

Planning Your Asset Management Journey

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Pacific Northwest Section AWWA
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Why Asset Management?

The New York Times

Friday, December 5, 2008

U.S. Loses 533,000 Jobs in November

By LOUIS UCHITELLE

With the economy deteriorating rapidly, the nation's employment fell in November, the 11th consecutive monthly decline, the government said, and the unemployment rate rose to 6.7 percent.

The decline, the largest one-month loss since December 1974, was fresh evidence that the economic contraction accelerated in November, promising to make the current recession, already 12 months old, the longest since the Great Depression. The previous record was 16 months, in the severe recessions of the mid-1970s and early 1980s.



The alarming job decline suggests that consumers and businesses have pulled back sharply on spending, worsening credit crisis. That has put pressure on Congress to act with a stimulus package that would substitute for the missed

Over all, the losses since the recession began now total about 3.5 million in the last three months.

"We have gone from recession into something that looks more like a depression," said Mark Zandi, chief domestic economist at High Frequency Economics, accelerating job losses in recent months.

The losses in November far exceeded the 350,000 figure that some economists predicted.

"Business shut down in November," said Mark Zandi, chief



Clean Water Infrastructure Investment Urged As Part of House Economic Stimulus Package

The House Transportation and Infrastructure Committee today unveiled a targeted infrastructure spending package to

THE BOND BUYER

THE DAILY NEWSPAPER OF PUBLIC FINANCE

Crisis Upends Muni-Treasury Relationship

Tuesday, December 2, 2008

By Dan Seymour

It used to be that a good street of municipal bonds. No longer.

A scorching-hot two months for municipal bonds. As investors seeking shelter have become unprecedentedly cheap.

For most of their history, municipal bonds reflecting pristine credit quality have yielded 80% of a 10-year Treasury note. Depending on the maturity, yields have ranged from 100% of the yields on Treasury notes.

John Derrick, who manages Treasury funds for U.S. Global Investors, says municipal bonds to yield 80% of a 10-year Treasury note.

On Wednesday, a 10-year Treasury note, the highest rated Treasury note, yielded 5.4%.

That ratio remained at less than 80% through October 2008.

The disparity on longer-dated Treasury notes Wednesday yielded 154.6% of a 10-year Treasury note.

In 2007, that ratio topped 100%



Revenue shortfall at water, sewer utility could spur rate hike

By Jimmy Nesbitt
Friday, November 28, 2008

The Evansville Water and Sewer Utility has received around \$1.3 million less in revenue than the department projected for the first 10 months of the year.

Through Oct. 31, total water revenue is \$865,526 less than forecast, and sewer revenue is down \$475,145. The downward trend began in December 2007 and has continued through today, forcing the water and sewer utility to use its cash reserve fund to pay operational expenses. Revenue projections are based on a four-year average of actual revenues, Harry Lawson, water and sewer utility general manager, said Wednesday.

At the same time, operational expenses — chemicals used to treat the water, electricity and fuel — have increased significantly. Lawson estimated that operational expenses have increased \$2 million this year.

Exactly what's causing water and sewer revenues to dip remains somewhat of a mystery. It's commonplace for industrial usage to decrease in a drought,

Bloomberg.com

U.S. Government Should Insure Municipal Bonds, Bloomberg Says

By Henry Goldman and Michael McDonald
Dec. 2 (Bloomberg) --

The U.S. government should insure municipal bonds to spur job growth and help repair the economy, New York Mayor Michael Bloomberg said.

Governors Ed Rendell of Pennsylvania and Arnold Schwarzenegger of California has called upon the U.S. government to insure municipal bonds in financing infrastructure projects. Bloomberg said the proposal last month with President-elect Barack Obama's transition team. Governors of 48 states today to meet in Washington to discuss the plan.

Markets aren't really open to that idea, Bloomberg said during a news conference. He said the federal government should insure municipal bonds through insurance companies that used to insure municipal bonds.

Higher yields on insured municipal bonds would allow guarantors of about 50 percent of municipal bonds to be stripped of their AAA credit ratings and downgraded to subprime mortgages. A Nov. 20 report said the insurance companies that used to insure municipal bonds have top credit ratings because of their financial strength might destroy the market.

Why Asset Management?

business concerns



BY MIKE MATICHICH

Minimizing financial risk in today's turbulent economy

As the global financial crisis that started in 2008 translates into greater financial uncertainty, most water utilities are facing significantly increased financial challenges. Questions relating to decreased customer usage, hookup fee reductions, and access to reasonable long-term debt loom large. The need to ramp up capital spending to address multiple agendas remains. Regulatory requirements, service to new customers, and repair and replacement of aging assets have not changed. However, at the municipal level competition for limited resources is often intense—and federal funding is less than it was in previous decades. Although a relatively small number of water utilities will receive grants and low-interest loans through economic stimulus funds, many more will need creative solutions that balance utility financing needs with their customers' diminished capacity to pay.

CONTEXT FOR THE UTILITY FINANCIAL CRISIS

Each water utility's financial context is unique. Income levels of residential customers vary. Levels of commercial and industrial development fluctuate. The age, assets, and level of previous invest-

A RELATIVELY SMALL NUMBER OF WATER UTILITIES WILL RECEIVE GRANTS AND LOW-INTEREST LOANS THROUGH FEDERAL ECONOMIC STIMULUS FUNDS, BUT MANY MORE WILL NEED CREATIVE SOLUTIONS TO BALANCE THEIR FINANCING NEEDS WITH THEIR CUSTOMERS' DIMINISHED CAPACITY TO PAY.

