REPI READINESS AND ENVIRONMENTAL PROTECTION INTEGRATION PROGRAM
STATE PROFILE | MARYLAND

MARYLAND

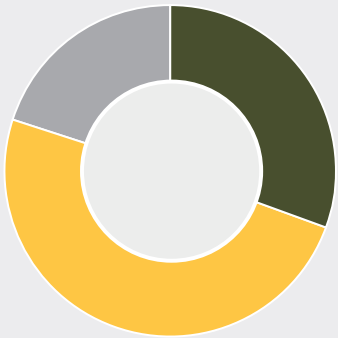
OVERVIEW

Maryland received $25.2 billion in Defense spending in Fiscal Year (FY) 2018, which provides direct funding for DoD personnel salaries, defense contracts, and construction of military facilities in the state. This spending by DoD personnel, contractors, and their families creates significant economic activity, attracts related industries and investment, and generates important state and local government tax revenues.

The Readiness and Environmental Protection Integration (REPI) Program is a key tool used by DoD and its partners to protect the military's ability to train, test, and operate in the state. DoD created the REPI Program in response to the development of lands and loss of habitat in the vicinity of or affecting its installations, ranges, and airspace that can lead to restrictions or costly and inadequate training and testing alternatives. Through REPI, DoD works with state and local governments, conservation organizations, and willing private landowners to address these challenges to the military mission and the viability of DoD installations and ranges. The REPI Program has enjoyed broad bipartisan support both in the U.S. Congress and among groups representing state and local officials. Through FY 2019, DoD and its partners have spent over $59 million on REPI projects at 6 installations in Maryland.

DOD IN MARYLAND

DoD Personnel (as of 30 Sep 2018)

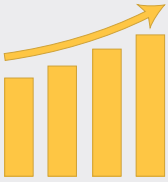


- **Active Duty:** 28,250
- **Civilians:** 45,884
- **Reserve/National Guard:** 18,251

Total DoD Personnel: 92,385

Federal Defense Spending and Economic Impact (in FY 2018)

$25.2 billion in Federal Defense spending



6.0% of state GDP

$7.4 billion in payroll contributed
$17.8 billion in contracts awarded

Acres of DoD Managed and State-Owned National Guard Land (as of 30 Sep 2017)

DoD Managed Land	State-Owned National Guard Land	Total DoD Managed and State-Owned National Guard Land
115,158	2,354	117,512

REPI PROJECTS* IN MARYLAND

Funding Summary (through FY 2019)

- **REPI Expenditures:** $19,086,116
- **Military Service Expenditures:** $10,973,909
- **Partner Expenditures:** $29,212,244

Total Expenditures: $59,272,269

** REPI projects refer to any action authorized by 10 USC §2684(a) to include the acquisition of interests in land from willing landowners to prevent incompatible development and protect habitat or any other natural resources management. REPI projects involving the Army or Army National Guard are also termed Army Compatible Use Buffer (ACUB) partnerships. Those involving the Navy, Marine Corps, or Air Force, are also termed encroachment partnering agreements. Eligible partners include conservation organizations and state and local governments.*

Total Acres Protected (through FY 2019): 12,227

MILITARY PRESENCE

- NSF Indian Head recently made a conscious effort to protect Maryland's environment by upgrading the Navy Support Facility's power and steam capability system. **The system is expected to reduce about 40 tons of particulate matter and other harmful carbon emissions per year.**
- The state's **17 facilities** attract thousands of visitors into Maryland who spend more than $41.3 million annually.
- Andrews Air Force Base generated a total of **$1.0 billion in economic activity** in Maryland and created or supported 12,506 jobs earning an estimated $580.9 million in employee compensation.
- Aberdeen Proving Ground (APG) generates a total of $4.3 billion in economic activity in Maryland and **creates or supports 28,995 jobs earning an estimated $1.6 billion in employee compensation**.
- NAS Patuxent River and Atlantic Test Range **provides critical services for the Navy** such as aircraft research, test/simulation, development and acquisition capabilities while partnering with environmental stakeholders in the surrounding communities.
- Because of its proximity to Washington, D.C., **Maryland has a large concentration of military facilities**. Rather than serving as the base for self-contained armed services combat or support units, many of the military facilities in Maryland perform administrative, medical and research functions to support the overall operations of the nation's military and the DoD.
- Fort Meade is **Maryland's largest employer** and is the third largest workforce of any Army installation in the U.S.

