FOCUS on FACILITIES
Diocese of Cleveland Facilities Services Corporation

Budget Annual Planned & Deferred Maintenance

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"Pay Me Now…..Or Pay Me Later." When it comes to owning a building(s), management will acknowledge that the building and its assets, (e.g., central air system equipment) require planned maintenance, a.k.a., preventive maintenance (PM) during the year, and year after year. Anyone who owns a car knows the engine oil should be changed after a specific number of miles traveled. No one wants their automobile to incur engine problems and/or damage to the engine parts due to avoiding a routine oil change. That said, car owners won't compromise the manufacturer's recommended maintenance because resulting engine damage will cost these owners, "hitting them in their wallets." So, don't you think building owners face the same concerns when it comes to manufacturer recommendations for the facility's assets?

In our May 2021 Facility Management column we dug deeper into maintenance, highlighting 9-types of preventive maintenance. For this month we are focusing on budgeting in advance of equipment failure and also budgeting for deferred maintenance, a topic we addressed in October 2019 Asset Management column. We have discussed planned maintenance in the past and, at the end of this discussion, we refer you to Focus on Facilities columns covering facility management and asset management highlighting preventive (PM), predictive (PdM), and/or unscheduled maintenance.

Just like maintenance planning is the process of determining when preventive maintenance work should be done each year, a similar process needs to be in place to mirror this strategy so that there are funds available to implement this process each year. In the second half of this column, we'll also discuss how deferred maintenance plans and finance budgeting needs to compliment that annual plan.

To get started on both annual budgets there must be an equipment database inventorying all equipment that requires maintenance even if the maintenance is to be deferred, such as roofs which probably won't need annual planned maintenance but may need unscheduled maintenance over the years, e.g., water leak.

For those who will be reviewing and approving the proposed budgets (Planned Maintenance & Deferred Maintenance) report, it is always recommended to provide an executive summary to highlight and/or remind those reading this report the purpose and benefits of proactive facility management. Also worth noting will be the potential risks from equipment and system failure,

as it pertains to emergency response, e.g., loss of the heating system boiler in the winter and the disruption of the business activities and displacement of workers depending on the failure. "Pay Me Later" will usually be far more costly when it occurs if not funded, versus a "Pay Me Now" annual maintenance budget. Annually, a proactive PM operating budget can result in:

- Increased worker productivity
- A safer environment
- Increase in equipment/asset useful service life
- Lower equipment downtime
- Minimizing of unscheduled disruption within the building due to equipment failure

If a PM work order system already exists, then the drafting of a proposed annual budget should be relatively easy to produce because the equipment inventory will be found in the work order database along with the require time and costs (labor and materials). If there isn't an existing database, then facility management will need to inventory the equipment and refer to existing manufacturer operation and maintenance (O&M) manuals with their recommended work order tasks (refer to August 2019 Facility Management column).

The work order system will identify when equipment should receive maintenance, e.g., semi-annual PM tasks and so a proposed cash flow can be created and incorporated into a monthly cost that will be this report. The table of contents for the annual planned maintenance report could look like this:

- Introduction
- Executive Summary
- Work Order System:
  - Security Systems (this PM work will probably be performed by an outside service contractor so budget a service contractor quote)
  - Fire Alarm System (this PM work will probably be performed by an outside service contractor so budget a service contractor quote)
  - Electrical Equipment and Systems
  - HVAC Equipment and Systems
  - Plumbing Equipment and Systems
- Other Service Contracts (Optional within this specific report)
  - Housekeeping
  - Landscape
  - Snow Removal
- Financial Spreadsheet for all the work order categories noted above
- Training (as part of the maintenance, it is suggested that funds be budgeted for continuous staff training, e.g., annual personnel safety)

Similar to the annual PM budget, deferred maintenance (DfM) will mirror its counter-part report but will be spread out in years, e.g., 10-DfM spreadsheet plan instead of a budget spread out over 12-months of the coming year.

DfM is the "crystal ball" educated guess on when equipment will fail, e.g., water pumps have a useful service life of 16 years but, when well maintained, the pump may operate for 18-19 years. Still, it is important to understand no equipment lasts forever, and the building management team should consider reviewing the deferred maintenance equipment spreadsheet every 3-4 years to continue to anticipate asset costs that will occur at some point in time.

That said, this DfM inventory can also be considered part of a master plan where the assets, in sync with business growth, require financial planning to increase growth, e.g., addition of 500 ton refrigeration chiller while investing in replacing antiquated equipment.

Just like the facility management group needs an equipment database for annual preventive maintenance, an asset management group needs the same equipment database to accommodate deferred maintenance budgeting. The difference is the PM budget must be proposed and funded

annually while the deferred maintenance budget is required every 3-4 years and that the deferred maintenance should be completed in sync with master planning for the entire complex.

A suggested proactive DfM operating budget, submitted for funding every 3-4 years may have a management report format along the lines of:

- Introduction
- Executive Summary
- Asset Inventory:
  - Security Systems (this technology may require replacement with an upgrade based on continuously improved technology)
  - Fire Alarm System (this technology may require upgrading to comply with the latest safety codes and/or recommended "good practice.")
  - Electrical System Equipment nearing "end-of-useful" service life.
  - HVAC System Equipment nearing "end-of-useful" service life.
  - Plumbing System Equipment nearing "end-of-useful" service life.
- Financial Spreadsheet covering the next 10-years acknowledging the DfM budgeting will be updated every 3-4 years.

For additional *Focus on Facilities* articles integral with creating and maintaining a database:

Facility Management

October, 2020 "A Facility Maintenance Checklist"

August, 2021, "Creating Your Own Database for Routine Performance Maintenance Part-1 Equipment"

September, 2021, "Creating Your Own Database for Routine Performance Maintenance Part-2 Interior & Exterior"

November, 2021 "Scheduling Preventive Maintenance Based on the Building Application"

Asset Management

June, 2019 "Facility Assessment = Your Building Condition Index"
September, 2019 "Seasonal Maintenance-Why It Is Done"
November, 2020 "Creating a Deferred Maintenance Plan"
October, 2021 "Incorporating Your Deferred Maintenance Plan with Your Master Plan"

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