78 APRIL 2009 | JOURNAL AWWA • 101:4 | MATICHICH

Many Images of Why Asset Management is Important

- ◆ The basis prioritizing capital investments for Repair & Renovation
- ◆ The basis for optimizing Operation & Maintenance
- ◆ The basis for investing in condition assessments
- ◆ A uniform and rigorous manner that results in defensible decisions



Many Images of Why Asset Management is Important

◆ Extremely Valuable Communication Tool



Reasons for Structured Asset Management

Ten Attributes of Effectively Managed Utilities*:

1. Product Quality
2. Customer Satisfaction
3. Employee and Leadership Development
4. Operational Optimization
5. Financial Viability

**From Primer for Effective Water and Wastewater Utility Management*

Reasons for Structured Asset Management

Ten Attributes of Effectively Managed Utilities:

6. Infrastructure Stability

7. Operational Resiliency

8. Community Sustainability

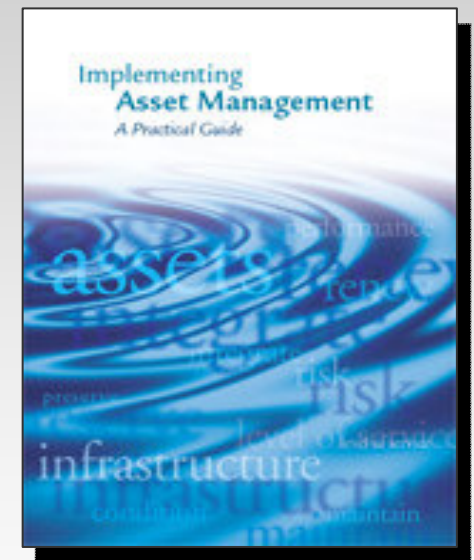
9. Water Resource Adequacy

10. Stakeholder Understanding and Support

Defines “What we should be best at”

Benefits of Asset Management*

- ◆ Rigorous and Defensible Decision Making
- ◆ Better Managed Risk
- ◆ Lower Costs
- ◆ Improved Public Confidence
- ◆ Improved Bond Rating



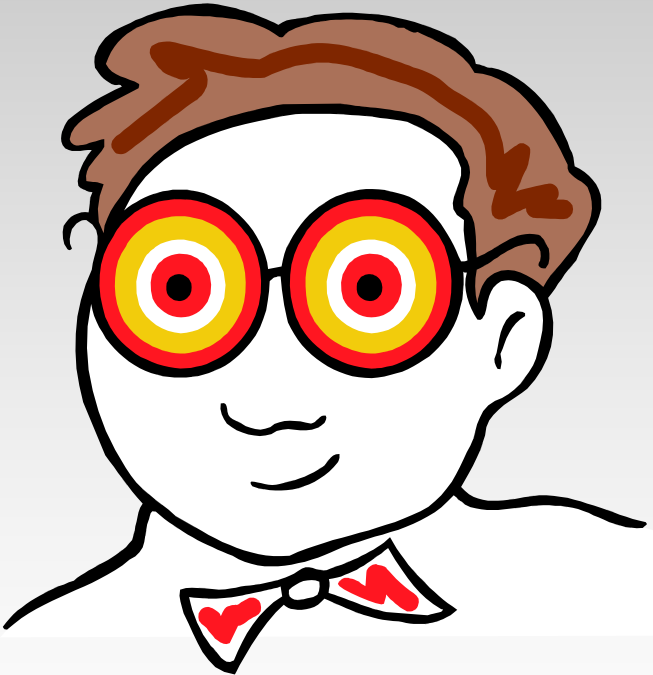
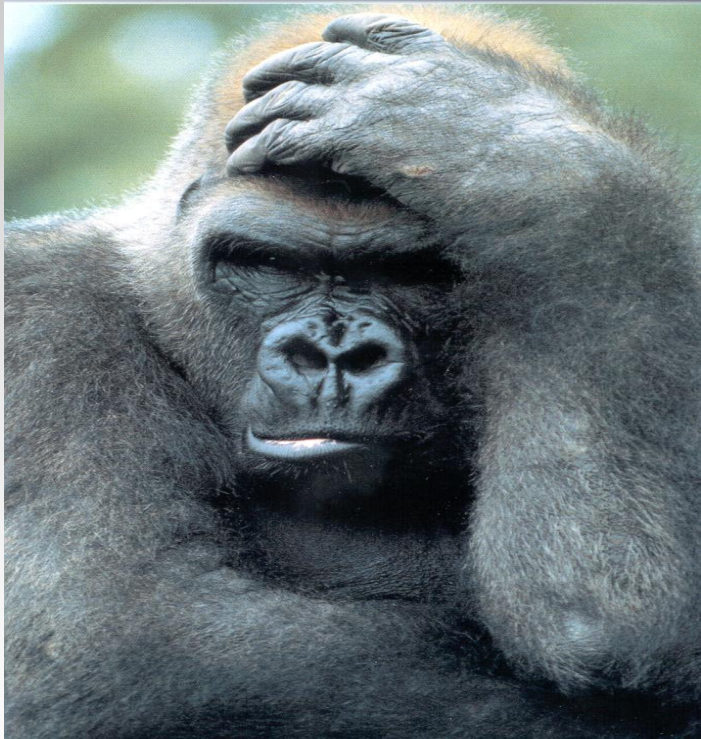
**From Implementing Asset Management –
A Practical Guide*

