United States Army Corps of Engineers Overview

Brigadier General Kent D. Savre
Commander
North Atlantic Division, U.S. Army Corps of Engineers

on behalf of:

Lieutenant General Thomas Bostick
Commander
U.S. Army Corps of Engineers

7 October 2014

US Army Corps of Engineers
BUILDING STRONG®

Briefing Agenda

- USACE Command Overview
- A USACE Division Overview
- History of USACE
- USACE Chief of Engineers - Multiple Roles
- USACE Mission: Who we are, What we do, How we do it
  - Program Areas
    - Military Programs
    - Civil Works Programs
    - Engineer Research and Development Center
- Questions

AN OVERVIEW: US Army Corps of Engineers

Overview

- **Military Missions** (Design, Construction, COCOM Support, Environmental, Energy and Sustainability)
- **Civil Works** (Navigation, Hydropower, Flood Control, Shore Protection, Water Supply, Regulatory, Recreation, Disaster Response, Environmental Restoration)
- **Real Estate** (Acquire, Manage and Dispose; DoD Recruiting Facilities; Contingency Operations)
- **Research and Development** (Warfighter, Installations & Energy, Environment, Water Resources)
- **Interagency Support** (Federal, State, Local, International)

National Capabilities

- Delivery across the globe
- World-class civilians and Soldiers
- Rapid response to disasters and challenges of all kinds
- Professional delivery of construction, natural resource management, energy, sustainability, capacity building

The Numbers

- 9 divisions, 44 districts
- 35,683 civilians; 782 military
- $15B for FY12 Military Program
- $6B for FY12 Civil Works Program
- 6 research labs : $1.5B
- 25K miles of navigable channels
- 195 commercial locks
- 926 harbors; 694 dams
- 4,300 recreation sites

Mission

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

Vision

Engineering solutions to the Nation's toughest challenges

Priorities

Support the Warfighter
Transform Civil Works
Reduce Disaster Risks
Prepare for Tomorrow

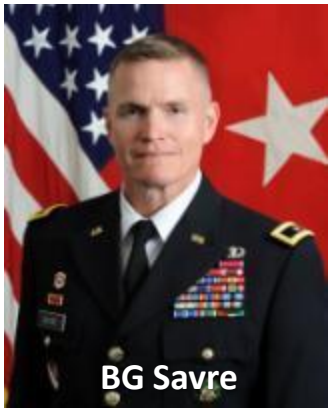
AN OVERVIEW: North Atlantic Division

Overview

- 1 of 9 regional business centers, consisting of six districts that plan, design, build, operate and maintain military and civil works projects and facilities within the region, Europe and Africa
- Projects address the environmental, infrastructure, and water-resource challenges within the region
- Support the military, protect America's water resources, and restore and enhance the environment

The Numbers

- 23% of U.S. population (72 M)
- 20% of U.S. commercial cargo
- 3,400 employees
- 50 Army, 13 USAF installations
- 2685 mi. of navigation channels
- 63+ miles of levees/channels
- 5 major ports; 3 hurricane barriers
- 8 high-rise bridges
- 54 dams; 5 canals; 4 locks

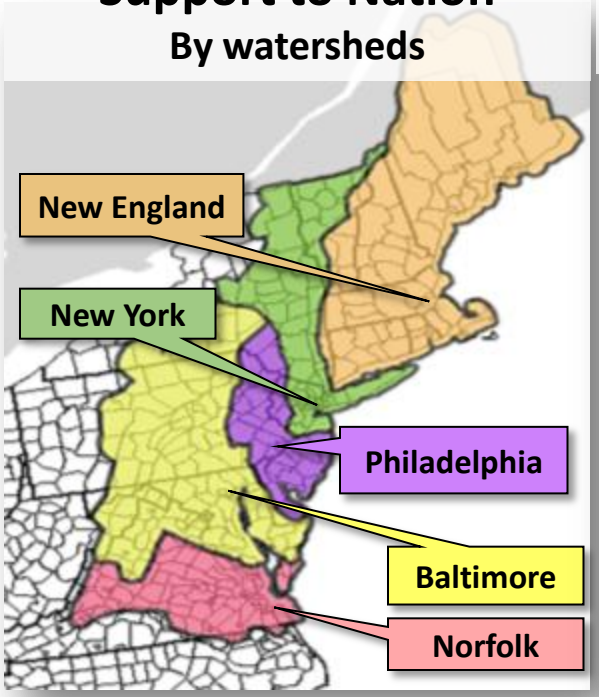


Division Capabilities

- Master Planning, Sustainability
- Construction Management
- Engineering, Design, Inspection
- Dredging
- Operations and Maintenance
- Disaster Response & Recovery
- Environmental Services
- Real Estate Services
- Estimating, Value Engineering
- Coastal Storm Damage Reduction
- Modeling
- Independent Technical Review
- Reach-back capability

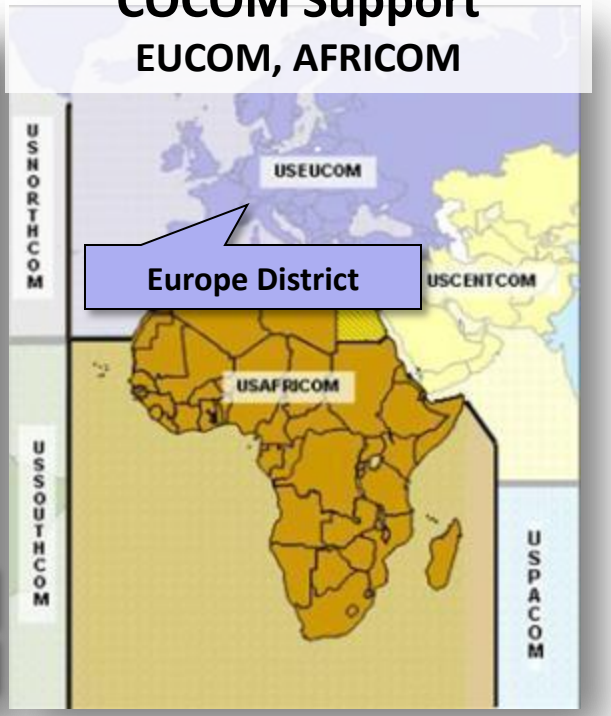
Support to Nation

By watersheds



COCOM Support

EUCOM, AFRICOM



History of the U.S. Army Corps of Engineers

1775-Today

•GEN George Washington appointed Colonel Richard Gridley as the Army's first chief engineer **June 16, 1775**.

