

U.S. Army Engineering and Support Center “Huntsville Center” Command Overview

COL Nello Tortora

Commander

U.S. Army Engineering and Support
Center, Huntsville

U.S. Army Corps of Engineers

7 JUNE 2011



US Army Corps of Engineers
BUILDING STRONG[®]



USACE Vision

A GREAT engineering force of highly disciplined people working with our partners through disciplined thought and action to deliver innovative and sustainable solutions to the Nation's engineering challenges.

USACE Mission

Provide vital public engineering services in peace and war to strengthen our Nation's security, energize the economy, and reduce risks from disasters.

Huntsville Center Mission

The U.S. Army Engineering and Support Center serves the U.S. Forces, their Families and the nation by providing specialized technical expertise, global engineering solutions, and cutting edge innovations through centrally managed programs in support of national interests.



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Our Charter

ER 10-1-22

Huntsville Center has programmatic and functional boundaries in lieu of geographical boundaries. We execute programs and projects that:

Are national or broad in scope

Require integrated facilities or systems that cross geographical division boundaries

Require commonality, standardization, multiple site adaptation, or technology transfer

Require a centralized management structure for effective control of program development, coordination and execution

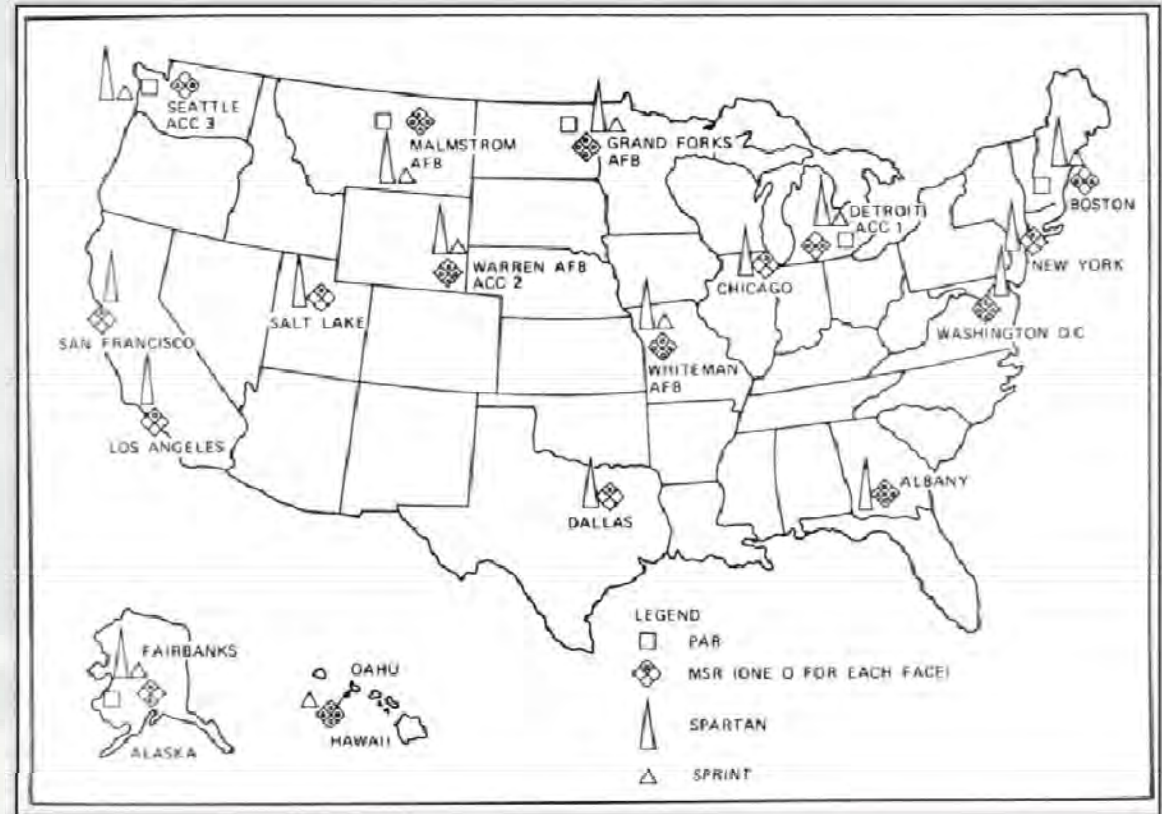
Require functions to be performed that are not normally accomplished by a HQUSACE organizational element



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Historical Overview

- Huntsville Division was founded in 1967 to manage the design and construction of facilities needed for the nation's Sentinel/Safeguard Ballistic Missile Defense System.



