

Integrating Condition Assessment Results

by Chuck Griffin

Integrate the results of your condition assessment

Once you have assessed the condition of your facility, you then must integrate those findings with your maintenance planning and budgeting practices. This requires careful strategic alignment.

Typically a maintenance budget represents a plan to spend specified amounts of money during a fixed period of time and an estimate of all maintenance costs for the same time period.

As discussed in my previous articles, the maintenance planning and budgeting process should incorporate deferred maintenance, routine maintenance, preventive / predictive maintenance, repair maintenance, replacement forecast and upgrade expenditures. The latter two are more commonly referred to as capital projects.

Knowing your facility's condition and needs will allow accurate and strategic planning for maintenance activities and budgeting. The planning for maintenance and replacement needs is essential to support comprehensive life cycle management.

At this stage of integration, cost becomes a key factor. There are different approaches to integrate the condition assessment results into the maintenance planning and budgeting processes. These approaches will vary depending on the accuracy of the data you have collected.

The methods employed can range from the simplest approach requiring very little data, to one of the more complex approaches requiring more extensive amounts of data-the life cycle approach.

Determining the integration approach

Approach 1:

* Establish the maintenance and replacement expenditures on a percentage of the current replacement value of your facilities. Typically this could range from 1.5 percent to 4.6 percent depending on the type and use of the facility.

Approach 2:

* Establish a funding model by incorporating the facility's age, extent and type of use, and preventive maintenance levels and maintenance history into the funding model. Basically, the funding model adapts the funding requirements more in line with the facility needs.

Approach 3:

* Develop and implement a comprehensive life cycle approach. This asset management strategy provides a more reliable and effective tool to manage current and future requirements for your facility.

I believe that every organization needs to strive to incorporate a life cycle management strategy as an integral part of their asset and maintenance management practices.

This life cycle approach to maintenance planning and budgeting, (Approach 3), requires the inventory, inspection and condition rating of actual building systems and components. When conducting the building assessment, generic (theoretical) life cycles are assigned to each building system down to component level. This helps establish estimated frequencies for replacement or rehabilitation.

The condition assessment results will provide data to enable the adjustment of the theoretical life cycle data to actual projected life cycle/replacement forecast.

Now, based on the age and condition of the facility, the original established model for replacement can be adjusted accordingly.

These results of the building condition assessment combined with the funding model will provide the foundation on which the development and implementation of life cycle management can be built.

This life cycle model integration should incorporate, but not be limited to:

- * a database of all building systems and components;
- * an estimated remaining life of all building systems and components;
- * a replacement forecast with budget requirements;
- * the projected failure potential;
- * the level of deferred maintenance;
- * the level of preventive maintenance required to achieve or exceed the established remaining life;
- * the overall resource requirements.

At this stage, it will be apparent that the integration of the building condition assessment results will require careful management. This integration and the change management required to move to a comprehensive life cycle management strategy, should incorporate a methods and organization review, including an analysis of the information management requirements.

Much too often, information is gathered with no subsequent plan of putting the information to work. This is often a repeated exercise in many organizations.

The benefit of incorporating the results of the condition assessment into your maintenance management practices is the overall ability to be able to forecast replacement/rehabilitation strategies and use the historical data from the preventive maintenance, repair maintenance and failure data to support and monitor the replacement forecast. This will provide a substantially higher return on your investment.