

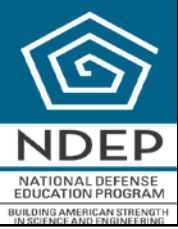


# National Defense Education Program NAVAL Program

*“A PROGRAM For Securing Current and Future  
Science, Technology, Engineering & Math (STEM)  
Resources”*

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# Mission

Increase numbers of *domestic* students (particularly students from under-represented groups) completing science, technology, engineering, and mathematics degrees through enhancing student interest and attitudes toward math, science, technology, and engineering; strengthening peer, family, and school support for such interests; ensuring long-term inclusiveness of women and minorities in science and technology programs; increasing the numbers of students taking college-prep mathematics and science courses.

# Objective

Establish and ensure a successful, sustainable, and affordable long-term DoD-wide program to develop the future Science and Engineering workforce for the DoD Research Enterprise by invigorating the science and mathematics curriculum at the K-12 levels, enhancing the teaching skills of science and mathematics teachers to deliver that curriculum, and increasing the interest of K-12 students in the STEM (science, technology, engineering, and mathematics) disciplines.

# ***Core Criteria***

- Inclusive Program (in classroom)
- S&E Involvement
- Efforts matched to Standards of Learning/State Requirements
- Problem/Inquiry Based Learning
- Evaluation and Metrics
- Consistent Sustainable Program
- Educational Partnership Agreements

# STEM Learning Modules

## Naval Programs



### Program Components:

**S&E Intervention In-Classroom and After Hours**  
**First Robotics**  
**Sea Perch**  
**Mathcounts**  
**Material Science Modules**  
**Curricula and Module Development (PBL/IBL)**  
**Professional Development (S&Es with Teachers)**  
**Aligning to National and State Standards**  
**Educational partnership agreements**

### Key Participants:

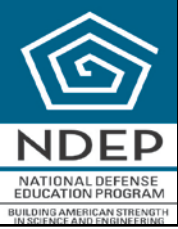
NAVAIR/NAVSEA/SPAWAR/MCSC  
 Local School Districts  
 Universities  
 Local Chambers of Commerce

### Products

Summer Camp Guides  
 PBL/IBL Modules  
 Classroom Curricula  
 Professional Development and Ethics Training

### Impact:

Multiple States/Labs/Shipyards/  
 Leveraged: Grants/Congressional/HQ/Labs  
 VDOE Programs That Work Award (2008 & 2009)  
 2009 Navy Community Service of the Year  
 (NUWCNWPT)  
 Golden Engineering leadership Award (SPAWAR)  
 2009 *Admiral Samuel Gravely Award* for Outreach and  
 Diversity (NSWCCD)



