

# *Headquarters U.S. Air Force*

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## **USAF Contracting Opportunities**

**7 Dec 10**



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Chief, MILCON Program Policy and Analysis  
HQ USAF/A7CPA

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# Overview

- **AF Leadership Priorities, AF Civil Engineer Goals and Mission**
  - **AF Locations – Where is the work?**
  - **AF Construction Programs Overview**
    - **MILCON**
    - **SRM**
    - **ERA**
  - **MILCON Program**
    - **Military Construction Legislation Status**
    - **Potential Projects**
    - **Program Focus Points**
      - **LEED**
      - **BIM**
      - **Execution**
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# A7C Mission and Vision

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## MISSION

Provide, operate, maintain, and protect *sustainable installations as weapon-system platforms* through engineering and emergency response services across the full mission spectrum.

## VISION

*Lead DoD* by providing global combat support and efficient, *sustainable installations using transformational business practices* and innovative technologies to enable the projection of global air, space, and cyber power.



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# CONUS Locations



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# USAFE Locations



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# ***PACAF Locations***

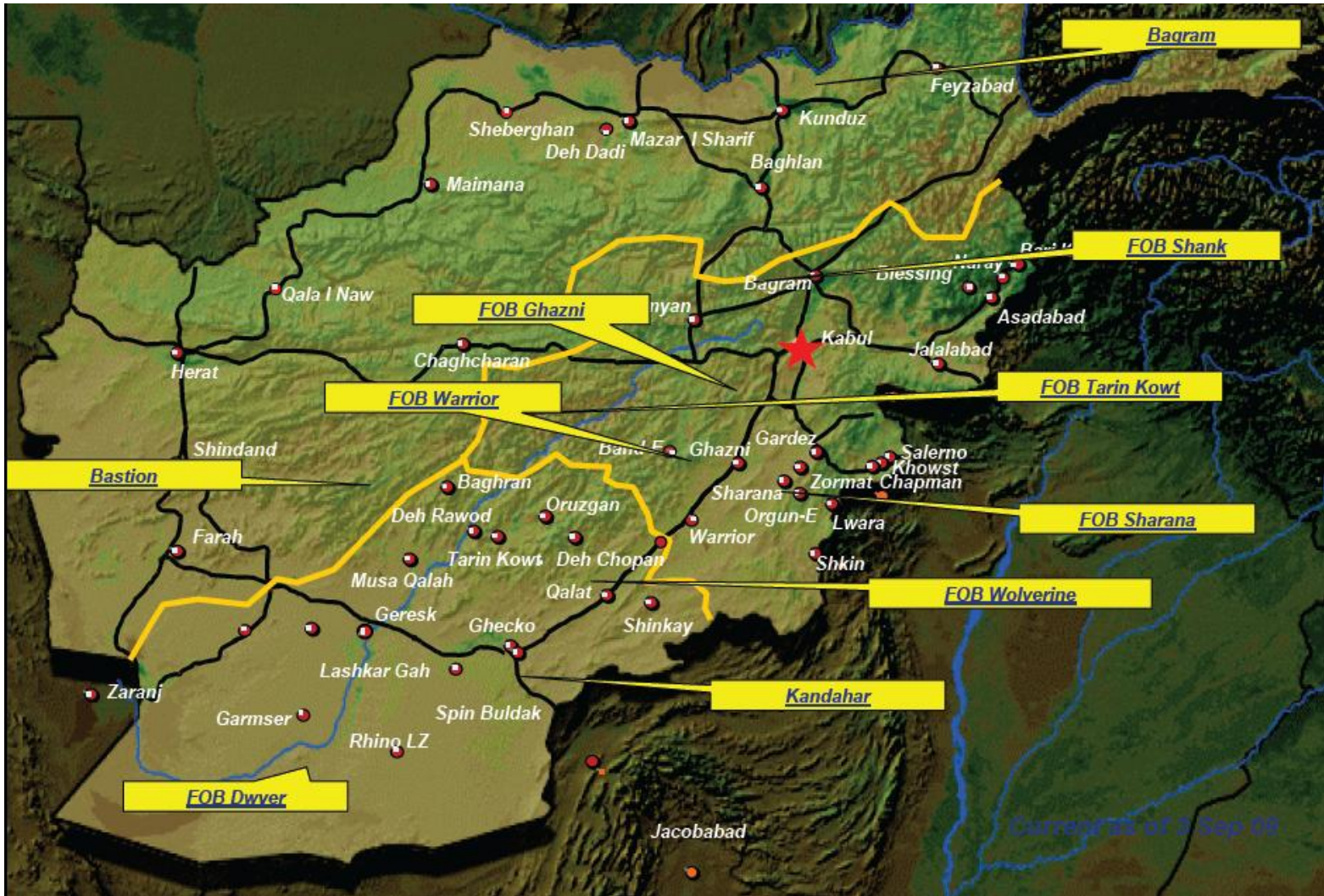


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# AOR Locations



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# Execution Agent Statistics

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## ■ FY11 MILCON

- 82% USACE and NAVFAC
- 18% AFCEE \*
- 70% Design/Build vs. 30% Traditional
  - *Future AF Goal is 90% Design/Build*



## ■ FY11 ERA

- 53% USACE
- 40% AFCEE (multi-year IDIQs)
- 6% Base Contracting
- 1% Other (Dept of Energy, USGS, etc.)



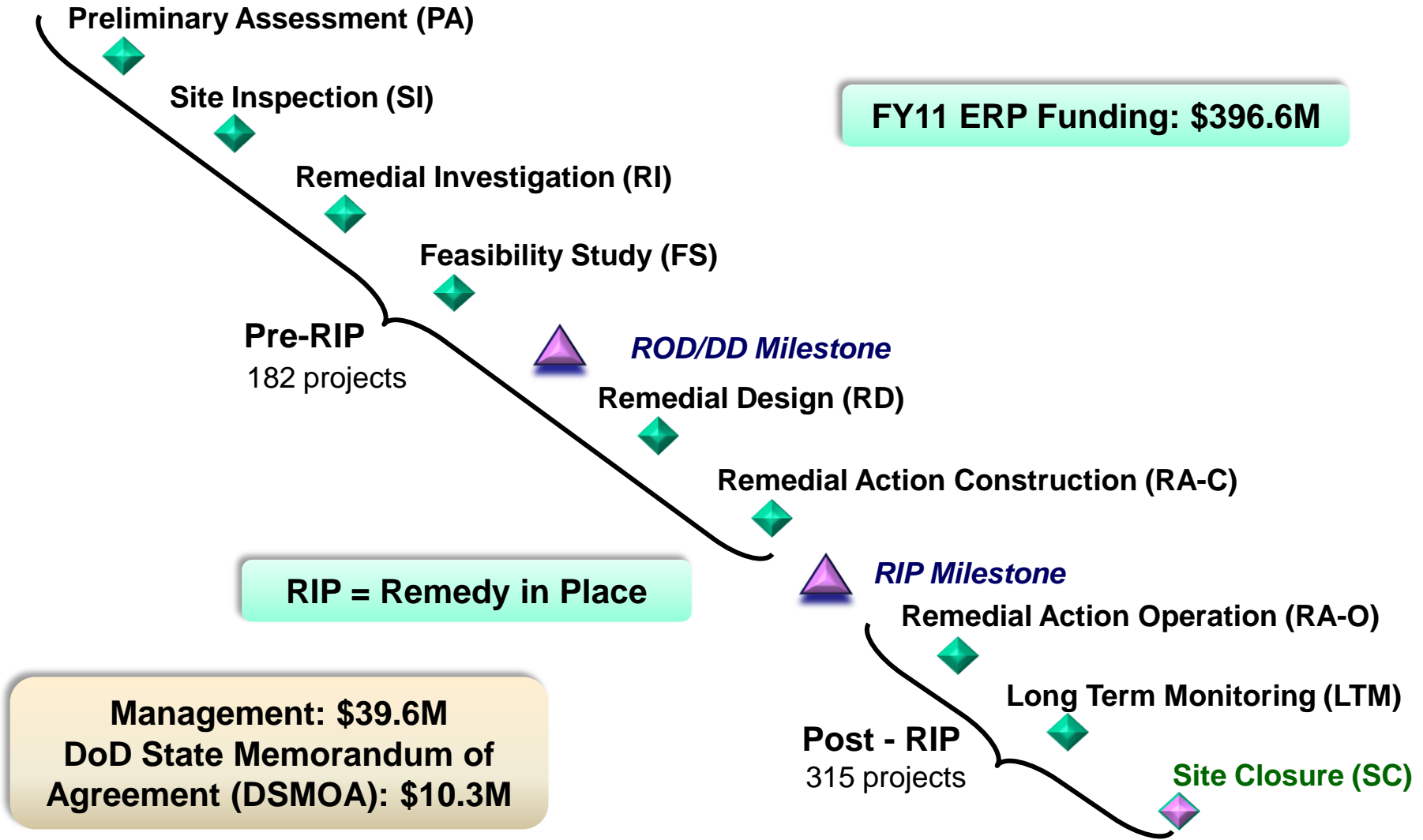
- FY11 FSRM - majority of projects executed by Base Contracting
  - Some bases execute SRM through USACE/NAVFAC contracts!