Benefits of Asset Management*

- ◆ Potential Higher Priority for Low-Interest Loans
- ◆ Effective Information Transfer and Knowledge Retention
- ◆ Improved Coordination and Communication
- ◆ Improved Regulatory Compliance

**From Implementing Asset Management –
A Practical Guide*

Reactions to *Asset Management*



One Community's Experience

- ◆ Water
- plus,
- ◆ Wastewater
- ◆ Stormwater
- ◆ Facilities
- ◆ Streets
- ◆ Fleet



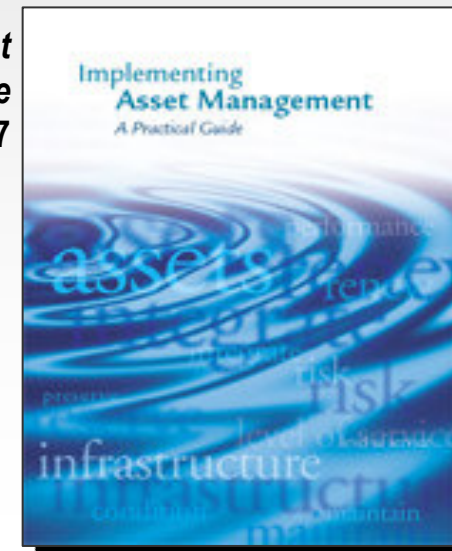
All of Public Works

Universal Definition is Useful

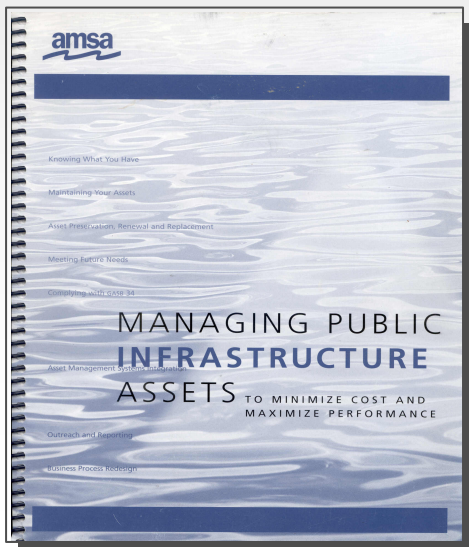
Effective Asset Management is:

An integrated set of processes to minimize the life-cycle costs of owning, operating and maintaining assets, at an acceptable level of risk, while continuously delivering established levels of service.

**Implementing Asset Management
– A Practical Guide
AMWA, NACWA, WEF 2007**

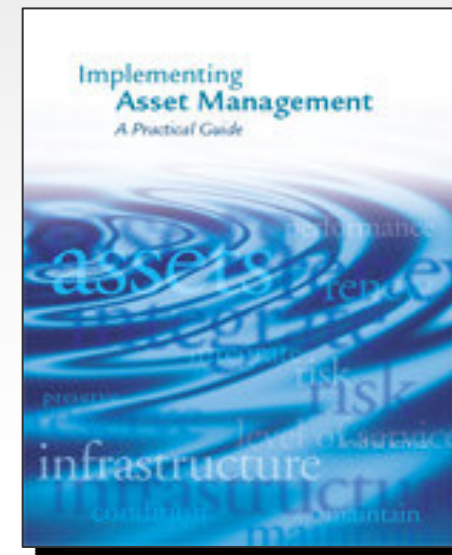
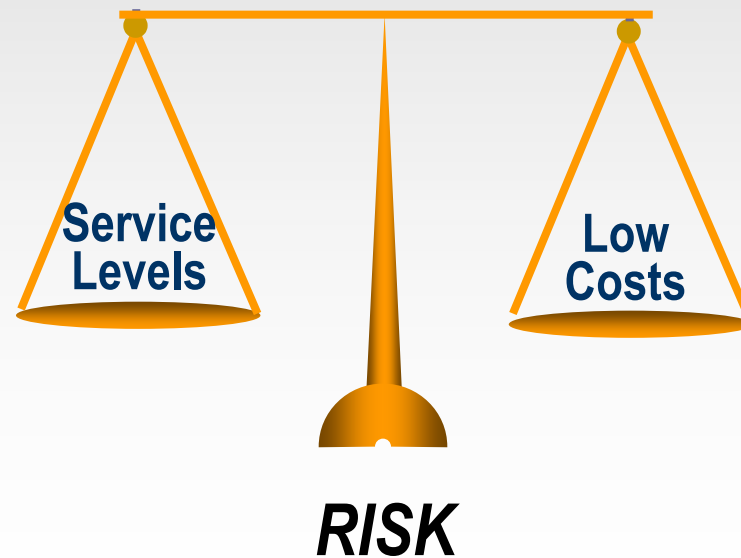


**Managing Public Infrastructure Assets to
Minimize Costs and Maximize Performance
AMSA, AMWA, AWWA, WEF 2002**



Balance Conflicting Goals by Managing Risk

- ◆ Minimize the life-cycle costs of assets
- ◆ Continuously deliver established levels of service
- ◆ At an acceptable level of risk

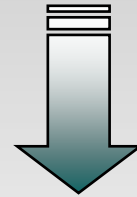


Risk is Quantified Using the Classic Risk Equation

Risk = f (consequence x likelihood)



How severe are the consequences of asset failure?



