

UEM professionals have invested their entire careers in **ASSET MANAGEMENT**

**Why do we do what we do?
We do this because we believe . . .**

- ... there is a better way to manage our assets and infrastructure.
- ... there is a better way to make decisions.
- ... there is a better way to allocate our resources and plan for the future.
- ... that every dollar counts.



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Explore the scope of UEM's Asset Management Services . . .

WHAT IS ASSET MANAGEMENT?

It's leadership.

It requires an organization to rethink their business.

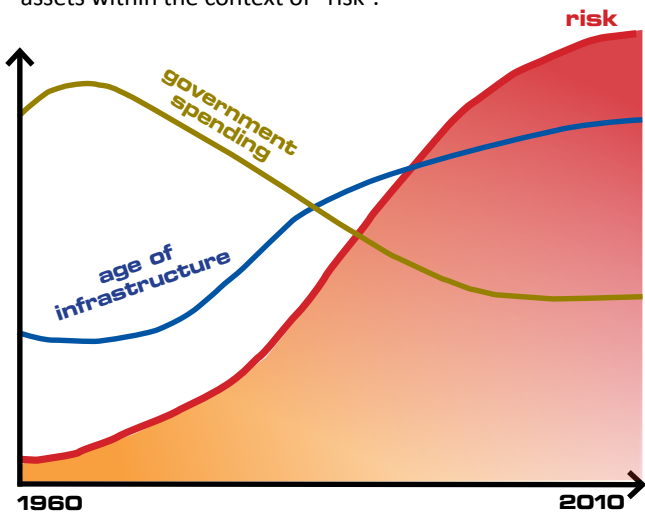
Assets have a predictable life span: they require periodic maintenance and rehabilitation, and they eventually need to be replaced. These needs must be balanced against financial constraints, legislative requirements, and the need to maintain service to customers. This is a significant challenge for today's organizations, but is one that can be addressed with a sound asset management program.

Asset management is a process that provides the tools to make informed decisions on infrastructure spending choices in the public environment where accountability is demanded and varied interests are competing for a share of scarce resources.

Asset management practices consider corporate objectives and customer levels of services to establish service hierarchies and spending priorities, reduce risk, improve system reliability, and sustain valuable community services.

An asset management analysis starts with the question: "How can infrastructure be managed in the most cost-effective way to a level of service acceptable to the community?". This requires an examination of the assets: age-related deterioration, condition assessment, fitness for purpose, health and safety considerations, and the potential impact of failure on other assets and systems.

Finally, it requires a comparison and prioritization of all assets within the context of "risk".

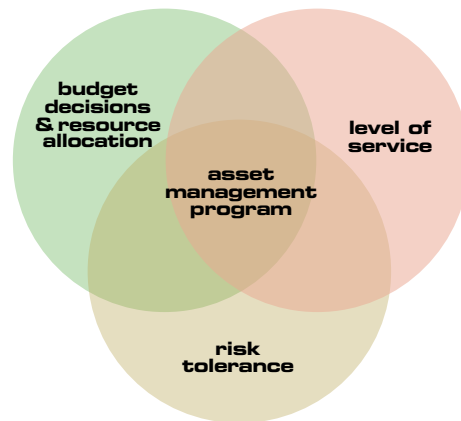


WHAT IS "RISK-CENTRIC" ASSET MANAGEMENT?

"Risk-centric asset management" is an asset management philosophy that examines the risk profile of each asset and the consequences of failure using a consistent process of evaluation and the collective knowledge of the client and UEM's Asset Management Team.

		consequence			
		minor	moderate	major	catastrophic
probability	almost certain	high	high	very high	very high
	likely	moderate	high	high	very high
	somewhat likely	low	moderate	moderate	high
	unlikely	low	low	moderate	moderate

UEM has investigated over 135 asset classes to categorize assets and organize asset inventories. With a risk-focused approach, assets that are essential to deliver services safely, efficiently, and within regulatory constraints are prioritized. Risks associated with failure of these assets and financial (capital or operating) resources required to ensure that they continue to operate are quantified.



HOW DO I BALANCE THE REQUIREMENT TO PROVIDE SERVICE TO MY CUSTOMERS WITH THE COST OF MAINTAINING THE NECESSARY INFRASTRUCTURE?

Every organization must balance its customers' needs with its resource constraints. UEM has developed a proprietary "Sustainable Infrastructure Module" (SIM) that assists our clients in deciding how to allocate scarce resources while accounting for their needs and expectations. The SIM is a decision-making process that identifies and prioritizes asset management needs while taking financial and resource constraints, environmental considerations, and customer expectations into account.