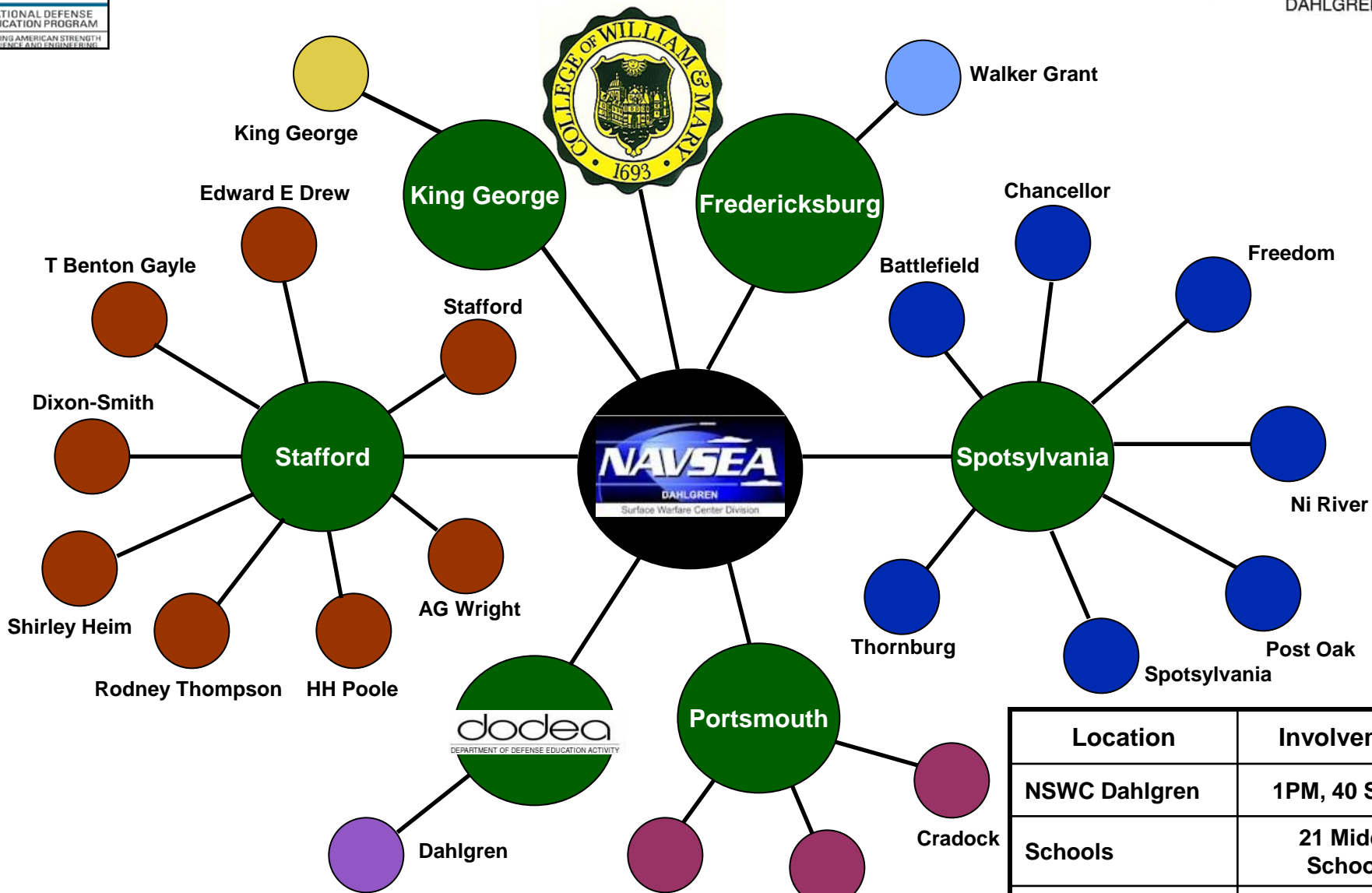
# FY10 Activities / Highlights



- S&Es In-classroom
- Summer STEM Academies
- First robotics
- Juneau Sun-to-Sea Camp
- Science fairs
- Math/Science Tutoring
- Mathcounts
- STEM Professionals with Class
- Girl's Day Out
- St. Mary's Summer Internships
- BEWISE Boot Camp
- San Diego Science Festival
- Grossmont College Science Festival
- Expanding Your Horizons
- Science Nights
- Space Day
- RF SEEK
- SEAPERCH
- Bring Future Engineers/Child to Work

Distribution A. Approved for public release.

# Virginia Implementation



**All are Middle Schools!**

Distribution A: Approved for public release.

