

WELCOME



Open House Public Meeting

for the

Transition from C-2A to CMV-22B Aircraft at
Naval Air Station North Island, CA and Naval Station Norfolk, VA



January 18, 2018

4:00 PM to 6:00 PM

Pretlow Library
111 W. Ocean View Ave
Norfolk, VA 23503

January 23, 2017

5:00 PM to 7:00 PM

Coronado Community Center
1845 Strand Way
Coronado, CA 92118

Please provide comments on the Draft Environmental Assessment

For more information, please visit the project website at: <http://www.aftteis.com/navy-v-22>

NAS North Island

Overview

Naval Air Station (NAS) North Island was commissioned in 1917 and is considered the birthplace of Naval aviation. It is located on the north end of Coronado peninsula on San Diego Bay and is the largest naval aviation industrial complex on the West Coast. NAS North Island is one of eight installations making up Naval Base Coronado.

Today, NAS North Island serves as the Navy's West Coast master helicopter base and the homeport for up to three aircraft carriers. NAS North Island supports the operational readiness of the U.S. Pacific Fleet, providing facilities and services to enable mission accomplishment.

NAS North Island Overview	
Size (acres)	2,800
Military/Civilian Personnel	24,500
Number of Aircraft Squadrons	19
Airfield Hours of Operation	24 hours/day & 7 days/week

NAS North Island Contributes to the Community

NAS North Island contributes directly to the local economy through jobs and expenditures for on-going operations and improvement projects. There are additional indirect impacts, as NAS North Island spending leads to businesses hiring employees who in turn, spend money on various goods and services, creating a ripple effect as dollars are spent and re-spent in the community.

- The Navy currently employs approximately 24,500 active duty military and civilian personnel at NAS North Island.
- The Navy's total contribution to the San Diego region includes approximately 58,500 military and civilian personnel.



Military personnel and their families are major contributors to the local economy in San Diego

- Defense-related activities and spending will generate an estimated \$50 billion of gross regional product (GRP) for San Diego County in fiscal year 2017.

NAS North Island Works with the Community to Address Noise Issues

Flight operations at NAS North Island may be conducted 24 hours per day, seven days per week. The Navy recognizes the importance of being good neighbors with the local communities and makes every effort to balance noise abatement with the need to train Navy pilots. The main tools through which these efforts have been implemented at NAS North Island are:

- *Air Installations Compatible Use Zones (AICUZ) Program* – The Navy partners with local jurisdictions to minimize impacts to surrounding communities. The Navy's AICUZ program focuses on protecting the health, safety, and welfare of those living near a military airfield while preserving the airfield's flying mission. The program recommends land use controls for areas beginning at the 65 decibels (dB) Community Noise Equivalent Level (CNEL) and for Accident Potential Zones (APZs). The current version of the NAS North Island AICUZ was published in the 2011 AICUZ Study Update for NAS North Island and Naval Outlying Landing Field Imperial Beach.
- *Noise Abatement Program* – Noise abatement procedures have been voluntarily developed by the Navy for NAS North Island. The installation has collaborated with the surrounding communities, especially the City of Coronado, in developing airfield operations procedures to reduce noise associated with aircraft while executing the mission and maintaining flight safety.

Noise Abatement Hours

10 PM – 7 AM Monday through Friday
6 PM Friday – 7 AM Monday

Noise Concerns Hotline

(619) 545-8847

NS Norfolk

Overview

Naval Station (NS) Norfolk, the center of naval operations on the East Coast, is part of the world's largest naval complex and is the primary homeport of the Atlantic Fleet. The station is located on Sewell's Point peninsula in the northwest corner of Norfolk, Virginia.

The station is home to 63 ships, 187 aircraft, 18 aircraft squadrons, and 386 tenant commands. NS Norfolk supports the operational readiness of the U.S. Atlantic Fleet, providing facilities and services to enable mission accomplishment.

NS Norfolk Overview	
Size (acres)	4,600
Military/Civilian Personnel	67,000
Aircraft Squadrons	18
Airfield Hours of Operation	24 hours/day & 7 days/week

NS Norfolk Contributes to the Community

NS Norfolk contributes directly to the local economy through jobs and expenditures. There are additional indirect impacts, as NS Norfolk spending leads to businesses hiring employees who in turn, spend money on various goods and services, creating a ripple effect as dollars are spent and re-spent in the community.