•In **1779** Congress created a "Corps of Engineers," which included many French officers, to provide engineering support during the Revolutionary War.

•On **March 16, 1802**, the Army re-establishes USACE permanently. First task: Found and operate USMA, which, until the mid 1800s, was the country's only engineering school, with only engineers as academy superintendents until 1866.

•In the **early 1800s**, Congress tasked USACE – the only formally trained body of engineers in the new republic – to contribute works "of a civil nature," starting with a coastal fortification in Norfolk, lighthouses, jetties, and maps of the navigation channels. USACE also constructed monuments in Washington, D.C.

•As a young nation, America's frontiers beckoned. USACE soon began exploring and mapping the Western frontier and working on canals, rivers, and roads to ensure its pathways were cleared for commerce, military uses, and public mail. USACE surveyed and built roads over the Appalachians, eliminated navigational hazards, and built canals, locks, levees.

•Since then, USACE has responded to changing defense requirements and played an integral part in the development of the country.

Chief of Engineers Responsibilities

Multiple Roles

Chief of Engineers
ARSTAF

Commander
USACE

Chief of Branch
Engineer

ARSTAF Staff Principal

Direct Reporting Unit Commander (GO#3 & AR 10-87)

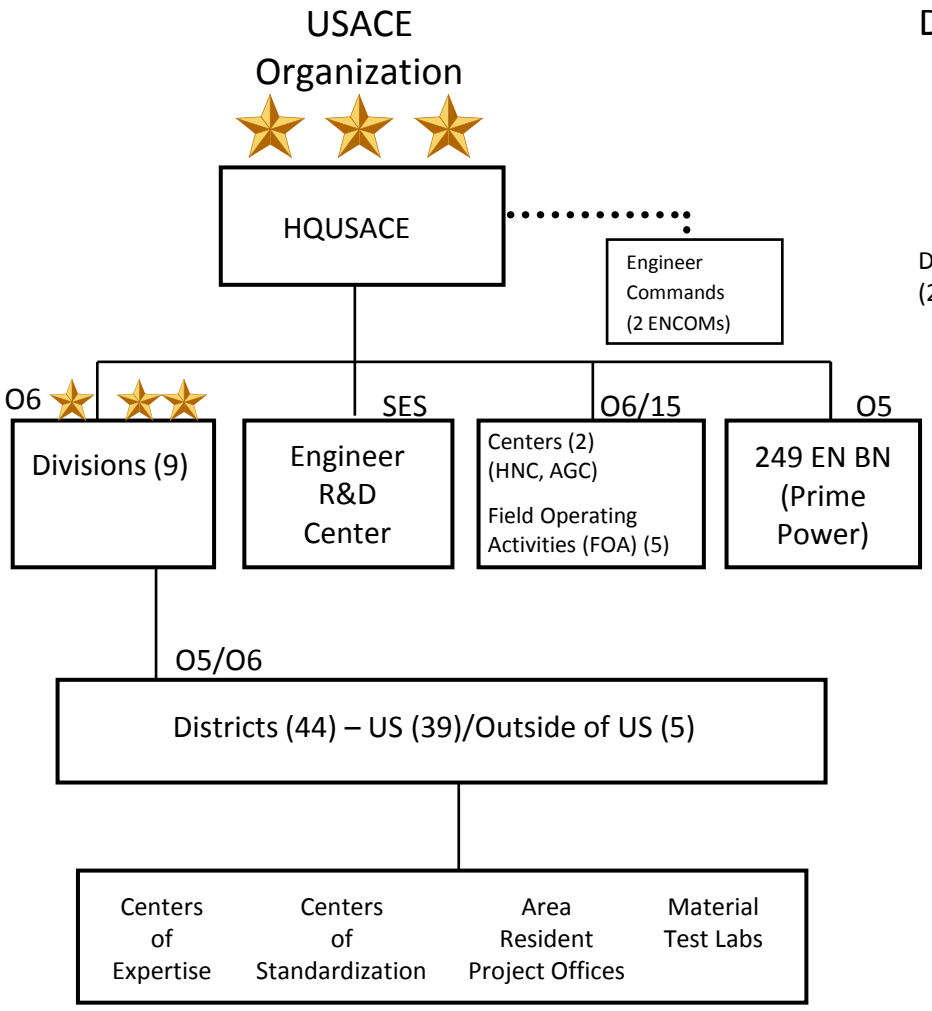
Capability Area Manager Operational Engineering (DODD 7045.23)

