

Joint City-Schools Facility Investment Task Force

Facility Maintenance and Operations Subcommittee

Meeting #1, September 18, 2017

Agenda

- Welcome and Introductions
- Community Comments
- Subcommittee Objectives
- Best Practices Briefing
- Observations to date
- Wrap Up

Facility Maintenance & Operations

Subcommittee

- Amy Liu, Chair
- Micheline Castan-Smith
- Lynn Hampton

Subcommittee Objectives

Community Comments



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Facility O&M Best Practices Briefing

Kayla Anthony, Brailsford & Dunlavey

Adam Shirvinski, A2

Operations and Maintenance

Definition

“Operations and Maintenance are the decisions and actions regarding the **control and upkeep of property and equipment.**”

Include, but not limited to:

- Actions focused on scheduling, procedures, and work/systems control and optimization
- Performance of routine, preventive, predictive, scheduled and unscheduled actions aimed at preventing equipment failure or decline with the goal of increasing efficiency, reliability, and safety.”

Source: U.S. Department of Energy, O&M Best Practices Guide, Release 3.0, August 2010

<https://energy.gov/eere/femp/downloads/operations-and-maintenance-best-practices-guide>

Operations and Maintenance

Relation to CIP Discussion

1. O&M **before** a capital improvement is needed
 - How was the asset maintained to keep it in a state of good repair and operation condition?
2. O&M **after** a capital improvement occurs
 - Building turned over from builder to maintenance activities
3. Maintenance repairs vs. capital improvements

Operations and Maintenance

Policies and Procedures

1. Mission statement
2. Organizational structure and interdepartmental coordination
3. Data and documentation management
4. Training materials

Operations and Maintenance

Maintenance Data Analysis

Computerized Maintenance Management System is a type of management software that maintains a computer database of information about an organization's maintenance operations

- CMMS tracks O&M activities – eliminates manual tracking and paperwork
- Does not make decisions, but provides O&M manager with best information to affect operational efficiency of a facility
- Can also track Work Orders / Service Calls

Source: U.S. Department of Energy, O&M Best Practices Guide, Release 3.0, August 2010

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Operations and Maintenance

Maintenance Program

1. Annual Budgeting: Preparation & Forecasting

- Preventive Maintenance (PM)
- Corrective Maintenance (CM) / Repair & Alterations
- Service Call Work – trends & analysis

Operations and Maintenance

Approaches to Maintenance – Planned / Preventive

- 1. Preventive maintenance (PM):** actions performed on a schedule (time-based) that detect and mitigate degradation of a component or system; goal is to sustain and even extend useful life
- 2. Predictive maintenance:** rather than preset schedule, bases maintenance on actual condition of the component (need-based)
- 3. Reliability-centered maintenance:** places importance on certain pieces of equipment based facility-by-facility; evaluates a facility's equipment vs. resources

Source: U.S. Department of Energy, O&M Best Practices Guide, Release 3.0, August 2010

<https://energy.gov/eere/femp/downloads/operations-and-maintenance-best-practices-guide>



Operations and Maintenance

Approaches to Maintenance

4. Corrective / Reactive Maintenance:

“run it til it breaks or receive a call”– no efforts taken to maintain equipment (Deferred Maintenance)

- Emergency / Urgent
- Troubleshooting / Service Calls
- Routine

Operations and Maintenance

Maintenance Execution

- Purchasing & Procurement
- Staffing, Training, and Management
- Document Management
- Work Order Coordination & Communication

Operations and Maintenance

Facility Management & Operations

- Staffing and Scheduling
- Security and Access
- Custodial and Grounds / Plant Operations
- Supply and Inventory Management

Operations and Maintenance

Other Related Topics

- Compliance, Regulatory Issues, and Health & Safety
- Energy Efficiency, Benchmarking, Energy Management, and Sustainability
- Waste / Recycling

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Current Practices Overview

Jeremy McPike, City of Alexandria

Debra Yap, Alexandria City Public Schools

Current Practices & Processes

Questions for Discussion

1. What policies govern maintenance?
2. How much funding does ACPS receive for maintenance? City of Alexandria?
3. Who performs the maintenance work?
4. Who manages maintenance work?
5. How are work orders informed?
6. What systems used to track maintenance work?
7. What is the communication with building reps/end users?
8. What performance indicators/measures are tracked?
9. How does the system relate to capital project tracking or asset management systems?

Operations & Maintenance

Discussion

Guiding Questions:

- What are your questions or thoughts on the current process utilized by the City and ACPS?
- What processes would you like to discuss further?
- What are the goals of the subcommittee? Where should this subcommittee focus?



Ad Hoc Joint City-Schools Facility
Investment Task Force

Alexandria, VA

June 2017 – December 2017