# Facility Management Assessment & Assistance

FFC December, 2016

U.S. DEPARTMENT OF STATE BUREAU OF OVERSEAS BUILDINGS OPERATIONS

# The Challenge



- The U.S. maintains 275 embassies, consulates, and missions throughout the world, ranging from multi-acre compounds to small offices,
- Existing policies and standards for asset management are vague and flexible to allow for differences worldwide, but they are often open to interpretation by post management
- Standards for implementing successful facility management strategies are often interpreted from a political, short term view, not considering total cost of ownership perspective,
- Facility Managers report to the embassy/consulate Management Officer, and not to OBO, which may lead to conflicting direction/actions/priorities, with focus placed often on residential leases over the embassy/consulate.

# The Strategic Goals



- Develop an evaluation system for DOS Facility Management operations to:
  - Be proactive,
  - Be able to be customized to different embassies/consulates,
  - Uniformly assess the FM organization,
  - Identify and measure organizational performance,
  - Establish realistic metric and benchmarks,
  - Provide the FMs practical strategies for improvement

# **New Initiative Needed**



- Challenges to the FMs required that the OBO Office of Facility
  Management create a systematic procedure to:
  - Evaluate embassy FM organizational functions
  - Focus on process performance, benchmarked to industry practices
  - Provide tools for measuring ongoing improvements
  - Develop plans for real property asset lifecycle milestones
- Previously, facility evaluation and assistance program was focused only on *maintenance management* audits/reports, not on Facility Management.
- New model: A comprehensive Facility Management organizational and leadership evaluation tool, titled:
  - The Facility Management Assessment & Assistance Program

# **Desired Outcomes**



- Align the operational performance of embassy FM organization, with the State Department's mission, vision, and strategy,
- Reduce total cost of ownership,
- Adopt real property lifecycle model as the overriding organizational framework
- Maximize the productivity of the FM organization,
- Improve property asset value and equipment service life,
- Create high-performance embassy FM organizations.

# FM Industry Baselines for FMA&A



Incorporate latest research and findings from :

- Association for Higher Education Facilities Officers APPA
- International Facility Management Association IFMA
- Federal Facilities Council, National Research Council FFC
- American Management Association AMA
- Harvard Business School
- Baldridge National Quality Program





 The FMA&A uses the Capability Maturity Model (CMM) approach to organizational improvement, developed at Carnegie Mellon University for DoD.



Characteristics of the Maturity levels

# **Performance Categories**



- <u>Leadership</u>: Strategic facility planning, effective communications, and organizational structure,
- <u>Planning</u>: Annual and multi-year plans,
- <u>Customer Focus</u>: Input from customers, feedback for work control
- <u>Workforce Development</u>: Locally-employed staff position descriptions, succession planning, training and professional development
- <u>O&M Process</u>: Maintenance: Asset and equipment inventories, documentation of work management and work orders, CMMS, and PM, and post Operations: Service level agreements, procurement procedures within the FM organization,

# Steps to Implement FMA&A

- Site-visit Preparation
- Embassy In-brief: Purpose and objectives
- Interviews: Embassy FM, Management Officer, senior maintenance engineers/supervisors, work order clerk
- Embassy out-brief, present preliminary recommendations
- Report preparation, with detailed findings and recommendations in each category
- Implement recommendations
- Re-evaluate in two years





- First pilot FMA&A studies conducted at embassies in:
  - Lima, Peru
  - Panama City, Panama
  - Quito, Ecuador
  - Santiago, Chile
- Internal review of results showed too many questions asked by trained interviewers, reports "too academic", more short term recommendations needed for FM to quickly see results
- FMA&A studies subsequently concluded in:
  - Brazzaville, Republic of the Congo
  - Kinshasa, Democratic Republic of Congo
  - Yaoundé, Cameroon
  - Mumbai, India
  - Tbilisi, Georgia

- Bucharest, Romania
- Sarajevo, Bosnia-Herzegovina
- Phnom Penh, Cambodia
- Kigali, Rwanda

# Participating U.S. Embassies





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## Findings from FMA&A visits



- Repair and replacement (R&R) costs over 10 years showed wide variance
- 10 year R&R costs, when equipment service life is reduced due to inadequate maintenance, ranged from twice to 10 times, compared to normal PM cost
- FMs need assistance in developing their annual and strategic maintenance plans
- Residential leases maintenance/repairs often takes priority and absorbs
  resources over the care of functional properties
- Reporting features of the CMMS need to be refined to allow for optimal use of the data

### Maturity Models Results, 2 AF Posts





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# 15 Year M&R Cost Estimates



- CBRE evaluated detailed annual R&R costs to compute future (15 years out) R&R budget needs
- R&R costs from site surveys at nine large, medium, and small NECs examined, constructed from 2005 to 2011
- Sample then expanded to 29 NECs, constructed from 2003 to 2010
- Results: Future annual R&R costs for all 29 NECs ranged from \$12M in 2015, to \$18.8M in 2028
- No correlation to "2 to 4% of replacement value"

# Conclusions



#### • FMA&A has shown:

- Developing regional FM offices to advise and mentor first tour FMs and post Management is needed
- Training of local staff on 21<sup>st</sup> century building systems is a continuing need
- Monitoring the data entered in the CMMS is essential to develop truly useful KPIs
- Regional PM service contracts for the installed major equipment/systems will result in cost savings
- Future R&R cost estimates can provide the baseline for total cost of ownership

# Future FMA&A Embassies





## FMA&A Management & Contributors



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