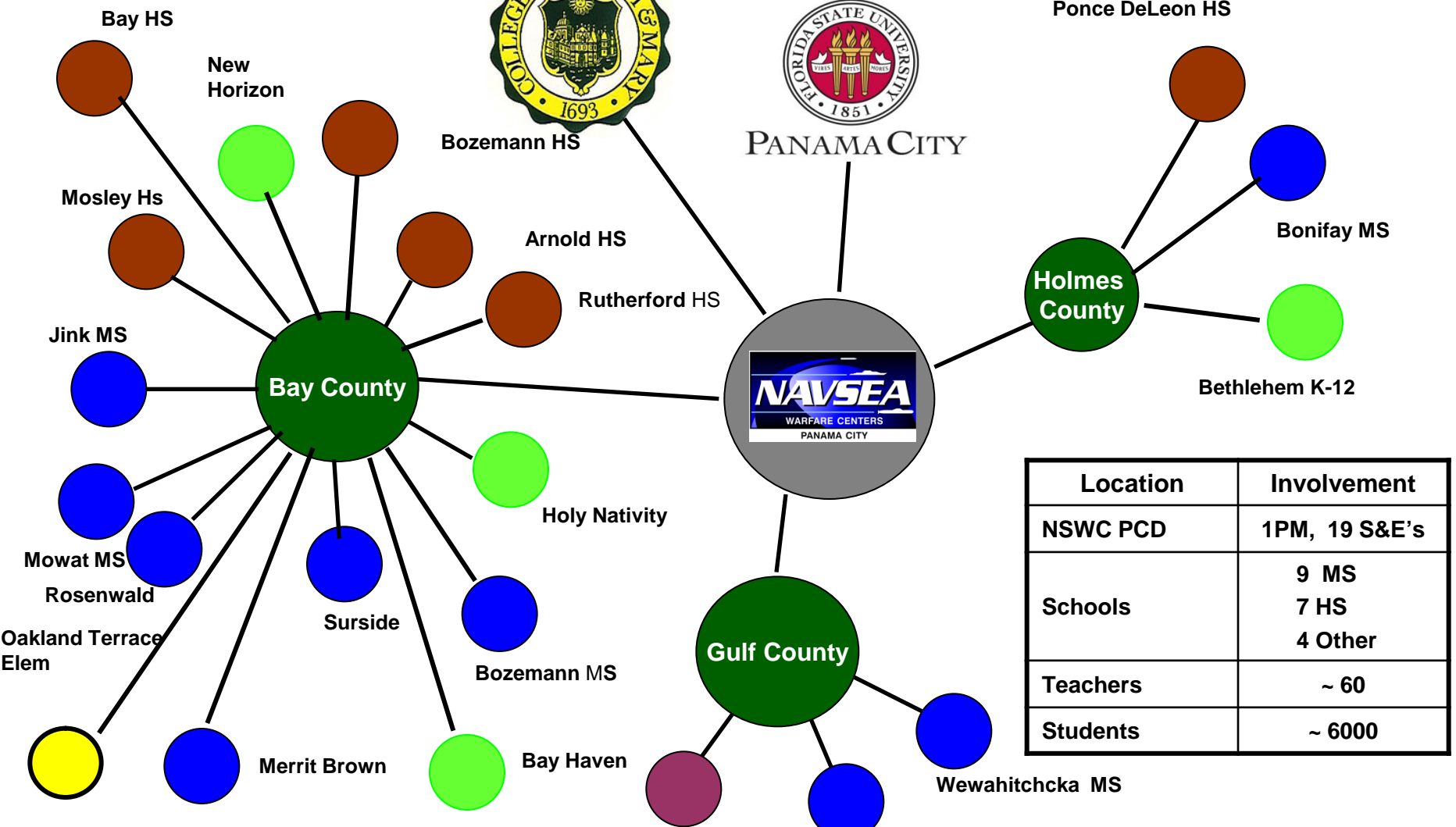
Location	Involvement
NSWC Dahlgren	1PM, 40 S&E's
Schools	21 Middle Schools
Teachers	~ 79
Students	~ 5000