- The Navy currently employs approximately 67,000 military and civilian personnel at NS Norfolk.
- The Navy's total contribution to the Hampton Roads region includes approximately 114,000 jobs, over \$7.8 billion in annual payroll expenditures, and approximately \$1.3 billion in procurement for goods and services.
- The total economic benefit of the Navy is approximately \$9.2 billion in the Hampton Roads region.



Military personnel and their families are major contributors to the local economy in Hampton Roads

NS Norfolk Works with the Community to Address Noise Issues

Flight operations at NS Norfolk may be conducted 24 hours per day, seven days per week. The Navy recognizes the importance of being good neighbors with the local communities and makes every effort to balance noise abatement with the need to train Navy pilots. The main tools through which these efforts have been implemented at NS Norfolk are:

- *Air Installations Compatible Use Zones (AICUZ) Program* – The Navy partners with local jurisdictions to minimize impacts to surrounding communities. The Navy's AICUZ program focuses on protecting the health, safety, and welfare of those living near a military airfield while preserving the airfield's flying mission. The program recommends land use controls for areas beginning at the 65 decibels (dB) Day-Night Average Sound Level (DNL) and for Accident Potential Zones (APZs). The current version of the NS Norfolk AICUZ was published in the 2009 AICUZ Study for NS Norfolk Chambers Field.
- *Joint Land Use Study (JLUS)* – The JLUS for the Hampton Roads region was initiated in 2004. It addresses land use compatibility issues among three jurisdictions – the cities of Virginia Beach, Chesapeake, and Norfolk.
- *Noise Abatement Program* – Noise abatement procedures have been voluntarily developed by the Navy for NS Norfolk. The installation has collaborated with the surrounding communities in developing airfield operations procedures to reduce noise associated with aircraft while executing the mission and maintaining flight safety.

Noise Abatement Hours

11 PM – 7 AM Sunday through Saturday

11 PM Saturday – 1 PM Sunday

Noise Concerns Hotline

(757) 322-3429

Alternatives

The Department of the Navy (Navy) has published a Draft Environmental Assessment (EA), in accordance with the National Environmental Policy Act (NEPA), that evaluates the environmental effects of the Navy's proposal to transition from the C-2A to CMV-22B (hereinafter referred to as "Navy V-22") aircraft at Naval Air Station (NAS) North Island, California and Naval Station (NS) Norfolk, Virginia.

What is the Navy proposing?

The Navy is proposing to provide the facilities and functions to support the replacement of the C-2A with the Navy V-22 at NAS North Island, California and NS Norfolk, Virginia in co-location with established fleet logistics centers to meet updated operational requirements. Under the Proposed Action, the Navy plans to:

- replace 27 aging C-2A aircraft with 38 Navy V-22 aircraft;
- establish a Navy V-22 training squadron for pilots and aircrew and establish a maintenance school for maintenance personnel;
- construct, renovate, and maintain facilities to accommodate Navy V-22 squadron aircraft and personnel;
- make adjustments to personnel levels (increases or decreases) associated with the aircraft transition; and
- conduct Navy V-22 flight training operations.

Why is the Navy proposing this action?

The Proposed Action is needed because the older C-2A aircraft has reached the end of its service life. Increased maintenance requirements limit the use of the aging C-2A for the aircraft carrier on-board delivery mission. The Proposed Action would provide the facilities needed to efficiently transition the aging C-2A to the Navy V-22 aircraft without interruption of the time-critical logistics support mission for carrier strike groups at sea.



Navy V-22 Aircraft

Where would the Proposed Action take place?

The proposed location for the Navy V-22 on the West Coast is NAS North Island, which currently supports the C-2A. The proposed location for the Navy V-22 on the East Coast is NS Norfolk, which currently supports the C-2A. Flight training occurs at primary home base airfields, in national airspace, and at secondary airfields where C-2A, Marine Corps MV-22, and other rotary aircraft currently conduct training operations. Secondary airfield training would be distributed among six West Coast and six East Coast airfields. The Proposed Action does not establish new airspace, training ranges, or airfields.

When would the Proposed Action be implemented?

The Proposed Action would be implemented over a 10-year period beginning in 2018 with facility renovations and personnel actions, and the first aircraft deliveries in 2020.