Historical Overview



- 1970s: Huntsville Division transitioned to a diverse set of programs characterized by a need for centralized management, large scale procurement, and the development and application of sophisticated engineering criteria.
- 1980s: Huntsville Division changed from a design and construction organization to a diversified center of expertise for engineering, design and procurement with 20 new programs assigned.
- 1990s: Huntsville Division became the U.S. Army Engineering and Support Center and now has 40 programs and 10 centers of expertise assigned to support the Army and the nation.



Huntsville Center Footprint

Annual Program: \$1.5B

- Installation Support \$1,100M
- Engineering \$88M
(includes Medical CX of \$25M)
- Chemical Demil \$187M
- Ordnance Explosives \$220M
- Environmental and Munitions CX \$16M

Customers: Very diverse customer base which includes DOD and many Federal government agencies.

Personnel: 756

649 – Huntsville, AL
52 – Omaha, NE
10 – Pueblo, CO
12 – Richmond, KY
21 – Alexandria, VA
1 – Fort Worth, TX
1 – Louisville, KY
2 – Iraq
7 – Afghanistan
1 – Baku, Azerbaijan



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USACE Centers of Expertise

Mandatory Centers of Expertise

- Medical Facilities
- Army Ranges and Training Lands
- Electronic Security Systems
- Environmental and Munitions
- Utility Monitoring and Control Systems



San Antonio Military Medical Center

Technical Centers of Expertise

- Energy Savings and Performance Contracting
- Heating, Ventilation and Air Conditioning
- DD Forms 1391/3086 Preparation/Validation
- Operation and Maintenance Engineering Enhancement
- Installation Support



New York, Brooklyn Bridge



Ordnance and Explosives Programs

- Environmental and Munitions Center of Expertise (EM CX) provides:
 - ▶ Technical assistance and document review
 - ▶ Technology transfer/lessons learned
 - ▶ Guidance document development
 - ▶ Participation on panels and advisory committees
 - ▶ Training
 - ▶ Environmental program and project management assistance
- Military Munitions Design Center and Remedial Action Team
 - ▶ Investigation, design, and remediation of FUDS, ranges, and construction sites.
 - ▶ Technology Insertion/Development
 - ▶ Supporting 200 sites and managing execution of \$107 million in contracts



A specially equipped helicopter searches for anomalies at Martha's Vineyard, Mass.



UXO equipment demonstration at Fort Bliss Digital Multi-purpose Range Complex



Ordnance and Explosives Programs

- Chemical Warfare Design Center
 - ▶ Investigation and remediation of chemical weapons sites and weapons
 - ▶ Support to DA, DOD, State Department, and DTRA worldwide
 - ▶ Supporting RI/FS/RA at 10 sites and managing execution of \$15 million in contracts



Spring Valley Formerly Used Defense Site (FUDS) near Washington D.C.



Ordnance and Explosives Programs

- OCO Support
 - ▶ Captured Enemy Ammunition (Iraq) destroyed 400,000 tons of munitions from 2003 - 2008
 - ▶ Coalition Munitions Disposal Iraq (coming soon to Afghanistan and Kuwait)
 - ▶ Mine clearance in Afghanistan
 - Mobile teams clearing 7,413 acres
 - Supporting 494 acre expansion of Bagram air field clearing mines, ordnance, bunkers
- \$2 billion Worldwide Remediation Services Contract



Mine clearance in Afghanistan



Medical Programs

- Medical Facilities CX: Leadership responsibility for design acquisition strategy, design development and technical oversight during design and construction execution for medical aspects of the project.
 - ▶ Partnership with Project Delivery Teams
 - ▶ Subject Matter Experts for preparation and interpretation of medical unique standards, criteria, specifications and guidance
 - ▶ Liaison and coordinator between USACE and military services and surgeon generals
 - ▶ Liaison with academia, code bodies, testing and standard setting jurisdictions, and professional associations
 - ▶ Manage \$500 million A/E IDIQ



Artist's rendering of Darnall Army Community Hospital, Fort Hood, Texas.

Magnitude of the Medical Program

- **Collaboration with 19 individual districts**
 - 47 projects in design
 - 35 projects in construction
 - 74 projects awaiting authorization
- **\$13.23 billion = value of all projects**



Medical Programs

Huntsville Center Medical Support Team: One of three USACE teams that provide specialized support to Army MEDCOM facilities.