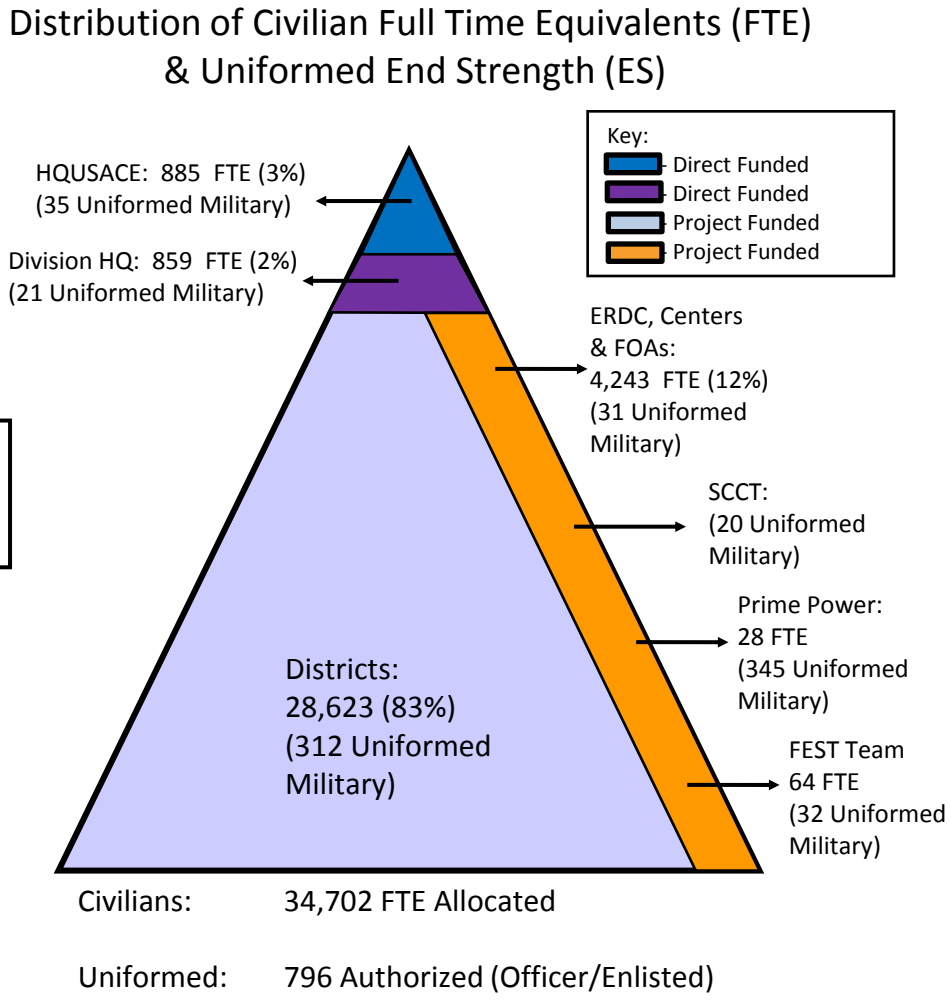
Regimental Advisor - Senior Mentor

Geospatial Governance Board Co-Chair (GGB Charter s/VSCA 1 May 2011

Joint Operations Engineer Board Co-Chair (JROCM 05 / DODD 7045.23

USACE Organization and Manpower





Workforce Size Driven by Customer Programs – 95% FTE Project Funded

Data as of Oct 12 FOAs=HECSA,IWR,MDC,UFC,ULA ▪▪▪▪▪ OPCON to USACE when not deployed Full-Time Equivalent (FTE) Senior Contingency Contracting Teams (SCCT)

USACE Mission Areas

BUILDING STRONG – USACE Supports the Army and the Nation

Military Programs

- Military Construction
- COCOM Support ,Overseas Contingency Operations (OCO)
- Installation Support, Environmental, Energy and Sustainability

Real Estate

- Acquire, Manage and Dispose
- DoD Recruiting Facilities
- Contingency Operations

Civil Works

- Navigation, Hydropower
- Flood Control, Shore Protection
- Water Supply, Regulatory
- Recreation, Disaster Response
- Environmental Restoration

Research & Development

- Warfighter
- Installations & Energy
- Environment
- Water Resources

Homeland Security

- Critical Infrastructure
- Anti Terrorism Plans
- Intelligence
- Facility Security Partnership

Interagency Support

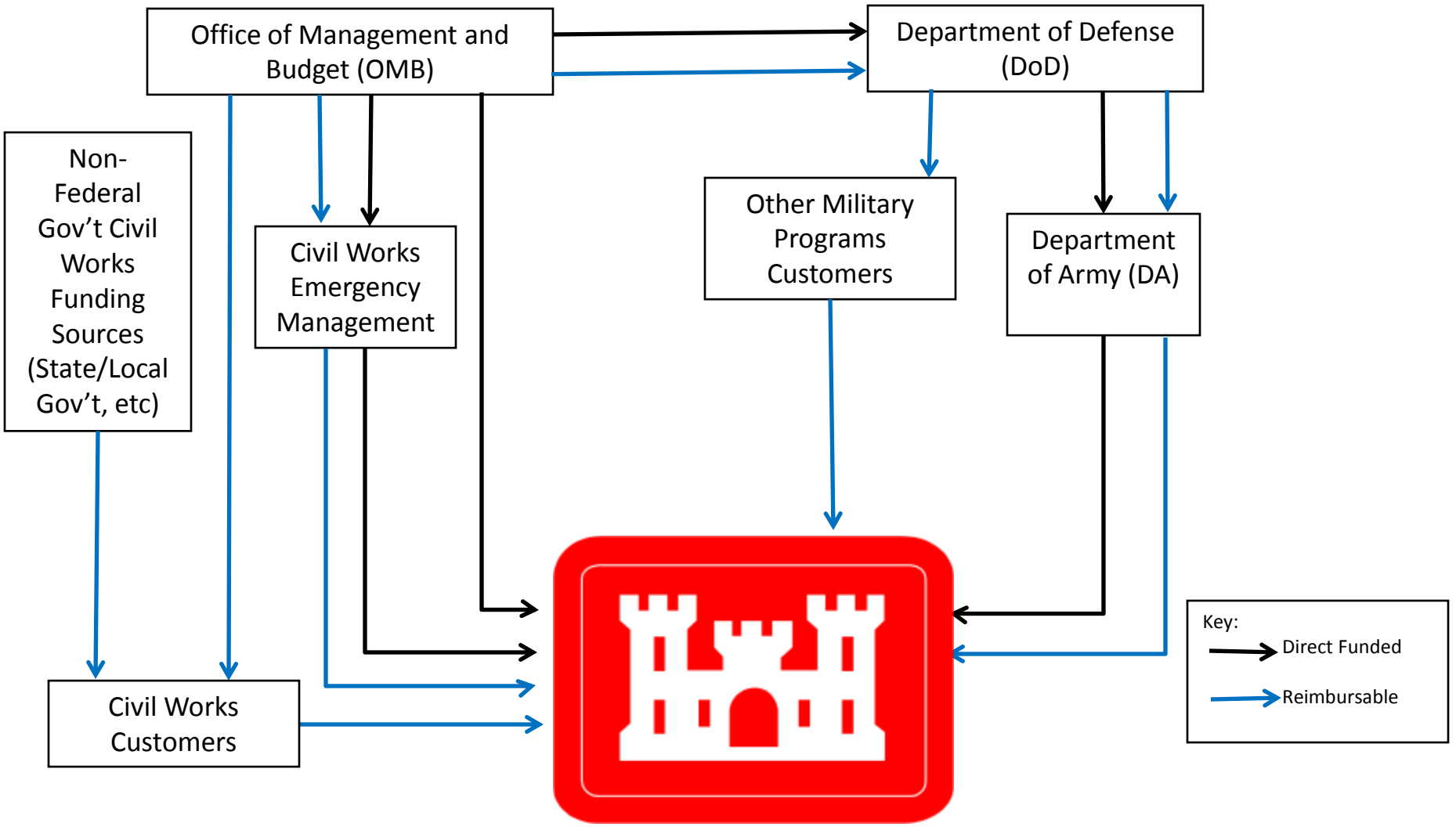
- Federal
- State
- Local
- International

Geospatial Support

- Support to Civil Works Programs
- Support to Military Programs
- Common Operating Picture/Environment
- Support to Emergency & Contingency Ops

