Asset Management:

"It's not just about the assets, it's about the people."



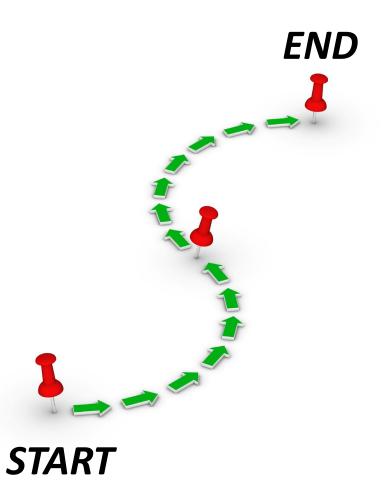


AGENDA

Starting Line:	What is asset management?	
Why take the trip:	The value of asset management	
The journey:	A path to asset management	
Stops along the way:	Key program elements	
Roadblocks:	Issues to avoid	
The travelers:	s: Choosing your travel partners	
Memories:	Lessons learned	

Starting Line:

- Ambiguous term, not well defined in our industry
 - Reactive vs proactive management
 - Work order tracking and management
 - Inventory and condition assessment
 - Life cycle planning
 - Repair and replacement planning
 - Just another fad or program
- Very few grasp the benefit or value of a robust asset management program



Starting Line: What is asset management?

"Asset management is about extracting value more than what you do to assets. It is about using assets to deliver value and achieve the organization's business objectives."

- An Anatomy of Asset Management

"...the coordinated activity of an organization to realize value from assets (i.e., balancing costs, risks, opportunities, and performance benefits)"

- ISO 55000

Starting Line:

"Asset management is about achieving a higher level of service more than what you do to your stormwater system. It is about using assets to efficiently manage stormwater runoff and achieve the community's stormwater program objectives."

- An Anatomy of Asset Management

"the coordinated activity of a community to realize a higher level of service from its stormwater system (i.e., balancing costs, risks, opportunities, and performance benefits)"

- ISO 55000

Asset management provides a plan for doing the right things—at the right times—for the right reasons —to the right assets.

Why take the trip:

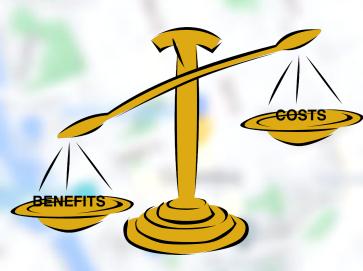
The value of asset management

Quantifiable

- Long-term cost savings
- Improved level of system service

Other

- Public reputation
- Council approval
- More appropriate budgets
- Less stress
- Employee growth



Why take the trip: The value of asset management

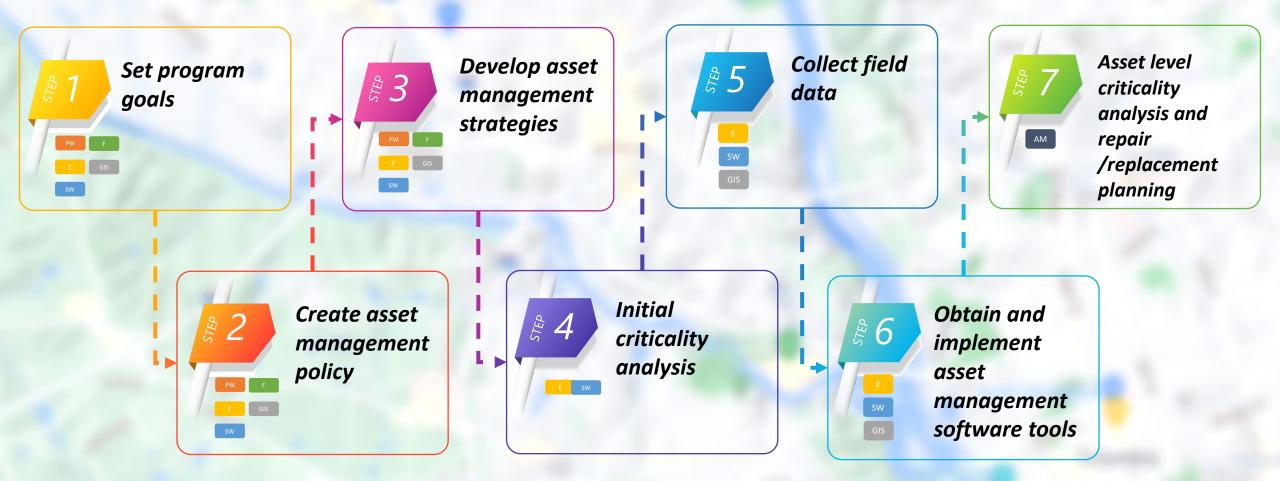
	R <mark>eplacement</mark> Value	Average Annual CIP / O&M	Average Annua Need	I Maximum 25- year Need
Community #1	\$500 M	\$2 M	\$2.5 M	\$4.2 M
Community #2	\$250 M	\$0.5 M	\$3.9 M	\$6.1 M
Community #3	\$150 M	\$1.5 M	\$2.1 M	\$3.5 M
			5	AVE YOUR LIVES SKY IS FALLING

RUN

✓ The sky is falling!