- Medical Repair and Renewal (MRR) Program: Executes design, repair, replacement, renovation, sustainment, restoration and modernization of medical facilities.
 - ▶ Customers include Army, Air Force, Navy and Veterans Administration
 - ▶ 100 design-build projects valued at \$500 million
 - ▶ Projected Acquisitions: \$750 million, \$585 million Unrestricted 3rd Quarter FY 11, \$165 million Restricted 1st Quarter FY 12



Nutrition Care, Fort Hood, Texas



Fort Sill Vet Clinic



Medical Programs

- Integrated Medical Modular Support Systems (IMMSS): Provides systems furniture worldwide for Army MEDCOM
 - ▶ Blanket purchase agreements with \$400 million capacity
 - ▶ 200 task orders at \$25 million
- Operations and Maintenance Engineering Enhancement (OMEE): Provides contract services to operate facility infrastructure and maintain building systems
 - ▶ Customers include Army, Air Force, Navy and Veterans Administration
 - ▶ 40 hospitals at \$85 million per year
 - ▶ Capacity Unrestricted/Restricted = \$465 million
- Initial Outfitting and Transition (IO&T): New program that takes facility from construction complete to functional Soldier ready. Recently awarded \$500 million IDIQ for Army MEDCOM



Nurses station



Installation Support Programs

- USACE Installation Support CX: Huntsville Center executes assigned ACSIM and IMCOM programs in partnership with Districts, DPWs and IMCOM.

- ▶ Facilities Reduction Program: Eliminates excess facilities

- Regional MATOCs with \$240 million in capacity.
- Demolition MATOCs are available to support the Districts and Garrisons with demo associated with a MILCON project (footprint and non-footprint).
- FY11 budget = \$17 million



Tencza Terrace, Fort Myer, Va.

- ▶ Facilities Repair and Renewal: Fast track, efficient method for design/build renovations for all federal agencies

- \$500 million design-build MATOC and \$20 million A/E services
- 40 projects valued at \$95 million



Air Force Personnel Center at Randolph Air Force Base

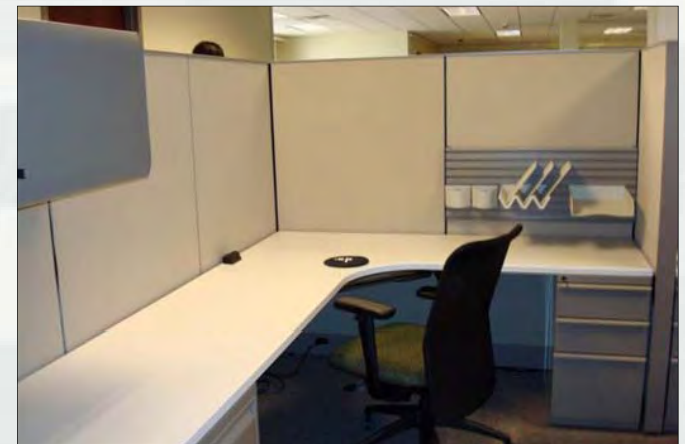


Installation Support Programs

- ▶ Access Control Points: Upgrade installation gates security equipment and facilities to meet new standards and assure consistency Army-wide.
 - Establishing three different contract suites for AE services, construction and maintenance.
 - \$50 million annual budget
 - **Projected Acquisitions: \$800 million, 3rd quarter FY 11, \$480 million Unrestricted, \$320 million Restricted**
- ▶ Army Centralized Furnishings Program: Provides program management for ACSIM/IMCOM MILCON, BRAC, SRM projects administrative and barracks furniture
 - Centralized approach results in clear standards and consistent quality; competitive procurements with 20 percent cost savings; and a standard process for on-time delivery
 - FY10: \$300 million in awards with \$75 million cost savings and met 97 percent of troop ready dates.



IB barrier being tested at Aberdeen Proving Ground, Md.



Installation Support Programs - Energy

- Utility Monitoring and Control Systems (UMCS) CX: Reviews all design and procurement packages; provides technical assistance, criteria, guidance and training, and executes projects for DOD and other federal agencies.
 - ▶ \$900 million unrestricted/restricted MATOC
 - ▶ 420 projects at \$639 million
- Army Metering: Installing 13,000 meters and global meter data management system to track, record and report energy consumption
- Energy Program Projected Acquisition: \$480 million, Unrestricted, 1st Quarter FY 12



The Brigade Combat Team Dining Facility at Fort Bliss, TX, is powered by solar panels.



