PART 2 – WEAVING THE PIECES

Typical Asset Values

Having accurate valuations for assets will contribute to a more complete and reliable asset management plan. In general, the closer the asset is to renewal or development, the more accurate the cost estimates should be. For assets that will be replaced further in the future, there are many uncertainties that will affect the cost before it gets developed, and therefore having a general cost estimate is sufficient. For capital projects to be undertaken within the next few years, having a more accurate cost estimate of both the up-front capital costs, and the costs of ongoing operations and maintenance will be important.

Accounting practices use the historic cost of assets, or the actual cost of acquiring the asset. In asset management practices the replacement cost, or the total cost of replacing the asset in today's dollars is used to put all assets on level playing field. To gather replacement values for a community's assets, the following sources of data are available:

- Extended Asset Condition Reporting System (E-ACRS)
- Unit Cost Estimates
- Actual Costs from recent projects
- Community insurance valuations
- Consultants
- Contractors /Suppliers
- Market Value
- RS Means

Comparing Apples to Apples

Are two projects the same? Consider the following when comparing projects:

- Location
- Site Conditions
- Market Conditions
- Size/ Quantity
- Unit Cost Details

In gathering information for replacement value estimates, it is important to confirm that the estimate matches the observed conditions. Values should consider the location where the asset is to be located, current global markets and the availability of resources. It is also important to ensure that the estimate includes the full cost of the replacement, including materials, delivery, construction, engineering fees and contingency.

When using cost estimates as a means of estimating asset value, be sure to consider where the estimate came from and its purpose. There are four classes of cost estimates (A-D) that have a varying degree of accuracy based on their level of detail. Class A estimates are based on actual designs and have a high degree of certainty, ±10%. Class D estimates provide a general guideline but can vary by ±50%.

When the replacement value cannot be estimated accurately, the historical value can provide an alternative approach. The historical value can provide a starting place of what the asset cost a certain point in time. The more recent the historical value, the more accurate the value will be. To adjust the value to a current replacement value, the historical value should be adjusted for inflation. This should be done for any value greater than two years old. It is also important to confirm that a like-for-like replacement is available to ensure that the asset can be replaced in a similar manner. The following data sources can be used to determine historical cost:

- Book Value/ Historical Cost
- Purchase Order/ Invoices/ Receipts
- Staff

Adjusting for Inflation

When adjusting the historical value (HV) to the current replacement value (RV) the Consumer Price Index (CPI) is used in the following formula:

$$RV = HV \times \frac{CPI_{Current}}{CPI_{Historical}}$$

Stats Canada publishes CPI Values annually that can be found here:

Statistics Canada