The SIM uses your organization's knowledge of its assets – their ages, their conditions, their importance to operations, and the potential impacts of their failure – to draw these conclusions. It pulls from inventories, asset data, maintenance history, and standards. The SIM can take many forms, and can be as simple as a spreadsheet or as complex as a new layer in your organization's GIS. It can also be created as a custom-built software solution.

HOW CAN I BE SURE THAT MY ASSET MANAGEMENT PROGRAM IS EFFECTIVE?

The success of your asset management program can be assessed using a Key Performance Indicator (KPI) monitoring program. KPIs define a set of goals and targets for various aspects of operations. Using KPIs, an organization can “grade itself” on the performance of its programs.

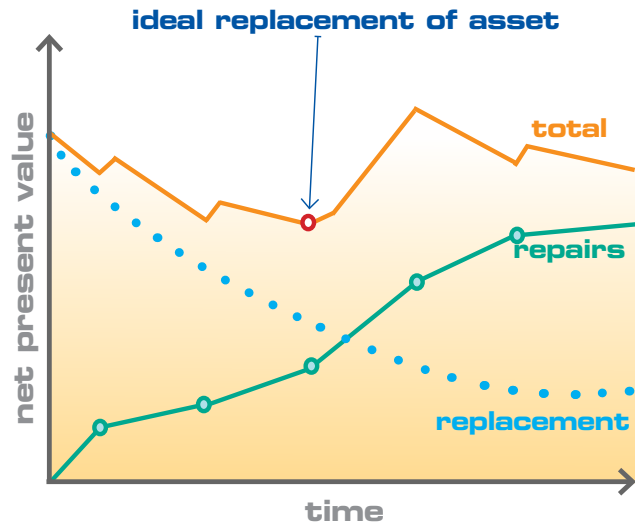
UEM develops KPI monitoring programs based on industry benchmarks, data, and the collective experience and expertise of our clients and our team of professionals. KPIs are measurable targets and provide a method of self-evaluation that is defensible, repeatable, and supported by data and standards.

REPORT CARD	
regulatory compliance	A
level of service	B
condition assessment	C
age of infrastructure	C+
water quality	A+
customer complaints	B+
service calls	A-
capital & operating budgets	B

ONCE AN ASSET MANAGEMENT PROGRAM IS ESTABLISHED, HOW DO I “RUN WITH THE BALL”?

An asset management program should be integrated into the culture of your organization.

Asset management plans can help with this transition by providing details of your program in a form that is meaningful and useful to the various areas of responsibility within your organization.



Asset management plans describe the future of all types of assets and can include state-of-the-art infrastructure reports, operational forecasts that predict the potential for asset failures, “report cards” to assess performance, and capital/operating plans for future years.

HOW DOES ALL OF THIS TRANSLATE INTO DOLLARS SPENT AND SAVED?

It’s critical to translate knowledge of assets into reliable, accurate financial estimates for maintenance and replacement. It’s also important to quantify dollars saved as the result of effective asset management practices. UEM’s asset management approach includes financial assessment that considers asset values, asset depreciation rates, future service

demand, population forecasts, projected capital replacement, and annual operations costs. Different proposed levels of risk tolerance, level of service, and asset lifespan can be tested, and the SIM will present realistic estimates of the financial impacts of these changes.

HOW CAN UEM HELP?

UEM’s Asset Management professionals can assist your organization with:

- Asset management programs
- Asset management plans
- Asset management business models
- Asset inventories and hierarchies
- Gap analysis
- Condition assessment
- Level of service development
- Risk assessment profiling
- Asset management implementation strategies
- GIS integration
- Infrastructure funding strategies
- Service delivery reviews
- Continual improvement policies and procedures
- Capital budgeting
- Financial reporting
- Training development and delivery



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NIAGARA FALLS
4701 St. Clair Avenue, Suite 301
Niagara Falls, ON L2E 3S9
telephone 905.371.9764
facsimile 905.371.9763

BRANTFORD
120 Colborne Street, Unit 105
Brantford, ON N3T 2G6
telephone 519.752.8686
facsimile 519.752.6419

GREATER TORONTO AREA
5100 Orbitor Drive, Suite 300
Mississauga, ON L4W 4Z4
telephone 905.212.9722
facsimile 905.212.9397

LONDON
14 Bromleigh Avenue
London, ON N6G 1T9
telephone 519.472.1975

toll free 866.840.9764
www.uemconsulting.com



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