# Panama City, Florida

FLORIDA STATE  
UNIVERSITY



PANAMA CITY



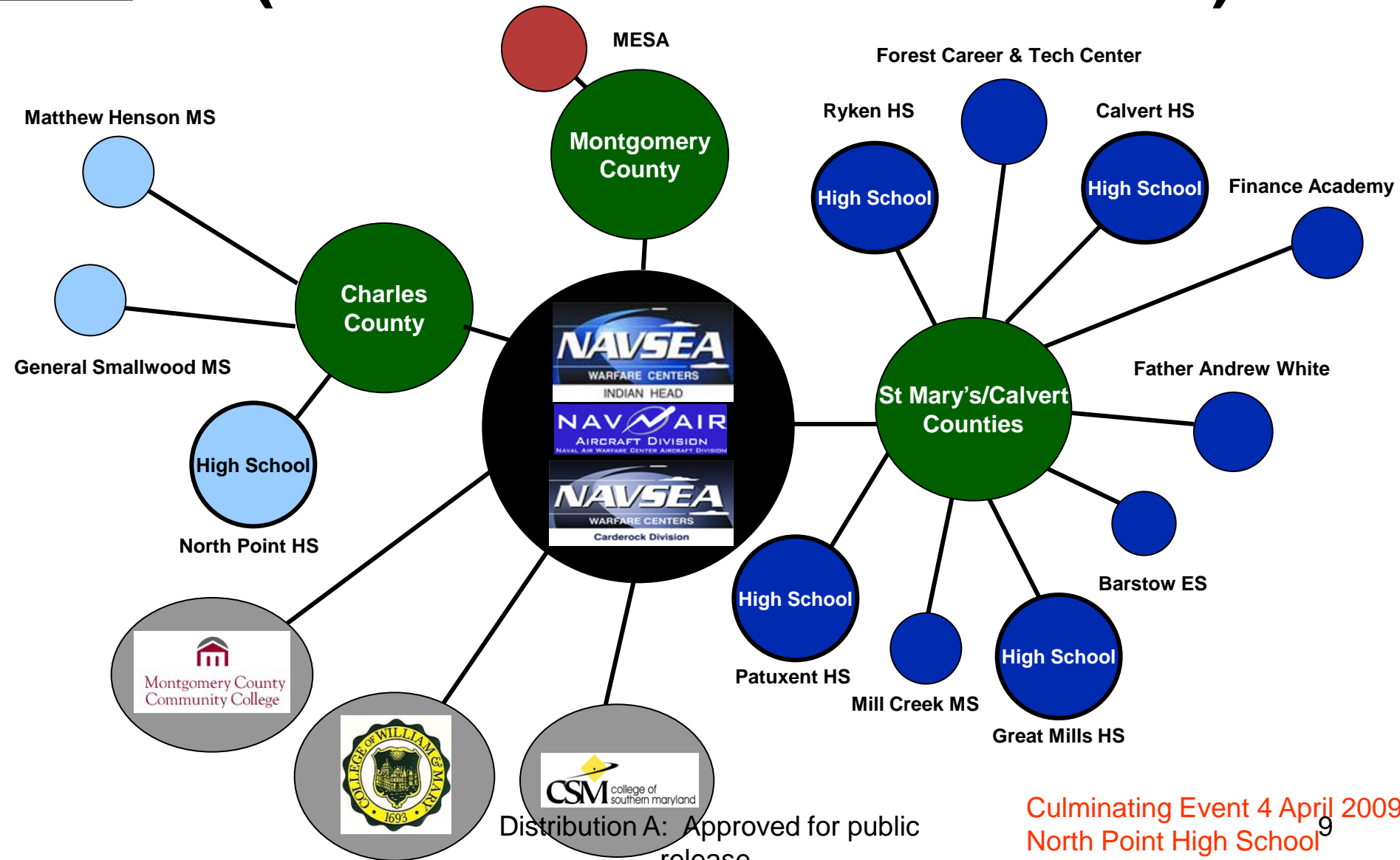
Location	Involvement
NSWC PCD	1PM, 19 S&E's
Schools	9 MS 7 HS 4 Other
Teachers	~ 60
Students	~ 6000

Middle Schools

High Schools

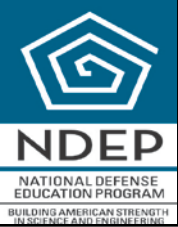
Distribution A: Approved for public release.