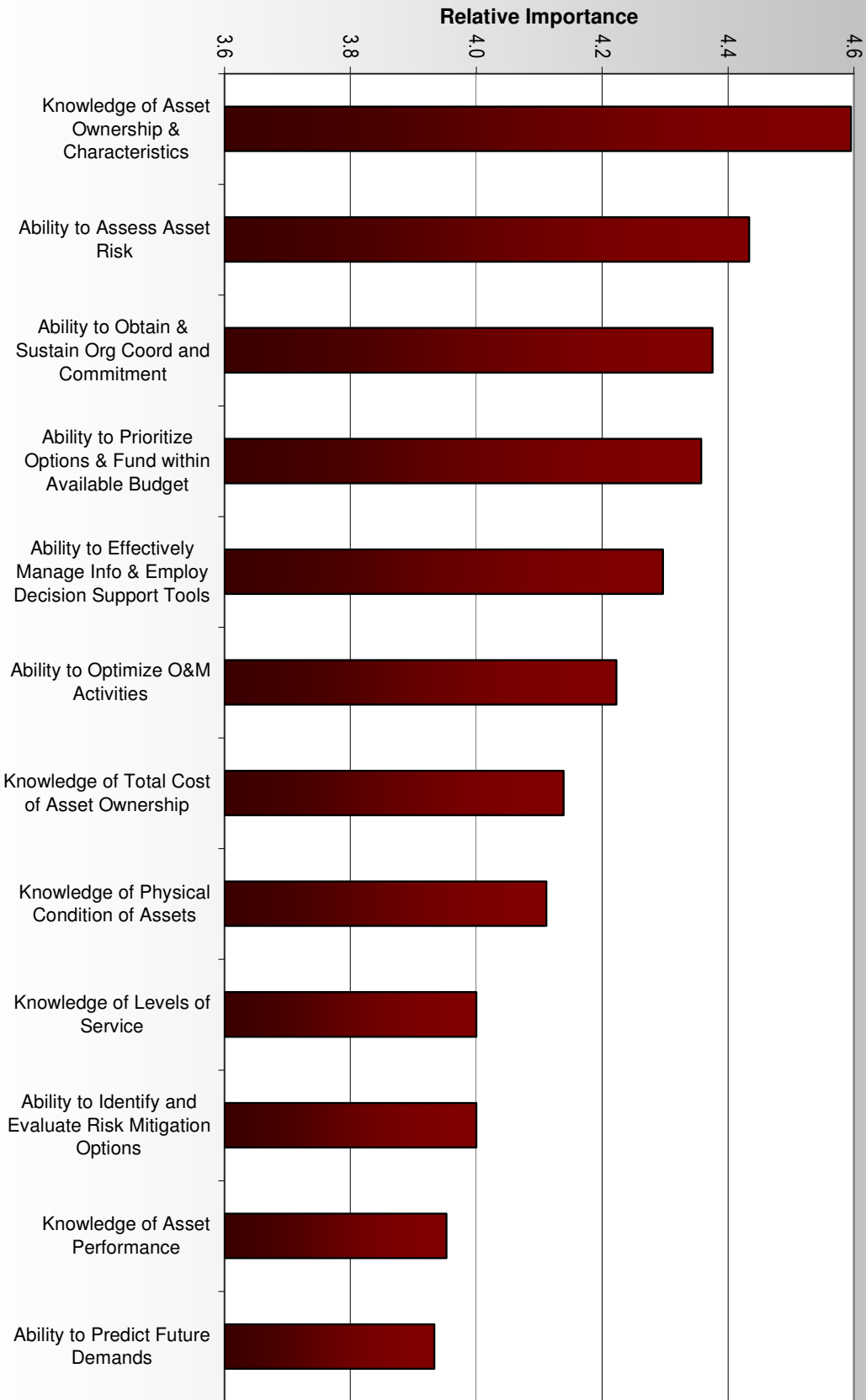
How likely is it for the asset to fail?

Asset Management Best Practices

Knowledge of:	Levels of service Assets and their characteristics Physical condition of assets Performance of assets Total cost of asset ownership
Ability to:	Optimize O&M activities Assess asset risk Identify and evaluate risk mitigation options Prioritize options and fund within available budget Predict future demands Effectively manage information and employ decision support tools Obtain and sustain organizational coordination and commitment

Where Do We Start?