Installation Support Programs - Energy

- Energy Engineering Analysis Program (EEAP): Analyzes energy use at installations and provides options for savings. Since 2006, 32 surveys completed with 2,400 projects identified for \$125 million per year in potential savings.
 - ▶ Combined with Installation Energy and Water strategy, a project list is produced to achieve energy goals

- Energy Conservation Investment Program (ECIP)
 - ▶ Revised Program Management Plan finalized 24 Feb 2011
 - ▶ New \$240 million MATOC for ECIP execution
 - ▶ DD 1391 validations performed by HNC
 - ▶ **Projected Acquisition \$40 million, Unrestricted, 1st Quarter FY 12**

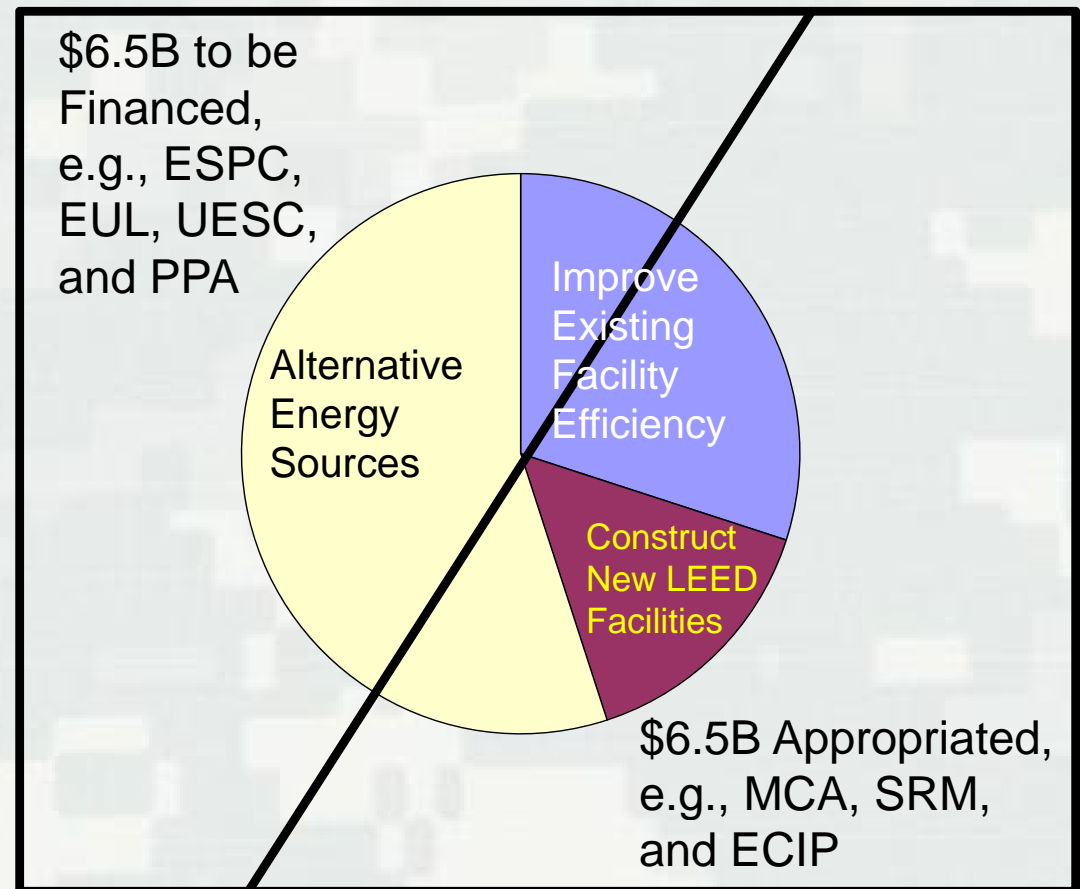
- Energy Savings Performance Contracting (ESPC): Contractor provides capital and expertise to make infrastructure energy improvements to significantly reduce energy utilization and cost.
 - ▶ Contractor maintains project and shares in savings over a payback period up to 25 years.
 - ▶ Current projects: Investment of \$397M with energy savings of \$801M



Proposed Army Energy Initiative Office

For the non-appropriated half of the Army's energy requirement,

- DASA(E&S) will manage acquisition of private sector financed, utility scale renewable energy projects similar to the Residential Communities Initiative (RCI) program.
- CEHNC will provide contracting support to the DASA(E&S) Energy Initiative Office during the program and project development phase.
- Projects will transition to an increasing USACE management role for project execution and life cycle contract administration.