\* Based on dollar value including BRAC, MFH, UK, and CENTCOM Contingency Construction



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# FY11 ERA Program (Environmental Restoration Account)





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# Budgeted Funding Streams

ECIP	28.30	29.15	30.02	30.92	31.85	32.81	183.06
SRM	287.24	273.69	274.41	270.08	250.00	250.00	1605.42
TOTALS	315.54	302.84	304.43	301.00	281.85	282.81	1788.48

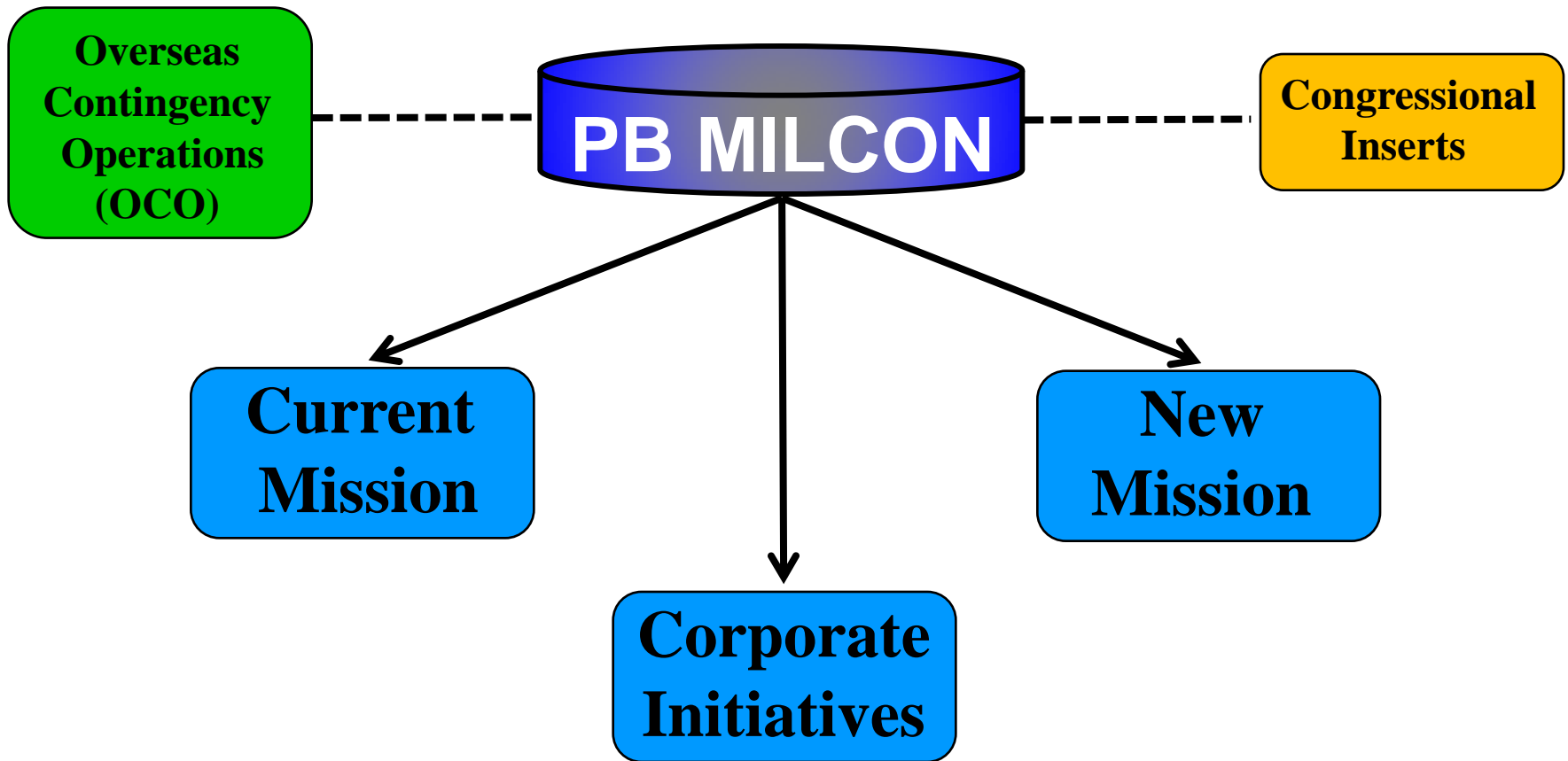


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# AF MILCON Program



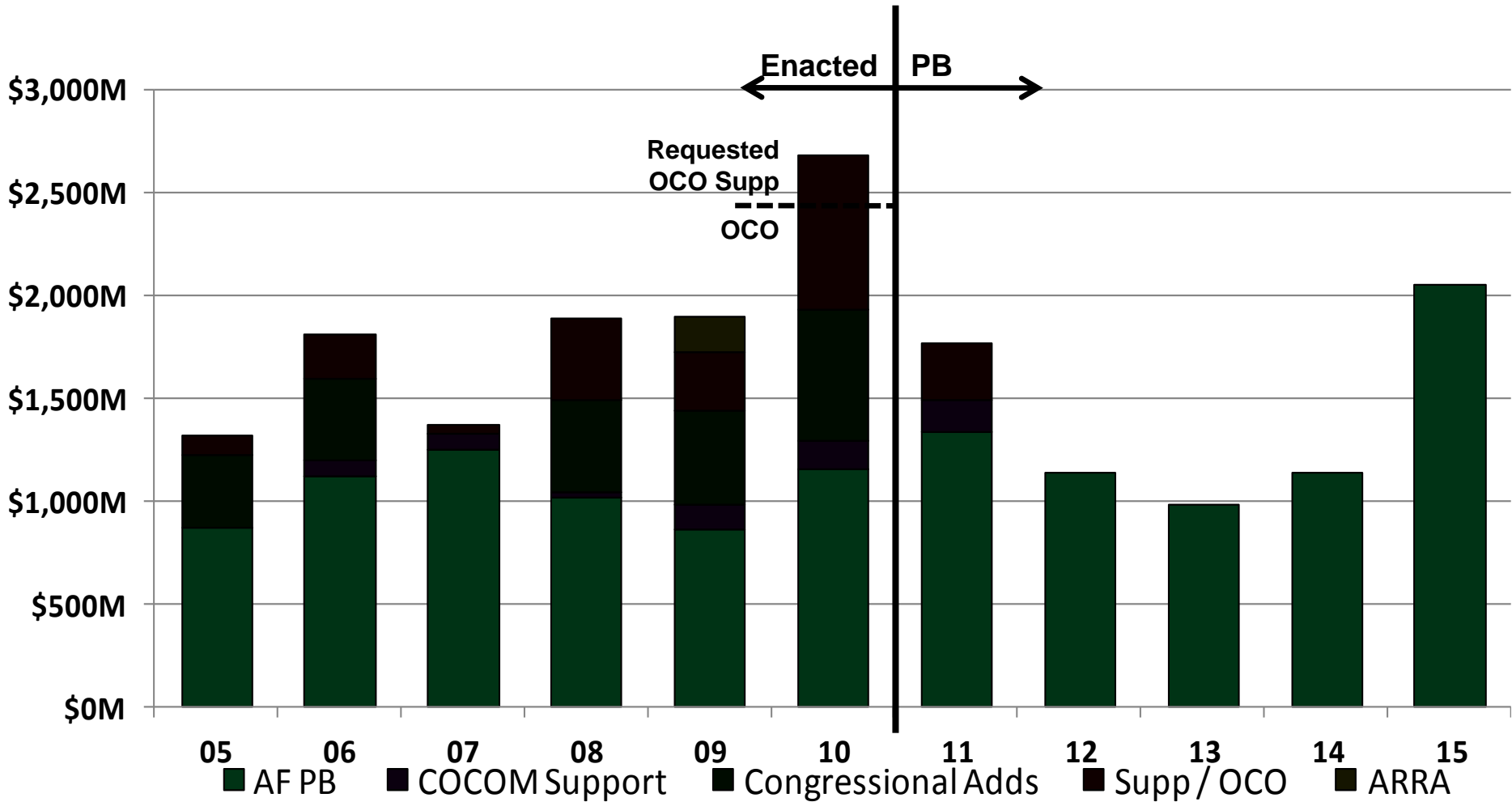
Note: BRAC 2005 & Housing MILCON winding down