# Maryland Implementation (NSWC-NAWC Collaboration)

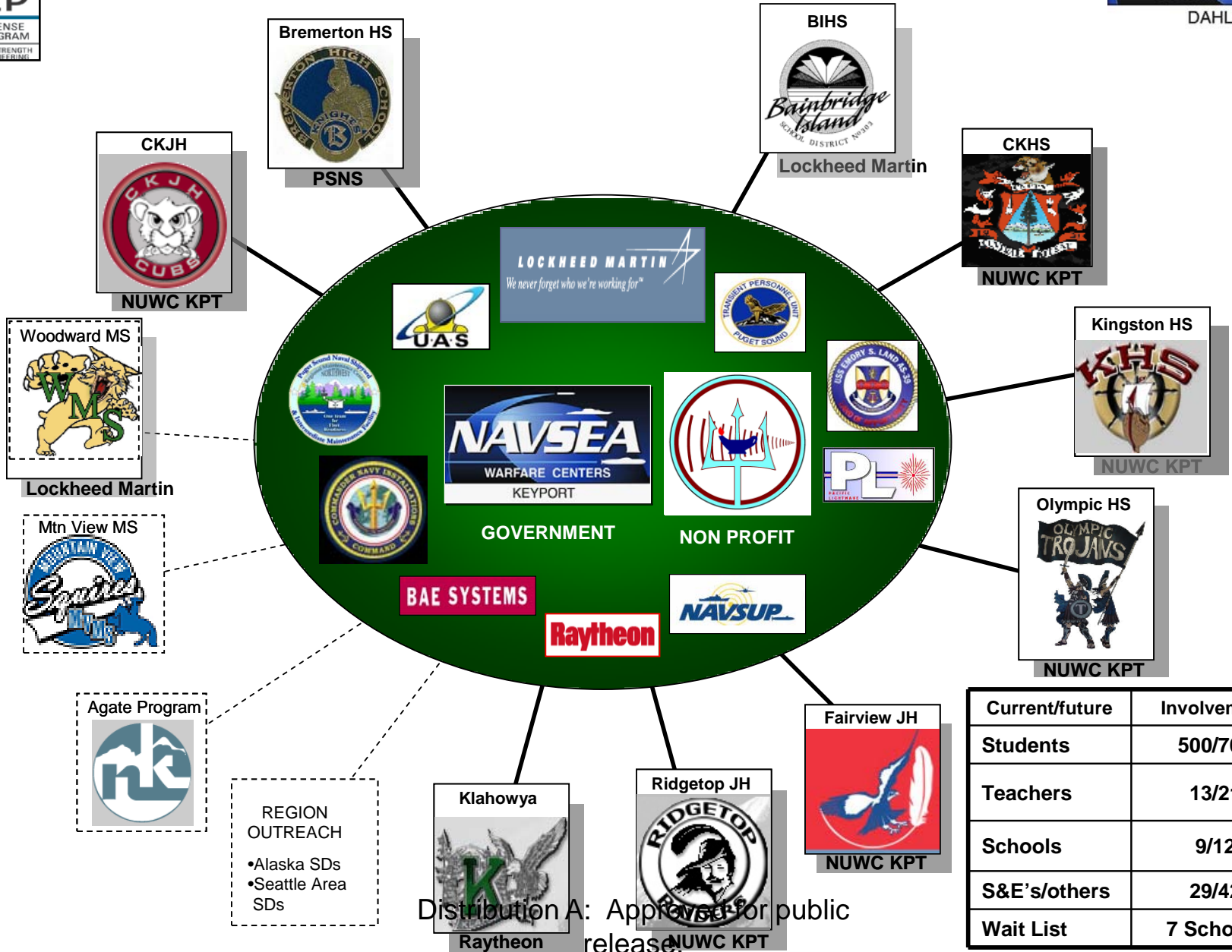


Distribution A: Approved for public release.