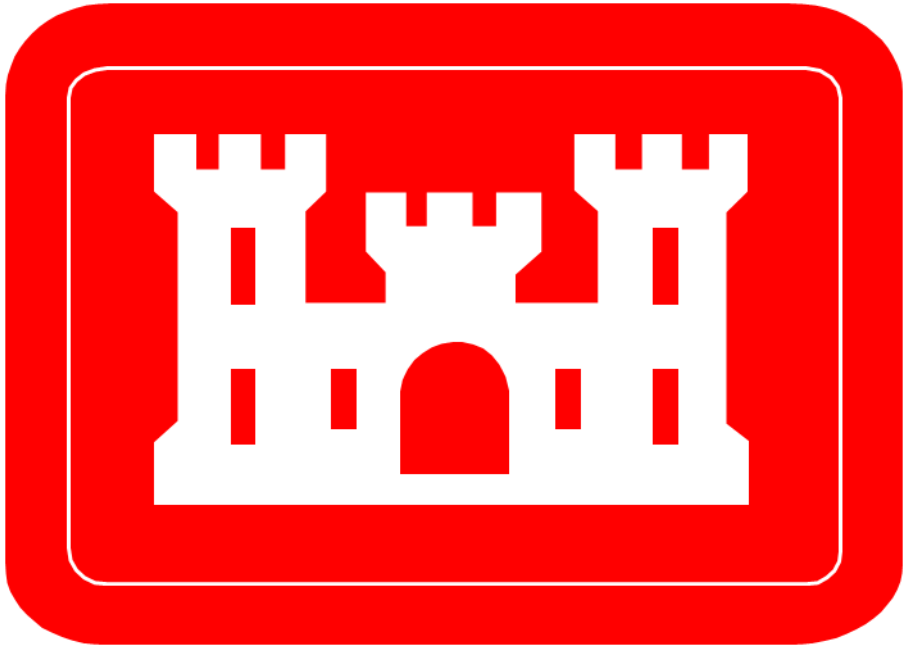
USACE Has a Diverse Mission Set … Driven by Diverse Customers

USACE Funding Flow



USACE Funding Comes from Multiple Sources

Military Programs



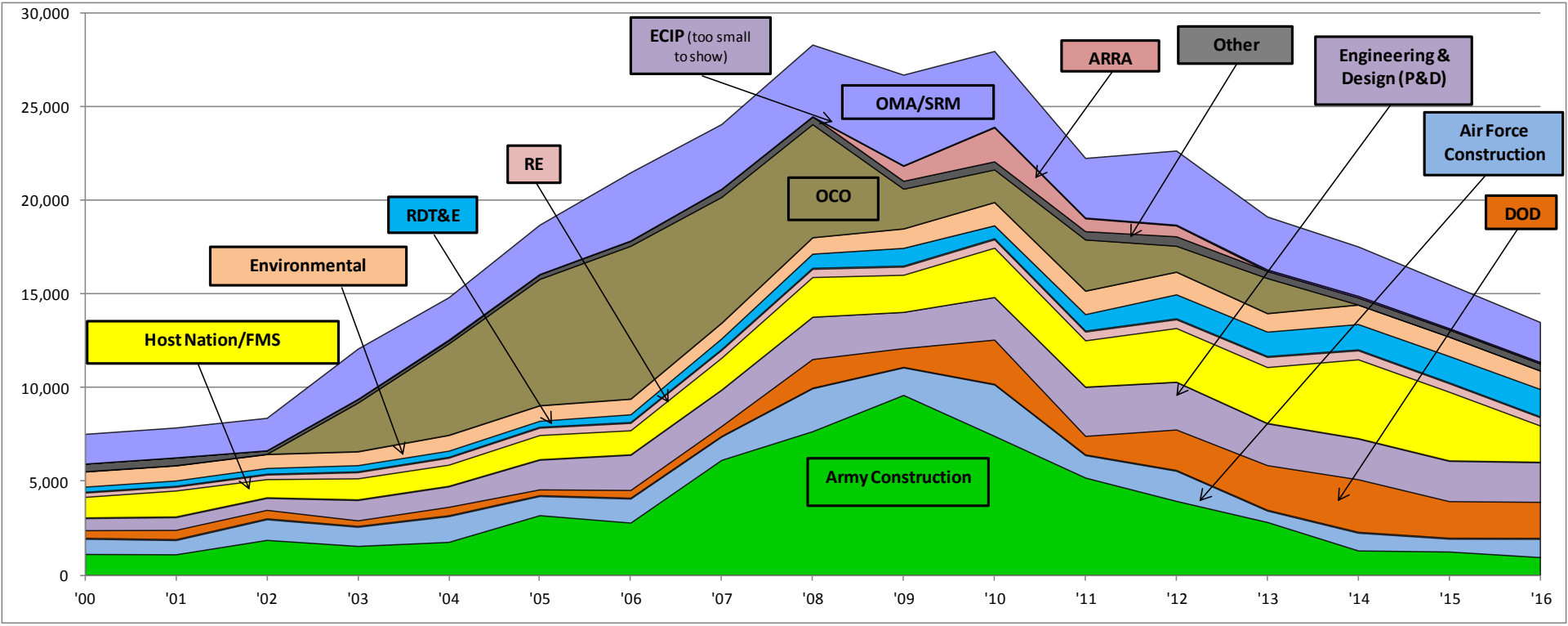
Military Programs Missions

- Military Construction
- Real Estate
- Overseas Contingency Operations (OCO)
- Installation Support
- Environmental of Formerly Used Defense Sites
- Interagency Support
- International Services