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# MILCON Funding Profile (Total Force)

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# Military Construction Funding FY 11 Legislative Overview

## Overall MILCON Program Totals (\$000)

Account	PB Request	Authorization		Appropriation	
		HASC	SASC	HAC	SAC
ACTIVE AF	\$1,311,385	\$1,315,773	\$1,373,125	\$ 1,277,273	\$1,368,688
ANG	\$ 176,986	\$ 294,371	\$ 294,371	\$ 336,086	\$ 345,304
AFRC	\$ 7,832	\$ 47,332	\$ 7,832	\$ 44,762	\$ 12,832
OCO MILCON	\$ 280,506	\$ 280,506	\$ 193,766	\$ 280,504	\$ 164,826
AF MFH Construction	\$ 78,025	\$ 78,025	\$ 78,025	\$ 78,025	\$ 78,025
AF MFH O&M	\$ 513,792	\$ 513,792	\$ 513,792	\$ 513,792	\$ 513,792
AF BRAC 2005	\$ 127,255	\$ 127,255	\$ 127,255	\$ 127,255	\$ 127,255
AF BRAC IV	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
General Reduction	\$ -	\$ -	\$ -	\$ (38,500)	\$ -
<b>Totals</b>	<b>\$2,620,781</b>	<b>\$2,782,054</b>	<b>\$2,713,166</b>	<b>\$ 2,744,197</b>	<b>\$2,735,722</b>



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# MILCON Program Focus

## Sustainable Design & Development

- **AF LEED policy July 2007**
  - **100% of FY09 program and beyond capable of “Silver” certification**
    - 5% of FY09 program actual USGBC Silver Certification
    - 10% of FY10 program and beyond actual USGBC Silver Certification
  
- **FY10 LEED status actual achieved**
  - **100% certification of eligible projects**
  - **65% overall certification rate (73/113 projects—CONUS, AK, HI, Guam)**
  - **68 projects LEED Silver certification**
  - **5 projects LEED Gold certification**
  
- **“Eligible” LEED projects exclude horizontal, industrial and utility projects, but they should incorporate sustainable features IAW A7C policy for horizontal, industrial and utility projects**

FY06 Offutt Weather Agency  
First AF LEED Gold Project



FY08 Tyndall Fitness Center  
First AF LEED Platinum Project  
to be Certified This Year





# ***MILCON Program Focus Sustainable Design & Development***

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- **AF Commitment to Sustainable Design and Development**
  - **Over 1,000 AF personnel trained in LEED & SDD**
    - **Approximately 100 AF personnel have attained LEED AP credential**
  - **Detailed implementation guidance**
    - **LEED charrette at start of design. Must be lead by LEED AP**
    - **LEED features will not be cut from basic scope of project**
    - **LEED, Federal mandates and HPSB in single checklist**
    - **Engineering Technical Letter (ETL) 08-13, *Incorporating Sustainable Design and Development (SDD) and Facility Energy Attributes in the AF Construction Program* (signed Sep 08)**



- **Building Information Modeling (BIM) based designs required for all future vertical MILCON construction**
  - **FY10 Congressional Inserts**
  - **FY11 Presidential Budget**
- **Our current design criteria standards**
  - **Design criteria guides & Unified Facilities Criteria**
  - **Use previous like-facilities designs**
- **Goal: Leverage Building Information Modeling (BIM) as a new “electronic design guide” Exportable electronic Knowledge base**
  - **Address local conditions & maintain critical design features**
  - **Dynamic Prototypes**
    - **“Dynamic” – Flexible and changeable while leveraging advantages of BIM using a “Prototype” – model on which to build**
    - **Uses a “Kit-of-Parts” approach**
- **AF blanket purchase of REVIT based system**



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# BIM/LEAN-Enabled Project Delivery Comparison