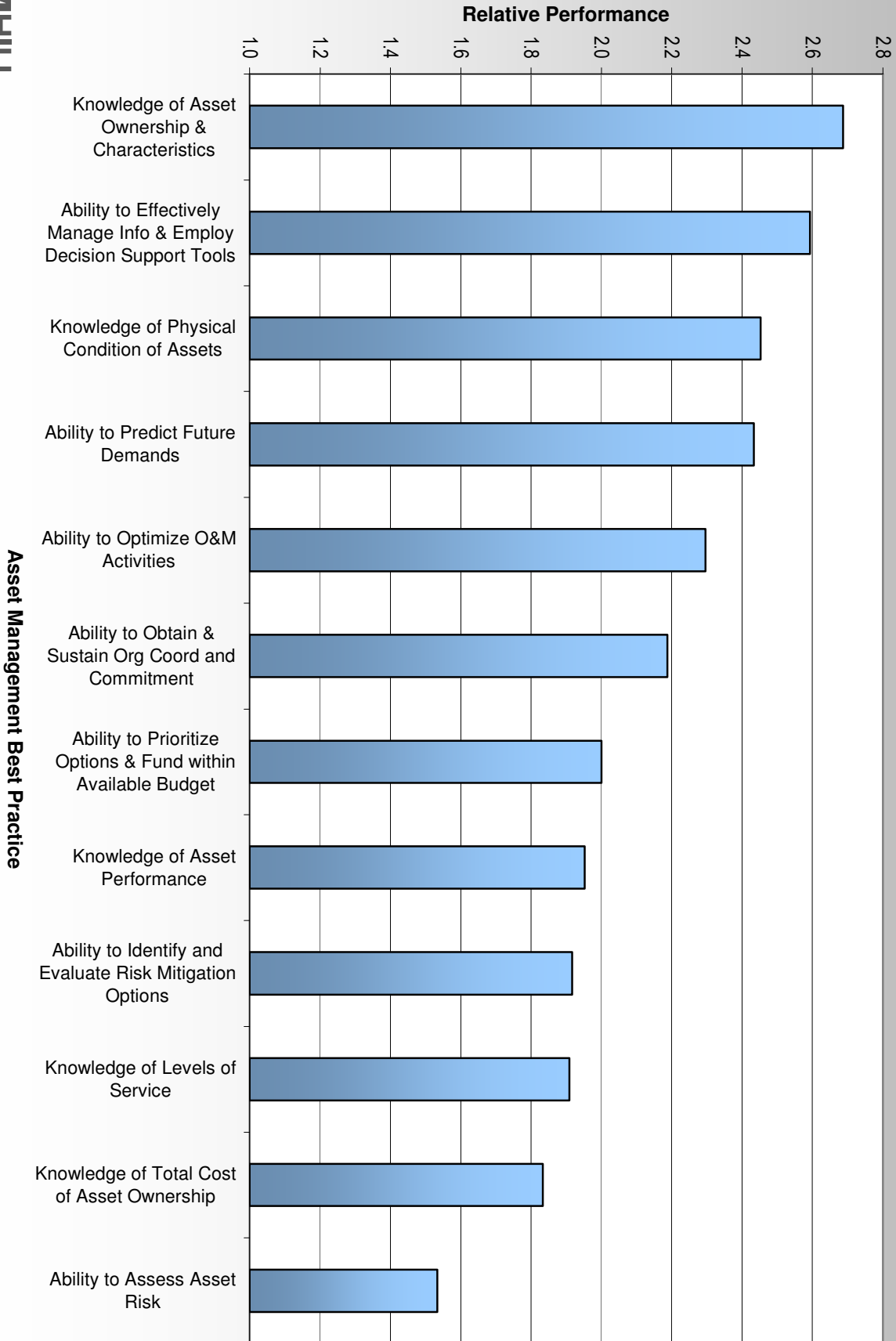
- ◆ Common understanding of concepts
- ◆ For asset management best practices
 - ◆ Which are important?
 - ◆ How are we doing on them?
- ◆ Conduct exercise to consider both, separately
- ◆ Compare them