Project Installation	County	Congressional District
Aberdeen Proving Ground	Harford	2nd
Atlantic Test Ranges	Dorchester, St. Mary's	1st, 5th
Joint Base Andrews (Air Force)	Prince George's	5th
NAS Patuxent River	St. Mary's	5th
Naval Support Activity Annapolis	Anne Arundel	3rd
NSF Indian Head	Charles	5th

For all REPI Project Profiles visit: http://www.repi.mil/BufferProjects/ProjectList.aspx

Varied and hilly terrain allows for testing of maneuver vehicles at the Churchville Test Area (left and right).

For more information about the REPI Program, visit ***www.repi.mil***

Key REPI Partners

- Charles County
- Chesapeake Conservancy
- Conservancy for Charles County
- Delaware Department of Agriculture
- Delaware Department of Natural Resources and Environmental Control
- Dorchester County
- Eastern Shore Land Conservancy
- Green Trust Alliance
- Harford County
- Harford Land Trust
- Maryland Agricultural Land Preservation Foundation
- Maryland Department of Natural Resources
- Maryland Environmental Trust
- Northern Neck Land Conservancy
- The Conservation Fund
- The Lower Shore Land Trust
- The Nature Conservancy
- Patuxent Tidewater Land Trust
- Prince George County Parks and Recreation Department
- Southern Maryland Resource Conservation and Development Board
- St. Mary's County
- State of Delaware
- The Trust for Public Land
- U.S. Fish and Wildlife Service
- Virginia Department of Game and Inland Fisheries
- Virginia Outdoors Foundation

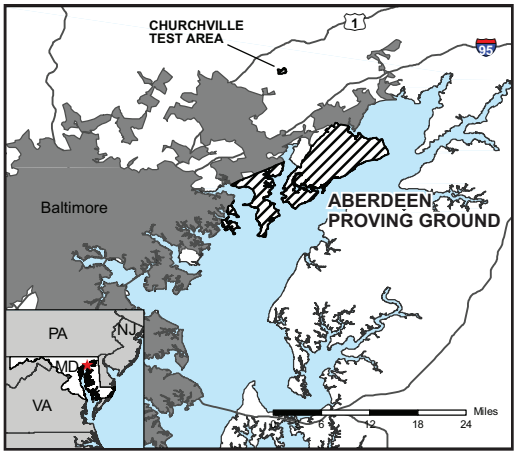
Data Sources

- **For Economic Impact Information:**
  - Maryland Military Installation Council Annual Report for 2017: http://commerce.maryland.gov/Documents/ProgramReport/maryland-military-installation-council-annual-report-2017.pdf
- **For Federal Spending and personnel Information:** Office of Economic Adjustment: "Defense Spending By State Fiscal Year 2018": https://www.oea.gov/sites/default/files/defense-spending-rpts/FY2018-Defense-Spending-by-State-Report_0_0.pdf
- **For Land Information:** Department of Defense: "Base Structure Report – Fiscal Year 2018 Baseline": https://www.acq.osd.mil/eie/Downloads/BSI/Base%20Structure%20Report%20FY18.pdf
- **For REPI Projects Information:** "2020 REPI Report to Congress": https://www.repi.mil/Portals/44/Documents/Reports_to_Congress/REPI2020RTC.pdf
- **For NSF Indian Head information:** http://www.navy.mil/submit/display.asp?story_id=94567
- **For Patuxent River and Atlantic Test Range information:** http://greenfleet.dodlive.mil/rsc/pax-river-compatibility/

U.S. ARMY :

ABERDEEN PROVING GROUND : MARYLAND

Aberdeen Proving Ground is the Department of Defense's oldest active proving ground, where military weapons, vehicles, and other technology or military strategies are tested. Aberdeen is the Department's lead for automotive testing for all manned and unmanned, wheeled, and tracked vehicles. Due to the region's temperate climate, the Army can test vehicles in 80 percent of real-world environments using world-renowned test tracks. These tracks, a national asset, are irreplaceable and critical to present and future testing of vehicles.



However, significant regional suburban growth stretching out from the city of Baltimore and other nearby towns is causing conflict due to noise, dust, and other issues. The combined efforts of the Aberdeen Test Center staff and concerned local stakeholder Harford Land Trust helped alleviate this threat to the nearby Churchville Test Area. This location is a hilly set of cross-country road test tracks providing a variety of steep inclines and tight turns designed to stress engines, drivetrains, and suspension systems for vehicles such as tanks, Bradley fighting vehicles, and the Humvee.

Of particular concern was the only owner of land not enrolled in a conservation program adjacent to the test area. The owner planned to subdivide his property into a housing development, and new residents could lead to noise complaints that would interfere with the test mission. Saving this farmland protects Deer Creek, part of a watershed that provides drinking water for nearby communities and is the only known habitat for the endangered Maryland darter.