Navy V-22 Osprey

The Navy V-22 is a modified longer-range variant of the Marine Corps' MV-22B that meets the logistics capability requirements of the Navy. The Navy V-22 will have greater capacity to carry more weight a longer distance and an added capability to perform vertical carrier on-board delivery to aircraft carriers and other ships. The Navy V-22 will operate in vertical and short-takeoff and landing modes at shore airfields.

Alternatives

What alternatives did the Navy consider?

The Navy considered two action alternatives: Alternative 1 and Alternative 2. Under Alternative 1, the Navy would provide facilities and functions to support the replacement of the existing C-2A aircraft with the Navy V-22 aircraft at NAS North Island and NS Norfolk and would establish the Navy V-22 training squadron and maintenance school at NAS North Island. Alternative 2 would be similar to Alternative 1, except that the Navy would establish the Navy V-22 training squadron and maintenance school at NS Norfolk. Table 1 provides a summary of Alternatives 1 and 2.

Under the No Action Alternative, the Navy would not transition from the C-2A to the Navy V-22 at existing fleet logistics centers and the carrier on-board mission would continue to be performed by existing C-2A squadrons. The No Action Alternative would not meet the purpose and need of the Proposed Action, but would serve as a reference point for describing and quantifying potential impacts associated with the proposed alternatives.

Would the number of aircraft based at NAS North Island and NS Norfolk change under the Proposed Action?

There would be a modest change in the number of aircraft at either location. Under Alternative 1, there will be an increase of 13 aircraft at NAS North Island and a decrease of 2 aircraft at NS Norfolk.



Navy V-22 West and East Coast Locations

Under Alternative 2, there would be an increase of 8 aircraft at NAS North Island and an increase of 3 aircraft at NS Norfolk. The primary difference between Alternatives 1 and 2 is the location of the Navy V-22 training squadron.

Would the number or type of flight operations change?

As a rotary-tilt aircraft, the Navy V-22 has the vertical take-off and landing capabilities of a helicopter with the long-range and speed capabilities of a fixed-wing airplane. The proposed Navy V-22 home airfield operations would be generally similar in nature to the current C-2A airfield operations, but the quantity of operations, type of operations, and flight patterns would be slightly different (Table 1).

Table 1. Summary of Alternative 1 and Alternative 2

	NAS North Island		NS Norfolk	
	Alternative 1	Alternative 2	Alternative 1	Alternative 2
Navy C-2A Squadrons	-	-	-	-
Navy V-22 Fleet Squadron	1	1	1	1
Navy V-22 Training Squadron	1	-	-	1
Total Aircraft (Change*)	23 (+13)	18 (+8)	15 (-2)	20 (+3)
Personnel (Change*)	731 (+341)	551 (+161)	455 (-126)	635 (+54)
Facility Construction/Renovation (square feet)	156,000	102,200	62,153	96,096
Total annual operations- C-2A and Navy V-22 (Change*)	16,000 (+11,500)	10,300 (+5,800)	7,000 (0)	12,700 (+5,700)
Total annual operations- all aircraft (Percent increase*)	+14%	+7%	0%	+8.5%
*Change from the No Action Alternative				

How the Navy Assesses Noise

How is noise measured?

Noise is unwanted or annoying sound. Sound consists of minute vibrations that travel through a medium such as air or water and are perceived by the human ear. How sound is perceived depends on its intensity or acoustic energy, measured in decibels (dB); frequency, or number of cycles per second the medium vibrates, measured in hertz (Hz); and duration. For environmental noise measurements, calculations of noise energy in dB is adjusted to replicate human sensitivity to frequency by filtering out very low and very high frequencies, which are not perceived by the human ear. This adjusted measure is called A-weighted dB, or dBA. Differences in dBA are subjectively perceived as changes in the “loudness” of sound as shown below.

<i>Change</i>	<i>Change in Perceived Loudness</i>
+3 dB	Barely perceptible
+5 dB	Quite noticeable
+10 dB	Perceived as twice as loud

NOISE ASSESSMENT METHODOLOGIES

The Navy conducted a comprehensive study of the noise impacts of the proposed aircraft transition. The study:

- Included all operations at NAS North Island and NS Norfolk;
- Was conducted for average annual operations; and
- Was prepared using the best available data and best available noise modeling technology.