Budget

- Field Change Orders: 0%
- Steel Mill Order Timing: 10 Days
- Opportunity for Breakthrough Efficiency Gains: **Numerous**

Actual \$

BIM / Lean Enabled Design / Build (40 Weeks)

Budget

- Field Change Orders: 4-6%
- Steel Mill Order Timing: 40-60 Days
- Opportunity for Breakthrough Efficiency Gains: Little

Actual \$

Design / Build Fast Tracked (50 Weeks)

Budget

- Field Change Orders: 8-10%
- Steel Mill Order Timing: 70-80 Days
- Opportunity for Breakthrough Efficiency Gains: None

Actual \$

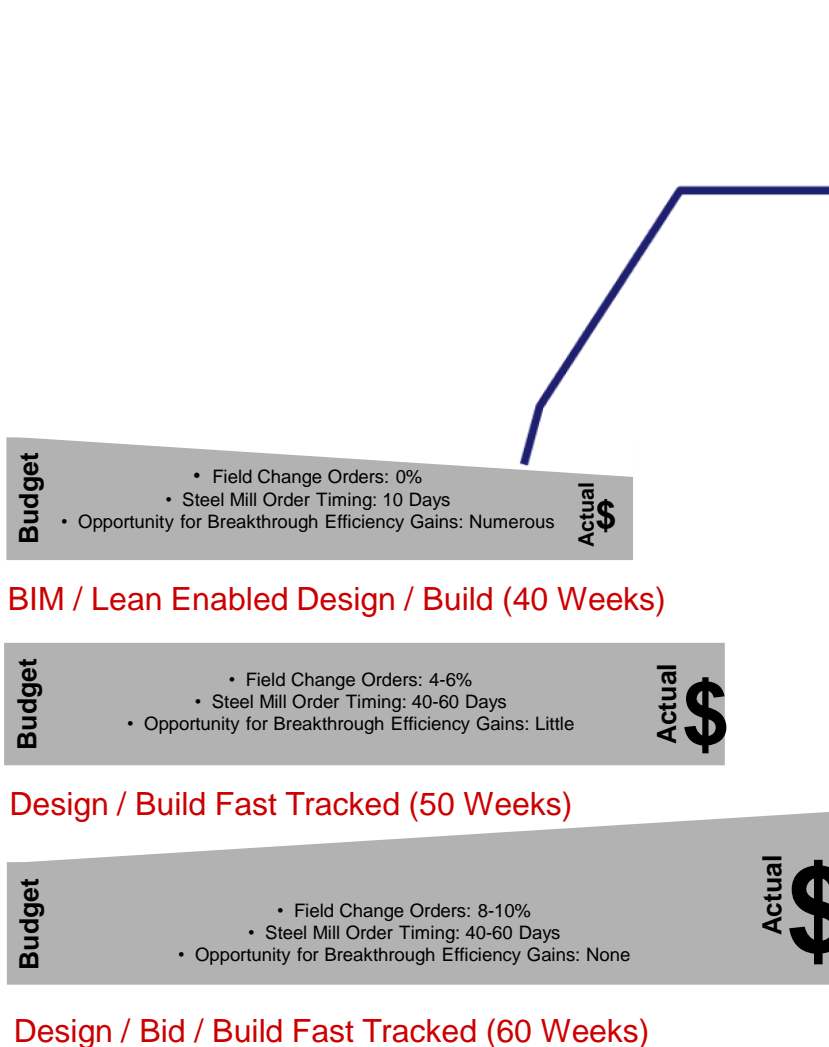
Design / Bid / Build Fast Tracked (60 Weeks)



# BIM-Enabled Delivery Comparison

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## Breakthrough Efficiency Gains



- Numerous, including:**
- 5D model based estimating
  - 4D construction sequencing
  - Accelerated commissioning / start-up
  - Just-In-Time installation / delivery
  - Preassembly / modularization
  - Increased offsite fabrication
  - 3D as-built potential before construction
  - Automated code checking
  - Energy analysis and sustainability
    - Improved safety
  - Build-to-the-model mandate



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# ***MILCON Program Focus Execution***

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- **Overall AF execution rate slightly down from 85% to 80%; however, statistics are skewed by 19 very late FY10 program adds**
- **Many projects are awarded under MATOC or similar contract mechanisms**
- **Execution agents are USACE, NAVFAC, and AFCEE/EX**

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## Open Discussion / Questions



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