BUILDING STRONG®

Military Missions Program Trends
FY00-16

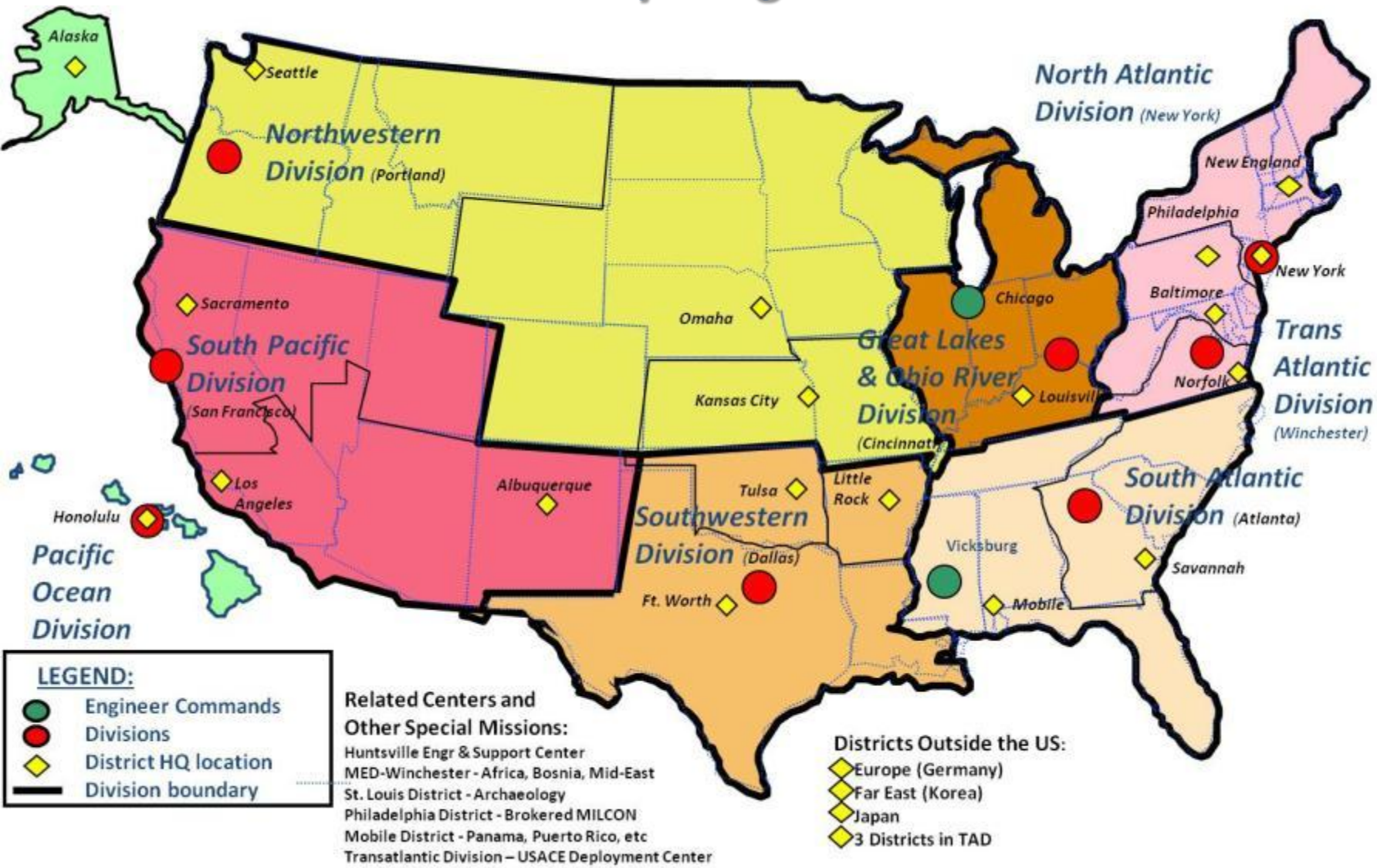
Program ($Millions)



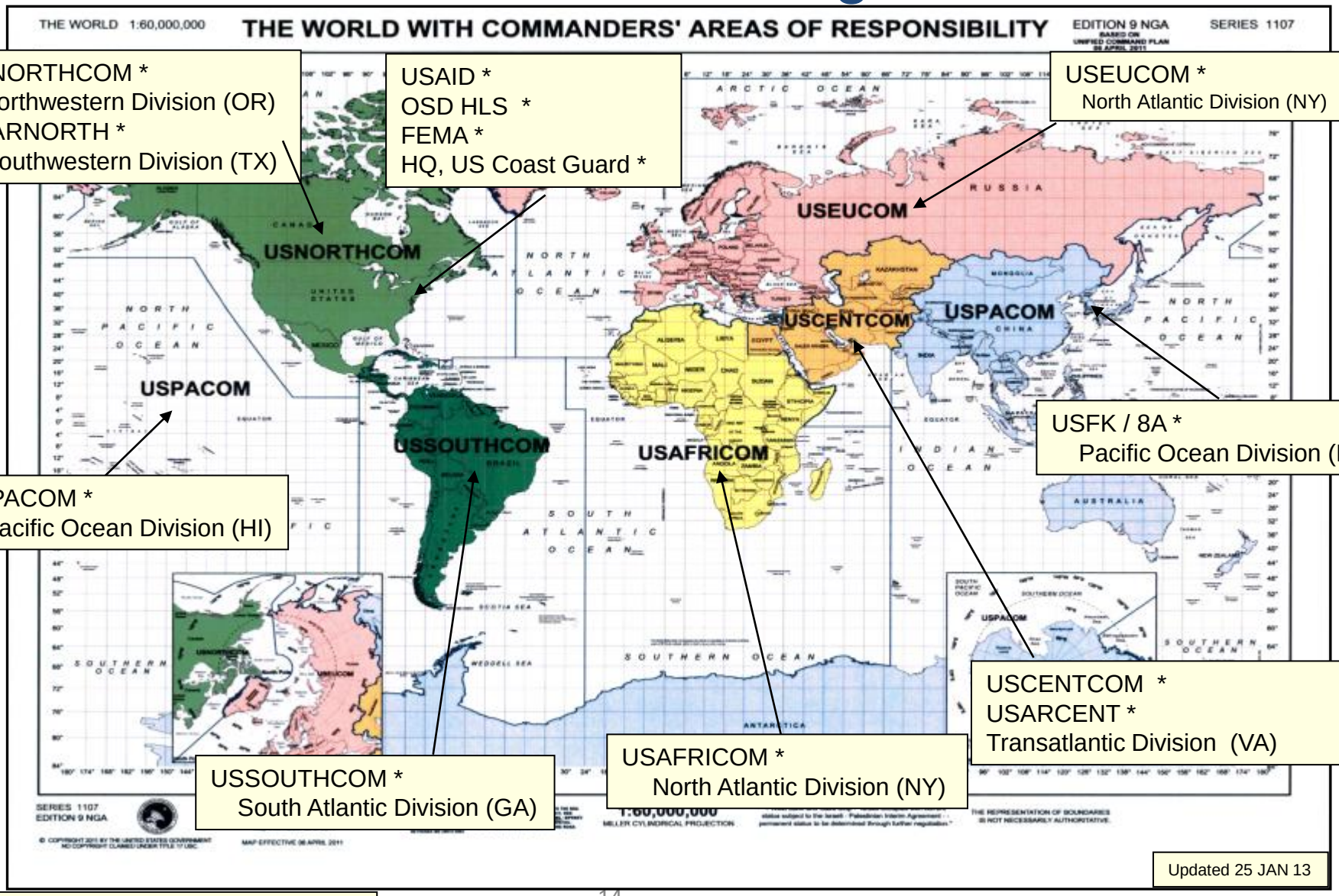
FY12 Consists of actual executed program
FY13 Consists of current program on books plus FY12 carryover
FY14-16 Consists of PRESBUD as of 26 Oct 12
OCO (FY12 and FY13) only includes OMA OCO for the Overseas Mission and Reconstruction-Reimbursable for Afghanistan Security Forces
Other includes OPA, Non-DOD Reimbursable, Diviison Support for MILCON (DOS) – direct and Other Dir (MCA SPT/DS-SD/ETC)
Note: The FY09-12 OMA/SRM data was adjusted to correct a discovered duplication error

