Construction Management Association of America
Owners Forum, Atlanta, Georgia
May 4, 2010
Agenda

**CBP and FM&E Overview – Who we are**

Human Resource Strategies

Integrated Project Delivery
Our Mission

“We are the guardians of our nations borders.
We are America’s frontline.
We safeguard the American homeland at and beyond our borders.
We protect the American public against terrorists and the instruments of terror.
We steadfastly enforce the laws of the United States while fostering our nation’s economic security through lawful international trade and travel.
We serve the American public with vigilance, integrity, and professionalism.”
CBP’s enforcement strategy:

- Layers of sophisticated targeting and communication systems
- State-of-the-art detection technology
- A cadre of professional law enforcement personnel

- Three Primary Enforcement components
  1. Office of Field Operations
  2. Office of the Border Patrol
  3. Office of Air and Marine
Processing
- Nearly 1,000,000 passengers and pedestrians
  - 240,000 incoming international air passengers
  - 45,000 passengers/crew arriving by ship
  - 700,000 incoming land travelers
- 57,000 truck, rail, and sea containers and
- 270,000 incoming privately owned vehicles

Executing
- Over 100 arrests of criminals at LPOEs

Seizing
- Over 7,500 pounds of narcotics
- $300,000 in undeclared or illicit currency
- 4,200 prohibited meat, plant materials, or animal products, including 400 agricultural pests

Protecting more than
- 5,000 miles of border with Canada
- 1,900 miles of border with Mexico
Facilities Management & Engineering

Formed in 2007 within CBP’s Office of Administration.

**FM&E Mission**

*Provide facilities, infrastructure, and related support services to enable the CBP and DHS missions of protecting America and its citizens while facilitating trade and travel.*
✓ **Delivery Excellence**: Providing effective, proactive solutions across all phases of the facilities life cycle

✓ **Effective Stewardship**: Managing the resources entrusted to us in a responsible manner

✓ **Organizational Performance**: Strengthening the organization by investing in people and establishing unified principles and values
FM&E supports its business partners across the entire facilities and infrastructure lifecycle to fulfill their mission requirements. Specifically, FM&E:

- Executes leasing, construction and repair/alteration projects
- Provides real property program/project management expertise
- Develops and implements operations and maintenance program for CBP owned and leased real property.
- Acquires and maintains the necessary tactical infrastructure to complement the Secure Border Initiative (SBI).
- Provides environmental planning, compliance, and training support
FM&E is CBP’s program manager for real property, engineering, acquisition and environmental management for over 3,800 buildings and structures nation-wide.

- FM&E has a total staff of nearly 400 federal and contractor employees.
- FM&E operates from CBP Headquarters in Washington, D.C. and three regional offices:
  - Dallas, Texas
  - Indianapolis, Indiana
  - Laguna Niguel, California
“Ports” serve as the frontline in defending the American public against terrorists and instruments of terror while facilitating the lawful movement of goods and people across the border.

261 Air Ports of Entry

165 Land Ports of Entry (LPOE)

203 Sea Ports of Entry
FM&E Portfolios
Border Patrol Facilities and Tactical Infrastructure (BPFTI)

- 144 Border Patrol Stations
- 20 Sector Headquarters
- 58 Checkpoints
- 17 Forward Operating Bases
- 646 miles of pedestrian and vehicle fence on the southwest border
FM&E Portfolios
Air and Marine Facilities (AMF)

- World’s largest civilian aviation and maritime law enforcement organization
- 26 types of aircraft at 41 locations
- 12 types of marine vessels at 37 locations
- 3 training centers, 1 maintenance facility and 1 operations center
- Leading edge deployment of Unmanned Aerial Systems (UAS) in the national airspace
FM&E Portfolios
Mission Support Facilities (MSF)

– Over 300 facilities for 12 internal Business Partners
  • human resources, information technology, public affairs,
  • operations & intelligence coordination centers, training, and laboratories
  • International trade, foreign attachés
  • Advanced Training Center, Harpers Ferry, WV
– Over 600 antenna locations
– Over 280 housing units
Land Port of Entry (LPOE) Modernization
LPOEs are outdated and undersized for border traffic and staffing levels.

- **American Recovery and Reinvestment Act**
  - CBP will award 33 design/build contracts at the CBP-owned LPOEs in FY2010
  - Construction to begin at the first 18 design/build projects, scheduled for completion in 2011
  - The remaining projects will be awarded by the end of FY2010

- **FY2010 Outbound Processing**
  - A CBP initiative to stem the flow of illicit activity departing via land, air or sea, using technology and traditional methods
  - CBP is completing outbound prototype for eventual deployment at 21 sites.
Environmental

**Carrizo Cane**

- The dense cane prevents BP agents surveiling the Rio Grande River, enabling illegal border crossings a safety threat to agents.