Relative Importance

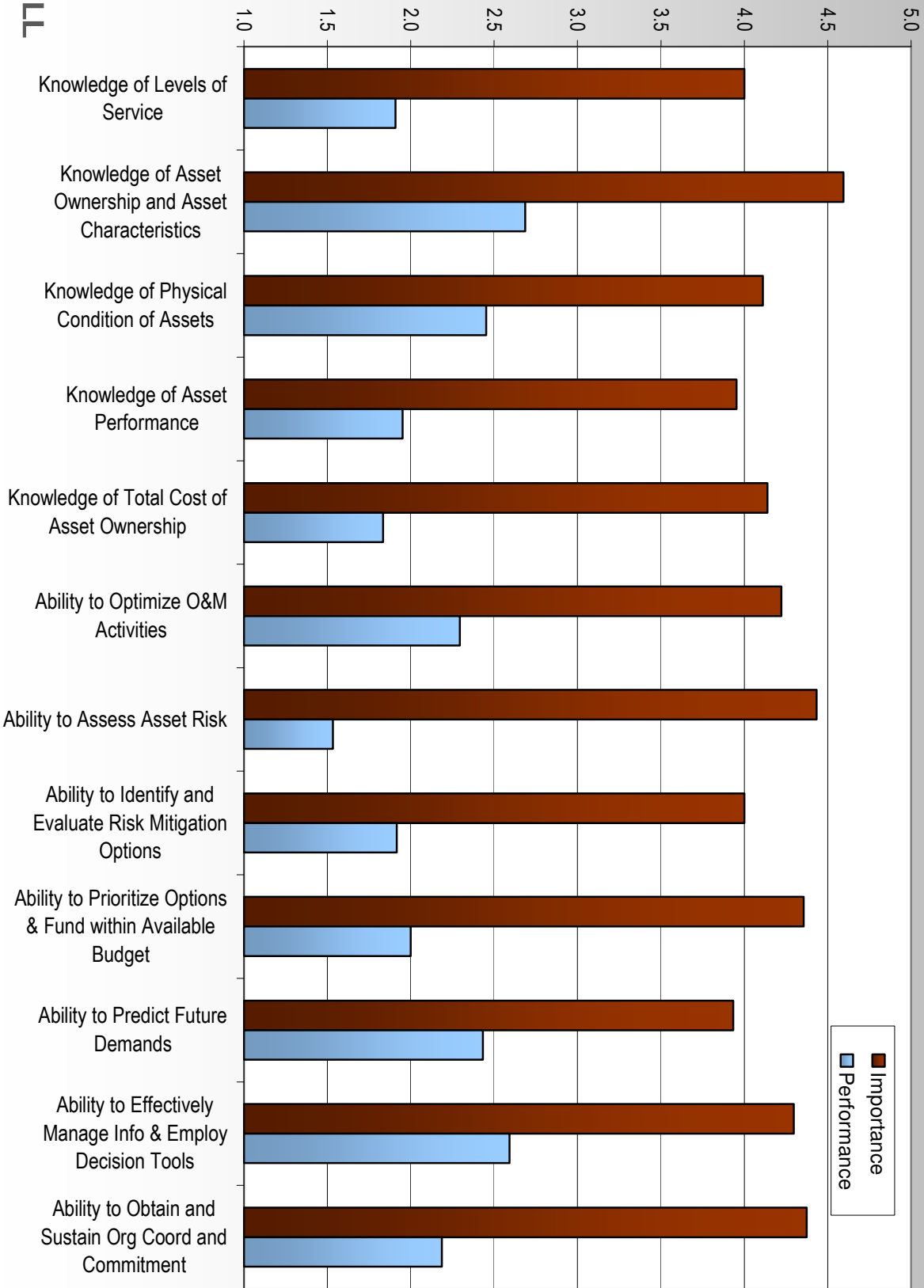


Relative Performance

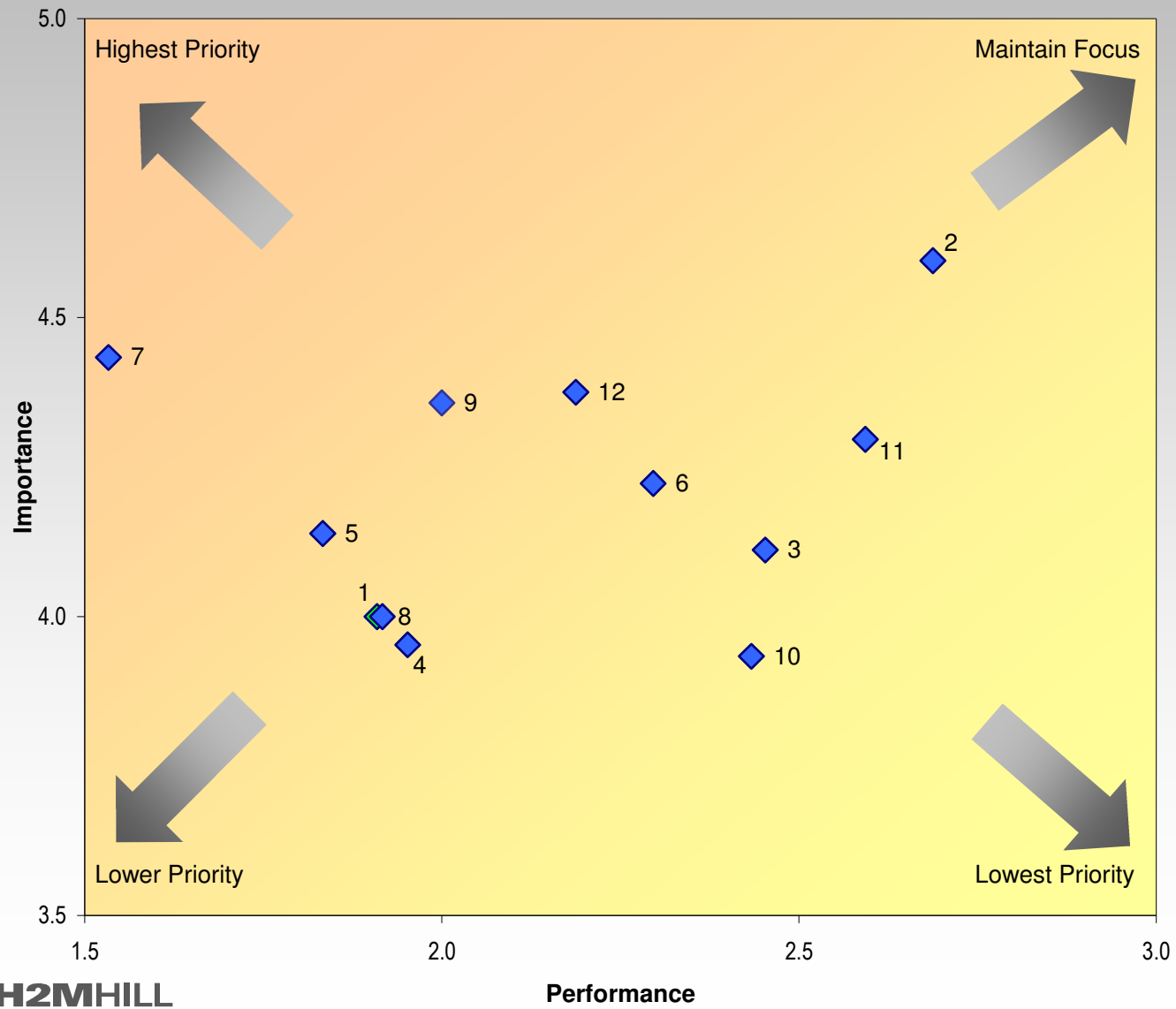




Importance and Performance Together



Importance-Performance Grid



LEGEND

- 1 Knowledge of Levels of Service
- 2 Knowledge of Asset Ownership and Asset Characteristics
- 3 Knowledge of Physical Condition of Assets
- 4 Knowledge of Asset Performance
- 5 Knowledge of Total Cost of Asset Ownership
- 6 Ability to Optimize O&M Activities
- 7 Ability to Assess Asset Risk
- 8 Ability to Identify and Evaluate Risk Mitigation Options