Culminating Event 4 April 2009  
 North Point High School  
 Waldorf, MD



# ROV Outreach



REGION  
OUTREACH

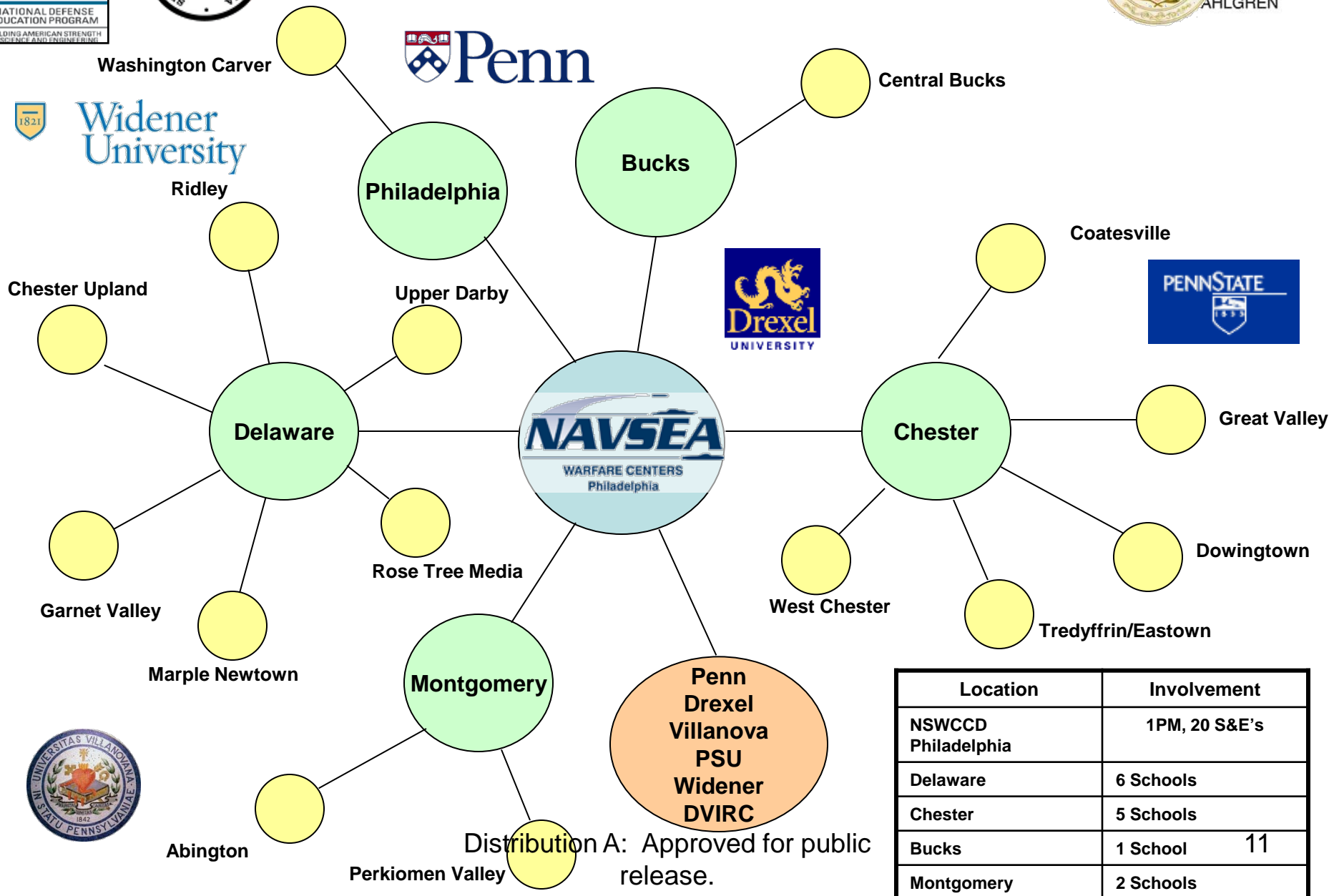
- Alaska SDs
- Seattle Area SDs

Current/future	Involvement
Students	500/700
Teachers	13/21
Schools	9/12
S&E's/others	29/42
Wait List	7 Schools

Distribution A: Approved for public release.



# Pennsylvania Implementation Draft



Distribution A: Approved for public release.

Location	Involvement
NSWCCD Philadelphia	1PM, 20 S&E's
Delaware	6 Schools
Chester	5 Schools
Bucks	1 School 11
Montgomery	2 Schools

# Educational Outreach Implementation