The Journey:

A path to asset management



The Stops Along the Way: Key program review times

Before you leave the garage

- Do you have a driver and navigator?
- Are the right people in the car?
- Do you know where you are going and why?
 - Defined level of service
 - Program KPIs
 - Understanding of risk and its role in decision making

After strategy development

- Do your strategies, policies, and goals all align with each other?
- Reacquaint your fellow travelers and allies with the route.

Before data collection

- Do you have adequate storage, management, and analysis tools for the effort?
- Does the data being collected support your end goals?
- Test your systems!

During and after data collection

- Test your systems, again!
- Define life cycle-based repair and replacement plans
- Create a plan for continual improvement



The Travelers:

Who will drive the program and who will navigate?

- Who will be most impacted by the program?
 - Who is needed to make the journey successful?
 - Who is most likely to put up a roadblock?

The Travelers:

Who should go along for the ride?

- 1. Stormwater
- 2. Public Works
- 3. Engineering
- 4. Finance
- 5. IT/GIS/CMMS
- 6. Community Administration
- 7. Community Council



IAM 39 Areas of Asset Management

1. Strategy and Planning

- 1. Asset Management Policy
- 2. AM Strategy & Objectives
- 3. Demand Analysis
- 4. Strategic Planning
- 5. Asset Management Planning

2. Asset Management Decision Making

- 6. Capital Investment Decision Making
- 7. Operations and Maintenance Decision Making
- 8. Lifecycle Value Realization
- 9. Resourcing Strategy
- 10. Shutdowns and Outage Strategy

3. Life Cycle Delivery

11. Technical Standards & Legislation
12. Asset Creation & Acquisition
13. Systems Engineering
14. Configuration Management
15. Maintenance Delivery
16. Reliability Engineering
17. Asset Operations
18. Resource Management
19. Shutdown & Outage Management
20. Fault & Incident Response
21. Asset Decommissioning & Disposal

4. Asset Information

22.Asset Information Strategy
23.Asset Information Standards
24.Asset Information Systems
25.Data & Information Management

5. Organization and People

- 26. Procurement and Supply Chain Management
 27.Asset Management Leadership
 28.Organizational Structure
 29.Organizational Culture
- *30.Competence Management*

6. Risk and Review

31. Risk Assessment and Management
32. Contingency Planning and Resiliency
33. Sustainable Development
34. Management of Change
35. Asset Performance & Health Monitoring
36. Asset Management System Monitoring
37. Management, Review, Audit and Assurance
38. Asset Costing and Valuation
39. Stakeholder Engagement

IAM 39 Areas of Asset Management

1. Strategy and Planning

- 1. Community administration and Department heads
- 4. Stormwater
- 5. Engineering
- 6. Public Works
 7. GIS / IT
- 2. Community Council
- 3. Legal Council

2. Asset Management Decision Making

- 1. Stormwater
- 2. Engineering
- 3. Public Works
- 4. GIS/IT

3. Life Cycle Delivery

- 1. Stormwater
- 2. Engineering
- 3. Public Works

4. Asset Information

- 1. Stormwater
- 2. Engineering
- 3. Public Works
- 4. GIS / IT
- 5. Finance

5. Organization and People

1. (Community	З.	Stormwater
C	administration and	4.	Engineering
L	Department heads	5.	Public Works
2. F	Human Resources	6.	GIS / IT

6. Risk and Review

- 1. Community administration and
- Department heads
- 2. Community Council
- 3. Legal Council
- 4. Human Resources

- Stormwater
 Engineering
- 7. Public Works
- 8. GIS/IT

The Travelers:

Who should go along for the ride?

Community Administration Phone calls from Council members about flooding and closed roadways

Community Council Phone calls from citizens about flooding and closed roadways Public Works

Engineering/Stormwater

• Failing infrastructure

- Lack of sufficient budget
- Emergency repairs
- Phone calls from.... everybody
- Failing infrastructure
- Lack of sufficient budget
- Phone calls from.... everybody

Finance

 Balancing necessary programs and projects with insufficient funding

IT / GIS

 Maintaining inaccurate and unmeaningful data

Roadblocks	Preparation is key		
Homesickness	There is no turning around		
Flat Tires	Don't limp along on a flat tire		
Running Out of Gas	Pace yourself, it's a long trip		
Road Closures	Create a flexible plan		
Travel Partners	Roadblocks can come from those in the car		

Memories:

Lessons learned

- 1. Set clear achievable goals
- 2. Document how AM meets community and budget goals
- 3. Highlight overall benefits to community
 - 1. Improved commerce
 - 2. Safety
 - 3. Improved emergency response
 - 4. Cost savings
- 4. Partner with finance and IT early in the process
- Decide who should lead from each group engineering & operations
- "No passion, no project. Change is hard and you'll need passion and conviction to convince people that your project is worth funding" ~Life Cycle Engineering
- 7. Identify pain points for all stakeholders & how AM will provide relief