- 9 Ability to Prioritize Options and Fund within Available Budget
- 10 Ability to Predict Future Demands
- 11 Ability to Effectively Manage Information and Employ Decision Support Tools
- 12 Ability to Obtain and Sustain Organizational Coordination and Commitment

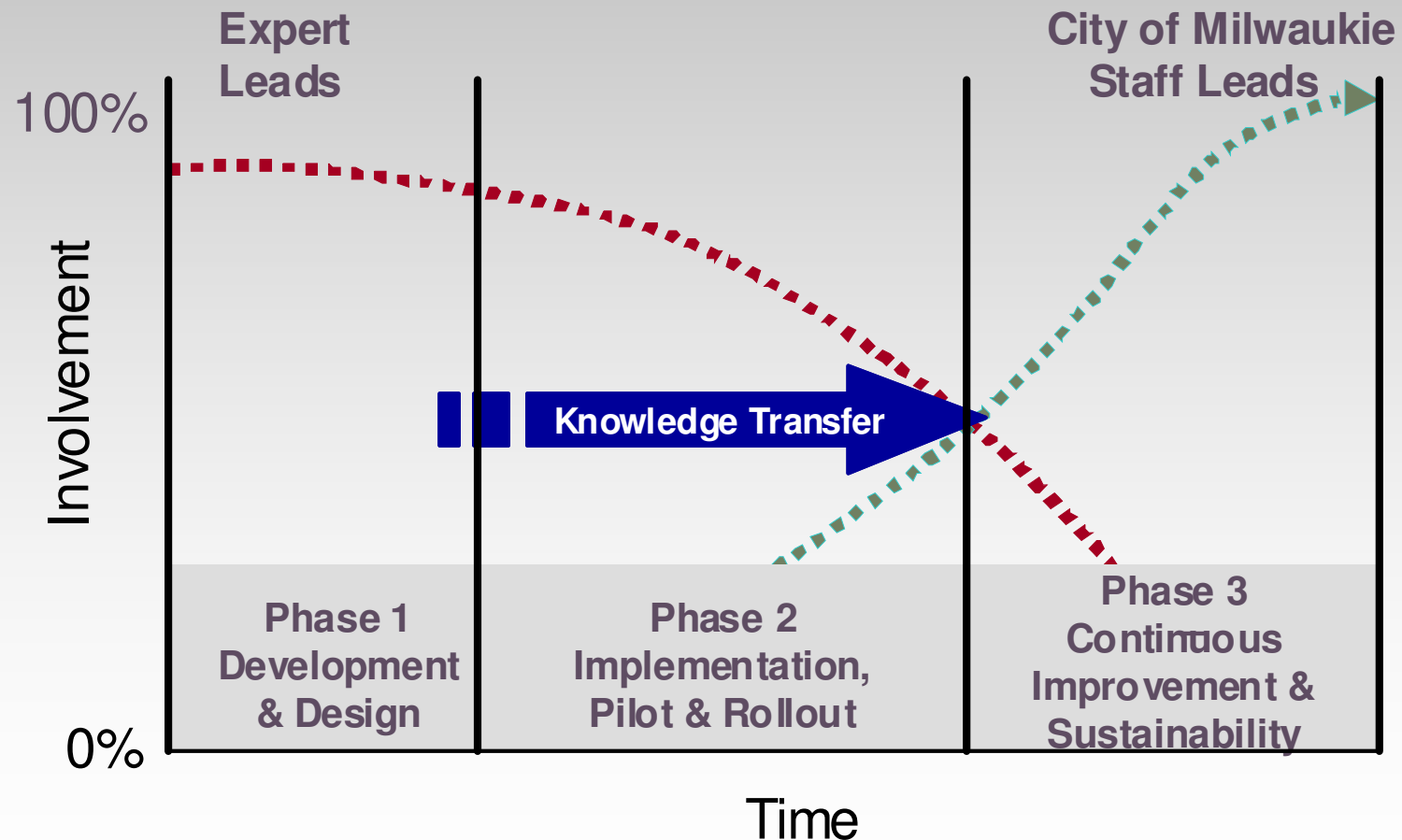
Highest Priority Areas

- ◆ Ability to assess the risk posed by asset failure
- ◆ Ability to prioritize risk reduction options and fund them
- ◆ Ability to obtain and sustain organizational coordination and commitment
- ◆ Knowledge of total cost of asset ownership