\$13B Total
FY12-16



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Renewable Energy in Perspective

- The Army is largest facility energy consumer in the Federal Government - 33.4 trillion Btu/\$1.2B/ 5.8 million barrels of oil equivalent (FY10)
- Federal Government success in meeting energy mandates depends upon the Army improving its performance
- Establishing the Energy Initiatives Office (EIO) is part of comprehensive strategy to attract private sector investment in an era of declining Army resources.



Fort Carson Photovoltaic Array

EXTERNAL VIEW: "Pay attention: When the U.S. Army desegregated, the country really desegregated; when the Army goes green, the country could really go green." – *Thomas Friedman, 2009*

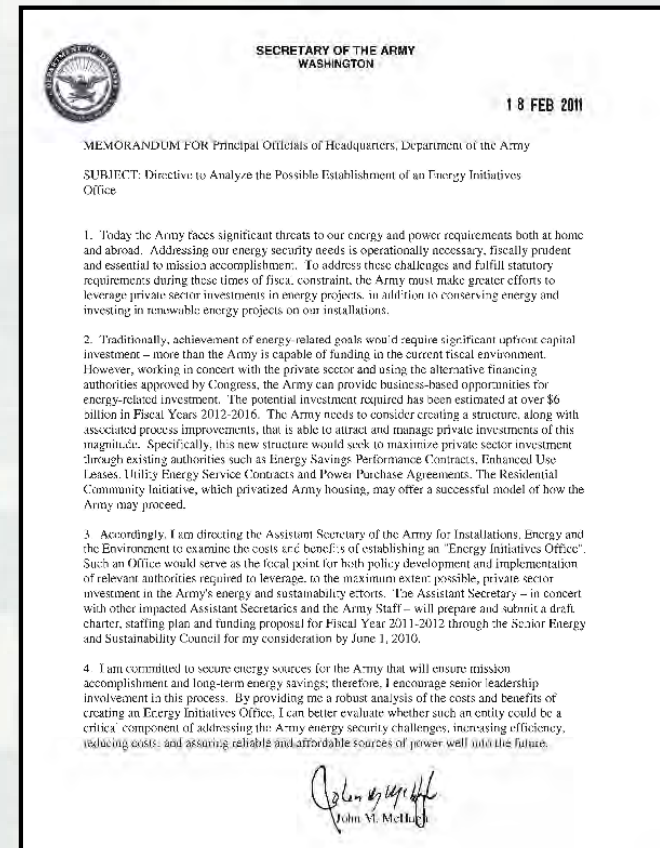
ARMY VIEW: "To remain operationally relevant and viable, the Army must reduce its dependency on energy, increase energy efficiency, and implement renewable and alternate sources of energy." – *SA/CSA Testimony, House Armed Services Committee, March 2011*

WHITE HOUSE VIEW: "Now, there are costs associated with this transition. And there are some who believe that we can't afford to pay those costs right now. I say we can't afford not to change how we produce and use energy – because in the long-term costs to our economy, our national security and our environment are far greater." – *President Obama, June 2010*

