

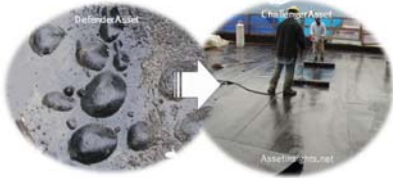
The "Forces of Retirement" of Assets

Some building owners, managers and operators think that their physical assets, such as roofs and boilers, will only need to be replaced when their physical condition deteriorates beyond a certain acceptable level.

It is important for stakeholders to recognize that there are other "forces of retirement" that have a bearing on realistic forecasts and prudent asset replacement intervals in a depreciation report. Furthermore, each asset is affected by a combination of these "forces" at different stages in its lifecycle.

1. Physical Deterioration

The replacement of an asset when a certain threshold of physical condition has been reached. For example: "There were blisters in our roof membrane causing leaks into the underlying suites and collateral water damage. The membrane could not be restored and was therefore replaced".



2. Technological Obsolescence

The process whereby an asset, or the components of an asset, become irreplaceable due to changes in technology over time. For example: "We cannot get replacement parts for our elevator relay control panel, which is antiquated, and must therefore carry out an elevator control modernization using current technology".



3. Economic Obsolescence

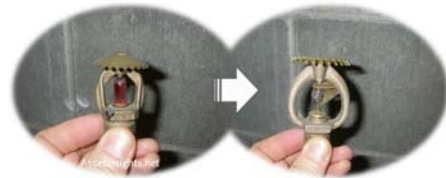
Replacement of an asset because cost objectives can now be achieved in a more efficient way. For example: "We decided to replace our low efficiency boiler with a high efficiency condensing boiler in order to reduce energy consumption and

save on our utility bills. The gas savings will be used to increase our reserve contributions." Another example is the installation of variable frequency drives on a booster pump assembly to reduce energy consumption and wear and tear.



4. Legal Obsolescence

Legislation, or other directive, issued by an authority having Jurisdiction, resulting in the prohibitive use of certain assets unless specified changes are introduced, typically by a stipulated deadline. For example: "We were informed of a recall of a certain type of deficient sprinkler head and therefore arranged to have these all replaced so as to maintain the necessary insurance coverage".



5. Style/Aesthetic Obsolescence

This occurs when an asset is no longer desirable to the owners because it has gone out of popular fashion. For example: "When we replaced our lobby floor we also replaced the furniture as it appeared dated and did not match the new aesthetics".



Anticipating these "forces" and developing optimal intervals for asset renewal is both an art and science.

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