The U.S. Environmental Protection Agency, Federal Aviation Administration, and Department of Defense (DoD) assess aircraft operational noise levels in dB using the following metrics.

Day-Night Average Sound Level (DNL) — [NS Norfolk Only]

- DNL represents the cumulative sound energy of events during a 24-hour period with a 10-dB adjustment added to night-time (10 PM-7 AM) operations. This 10-dB adjustment accounts for the added intrusiveness of noise when background noise levels are low and noise sensitive activities, such as sleep, take place.
- DNL is directly related to the number of aircraft overflights, the flight performance profile of each aircraft, and the time of the day each overflight occurs.
- DNL is typically used to determine long-term community response to environmental noise, particularly aircraft noise.

Community Noise Equivalent Level (CNEL) — [NAS North Island Only]

- CNEL, used for assessment in California, represents the cumulative sound energy of events during a 24-hour period with a 10-dB adjustment added to night-time (10 PM-7 AM) operations and a 5-dB adjustment to evening (7 PM-10 PM) operations. This adjustment accounts for the added intrusiveness of noise when background noise levels are low and noise sensitive activities, such as sleep, take place.

Sound Exposure Level (SEL)

- SEL represents the total noise energy of a single event, such as a flyover, as if it had occurred over one second.
- SEL is typically used to assess the potential for sleep disturbance from overflights.

Maximum Instantaneous Sound Level (Lmax)

- Highest noise level measured during a single event.
- Used to assess potential speech and classroom learning interference.

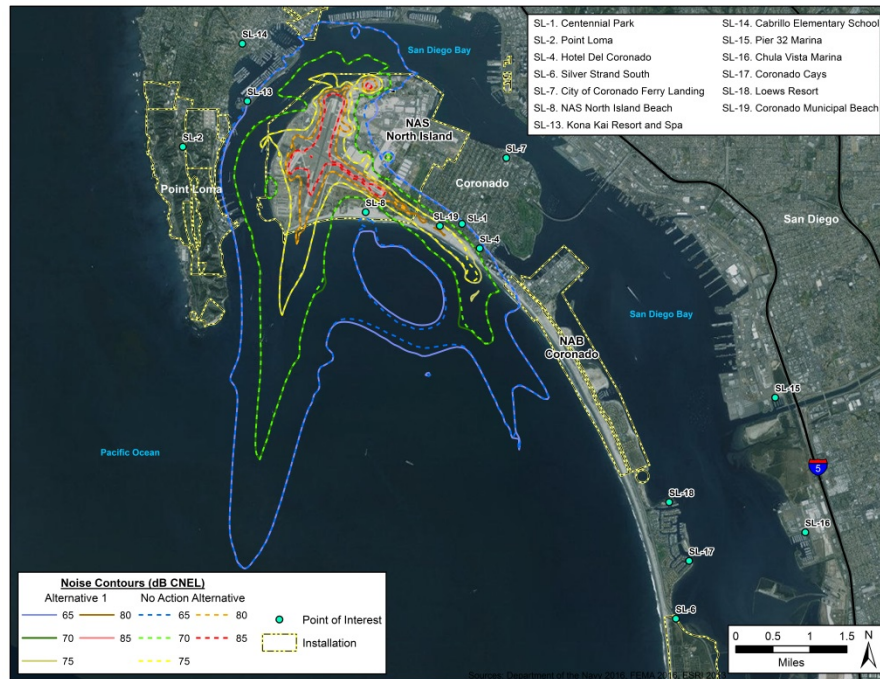
How is noise modeled?

As part of the study to determine the potential impacts of the Proposed Action, the Navy analyzed and compared aircraft noise under the No Action Alternative and Alternatives 1 and 2. The aircraft noise assessment is the result of noise modeling that analyzed the projected noise levels.

