

APWA Asset Management Road Map

Maintenance and Operations Strategies

Overview

A modern asset management approach optimizes the use of resources to provide a infrastructure service. This is especially useful when maintaining and operating infrastructure as:

- We all have aging infrastructure
- There is limited resources to maintain, operate and replace infrastructure
- As our communities grow, there are increasing demands put on infrastructure
- The largest portion of infrastructure budgets is spent on maintaining and operating the infrastructure. The opportunity for efficiency is in M&O.

While asset management concepts are the same for M&O, there is a level of detail that can make it more useful.

The Relationship between M&O and Preservation

The replacement or refurbishment of assets at the end of their useful life or at the point of lowest cost in the life-cycle is a key approach in modern Asset Management. There is a direct relationship between how an asset is maintained during its useful life and the method and cost of replacing the asset.

While the approach of preserving the functionality of an asset is covered in more detail in the next step of the Road Map – Determine Appropriate CIP Strategy (Residual Life, Replacement Cost and Timeframe), there is important data collected while maintaining the asset for years that informs this CIP Strategy.

A good example is the maintenance records of a dump truck that should inform the decision of when to replace the truck.