



Estimating Asset Management Budgeting

By Howard McKew, P.E., C.P.E.

Asset management budgeting goes hand-in-hand with facility management budgeting along with master planning (a topic for another day). Facility managers should be budgeting annually the cost to maintain equipment via preventive maintenance (PM), while budgeting every 3-4 years the estimated costs to address deferred maintenance. For asset managers, budgeting the building assets takes the building owner one-step closer to master planning the future of the facility. This management role is tasked with caring for the sustainability of existing equipment and systems while forecasting any potential master planning, e.g., forecasting a 150,000 square foot new building.

Whatever the planning and budget is, it always comes down to caring for equipment, purchasing new equipment, and replacing antiquated/inefficient equipment. A definition of “asset” we found, which defines it well, “is a resource with economic value that a building, corporation, institution, or government owns with the expectation that it provides a benefit to the building owner.” This is important to recognize because of its “economic value.” If it doesn’t have value, then it is not a piece of equipment that should be purchased or kept and maintained.

A building is an asset in its own-right but, for our purpose in this column, we are looking at equipment that is also designated as an asset. This equipment becomes an asset when purchased. Once purchased, equipment requires care, cleaning, routine maintenance, and quite often a tune-up to keep it operating efficiently. From a financial management point-of-view, it is



important, if not mandatory, to maintain an inventory/database for accounting and tax purposes. It is also essential to maintain and keep current, each piece of equipment/asset for operation and maintenance cost impact each year.

Budgeting the assets can be considered budgeting annual preventive maintenance, as well as deferred maintenance budgeting but is not that! Asset maintenance plans should be recognized as maintaining a master plan for the facility. Whether this is a parish, school, or healthcare facility, the ownership is committed to these facilities being sustainable. Unlike building “speculators” who invest in constructing a building, e.g., office building, that will be sold “sooner rather than later”, these other facilities have business plans to provide services to their community, the business they are in, or institutions, e.g., museum where the

building asset and its associated building system assets are intended to be reliable throughout the year and for years to come.

Recognizing assets have a useful-service-life, it is important to manage this estimated life span in sync with the business or institution's master plan. Therefore, the asset management team should make sure there is a master plan in place based on the condition of the building and the condition and capacities of the utility infrastructure. To do this, there needs to be an understanding the building's purpose, its "mission," (concise explanation of the organization's reason for existence). Next is the understanding of the building "vision," (goals, aspirations, and growth).

With an understanding of the facility's mission and vision, the asset manager can begin to draft a budget plan to forecast/estimate the available equipment and system assets and to outline a master plan that will help the organization prepare for future growth. At the same time, the "future" may be to reorganize or re-purpose the facility and not to simply expand the building's footprint.

Integral with this master plan is to have a clear understanding of how existing equipment is operating and being maintained, as well as capacity limits that will require expansion of a specific utility, such as the central air-conditioning plant. A format for this asset management budgeting report may be as follows:

- Introduction
- Executive Summary
 - Asset Inventory
 - Security Systems
 - Fire Alarm System
 - Electrical System Equipment
 - HVAC System Equipment
 - Plumbing System Equipment
- Asset Capacities
 - Age
 - Percent of Full Load
 - Percent Addition Capacity

- Limitations, e.g., not up to current standards
- Future Needs, e.g., increase central refrigeration equipment by 50%
- Recognizing the DfM Budget Report (updated every 3-4 years)
- Financial Spreadsheet covering the next 5-year projections

Preventive maintenance, deferred maintenance, and asset management are like a three-legged stool providing stability. Often, preventive maintenance and deferred maintenance receive the attention they need, but the asset management of the present and the future often get overlooked. If a facility is going to be reliable, comfortable, and safe, then the third leg of the stool, the asset management needs to be routinely addressed and updated to keep current with the operation and maintenance of the building.

Howard McKew is a registered engineer and president of Building Smart Software. Howie has a ton of experience to draw from the various industry jobs he's held and often writes about that experience in his columns in Engineered Systems Magazine. He is the author of 3-books, contributor to other author's books, lectures, and is an active member and Fellow in ASHRAE.

www.buildingsmartsoftware.com
hmckew@bss-consultant.com

The links to third-party websites included in this article are meant for convenience only. The Diocese of Cleveland Facilities Services Corporation does not review or control these third-party websites and is not responsible for any third-party websites or any content of those sites. Inclusion of any linked website does not imply our approval or endorsement of the products, services, or opinions of the third-party website. Linking to any other site is at your own sole risk and the Diocese of Cleveland Facilities Services Corporation will not be responsible or liable for any damages associated with linking to the third-party websites or any subsequent links.

For more information:
facilities@dioceseofcleveland.org