Recommended First Phase Work Plan

- ◆ Charter Asset Management Team
- ◆ Develop Mission and Objectives
- ◆ Establish Levels of Service
- ◆ Create Risk Matrices
- ◆ Design Asset Hierarchies
- ◆ Conduct High Level Risk Evaluation
- ◆ Redesign Highest Priority Practices

Role Change Over Time

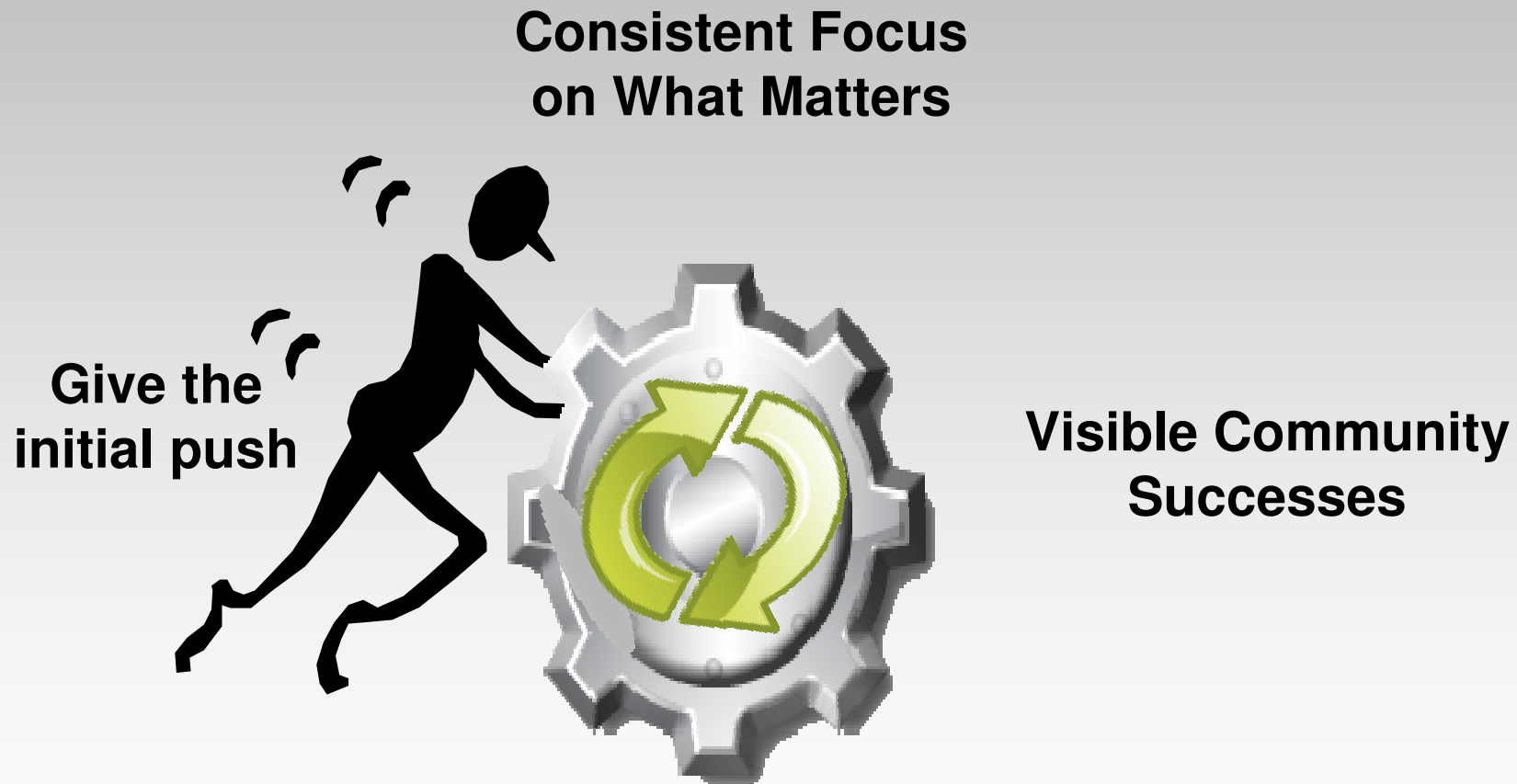


What Will Work for You?

- ◆ Take the first step, make the commitment
- ◆ Set it up so it works for you
 - ◆ Your community
 - ◆ Your organization
- ◆ Stay the course, make adjustments

Just get started on a Structured Asset Management Program – and Enjoy the Journey!

The Flywheel Effect



Thank you!

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Performance Measures and Levels of Service have to be SMART

- ