



Financial Benchmarks Series

Key financial indicators allow a utility to get a snapshot of its financial health and determine whether it needs to adjust its rates or consider regional solutions. These benchmarks should be calculated annually when financial statements are released. Please see the other overviews in the Financial Benchmarks Series for a more complete financial picture.

Percent Capital Assets Depreciated

How much of your utility's expected life has already run out (and how much is left)?

Percent Capital Assets Depreciated shows how much of the infrastructure's (i.e., capital assets) value has been lost over time and is a proxy for the life remaining in the life of utilities' assets. Depreciation is the loss of value of an asset over time when an asset is not restored by current maintenance or replaced. Depreciation may be caused by physical factors such as wear and tear from use, or decay, rot, rust, or corrosion from time and the elements. Depreciation may also be loss of value due to obsolescence (e.g., a functioning filter no longer compatible with a new pump), inability to meet current demand, or changes in regulation.

Depreciation is an economic inevitability for all utilities. Accumulated depreciation, one of the values used to calculate Percent Capital Assets Depreciated, is a financial calculation and is not based on the assessment of engineers. Which assets may need to be replaced or upgraded should be determined only after a thorough assessment. The goal through this financial calculation is to have saved the cost of an asset by the time it is scheduled to wear out.

Depreciation may be calculated in a variety of methods:

- **Based on historical value:** What you paid for the component originally. This value might not be helpful in determining future costs, though is a reasonable value in the absence of other data.
- **Current value:** How much the asset is currently worth. This value is more valuable if you are conducting a valuation of all current assets.
- **Replacement Value:** The cost of replacing the asset. This should reflect the actual asset that you plan to replace it with – not all assets are replaced with like assets.

Percent Capital Assets Depreciated is only as good as your depreciation schedule and even then, historic pricing is likely to distort the results. Accountants are typically the ones assigning a depreciation schedule for your physical assets and are may assign a linear depreciation if they have limited information. As in, they calculate the cost of a pipe, assume it will depreciate over 50 years, and divide the cost by 50 to get the annual depreciation for the pipe. But conditions vary, even for the same piece of infrastructure, and it's hard to estimate how long a pipe will last. Sometimes physical conditions will not match the financial depreciation.

Calculate Capital Assets Depreciated

Equation

$$= \frac{\text{Accumulated Depreciation}}{\text{Gross Plant and Equipment}}$$

Default Target

0.35 (35%)

Total Accumulated Depreciation

\$7,214,116

Total Depreciable Capital Assets

\$15,394,460

Percent Capital Assets Depreciated

$$\frac{\$7,214,116}{\$15,394,460} = 0.47 \text{ (47\%)}$$

Interpret Calculate Capital Assets Depreciated

Percent Capital Assets Depreciated lower than 0.25 (25%)

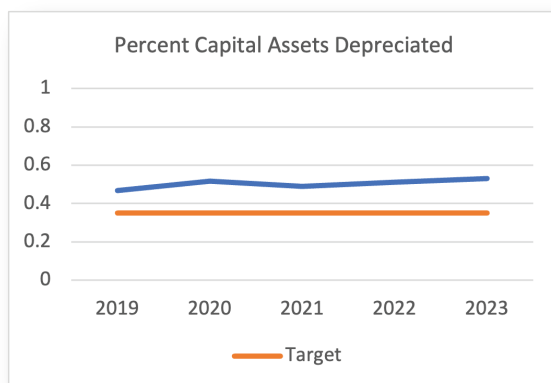
Percent Capital Assets Depreciated lower than 0.25 means your utility is being proactive (and finding funding) in replacing infrastructure as it's aging. The closer your Percent Capital Assets Depreciated is to zero, the closer to new your system is.

Percent Capital Assets Depreciated higher than 0.5 (50%)

Percent Capital Assets Depreciated higher than 0.5 might suggest that an increasing amount of your infrastructure needs repairing or replacing. It can be overwhelming, expensive, and time-consuming to replace a large percentage of your infrastructure, which is why the UNC EFC suggests a target of 0.35. A system with over 50% of Percent Capital Assets Depreciated should strive to identify funding to replace components of their system. As you approach 1.0, your system is near the end of its expected life.

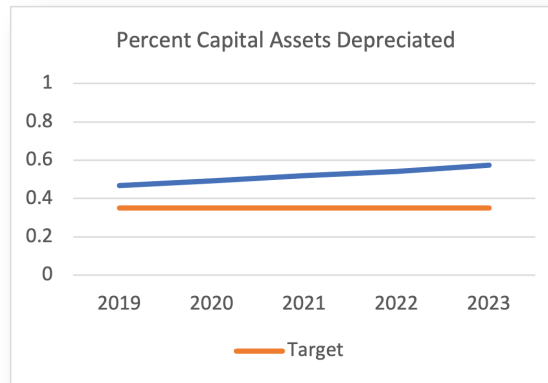
Year-over-year Trend - Flat

A flat trend for Percent Capital Assets Depreciated indicates you are actively working on replacing aging assets. If the Percent Capital Assets Depreciated is holding steady at 0.25 or less, your utility is doing a decent job of replacing infrastructure as needed. A flat trend at 0.5 or higher indicates that you are still actively working on replacing assets, but you are not replacing enough to make progress towards decreasing the Percent Capital Assets Depreciated.



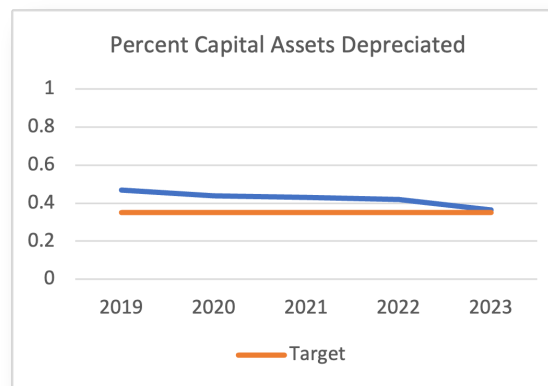
Year-over-year Trend - Increasing

Although it's counterintuitive, an increasing trend for the Percent Capital Assets Depreciated is not good. The higher the value, the more of your assets are depreciated and not being replaced. An increasing trend should be a red flag that you need to prioritize asset repair or replacement.



Year-over-year Trend - Decreasing

A decreasing trend for the Percent Capital Assets Depreciated is a good sign. This indicates that your utility is prioritizing the health of your assets and actively repairing or replacing old, aging, or broken components.



Year-over-year Trend - Erratic

Erratic trends may reflect unusual circumstances and should not be looked at in isolation. Since Percent Capital Assets Depreciated is an accounting placeholder, it's possible erratic trends may reflect an accounting error or change in auditing methods.

Where You Can Find These Numbers

If the system is owned by a government that follows GASB 34 procedures for audited financial statements, these numbers can be found on the Statement of Revenues, Expenses, and Changes in Fund Net Assets for the proprietary fund. They should be labeled explicitly as "operating revenues" and "operating expenses." To include depreciation, you will likely need to find the separate line item that lists the depreciation value.

The UNC Environmental Finance Center is here to help! You can reach the UNC EFC by **email** at efc@sog.unc.edu or reach the UNC EFC via the **web** at <https://efc.sog.unc.edu/contact-us/>.

This resource was funded by the North Carolina Collaboratory.