- Project developing the most cost effective solution for remove cane. Evaluating mechanical and herbicide methods.

- Biological Controls: USDA makes wasp release along Rio Grande in its first biological control test project
Tactical Infrastructure (TI) Program

- CBP has constructed over 645 miles of pedestrian and vehicle fence on the Southwest border.
- The TI Program is the largest construction program within DHS. TI includes:
  - fence and gates
  - roads and bridges
  - drainage structures and grates
  - lighting and electrical systems
  - vegetation and debris removal
  - a comprehensive operations and maintenance initiative

- **Total Number of BPFTI Projects in FY10**
  - 29 Tactical Infrastructure Projects
  - 229 Facility Projects
  - Major Construction (59) and Minor (170)
  - ~105 new repair/alteration projects
  - ~$15 Million in O&M contracts
Residential Housing Program

- FM&E is constructing new and replacing existing residential housing units to accommodate the deployment of hundreds of new agents and officers to remote locations. CBP is also performing proactive maintenance of the existing housing portfolio.

Tunnel Remediation

- Increased security at and between ports of entry has led to smugglers increasingly turning to underground tunnels to transport drugs, weapons, people, and other contraband items.
- Tunnel remediation consists of those activities required to physically secure cross-border tunnels.
FM&E Program Initiatives

• **Conservation and Energy Initiatives** - Ensuring that CBP facilities operate in compliance with applicable environmental and energy laws and Department of Homeland Security (DHS) policies

• **Environmental Planning** – NEPA support for facility and infrastructure projects on the northern and southern borders

• **Environmental Compliance** - Establishing an accurate and reliable environmental compliance information baseline

• **Spill Prevention Control and Countermeasure** - Ensuring facilities are in compliance with SPCC regulations
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Human Resource Strategies

Integrated Project Delivery
Staff and Contractor growth is directly connected to the growth of the FM&E programs. Below is a table depicting the growth from FY06 to FY09.

<table>
<thead>
<tr>
<th></th>
<th>FY06</th>
<th>FY09</th>
<th>▲</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget$^2$</td>
<td>$1.8 Billion</td>
<td>$4.9 Billion</td>
<td>172%</td>
</tr>
<tr>
<td>Active Budget Plans</td>
<td>98</td>
<td>Over 200</td>
<td>104%</td>
</tr>
<tr>
<td>Projects$^3$</td>
<td>481</td>
<td>1500</td>
<td>212%</td>
</tr>
<tr>
<td>Projects Value</td>
<td>$731 Million</td>
<td>$2.7 Billion</td>
<td>469%</td>
</tr>
</tbody>
</table>

**Workload Drivers**

- Border Patrol Hiring
- LPOE Modernization
- Operations & Maintenance
- Housing
- Environmental Compliance Requirements
- Co-location Initiatives
Over the past four years, FM&E’s workforce has almost doubled in size to meet the growing demands as related to a variety of workload drivers.

<table>
<thead>
<tr>
<th></th>
<th>FY06</th>
<th>FY10 (Current)</th>
<th>▲</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing (TOTAL)</td>
<td>195</td>
<td>377</td>
<td>93%</td>
</tr>
<tr>
<td>Government</td>
<td>133</td>
<td>228</td>
<td>71%</td>
</tr>
<tr>
<td>Contractor</td>
<td>62</td>
<td>149</td>
<td>140%</td>
</tr>
</tbody>
</table>

**Sourcing and Staff Augmentation** - Contractors are currently being utilized to meet the rapid program growth across FM&E. FM&E is currently undergoing efforts to increase the federal component and to identify and implement an effective sourcing strategy.
The Direct functions are those directly connected to project execution and project management. These functions reflect the mission work of FM&E.

<table>
<thead>
<tr>
<th>Project Management (PM) Functions</th>
<th>% of Project Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Analyst</td>
<td>8%</td>
</tr>
<tr>
<td>Tech Expert – A/E</td>
<td>10%</td>
</tr>
<tr>
<td>Project Managers (Construction and Leasing)</td>
<td>57%</td>
</tr>
<tr>
<td>Tech Expert – RE</td>
<td>1%</td>
</tr>
<tr>
<td>Space Management Specialist</td>
<td>2%</td>
</tr>
<tr>
<td>Facilities &amp; Infra. Mgr.</td>
<td>16%</td>
</tr>
<tr>
<td>Environmental Compliance &amp; Assessment</td>
<td>10%</td>
</tr>
<tr>
<td>Tech Support – Data &amp; Systems</td>
<td>6%</td>
</tr>
<tr>
<td>Tech Support – Real Property O&amp;M</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Project Staff</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
The ratio indicates the number of full time indirect staff required for each full time project-direct staff.
(e.g. 1 admin support for 15 project staff)