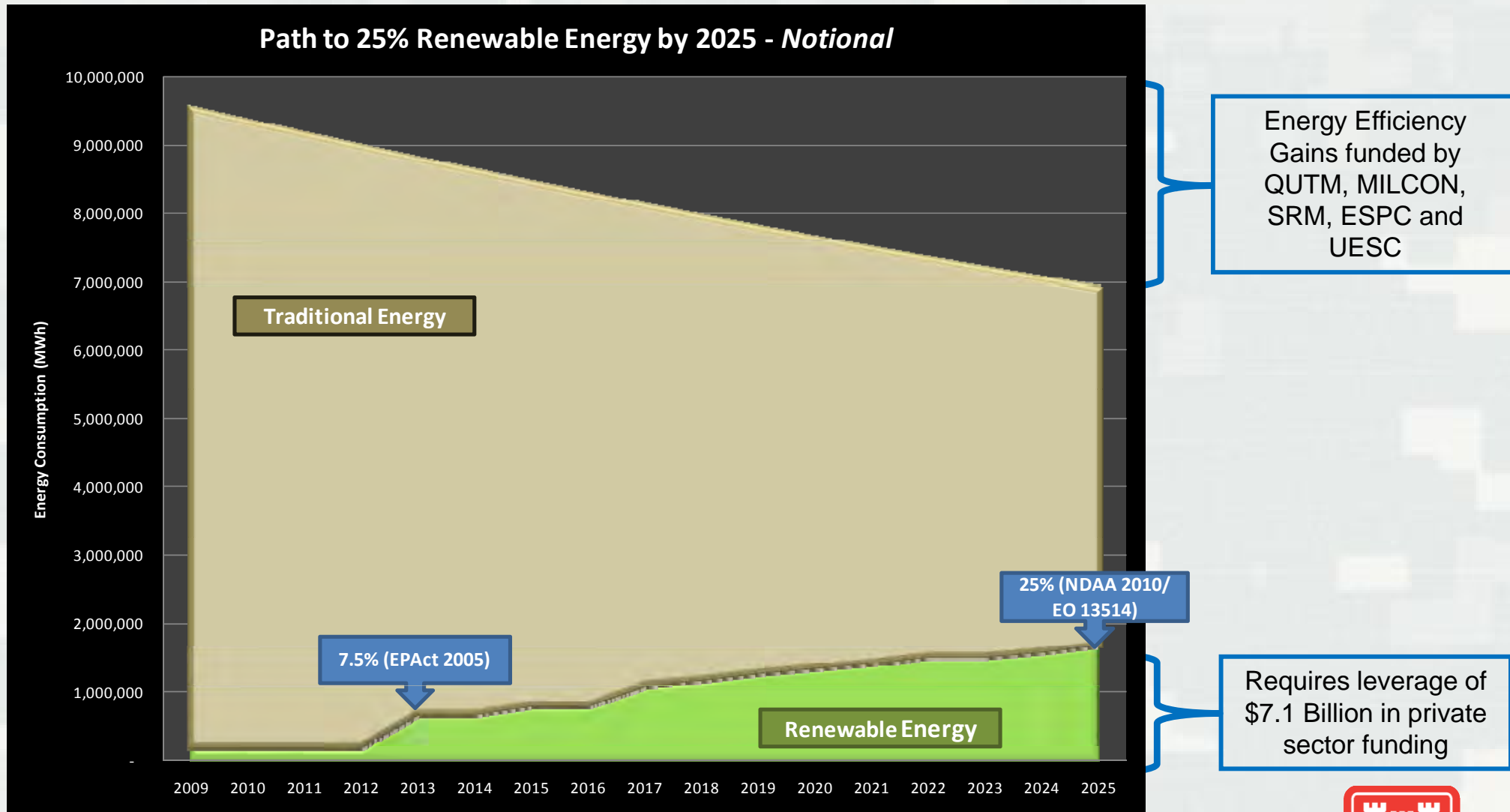


SECARMY Tasking

- SECARMY memorandum, 18 Feb 2011, directed ASA(IE&E) to examine the costs and benefits of establishing an “Energy Initiatives Office (EIO)”
- EIO Concept:
 - Mission: Develop and implement large scale renewable energy projects with alternative financing using an Army enterprise-wide approach
 - Key Functions:
 - Attract potential private financing of \$ 7.1B
 - Streamline process
 - Leverage existing inter-agency partnerships
 - Enterprise level project definition
 - Project development and execution



Planning the Program: "End Game"



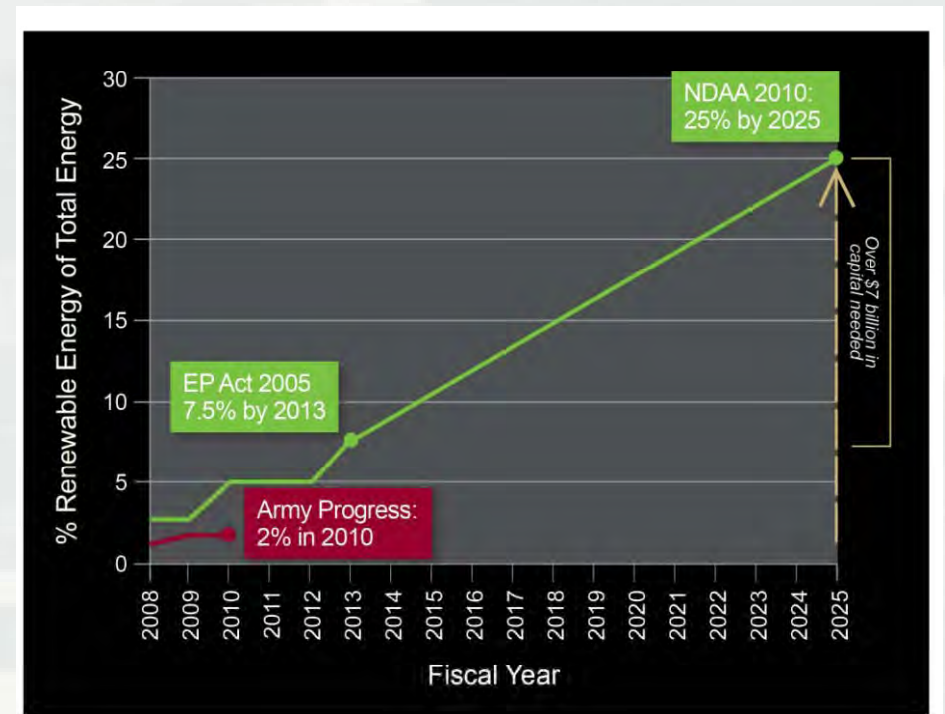
Source: Deputy Assistant Secretary of the Army for Energy and Sustainability



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Energy Problem Statement

- Army faces critical installation energy challenges -
 - ▶ Achieving secure, reliable electricity supplies for an volatile, uncertain future
 - ▶ Meeting federal renewable energy mandates
- Renewable power mandate:
 - ▶ 25% of energy consumption in 2025
 - ▶ FY10 performance: 2% vs goal of 5%
- Current decentralized installation-level approach is not meeting renewable energy mandates:
 - Garrisons lack expertise, resources and financing for project development
 - Army decision making longer than private sector standard; deals harder, transaction costs higher
 - No clear focal point for Army-wide execution and accountability



Installation Support Programs

- Electronic Security Systems (ESS) CX: Responsible for reviewing all design and test submittals for Army ESS. Also provides technical, engineering, acquisition, and fielding support to all federal agencies.
 - ▶ Currently 73 projects valued at \$149 million
 - ▶ Awarded new ESS \$900 million MATOC in FY11
- Range and Training Land Programs (RTLTP) CX: Responsible for reviewing designs and ensuring Army standards are met. Provides planning, MILCON programming and development of standard designs for Army automated ranges, and DD1391 preparation and validation.



Fort Bliss Digital Multi-purpose Range Complex



Centers of Standardization

- Child and Family Services

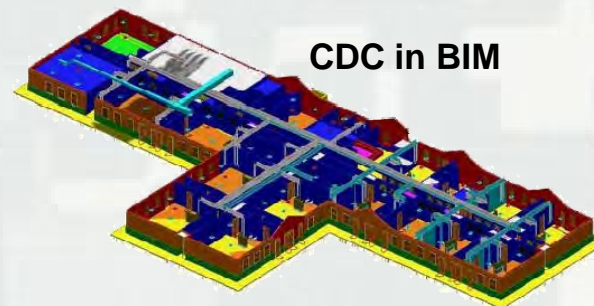
- ▶ Child Development Centers (Infants- 5 years)
- ▶ Child Development Centers (School Age 6-10)
- ▶ Youth Activity Centers
- ▶ Army Community Service Centers
- ▶ Soldier Family Support Centers



Fort Benning, GA
Fitness Center

- Sports and Fitness Facilities

- ▶ Physical Fitness Facilities
- ▶ Outdoor Sports Facilities
- ▶ **Projected Acquisition:**
Physical Fitness Facility,
Northern Region, \$97 million,
HUBZONE



- Emergency Facilities

- ▶ Fire Stations
- ▶ Consolidated Fire, Safety and Security Facilities

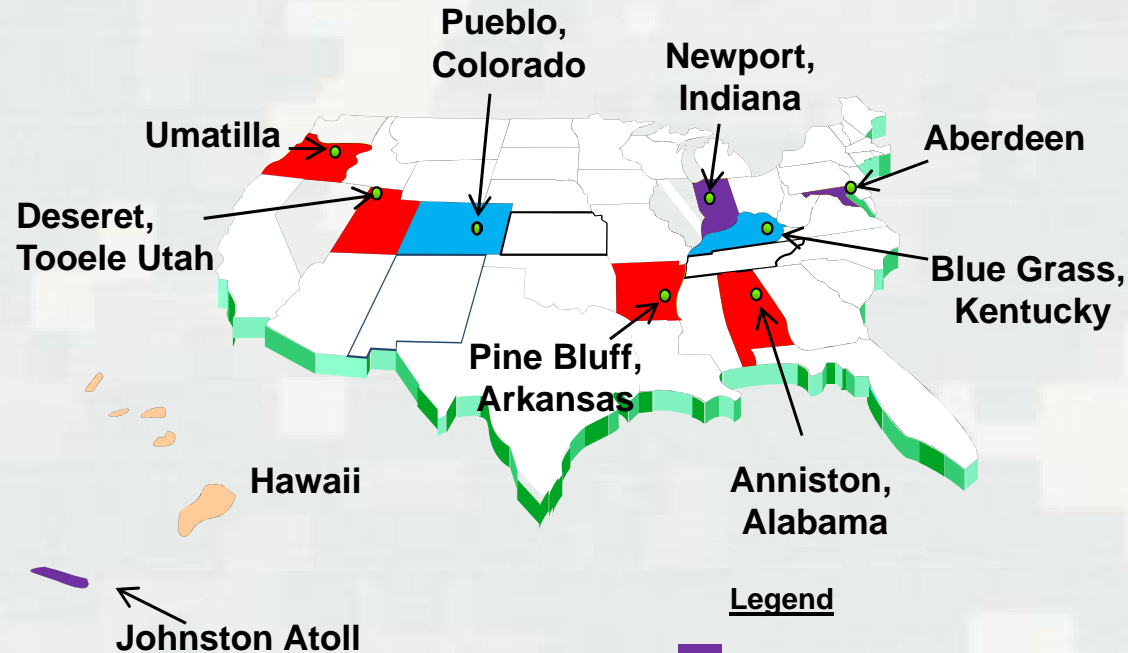
- Training Ranges

- ▶ Automated Record Fire Ranges
- ▶ Combat Pistol/MP Qualification Courses
- ▶ Modified Record Fire Ranges
- ▶ Urban Assault Courses
- ▶ Live Fire Shoothouses
- ▶ Battle Command Training Centers
- ▶ Training Support Centers



Chemical Demilitarization Program

- \$8.5 billion program assigned in 1981 to destroy chemical weapons stockpile.
- Design and construction of 9 sites using incineration and chemical neutralization technology.
- U.S. stockpile = 31,501 tons of chemical agent .
87 percent destroyed as of May 2011.
- Oversaw construction of Russian chemical demilitarization site.



Pueblo, CO



Proposed IDIQ Contracts

Project Title	New or Repl	Period of Perf	Reqmt	Region	Est Value	Method (# Awards are Estimated)	Type	Solicitation Timeframe
Medical Repair & Renewal	Repl	5	Design/Build	CONUS	\$750M	\$585M Unrestricted \$165M Restricted	MATOC FFP	3 rd Qtr FY11 1 st Qtr FY12
ACP	New	5	Design/Build	CONUS	\$800M	\$480M Unrestricted \$320M Restricted	MATOC	3 rd Qtr FY11
ECIP	New	5	Design/Build	CONUS and OCONUS	\$40M	Unrestricted MATOC	MATOC FFP	1 st Qtr FY12
Energy	New	5	Design/Build	CONUS	\$480M	Unrestricted MATOC	MATOC FFP	1 st Qtr FY12
Physical Fitness Facility – Northern Region	New	5	Design/Build	CONUS	\$97M	HUBZone MATOC	MATOC FFP	3 rd Qtr FY11



This information is subject to change.

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Proposed IDIQ Contracts

Project Title	New or Repl	Period of Perf	Reqmt	Region	Est Value	Method (# Awards are Estimated)	Type	Solicitation Timeframe
Ballistic Missile Defense – A-E	New	5	A-E Services	CONUS	\$48M	Unrestricted MATOC	MATOC FFP	1 st Qtr FY12
ACP/ESS/UMCS O&M Services	New	5	Services	CONUS	\$475M	\$315M Unrestricted \$160M Restricted	MATOC	3 rd Qtr FY11
UMCS/ESS A-E	New	5	A-E Services	CONUS	\$35M	MATOC Unrestricted	MATOC FFP	1 st Qtr FY12
ACP – A-E Services	New	5	Services	CONUS	\$15M	MATOC	MATOC FFP	1 st Qtr FY12
Planning & Programming A-E	New	5	A-E Services	CONUS	\$75M	MATOC's	MATOC FFP	3 rd Qtr FY11



This information is subject to change.

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Questions?



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