

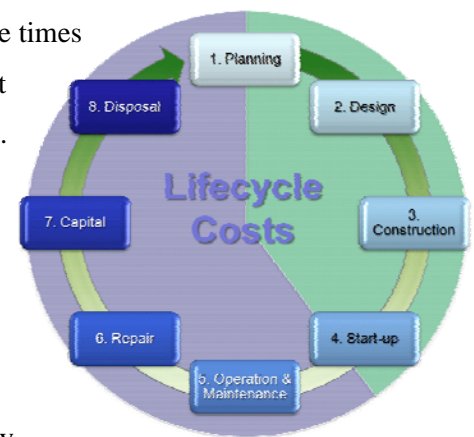
Justifying Your Facilities Budget

July 2008

by Anthony Sjolander, LEED AP

Imagine your CFO asking you to submit an optimized five-year budget for maintenance, repair and replacement of your facility components (boiler motors, chiller compressors, roof flashings, etc.) Knowing your annual compensation depends on the measurable return on investment (ROI) you deliver, how and when will you recommend spending the company's financial resources? How will you demonstrate ROI?

During a typical facility lifecycle, owners can expect to spend two to three times the cost of construction in operating, maintenance, repair and replacement costs¹, yet forecasting and justifying these costs is difficult for most firms. Operating and maintenance costs are relatively predictable; however, repair and replacement forecasts are usually much more subjective and are not always supported with objective financial analysis. While most companies understand that taking a 'run to failure' approach is not the wisest course of action, few have the information available to determine when, where and how much to invest in repairs and replacement of facility components.



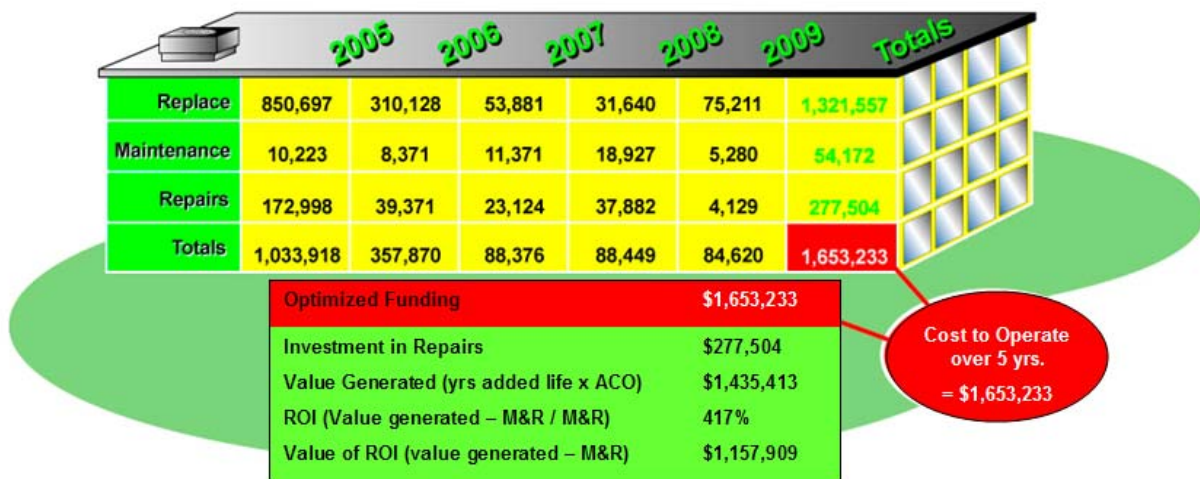
2/3 O&M / R&R 1/3 Construction

A data-driven Facility Asset Management (FAM) strategy provides companies with the objective financial information to help them answer this difficult question. FAM converts facilities into financial terms and provides the business case required by the C-Suite to approve or deny funding requests.

The first step in a FAM strategy is to understand the organization's objectives for their business and facilities: strategic goals, ROI objectives, mission criticality of various facilities, growth plans, scorecard metrics, etc. The next step is to do a complete inventory and assessment of facilities and building components, documenting discrete defects for each asset. Using algorithms the inventory and assessment data are carefully analyzed to determine the condition of each asset and identify which repairs would extend the life of the asset. By combining the information for all of the assets that make up a facility, repair and replacement recommendations can be made in an overall context. For example, it would not be prudent to install a new 20-year roof if the remaining building components only have 5 more years of useful life. This analysis also allows the company to forecast when the asset will reach "financial failure" and should be

replaced. “Financial failure” of an asset is defined as the point in time when the annual cost to maintain and repair the asset exceeds the annual cost of replacement.

With FAM, the asset manager can easily create multiple scenarios and determine the optimum mix of expense (repairs) and capital investment, justifying funding requests with data-driven ROI analysis that aligns with the company’s objectives.



In addition, FAM can provide analysis to support critical repair or replacement decisions. For one organization, utilizing FAM analysis allowed them to achieve a net benefit of \$10.15 million dollars and an ROI of 451% on their facility repair expenses. When faced with the decision of whether to repair, replace or delay action altogether on the roofs on 81 of their facilities, this company turned to FAM to help them make their decision. Unless immediate repairs were undertaken, it was projected that the roofs would need to be replaced within a year. However, by making the investment in specific repairs suggested by the FAM analysis, the company was able to extend the service life of their roofs by an average of 5 years, delaying a capital investment of over \$49 million. Since the investment of \$2.25 million in repairs over the study period is less than the annual cost of ownership over the study period, the investment was financially justified.

So when the CFO requests your facilities budget, you can provide not only a forecast, but the ROI information to justify your budget request – and a means to demonstrate the financial return your plan can generate for the company.

Anthony Sjolander, LEED AP is National Account Manager of Building Lifecycle Management for Adolfson & Peterson Construction. He can be contacted at (952) 525-2316 or tsjolander@a-p.com.

Adolfson & Peterson Construction is a family-owned company with offices in Arizona, Colorado, Minnesota, North Carolina and Texas. A&P provides construction management, design-build and general contracting services to both public and private clients. A&P is ranked 74th on Engineering-News Record's Top 400 General Contractor's list. Please visit our website at www.a-p.com for more information.

1. US Government Study "Cost Analysis of Inadequate Interoperability in the U.S. Capital Facilities Industry," NIST GCR 04-867. Prepared and sponsored by the National Institute of Standards and Technology, August, 2004, p. I-16, <http://www.bfrl.nist.gov/oa/publications/gcrs/04867.pdf>.