<table>
<thead>
<tr>
<th>FM&amp;E Operations Roles</th>
<th>Ratio to Direct Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin Support</td>
<td>1:15</td>
</tr>
<tr>
<td>Communications &amp; Reporting</td>
<td>1:4</td>
</tr>
<tr>
<td>Financial Management</td>
<td>1:10</td>
</tr>
<tr>
<td>Environmental Program Development</td>
<td>1:17</td>
</tr>
<tr>
<td>Policy &amp; Process</td>
<td>1:60</td>
</tr>
<tr>
<td>Program Review</td>
<td>1:38</td>
</tr>
<tr>
<td>Workforce Support</td>
<td>1:17</td>
</tr>
<tr>
<td>Management, specific to FM&amp;E ops (e.g. Branch Chiefs) and Senior Leadership</td>
<td>1:8</td>
</tr>
</tbody>
</table>
• **Hiring Optimization Tool** – FM&E is currently developing a data based staffing tool that will enable FM&E to better project and model staffing needs (Target Completion – End of FY2010).

• **Workforce Curriculum Development** – FM&E is finalizing the development of “FM&E University” curriculum to support the development of the FM&E workforce (Target Completion – Beginning FY2011).

• **Mentorship Program** – On the job mentoring is critical to the development of the FM&E workforce (Target Completion – Mid FY2011).
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Human Resource Strategies

Integrated Project Delivery
Why Integrated Project Teams.....?
<table>
<thead>
<tr>
<th>Traditional</th>
<th>Integrated Project Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragmented, assembled “just as needed”,</td>
<td>Integrated team entity of key project stakeholders</td>
</tr>
<tr>
<td>Linear, distinct, segregated; knowledge gathered “just as needed”</td>
<td>Concurrent and multi-level; early contribution of knowledge; info openly shared; trust and respect</td>
</tr>
<tr>
<td>Individually managed, transferred to greatest extent possible</td>
<td>Collectively managed, appropriately shared</td>
</tr>
<tr>
<td>Individually pursued, minimum effort for maximum return, first cost based</td>
<td>Team-success tied to project success; value-based</td>
</tr>
<tr>
<td>Paper-based, 2 dimensional, analog</td>
<td>Digitally based, virtual; Building Information Modeling (3,4,5 dimensional)</td>
</tr>
<tr>
<td>Encourage unilateral effort; allocate and transfer risk; no sharing</td>
<td>Encourage, foster, promote and support multi-lateral, open sharing collaboration, risk sharing</td>
</tr>
</tbody>
</table>
Principles of IPD – Trust & Transparency

- Mutual Respect and Trust
- Mutual Benefit and Reward
- Collaborative Innovation and Decision Making
- Early Involvement of Key Participants
- Early Goal Definition
- Intensified Planning
- Open Communication
- Appropriate Technology
- Organization and Leadership
The IPD Relationship…

CAN YOU FEEL IT?

Trust……an “Emotional Enablers”

<table>
<thead>
<tr>
<th>WITH TRUST</th>
<th>WITHOUT TRUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation</td>
<td>Interrogation</td>
</tr>
<tr>
<td>Feedback</td>
<td>Reprimand</td>
</tr>
<tr>
<td>Check-in</td>
<td>Micro-managing</td>
</tr>
<tr>
<td>Concern</td>
<td>“Spying”</td>
</tr>
<tr>
<td>Interest</td>
<td>Meddling</td>
</tr>
<tr>
<td>Goal-Setting</td>
<td>Orders</td>
</tr>
<tr>
<td>Delegating</td>
<td>Dumping</td>
</tr>
<tr>
<td>Partnership</td>
<td>Boss/Subordinate</td>
</tr>
</tbody>
</table>
“Team Play”

Roles and Responsibilities

- **Designers**
  - Involved in defining design processes
  - Frequent interactions with team members

- **Constructors and/or CM**
  - Provide strategic services early in project
  - Brought on early to provide expertise in design of project

- **Owner and PM/CM**
  - Greater and more active role in evaluating and influencing design options
  - Establishes project metrics at an earlier stage than typical

Multi-Directional Duties

- All parties formally recognize what exists in practice
- Blending of roles while maintaining individual work scopes
Integrated Project “Tripwires”
Simple, the minimum and practical