Data as of 22 Jan 13

USACE Military Programs Boundaries



USACE Alignment with Geographic CCMDs and other Federal Agencies



USNORTHCOM *
Northwestern Division (OR)
USARNORTH *
Southwestern Division (TX)

USAID *
OSD HLS *
FEMA *
HQ, US Coast Guard *

USEUCOM *
North Atlantic Division (NY)

USFK / 8A *
Pacific Ocean Division (HI)

USPACOM *
Pacific Ocean Division (HI)

USCENTCOM *
USARCENT *
Transatlantic Division (VA)

USSOUTHCOM *
South Atlantic Division (GA)

USAFRICOM *
North Atlantic Division (NY)

Updated 25 JAN 13

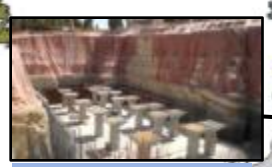
* USACE provides embedded LNO

FY 12/13 USACE Global Engagement

Engagement - 132+ Countries

Physical Presence - 43 Countries

Port in Bahrain development for U.S. and allied ships .



Jordan: Contract for underground bunkers in three separate locations.

Colombia Renovate Hangar, Support Building, Parking Lot, Helicopter Warehouse

Qatar: New construction consolidates several U.S. Air Force functions.

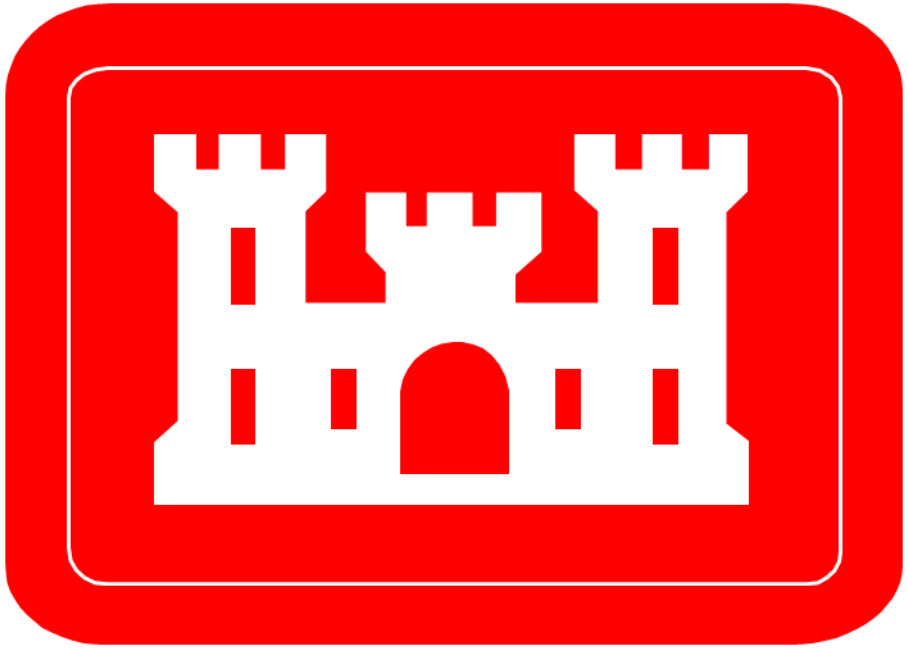
Technical Assistance Visit Sao Francisco River, Brazil

Zambia Water Supply Feasibility Studies

Potable Water Project, Mozambique

As of 23 Jan 13

Civil Works Programs



The Civil Works Mission

Development & Management of Water Resources Infrastructure

Protection, Restoration & Management of Environmental Resources

Engineering & Technical Services

Disaster Response & Recovery

Civil Works Program

Preserving the Strength of the Nation

Lock and Dam 15 (Mississippi River)

Flood Wall (Williamson, KY)

Florida Everglades

Deliver enduring, comprehensive, sustainable, and integrated solutions to the Nation's water resources and related challenges through collaboration with our stakeholders

(Regions, States, localities, Tribes, other Federal agencies)

($1.883 B) Navigation (38%)

($1.425 B) Flood Risk (28%) Management

($621 M) Ecosystem (12%) Restoration & Infrastructure

($193 M) Hydropower (4%)

($243 M) Recreation & Natural (5%) Resource Management

($193 M) Regulatory Program: (4%) Wetlands & Waterways

($6 M) Water Supply (<1%)

($185 M) Expenses (4%)
(Includes ASA(CW))

(FY 2012 Workplan)

Dredge ESSAYONS (Coos Bay, OR)

Lake Seminole (Mobile District)

Bonneville II Powerhouse (Washington)

Civil Works Value to the Nation

- Nearly $8 in flood damages prevented for every $1 spent on Flood Risk Management