BENEFIT SUMMARY

COMMUNITY

- Preserves working lands and local character
- Supports existing regional planning efforts
- Provides recreational opportunities for area residents
- Protects water supplies

MILITARY

- Preserves maneuver training capacity through the buffering of high-noise areas
- Increases operational safety
- Provides for future mission growth

Varied and hilly terrain allows for testing of maneuver vehicles at the Churchville Test Area (top and bottom).

KEY PARTNERS

- Eastern Shore Land Conservancy, Inc.
- Harford County
- Harford Land Trust
- U.S. Fish and Wildlife Service

FAST FACTS THROUGH 30 SEP 2019

» Acres preserved:
1,154

» Transactions conducted:
14

» Total funds expended:
$11.2 million

» Project status:
In Progress

CONTACT

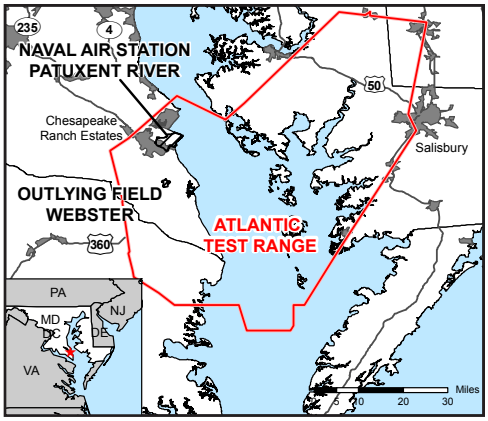
Public Affairs Office
(410) 278-1147

U.S. NAVY :

ATLANTIC TEST RANGES : MARYLAND

WITH NAS PATUXENT RIVER

The Atlantic Test Ranges (ATR), consisting of land, air, and sea ranges in the Chesapeake Bay area, is the Navy's principal location for the research, development, test, and evaluation of Naval aircraft. The range's restricted airspace is a critical national asset that allows for training missions and the concurrent testing of multiple new aircraft, including unmanned aerial systems. This restricted airspace, as well as Naval Air Station (NAS) Patuxent River (ATR's host installation) and Outlying Field (OLF) Webster, encompasses a vast ecologically sensitive area, including part of Maryland's Eastern Shore of the Chesapeake Bay.



Due to the inherent risk in test flights, as well as the noise from aircraft (including supersonic operations), the Navy is working to limit incompatible development underneath the test range airspace and installation flight routes to increase safety and quality of life. Another benefit to the mission is preventing increased conflicts in the use of frequency spectrum, allowing for testing of communications equipment and other electronics.

Acquiring easements under the restricted airspace and around NAS Patuxent River and OLF Webster also limits development of waterfront parcels and protects the health of the Chesapeake Bay and its tributaries. In addition, these projects also help sustain local agriculture and commercial and recreational fishing economies. Meanwhile, ATR and NAS Patuxent River can continue providing the test and evaluation capabilities that ensure safe and effective high-performance aircraft and aviation systems.

BENEFIT SUMMARY

COMMUNITY

- Preserves working lands and local character
- Supports existing regional planning, including a Joint Land Use Study
- Provides recreational opportunities
- Protects habitat within an existing wildlife corridor

MILITARY

- Preserves night flying and helicopter capacity that generates significant amounts of noise
- Reduces the potential for lost test and training days and the need for less-realistic workarounds
- Reduces electromagnetic interference
- Allows for future mission growth and multi-Service missions

NAS Patuxent River and the Atlantic Test Ranges serve as an important flight testing site (top). Testing an F/A-18 Hornet that runs on 50% biofuel (bottom).

KEY PARTNERS

- Chesapeake Conservancy
- Delaware Department of Agriculture
- Delaware Department of Natural Resources and Environmental Control
- Dorchester County
- Eastern Shore Land Conservancy
- Maryland Agricultural Land Preservation Foundation
- Maryland Department of Natural Resources
- Northern Neck Land Conservancy
- Patuxent Tidewater Land Trust
- Southern Maryland Resource Conservation and Development Board
- St. Mary's County
- State of Delaware
- The Conservation Fund
- The Lower Shore Land Trust
- The Nature Conservancy
- The Trust for Public Land
- Virginia Department of Game and Inland Fisheries
- Virginia Outdoors Foundation

FAST FACTS THROUGH 30 SEP 2019

» Acres preserved:
10,638

» Transactions conducted:
70

» Total funds expended:
$45.7 million

» Project status:
In Progress

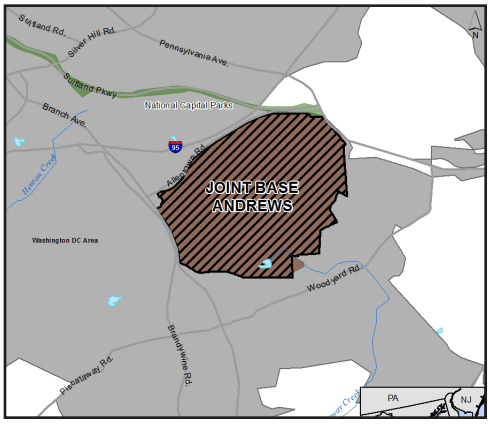
CONTACT

Community Plans and Liaison Office
(301) 757-4799

U.S. AIR FORCE - U.S. NAVY :

JOINT BASE ANDREWS : MARYLAND

In 2009, Andrews Air Force Base and Naval Air Facility Washington combined to become Joint Base (JB) Andrews-Naval Air Facility Washington, or JB Andrews. Located outside of Washington, D.C and known as "The Gateway to the Capital," JB Andrews has grown to support over 80 Federal, state, and commercial tenants in the National Capital Region. While the installation hosts a broad range of critical security missions, it is most widely recognized as the home of Air Force One.



The installation's ability to fulfill its national defense mission is contingent on having strong, safe, and state-of-the-art infrastructure. In its most recent Installation Development Plan, JB Andrews put forward several capital improvement projects, including a proposal to regrade its airfield. In order to offset the project's adverse impacts to wetlands on the base, JB Andrews partnered with GreenTrust Alliance and its affiliated organization, GreenVest LLC, to create a wetlands mitigation bank. Under the partnership, JB Andrews, GreenTrust Alliance, and GreenVest LLC are working together to preserve and manage a wetlands site outside of the installation at Mattawoman Creek in Charles County, Maryland.

This project will allow JB Andrews to support mission critical infrastructure improvements while also fulfilling its responsibility to be a good steward of the land. Furthermore, this effort will promote compatible development outside of JB Andrews; protect wildlife and flora within the Mattawoman Creek watershed area; and mitigate adverse impacts to the Chesapeake Bay. By creatively partnering with the GreenTrust Alliance, the U.S Army Corps of Engineers, Maryland Department of Environment, and others, JB Andrews will successfully strengthen military readiness while simultaneously protecting natural resources.

BENEFIT SUMMARY

COMMUNITY

- Protects water resources, including the Chesapeake Bay watershed
- Preserves habitat for species
- Supports existing regional planning and regulatory objectives

MILITARY

- Supports mission required airfield improvements
- Provides for future mission growth and multi-Service missions
- Increases operational safety

Preserving wetlands outside of JB Andrews (top) enables the installation to carry out mission-critical infrastructure improvement projects (bottom).

KEY PARTNERS

- Charles County
- GreenVest, LLC
- GreenTrust Alliance, Inc.
- Maryland Department of Environment
- Prince George's County
- The John M. and Sara R. Walton Foundation, Inc.
- U.S. Army Corps of Engineers

FAST FACTS THROUGH 30 SEP 2019

» Acres preserved:
142

» Transactions conducted:
2

» Total funds expended:
$1.3 million

» Project status:
In Progress

CONTACT

Public Affairs
(240) 612-4428

U.S. NAVY :

NAVAL SUPPORT ACTIVITY ANNAPOLIS : MARYLAND

Naval Support Activity Annapolis (NSAA) is home to the Naval Research Laboratory - Chesapeake Bay Detachment and the United States Naval Academy, which has been educating Midshipmen in preparation for naval careers since 1845. On a peninsula to the north of the Naval Academy is the North Severn Complex, which houses the armory, practice ranges, berthing and maintenance areas for training vessels, and NSAA command headquarters. The Naval Research Laboratory, located roughly 30 miles away, conducts mission critical research in naval technology that directly supports the National Defense Strategy.

NSAA is currently impacted by observability, safety zone infringements, and trespassing, all of which cause testing and training constraints and public safety concerns. If private development of other waterfront areas in surrounding communities continues, encroachment on NSAA and pressure to allow public use of its waterfront land may increase, potentially resulting in a negative impact on overall readiness and fleet support. In order to mitigate these effects, NSAA has formed partnerships with local communities and organizations to preserve and expand public waterfront areas by acquiring easements on waterfront properties in the area surrounding NSAA.

Working with Anne Arundel and Calvert Counties as well as other key partners, NSAA aims to increase recreational opportunities around the county, provide alternative local waterfront access points, and mitigate areas that pose a safety concern to the public. This project, therefore, addresses larger community needs while protecting NSAA's mission and training capacity. In addition, this project will improve water quality by limiting urban development and protecting natural waterfront areas within the Chesapeake Bay Watershed.