**Cost**
- Realism of the cost estimate
- Stability of funding sources

**Schedule**
- Reasonableness of the schedule plan
- Completeness of the schedule plan
- Realism of the schedule plan

**Technical**
- Clear understanding of scope requirements
- Good technical definition of work
- Technological achievability

**Resources**
- Realism of the resource plan (staffing availability and usage)
FM&E delivers projects through four integrated Program Management Offices (PMO) that support a single business partner.
Enterprise Management and Organizational Resources and Support organizations support the entire directorate.
Mission Support Program Management Office

Program Description

The Mission Support PMO develops, plans, executes, and sustains the facilities and infrastructure inventory necessary to support the mission of the CBP Mission Support Offices nationwide. These facilities include, administrative offices, training centers, laboratories, warehouses, tactical communications sites, and consolidated/co-located facilities/campuses. The Mission Support PMO also manages CBP Consolidation/DHS Co-Location Facilities, Residential Housing, all National Capital Region Facilities and any Facilities impacted in a National Emergency.

PM’s Program Current Status Assessment

The Mission Support Facilities Program is in the initial growth phase. The program is undergoing development in FY10, including completion and implementation of various policies, processes, procedures, standards, program and project performance metrics.

Recent Program Accomplishments

- Continuing with Business Partner discussions for FY11 mission requirements
- Held first Quarterly Mission Support Town Hall on March 8. Will rotate to a new location each quarter.
- Awarded IAA for 1st phase of COE project management/oversight for Harpers Ferry project

Upcoming Major Milestones

- Finalizing KMS-based project management oversight tracker tool
- Tucson IOCC Facility completion ribbon cutting ceremony March 30
- Big Bend groundbreaking ribbon cutting ceremony on March 30
- KMS Home Page launch on March 19

Financial Summary ($M)

<table>
<thead>
<tr>
<th>Total Prior Year Carry Over</th>
<th>Total Current Year Funds Available</th>
<th>Total Current Year Planned Obligations</th>
<th>Total Current Year Actual Obligations</th>
<th>Total Current Year Planned Award</th>
<th>Total Current Year Actual Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>$56,285</td>
<td>$132,708</td>
<td>$105,126</td>
<td>$4,316</td>
<td>$105,126</td>
<td>$2,751</td>
</tr>
</tbody>
</table>
### Mission Support Program

**Mission Support Program Top Risks and Issues**

#### Top Five Program Risks

<table>
<thead>
<tr>
<th>Rating</th>
<th>Risk Description</th>
<th>Impact and Mitigation Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4</td>
<td>Housing Shortfalls: Identified need is over $300M</td>
<td>Impact: Housing capacity shortfall to meet the current and future needs. Mitigation: Develop strong business case to get the necessary funding to meet long term needs. Look into interim solutions such as FEMA trailers.</td>
</tr>
<tr>
<td>3.3</td>
<td>Ongoing Maintenance of existing Housing Units</td>
<td>Impact: Quality of life for tenants &amp; potential higher cost to CBP to complete R&amp;A with deferred maintenance for further deteriorated facilities. Mitigation: Develop business case for the additional funding required ($21m over 5 years), look into using existing funding within Mission Support; Regional Maintenance Contracts; Contractor support</td>
</tr>
<tr>
<td>3.3</td>
<td>Ajo/Lukeville, AZ: Emergency housing</td>
<td>Impact: Shortage of housing: agents &amp; officers have a much farther commute &amp; difficulty to recruit to this location. Mitigation: Remove personal trailers, look at interim solutions like converting existing houses into duplexes.</td>
</tr>
<tr>
<td>3.3</td>
<td>Piegan, MT: New Construction delay due to site issues, infrastructure requirements and short construction window due to climate</td>
<td>Impact: Major slip to schedule for much needed housing Mitigation: Look at other potential interim solutions for temporary housing.</td>
</tr>
<tr>
<td>3.3</td>
<td>Shortfall of Program Resources (Staffing, Contract to include Personnel and Program Development Services, and Training)</td>
<td>Impact: Reduced ability to meet Program Expectations and Goals, including Delivery of Required Facilities to support Business Partners Mission. Mitigation: Develop strategies to Leverage and Maximize Resources/Seek and Secure Additional Funding and/or Staffing</td>
</tr>
</tbody>
</table>

#### Probability and Impact Scale

- **Probability**: 5 - Near Certainty, 4 - Highly Likely, 3 – Possible, 2 - Unlikely, 1 – Very Unlikely
- **Impact**: 5 - High, 4 - Significant, 3 – Moderate, 2 – Minor, 1 – Low
IPD....If models were perfect......