- Stewardship of 11.7 million acres of public lands

- 14,500 miles of Levees and 400 miles of shoreline protection

- 702 Dams and 926 Harbors

- 13,000 miles of Commercial Inland Waterways

- Environmental Restoration and Emergency Responses

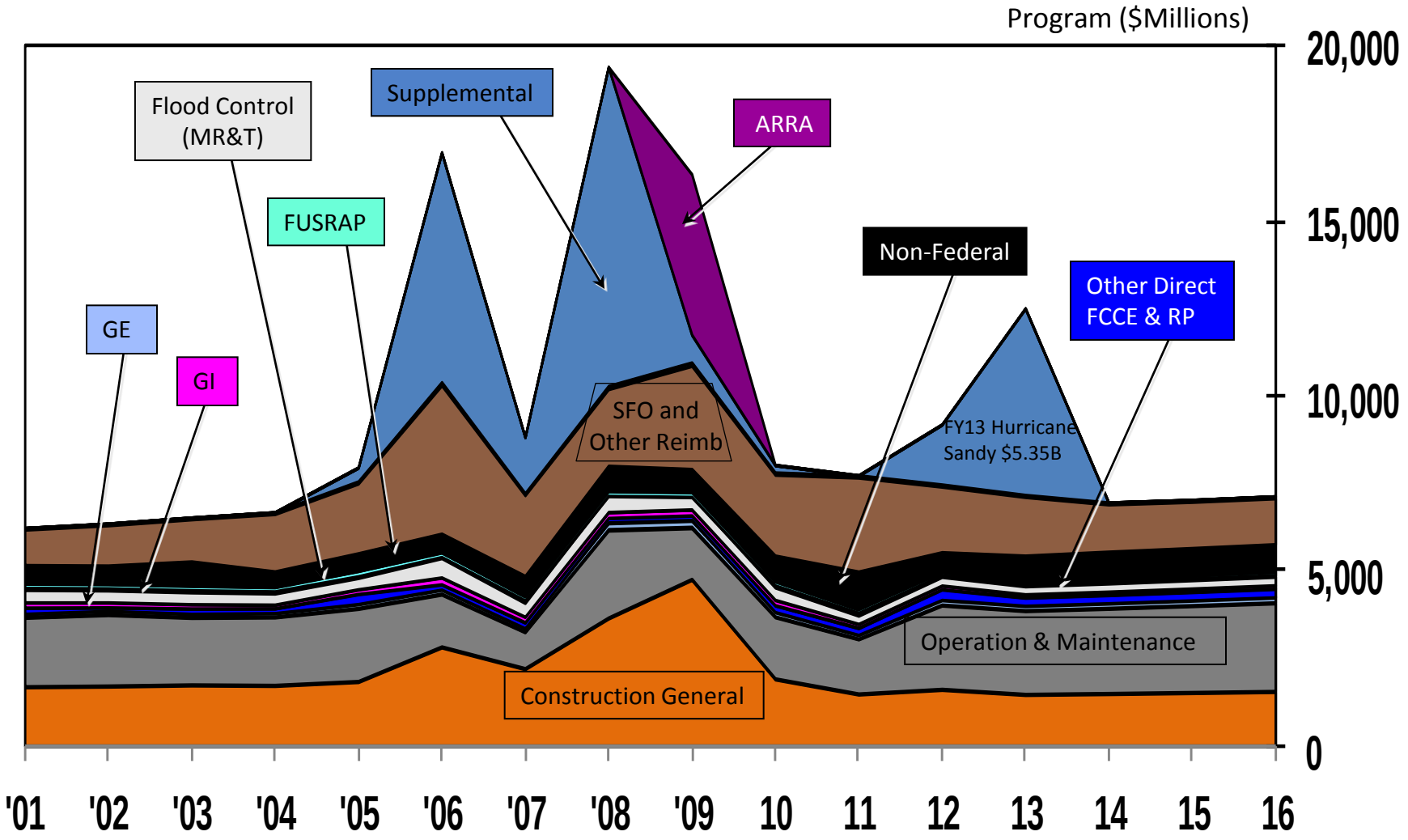
- Recreation program generating $16 B + 270 K jobs

- 3% of Nation's Electricity: $1.5 B plus in sales

- Waterways moving goods at 50% cost of Rail and 10% cost of Trucks

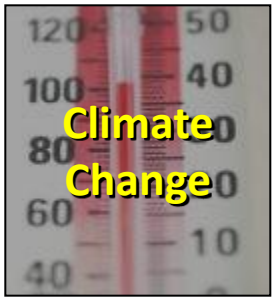
- ***U.S. Ports and Waterways convey >2B Tons of Commerce***
  Foreign Trade creates >$160 B in Tax Revenues

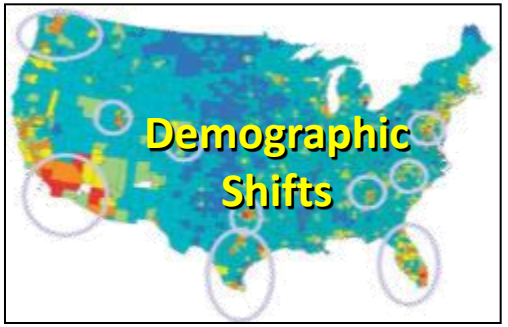
Civil Works Program Trends
FY01-16

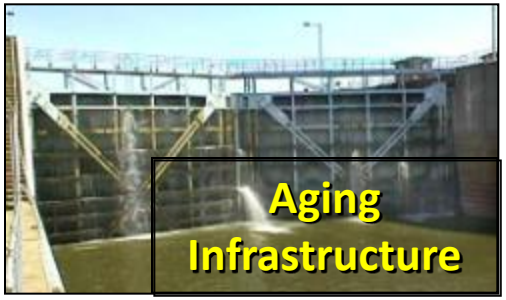


Data as of Mar 13

National Water Resource Challenges







Civil Works Support to National Defense

Civil Works makes available:

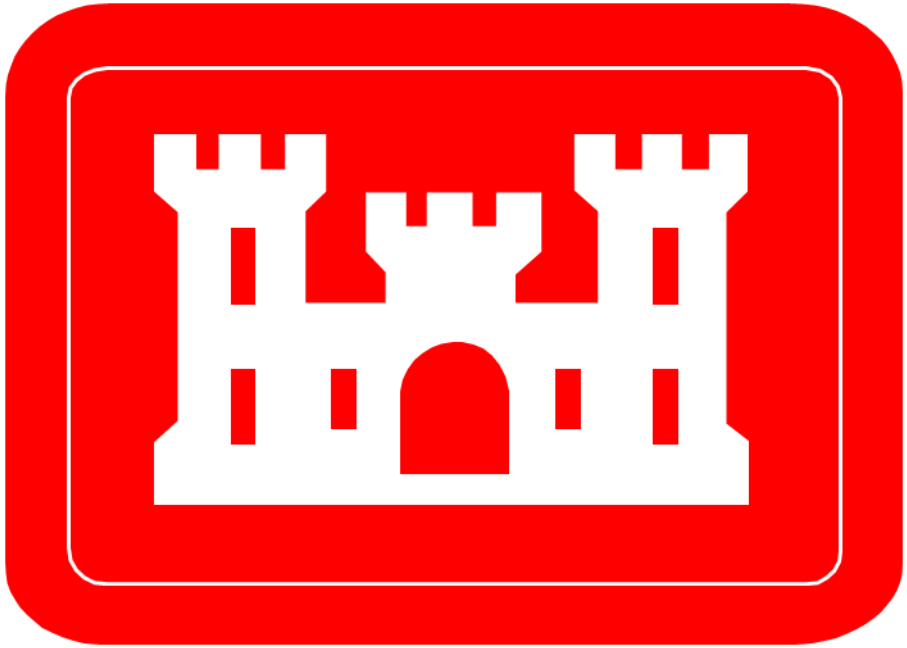
- 25,000 engineers and related professionals.
- Large-scale construction capability.
- Relationship with contracting community.
- Environmental skills.
- Location in hundreds of communities.
- Interaction with millions of citizens.
- … *all at no peacetime cost to DOD.*

