

PART 2 – WEAVING THE PIECES

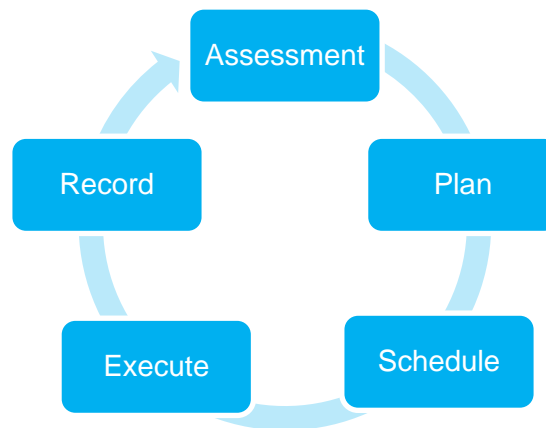


Maintenance Management Plan Development Guide

Maintenance management is the process of maintaining your community's assets and resources. The purpose is to:

- Ensure assets last as long as expected;
- That your community can continue to provide services at the expected level of service to community members;
- Minimize unplanned maintenance/failures (risks); and,
- Use limited resources (time/people/money) effectively
 - Enables collection of performance information
 - Allows for proactive planning of limited staff resources
 - Schedule and document procedures

A maintenance management plan is a working document and should be practical for maintenance staff to utilize and update. The following six-step process is a practical guide to developing a Maintenance Management Plan.



Assessment: The first step requires an understanding of the current condition of your infrastructure. Much of this information may be readily known by your public works or operation staff, but in some instances you may have to seek out information from condition assessment reports, undertake an assessment, or make some guesses based on when the infrastructure was installed. For Indigenous Services Canada (ISC) funded capital projects your most recent Asset Condition Reporting System (ACRS) report will provide condition information and recommended projects.

List all the major infrastructure components for the services you provide to community members.

What do you already know about its condition?

If you are missing condition information on assets it may make sense to engage public works or operations staff to review the assets. Depending on the type of asset and the level of condition assessment you would like to undertake, you may need to engage a qualified professional (e.g. electrician, engineer, contractor, etc). Assets should be assessed on a regular basis to understand how they are deteriorating. When assessing assets, use a standardized form to record the condition and any noted changes in the condition.

Plan: Once you have an understanding of the condition of your infrastructure the next step is to identify required work. Start by creating a list of all required maintenance activities and prioritize them based on community objectives and the risk of failure. The plan will consider immediate repairs as well as accounting regular maintenance activities. Consider completing related tasks at the same time.

Schedule: Consider the availability of resources. At this stage, plan to assign resources to specific tasks and ensure that staff, equipment and parts will be available to complete the work. Start by looking at the short term, creating daily and weekly schedules. As the program improves, extend it to monthly and beyond. This approach will help your community transition from reactive responses to a more proactive one. Don't forget to budget time in the schedule for addressing emergency repairs.

Execute: Engage Operations and Maintenance staff in the development of and revisions to the schedule. Scheduling tools are only useful if staff use them. It may make sense to try out a daily activities scheduler for a month and then re-evaluate the tasks to see if anything is missing.

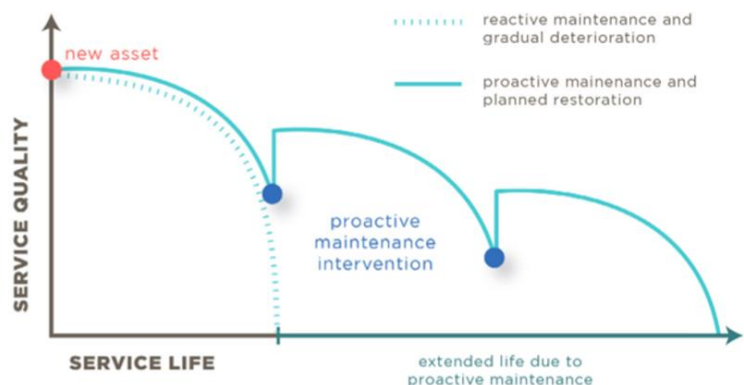
Record: It is important to record all of the maintenance work completed on an asset. Work orders are often used to record when the work was completed, what work was done and update the condition of the asset after the work was completed. Using a standardized template for your community will help to make sure that the same information is recorded no matter who is actually executing the work,

Quality Improvement: At each step in the process, look for opportunities to improve the process. Identify what works and what doesn't. A maintenance management program is a continuously evolving process. Encourage staff to provide feedback and contribute to the program.

Benefit of Proactive Maintenance

Having a maintenance management plan allows your community to be proactive in the maintenance and restoration of your assets. By addressing maintenance early, you will be able to extend the life of your assets and can receive greater value from capital investment projects.

The scenario presented here shows an asset deterioration curve where preventative maintenance extends the life of the asset three times longer without the need for a full replacement of the asset.



Source: Asset Management BC, The Role of Operations and Maintenance in Asset Management: A sustainable Service Delivery Primer, Asset Management BC, 2019.
<https://www.assetmanagementbc.ca/wp-content/uploads/The-Role-of-Operations-Maintenance-in-Asset-Management.pdf>

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Additional Resources

Further resources on capital facilities and maintenance program is provided by the ISC at the link below:

<https://www.sac-isc.gc.ca/eng/1100100016395/1533641696528>