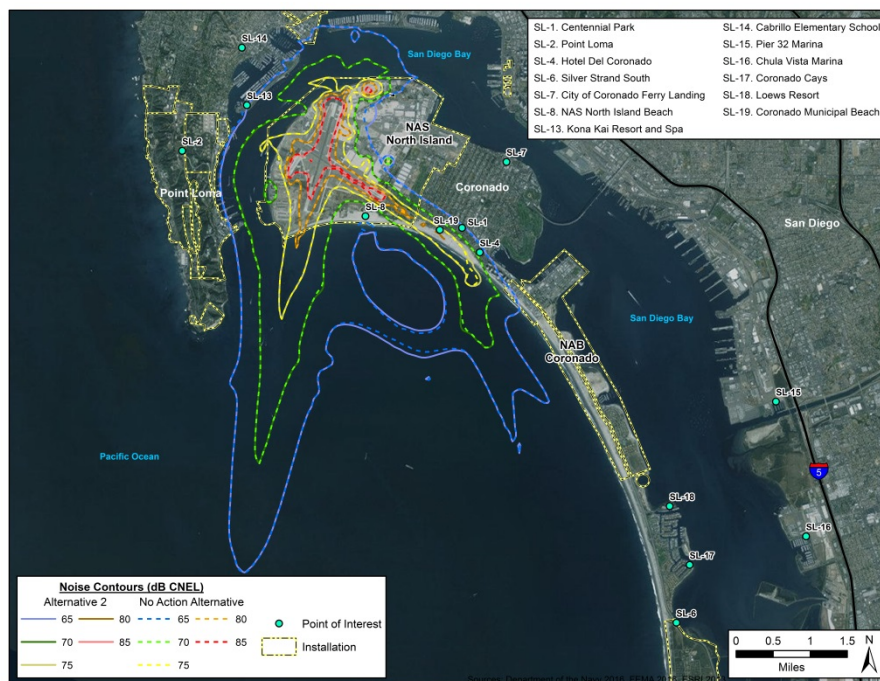
- Model inputs include aircraft type, number of operations, flight tracks, power settings, aircraft airspeed and altitude, terrain, temperature, relative humidity, engine maintenance testing, and noise data for each aircraft type derived from actual measurements of the aircraft in flight under varying conditions.
- Model Output is presented on a map in the form of noise contours. Noise contours are lines that connect points of equal noise exposure and are usually shown in 5-dB increments (e.g., 65 DNL/CNEL, 70 DNL/CNEL, 75 DNL/CNEL, etc.)
- Noise contours produced by the model allow a comparison of existing conditions and proposed changes or alternative actions that do not currently exist or operate at the installation.

Aircraft Noise Assessment – NAS North Island

- No perceptible difference in noise level in surrounding community
- Small increase in number of flight operations
- No change to NBC AICUZ Program land use compatibility recommendations



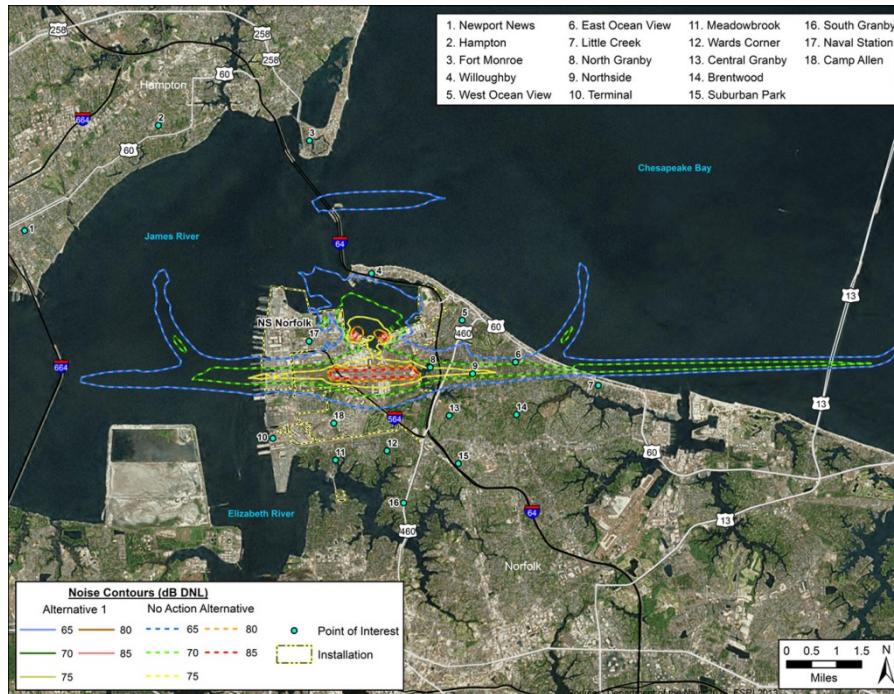
Alternative 1 CNEL Contours Compared to the No Action Alternative with Points of Interest



