

## A Formal Management System Dedicated to Infrastructure

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Owners have been taking care of their physical assets for centuries. We take care of everything we own like cars, boats, and homes; and when it comes to the corporate side, it's infrastructure. Infrastructure supports the very things we use whether it's the car we own to drive, or the roads we use to drive our vehicles on. In either case, formalized systems are put into place in order to afford us the things we use. For example, the manufacturing industry uses several internationally recognized Quality Management Systems to produce and sell vehicles at the lowest possible competitive cost. In more recent years, professionals in areas such as IT, Engineering, Architecture, and Construction, design their Project Management System (PMS) within their organization to holistically manage capital projects in a sustainable manner satisfying their strategic and business objectives.

### What is a system and what is it not?

A system is simply the universe to manage or operate within. The universe comprises of different elements that describe it. Think of the elements as 'nouns', like value, culture, data, finance, competency, technology, and assurance to name a few. To distinguish, actions that drive these elements are activities, or 'verbs', like Asset Management Planning, which is an activity. A myth in any industry is the idea that a software program is considered a management system, which it is not. Computer software that is used in Project Management or Asset Management is only a tool, but technology is an element since there may be other types of supporting software to complement it such as GIS, financial, and more.

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### Why not use a formalized system for Infrastructure Asset Management?

Infrastructure IS big business, and in many cities, the value of their infrastructure in just one asset class (such as water or sewer) can exceed \$1B. The question becomes, are you managing your infrastructure or putting a system in place for infrastructure management? Many organizations have become very sophisticated in managing their infrastructure assets. It is very easy to use tactical measures for managing assets because they are simply reactionary and focus on the “here and now”. Even in years when funding is more available, capital projects can sometimes be considered as a reactionary strategy by just playing “catch up” from years of funding shortfalls. With the dawn of Asset Management Plans, managing infrastructure assets includes some preventive measures but with expenditures only forecasted over a 5-year period, and in some cases up to 10-years. With that said, there are two questions that you should ask your top managers; (1) What is the expected life cycle of our infrastructure, and (2)

who has read the latest organizational strategic plan? The answer is likely way more than 10-years and not really, respectively. This should not come as a surprise. The moral of the story is that City Managers and Public Works Directors must transform their infrastructure management style to a more long-term strategic one. One that is over the complete life cycle of the infrastructure and aligned with the organizational strategic plan. To accomplish this, successful Asset Managers use an Asset Management System (AMS) as the formalized management style for infrastructure assets. Asset Managers that “see the forest rather than the trees” design management systems to manage both the daily tactical matters and to produce outcomes that satisfy long-term strategic objectives for the organization and the infrastructure assets.

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### **What exactly is an Asset Management System?**

The International Standards Organization developed ISO 55000, 55001, & 55002 for Asset Management outlining the elements necessary for a formalized Asset Management System (AMS). Over and above many other good elements of a system, an AMS has four core principles: value, alignment, leadership, and assurance. In simple terms, infrastructure assets have value, their operational objectives must be aligned with the long-term organizational strategic goals, people must lead and champion the coordinated efforts, and assurances must be in place to guarantee its effectiveness. In my 30 years of performing project management systems, it cannot be overstated that no management style succeeds without designing a management system as the culture for business operations. With all the complexities in an asset-centric world, an AMS is the formalized style of management for infrastructure. A well designed AMS can yield benefits such as effective leadership, coordinated efforts, clarity, collaboration, trust (internal and external), efficiencies, alignment with business objectives, informed decision-making, wise investment, and sustainable business models. It can also produce opportunities such as organizational resiliency, a more competitive product, or a completely new revenue stream.

### **Are all Asset Management Systems the same?**

Asset Management Systems are different from one organization to another because the long-term strategic objectives and their time frame for achieving them are not necessarily identical. The core principles; however, are the same. The best AMS is designed by taking a “systems approach” in holistically assembling the elements necessary to deliver the long-term organizational and infrastructure objectives. Some organizations are very sophisticated and have the capability but need assistance from an independent third-party person to organize the elements they already possess into an AMS that works for them. Smaller organizations only can begin with the four core principles and then build maturity with other elements over time as they grow. No matter what AMS is designed, the importance of reviewing its health and performance will always drive continuous improvement toward greater success. The Asset Management System designed to fit your needs and achieve the long-term strategic objectives of your infrastructure rather than short-lived gains by tactically managing asset infrastructure is a successful corporate recipe for success.



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