

Asset Management Plans (AMPs)

POINT/COUNTERPOINT ANALYSIS

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Utility customers demand their services to be reliable and cost-effective. Utilities, therefore, do not have the luxury of reacting to failed infrastructure. They must plan ahead to repair or replace deteriorating assets before they fail, maintain their most critical assets in a condition that limits the likelihood of failure, and design and operate their systems in a way that enhances reliability of service. Asset management plans (AMPs) capture this in one document so that it can be efficiently communicated and updated over time.

AMPs pave the way for utilities to advance their asset knowledge and modernize their infrastructure management practices. They outline how utilities will use the information they have to make informed, defensible decisions to improve service, reliability, and cost-effectiveness.

Many utilities would like to have AMPs but have misconceptions about what is needed to put a plan in place, often overestimating the effort. Read on for B&N's insight into the proven, structured methods of developing affordable AMPs and how they benefit utilities who use them.

POINT

It's just another plan that will sit on a shelf and never be used.

COUNTERPOINT

When asset management plans (AMPs) include tangible actions and implementation schedules, utilities are more likely to use them. B&N crafts AMPs that go beyond strategic thinking. They connect strategy and tactics with the everyday tasks of operations, maintenance, and engineering staff.

AMPs help decision makers more readily access information on asset inventory and condition and the issues that need to be addressed. They help engineers and planners understand which assets they should proactively replace and which ones can be run to failure. They help maintenance staff understand which assets to inspect, when to inspect them, and how to inspect them. They allow facility operators to better identify issues before they result in downtime, and reduce reactionary work which helps to keep utility staff safe.

From utilities in small, rural areas to large metropolitan cities, B&N has developed successful AMPs that support data-driven and structured approaches to help utilities understand and manage their infrastructure.



In Anchorage, Alaska, B&N helped the Anchorage Water & Wastewater Utility (AWWU) develop a portion of their AMP related to capital project planning. B&N prepared analytic tools and a guidelines manual for AWWU that standardizes how CIP alternatives are evaluated. This helps decision makers have confidence that their CIP is delivering the most value to their customers and the community. That structured process is now applied to every CIP project. B&N worked with AWWU to complete over 100 capital project reviews to reevaluate existing CIP projects' value and priority. B&N also is working with AWWU to standardize their CIP prioritization process.



POINT

It is a difficult process that will take too much time and effort.

COUNTERPOINT

With any program, there will be an up-front investment of time. However, utilities often believe that an asset management plan has to address all of a system's issues at once. Using a two-phased approach to

developing AMPs simplifies the process. Utilities should focus first on their current asset management practices and then develop targeted improvements only.

When it comes to implementing asset management improvements, it's better to focus on a few things and do them really well instead of trying to do too much and spreading resources thin. This is true regardless of utility size. When utilities hone in on their most critical system needs, they can minimize the initial time they invest. Once asset management practices are in place, utilities can expect to recoup the time they invested by being ahead of the curve instead of reacting to situations as they occur, all while improving service, reliability, safety, and cost-effectiveness.

Small communities like Lubeck, Wellsburg, Pennsboro, Point Pleasant, and Philippi in West Virginia have had success with this approach. B&N has been working with communities for five years to develop AMPs required for wastewater utility projects that utilize the state's Clean Water State Revolving Fund low-interest loan program. Even with budgets as low as \$10,000, they have been able to develop AMPs scaled to meet the needs and resources of their utilities.

POINT

We don't have the data we need to compile a plan.

COUNTERPOINT

Utilities rarely have all of the data they want, but all of them have enough to create an AMP. In fact,

AMPs can be created without any data at all. In those cases, the AMP would outline the steps needed to identify the right data to capture, where it would be stored, how it could be accessed and analyzed, and what decisions would be made from it. Most utilities now have the ability to capture and store data. The challenge is understanding what data to capture and how to leverage it.

B&N has a number of processes and tools that help utilities identify and capture the right asset data so the information is there when the utility needs it.

POINT

We can't develop an AMP because our utility doesn't have asset management software in place.

COUNTERPOINT

A common misconception among utilities is that asset management is only about software systems and that specialized "asset management software" is required. In reality, asset management is about what a utility does to deliver cost-effective service to its customers. Asset management software can be important in many cases, but it is just a support tool and smaller utilities can get by with more basic systems.

Implementing assets should allow utilities to answer these 5 core asset management questions (adapted from the US EPA Asset Management framework):

- 1) **What do I own and what condition is it in?**
(Current State of Assets)
- 2) **What do I need my assets to do?**
(Levels of Service)
- 3) **What are my risks?**
(Business Risk Exposure)
- 4) **How do I best mitigate those risks?**
(Optimized CIP and O&M Strategies)
- 5) **How do I keep my utility financially sustainable?** (Long-term Financial Plan)

The data needed to answer these questions will most likely come from a variety of software systems at the utility. The systems need to be coordinated so that the data is accessible, whether there is a dedicated asset management software system in place or not. The size and needs of the utility and the assets managed will help determine if asset management software is needed and what software should be used.



In some cases, software can help make the data management process more efficient and effective. B&N assisted the small community of Lubeck, West Virginia with the selection and implementation of a computerized maintenance management system (CMMS) as a tool for the utility's asset management activities. By structuring their asset hierarchy, developing asset naming conventions, and determining how to populate initial data sets, the utility is laying a foundation for better understanding the current state of its infrastructure.

POINT

Our current management practices are working fine. Why do we need to make improvements?

COUNTERPOINT

As assets age, regulations tighten, and funds fail to keep pace with infrastructure needs, the importance of making the right investments at the right time for the right cost continues to grow. Very few utilities can afford to remain in a reactive mode, and even those who can will benefit from asset management practices.

Even if existing practices at a utility are effective, more cost-effective tools that address asset management challenges are rapidly being developed to increase efficiency and capability. Maintaining the status quo may be the least affordable path in the long run.

B&N can help utilities solidify their knowledge of existing assets, better understand their asset management challenges and risks, develop a practical plan to address the most important concerns, and move forward proactively. By doing so, utilities will decrease their financial and safety risks, reduce the potential for community impacts, and meet their service requirements cost-effectively.



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KEVIN'S POINT OF VIEW

A nationally recognized expert in asset management, Kevin has led complex, large scale asset management programs on both the public and private sides of the industry. He has been a keynote speaker and Blue Ribbon Panelist for national asset management workshops and has been published in select national and international publications.

According to Kevin, the most important thing to remember when developing and implementing an asset management plan is that the goal is continuous improvement. Utilities can start from wherever they are and implement changes at a pace that best matches their resources and needs.

Developing and implementing an asset management plan helps utilities make data driven decisions and adjust how they do business to ensure that the available funds are spent on the highest priority concerns. In the long run, taking this proactive approach will be more cost effective than reacting to problems as they occur.