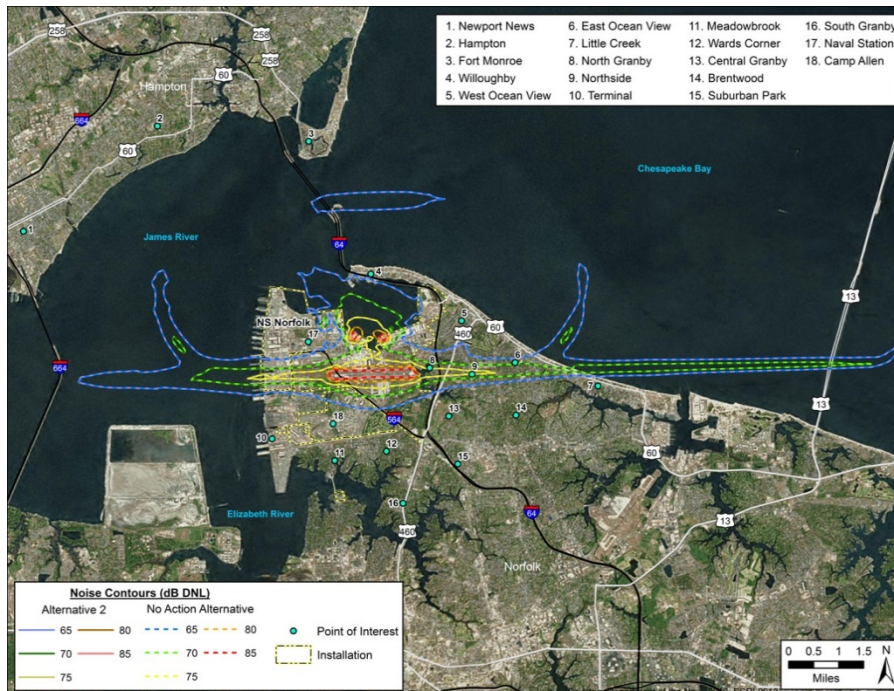
Alternative 2 CNEL Contours Compared to the No Action Alternative with Points of Interest

Aircraft Noise Assessment – NS Norfolk

- No perceptible difference in noise level in surrounding community
- No or small increase in number of flight operations
- No change to NS Norfolk AICUZ Program land use compatibility recommendations



Alternative 1 DNL Contours Compared to the No Action Alternative with Points of Interest



Alternative 2 DNL Contours Compared to the No Action Alternative with Points of Interest

Summary of Potential Impacts

What are the findings of the environmental analysis?

The Draft EA analyzed 12 resource areas. The Proposed Action would not result in significant adverse impacts to the human and natural environment. The results of the analysis are summarized below.

Airfields and Airspace: The proposed minor increase in aircraft operations would not impact civilian aircraft or other users in the vicinity of NAS North Island or NS Norfolk. Navy V-22 usage of associated airspace would be consistent with current operations, and there would be no impacts on airspace.

Noise: The small change in the number of flight operations would not result in a perceptible change to noise at NAS North Island or NS Norfolk. Noise levels would be nearly indistinguishable from the baseline. In addition, there would be no impact to the AICUZ Programs at NAS North Island or NS Norfolk. The Navy would continue to implement noise abatement procedures published in the 2013 NBC Instruction 3710.7V for NAS North Island and in the 2009 AICUZ Study at NS Norfolk.

Public Health and Safety: The proposed minor increase in aircraft operations would not change the installations' ability to comply with military airfield safety procedures for aircraft operations. Clear zone and accident potential zones would not change. No change to public or children's health and safety.

Air Quality: Negligible increase in air emissions. The increase in air emissions would be below applicable federal and state regulatory limits of the Clean Air Act.

Transportation: Traffic would increase by less than 1 percent of average daily traffic. At NAS North Island, recent Navy traffic counts are consistent with traffic analyzed in previous traffic studies. The Navy continues to promote its Transportation Improvement Program and works with local and regional agencies to plan for the improvement of the local and regional transportation system to provide

residents and military personnel with increased options for transportation.