Corps members deployed to Iraq and Afghanistan have built roads, airstrips, ports, electric stations, hospitals, schools, and other key infrastructure to promote stability.

Regional Water Resources Challenges

- Asian Carp (Great Lakes/Mississippi River)
- Vegetation on Levees (WA, CA, TX)
- ACT/ACF Basins (GA, AL, FL)
- Everglades Restoration
- Great Lakes - Lake Levels
- Chesapeake Bay
- Bay Delta, CA
- Columbia Fish Program (OR, WA, ID)
- Columbia River Treaty
- Missouri River
- Ohio River Basin

Engineer Research And Development Center



Engineer Research & Development Center

- 2500 Employees (1800 Full Time Federal)
- 991 Scientists & Engineers
- $1.2 Billion in Unique Research Facilities & Equipment
- $1.5 Billion Annual Program
- 77 Active Patents

Cold Regions Research and Engineering Laboratory

Hanover, NH

Construction Engineering Research Laboratory

Champaign, IL

ERDC
Geospatial Research & Engineering Division
(co-located w/ the AGC)

Alexandria, VA

ERDC Headquarters
Coastal and Hydraulics Laboratory
Environmental Laboratory
Geotechnical and Structures Laboratory
Information Technology Laboratory

Vicksburg, MS

Engineer Research & Development Center

Support to the Army and the Nation, Leveraging Technical Engineer Capabilities with R&D

Enable Theater Access

Rapid Airfield Construction

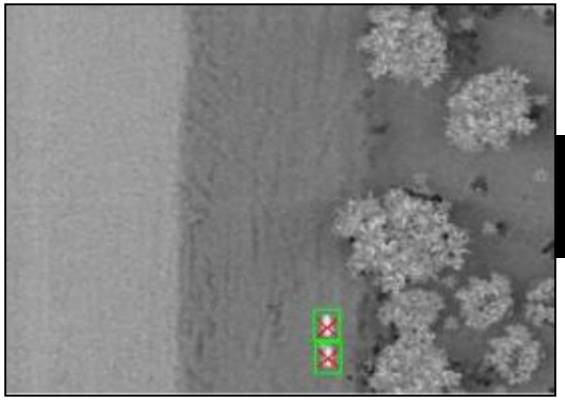
Force Protection

Immune Buildings

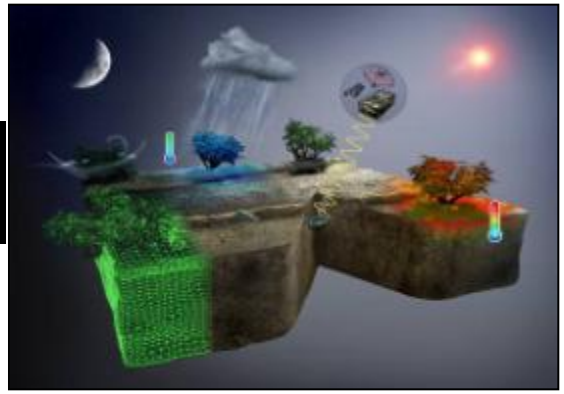
Structural **Retrofit**

Counter Rocket, Artillery & Mortar

Countermine Phenomenology



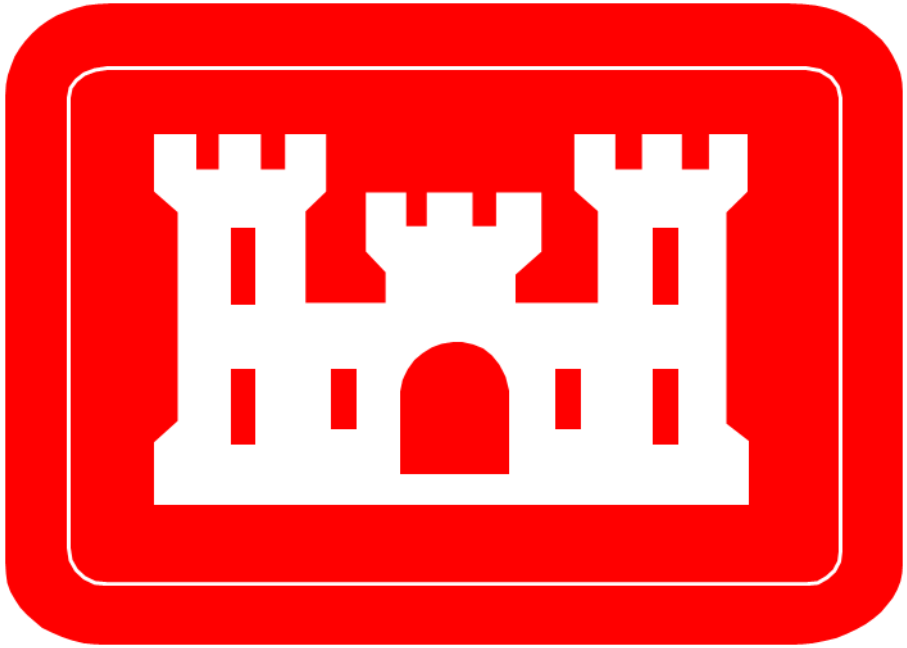
IED Simulation and Detection



Countermine Phenomenology Test bed

U.S. Army Corps of Engineers - Facts

- **USACE is structured to deliver across the globe.**
- **USACE has world-class Civilians and Soldiers.**
- **USACE rapidly responds to disasters and challenges of all kinds.**
- **USACE delivers professional results in construction, natural resource management, energy, sustainability, capacity building.**

We are U.S. Army "ambassadors" on a daily basis to political leaders, America's small businesses, and to citizens wherever we serve them.

Questions