BENEFIT SUMMARY

COMMUNITY

- Provides recreational opportunities
- Preserves water resources
- Protects natural lands

MILITARY

- Reduces the potential for lost test and training days and the need for less-realistic workarounds
- Protects live-fire training capabilities
- Increases operational safety

The United States Naval Academy is bordered on three sides by the Annapolis Harbor, Severn River and College Creek, the latter of which is shown in the top photo with Alumni Hall and the Naval Academy Chapel Dome. Pictured below is Memorial Hall which commemorates all alumni of the Naval Academy especially those who have fallen in combat or been awarded the Medal of Honor.

KEY PARTNERS

- Anne Arundel County, MD
- Calvert County, MD
- Calvert Nature Society
- Chesapeake Conservancy
- Maryland Department of Natural Resources

FAST FACTS THROUGH 30 SEP 2019

» Acres preserved:
0

» Transactions conducted:
0

» Total funds expended:
0

» Project status:
Initiated

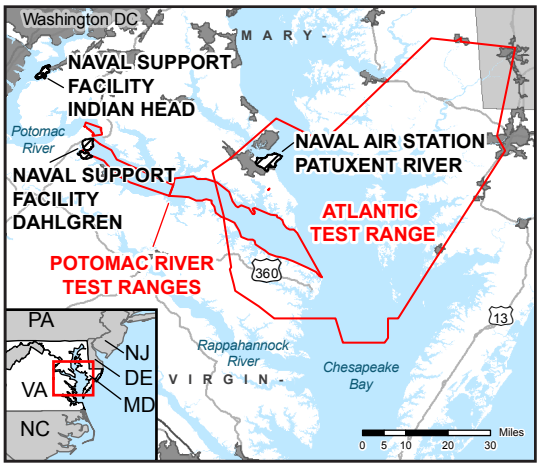
CONTACT

Community Plans and Liaison Officer
(410) 293-1084

U.S. NAVY :

NSF INDIAN HEAD : MARYLAND

Naval Support Facility (NSF) Indian Head supports the research, development, test, and evaluation (RDT&E) activities of the Naval Surface Warfare Center Indian Head Division. Its mission is to provide RDT&E of energetics and energetics material for warheads, propulsion systems, and ordnance. NSF Indian Head is located on the Potomac River approximately 20 miles south of Washington, D.C. on the Maryland side of the river, allowing for outdoor explosives testing over water. Although such testing occurs away from the main D.C. population centers, the sound waves travel up and down the river and impacts residents of Maryland and Virginia alike.



To prevent incompatible development and protect NSF Indian Head's RDT&E mission, the Navy is working with a number of partners to preserve land on both banks of the Potomac River and up to several miles inland. In some cases the partner may acquire the land in fee, but in all cases the Navy will acquire restrictive easements. These easements will remove the development rights on agricultural and forested lands.

Much of the land targeted for protection is already adjacent to public lands that cannot be developed. Preventing development on these private lands would help secure the isolation of NSF Indian Head and its mission activities, reducing the potential for complaints related to noise and shock waves from explosives and demolitions. Additionally, increasing protected lands in this area supports stream protection initiatives and supports goals for preserving habitat and species throughout the Chesapeake Bay ecosystem.

BENEFIT SUMMARY

COMMUNITY

- Protects working farm lands
- Preserves habitat for threatened, endangered, and at-risk species
- Protects water quality and water supply

MILITARY

- Protects live-fire testing that produces significant amounts of noise and vibration
- Prevents workarounds that would reduce test and training capacity
- Improves operational safety

A technician practices a rope rescue exercise (top). Some research, development, test, and evaluation activities include detonating an improvised explosive device to develop better ways of combating them in the field (bottom).

KEY PARTNERS

- Charles County
- Conservancy for Charles County
- Maryland Agricultural Land Preservation Foundation
- Maryland Department of Natural Resources
- Northern Neck Land Conservancy
- The Conservation Fund
- St. Mary's County, Maryland
- State of Delaware
- Patuxent Tidewater Land Trust, Inc.
- The Nature Conservancy
- Trust for Public Land
- Virginia Department of Game and Inland Fisheries
- Virginia Outdoors Foundation

FAST FACTS THROUGH 30 SEP 2019

» Acres preserved:
294

» Transactions conducted:
2

» Total funds expended:
$1.1 million

» Project status:
In Progress

CONTACT

Public Affairs Office
(540) 653-8153