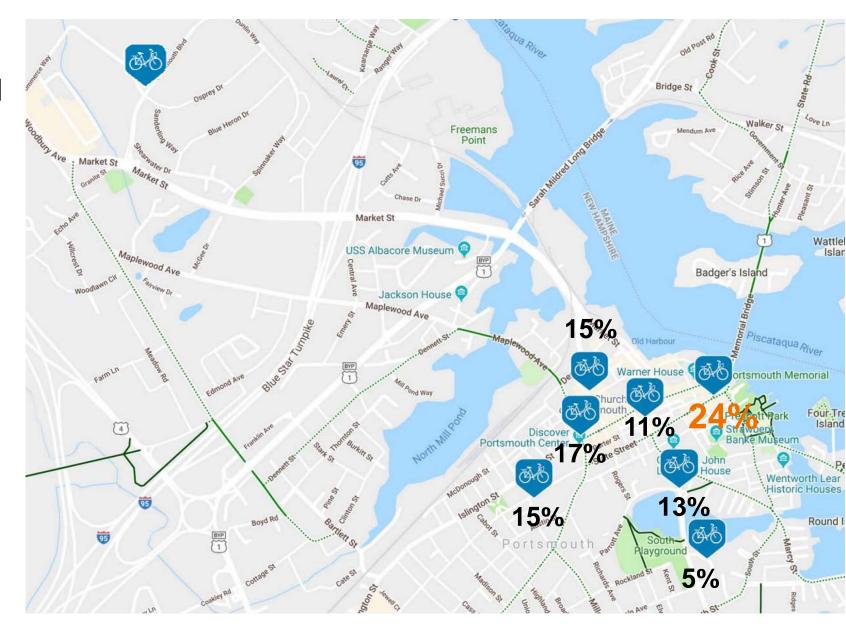


23. NEARBY PARK AND PEDAL PROGRAM



Bikeshare Locations and Utilization (2018)

 Highest utilization station is closest to Kittery & PNSY



Data Source: Portsmouth Bike Share 2018 Annual Report for City Council



CATALYTIC STRATEGY 6

24. DESIGN STREET FOR BIKE AND PEDESTRIAN APPEAL



COMPATIBILITY SCORE



Transportation Metric Average



Overall Metric Average

CONTEXT

There is wide variation in Kittery's infrastructure supporting biking and walking. Inconsistency in protective markings, signage, or sidewalk connectivity may discourage people from walking short distances, including from park and rides

SCORE ANALYSIS

- Improvements encourage walking from transit or remote parking
- Safety is greatly improved for pedestrians, bicyclists and motorists

SAMPLE ELEMENTS

- Streetscape & bike network studies
- Encourage sidewalk dining
- Integrate green infrastructure
- Provide covered bicycle parking

PRIMARY RESPONSIBLE PARTY

Town of Kittery

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Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
2	4	4	1	1	1	1



SUPPORTING STRATEGY

25. LOVE LANE/ROUTE 103 ROAD DIETS



26. PROTECTED BIKE LANES ON BRIDGES



28. BOOST BIKE AWARENESS



27. KITTERY BIKESHARE PROGRAM



Key Issue: Housing Affordability











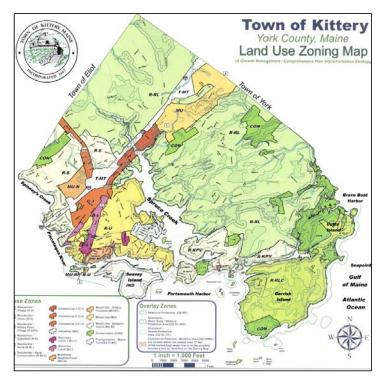








CATALYTIC STRATEGY 729. REZONE TO IMPROVE AFFORDABILITY



COMPATIBILITY SCORE





Transportation Metric Average

Overall Metric Average

CONTEXT

Kittery has been working to create opportunities to expand affordable housing supply through code amendments and are open to supporting zoning that encourages density which supports the town's long-term goals.

SCORE ANALYSIS

- Increases options for workers to live closer to base and rely less on cars for commuting
- Local congestion is moderately reduced as people use local alternative transportation

SAMPLE ELEMENTS

- Increase density
- Allow accessory units
- Implement inclusionary requirement

PRIMARY RESPONSIBLE PARTY

Town of Kittery

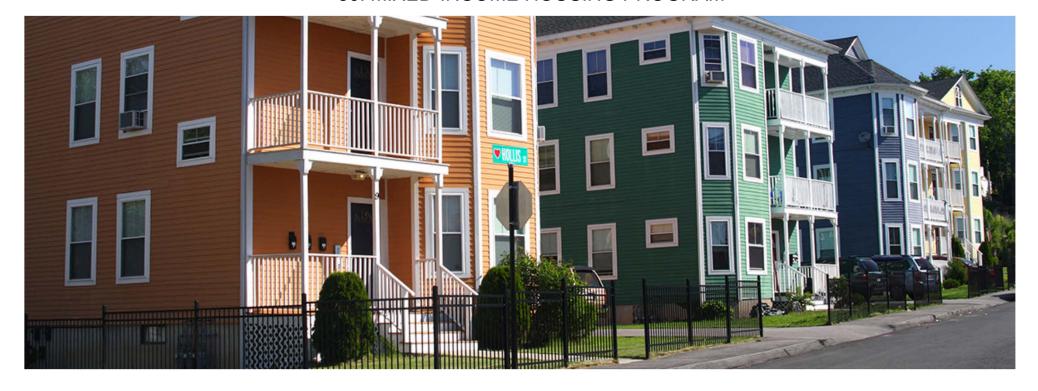
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Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
3	2	4	2	5	1	2



SUPPORTING STRATEGY

30. MIXED-INCOME HOUSING PROGRAM



Key Issue: Economic Opportunity





CATALYTIC STRATEGY 8

38. PROMOTE MIXED-USE DEVELOPMENT



COMPATIBILITY SCORE



Transportation Metric Average



Overall Metric Average

CONTEXT

The region is highly dependent on PNSY as an economic force with few current industries providing significant opportunity for local growth and diversified economic development.

SCORE ANALYSIS

- Significantly improves economic resilience
- Significantly improves local housing availability as new industries and development attract demand

SAMPLE ELEMENTS

TBD

PRIMARY RESPONSIBLE PARTY

Town of Kittery and PNSY

-ULL METDIC

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
2	1	2	4	4	2	4



SUPPORTING STRATEGIES

39. PROMOTE MANUFACTURING AND COMMERCIAL SPIN-OFFS



40. INTEGRATE JLUS FINDINGS INTO CEDS UPDATE





CATALYTIC STRATEGY 9

41. COMMUNITY - MILITARY RESILIENCE PARTNERSHIP



COMPATIBILITY SCORE

1.0

Transportation Metric Average



Overall Metric Average

CONTEXT

Sea Level Rise (SLR) and coastal flooding may affect the installation, the community, and external properties, infrastructure, and resources, adversely affecting continued military operations at PNSY.

SCORE ANALYSIS

 Coordination about pressing future needs and opportunities is significantly improved

SAMPLE ELEMENTS

- Develop community hazard/disaster education and outreach plan
- Establish Resilience Task Force
- Develop best practices in coastal development
- Inventory of vulnerable critical infrastructure/facilities

PRIMARY RESPONSIBLE PARTY

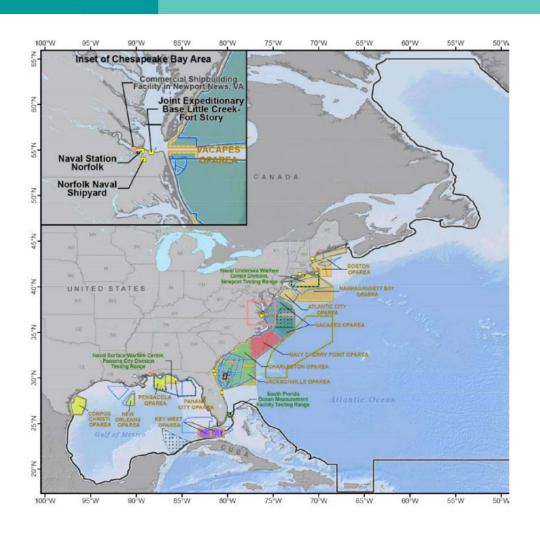
Town of Kittery and PNSY

FULL

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
1	1	1	4	1	5	2



SUPPORTING STRATEGY



42. ENSURE COMPATIBILITY OF WIND ENERGY PROJECTS





CATALYTIC STRATEGY 10 31. REGIONAL FUNDING PARTNERSHIPS



COMPATIBILITY SCORE





Transportation Metric Average

Overall Metric Average

CONTEXT

Multiple Federal funding sources are available for JLUS related recommendations. Competitiveness increases significantly when regional partnerships are established, like-minded and implementation-oriented.

SCORE ANALYSIS

- Coordinated governance addresses problems that are common to the region more effectively
- Substantial funding for safety, congestion and other projects that promote region's economy

SAMPLE ELEMENTS

- Identify partners
- Identify potential funding sources
- Develop common goals and commitments; then seek Federal assistance

PRIMARY RESPONSIBLE PARTY

The Region

FULL

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
2	3	2	4	1	1	2



SUPPORTING STRATEGIES

32. REGIONAL COMMITTEE PARTICIPATION



33. QUARTERLY PLANNING MEETINGS



34. REGIONAL DATA SHARING



H. COMMUNICATION

CATALYTIC STRATEGY 11 35. FORMAL JOINT COMMUNICATIONS PLAN



COMPATIBILITY SCORE





Transportation Metric Average

Overall Metric Average

CONTEXT

PNSY and the Town of Kittery have general communication regarding some shared issues however no plan exists which defines a formal, appropriate processes and contacts for addressing all shared issues.

SCORE ANALYSIS

- Provides rapid response system compatible with modern needs
- Improves foundation for dialogue to address larger, long-term issues

SAMPLE ELEMENTS

- Establish MOU of priorities
- Identify platform / technology aids
- Maintain regular updates

PRIMARY RESPONSIBLE PARTY

Town of Kittery and PNSY

FULL

Road Capacity + Congestion	Transportation Safety	Infrastructure Capacity	Coordination + Communication	Local Housing Availability	Environmental Resilience	Economic
2	2	1	4	1	1	1



SUPPORTING STRATEGIES

36. SOCIAL MEDIA PUBLIC ENGAGEMENT



37. EMERGENCY COMMUNICATIONS PROGRAM



CATALYTIC STRATEGIES

























NEXT STEPS

DISCUSSION