Biological Resources: The Proposed Action *may affect, but is not likely to adversely affect* western snowy plover and California least tern at NAS North Island. The Navy is consulting with the U.S. Fish and Wildlife Service on this determination. There are no endangered species present in the project area at NS Norfolk. Impacts to Migratory Bird Treaty Act (MBTA)-protected species and their active nests would be avoided during construction. Potential for take of migratory birds during operations would not result in a significant adverse effect on a population of migratory birds and would continue to be in compliance with the MBTA as a readiness activity.

Water Resources: Minimal impacts to groundwater and surface water would occur with implementation of best management practices and minimization measures. Non-tidal wetlands adjacent to the taxiway at NS Norfolk would be avoided.

Infrastructure: NAS North Island and NS Norfolk have sufficient capacity to accommodate the minor increase in demand that would result from construction and operations.

Cultural Resources: No adverse effects to historic properties.

Hazardous Materials and Waste: Hazardous materials and wastes generated during construction and operations would be handled, managed, and disposed of in accordance with applicable laws, regulations, and procedures. Construction would adhere to applicable land use controls and procedures.

Socioeconomics: No disproportionately high adverse human health or environmental effects on minority or low-income populations would occur.

Coastal Consistency: Alternative 1 and Alternative 2 would be consistent with applicable enforceable coastal zone policies of the California and Virginia coastal zone management programs.

Negligible impacts to the natural and human environment



Public Involvement

Please provide your comments because we value them

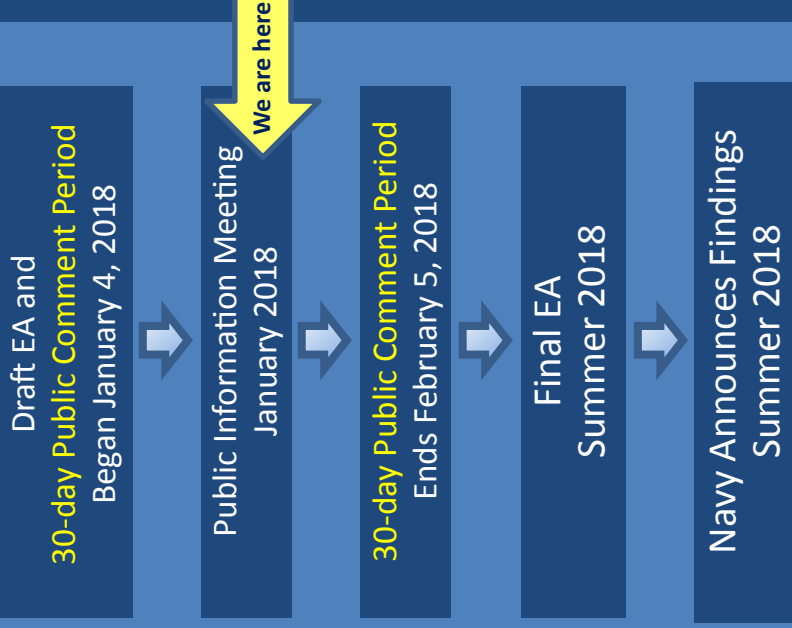
National Environmental Policy Act (NEPA) Process

- Draft Environmental Assessment (EA) examines environmental effects of Navy's proposal
- Public release of the EA is not required by NEPA, but the Navy has voluntarily made it available for public review and comment review

How to get a review copy of the EA:

- Copies of the Draft EA are available at the following libraries:
San Diego Area Public Libraries:
– Imperial Beach Branch Library
– Coronado Public Library
– San Diego Central Library
– Point Loma/Hervey Branch Library
Hampton Roads Area Public Libraries:
– Mary D. Pretlow Anchor Branch Library
– Groninger Library
– Chesapeake Public Library
- The Draft EA may also be viewed on or downloaded from the Navy's website:
<http://www.afteis.com/navy-v-22>

NEPA Timeline



How to Comment

- Provide your comments TODAY by:
- Filling out a comment form
 - Recording a verbal comment
- Provide your comments LATER by:
- Mailing your comments to:

Naval Facilities Engineering Command,
Atlantic Division
Attn: Navy V-22 EA Project Manager
(Code EV21JB)
6506 Hampton Boulevard
Norfolk, Virginia 23508

- Submitting your comments to:
<http://www.afteis.com/navy-v-22>

*Comments must be postmarked on or before
February 5, 2018 if mailed*

All comments will be considered when
preparing the Final EA

Thank you for your participation

Notes

Notes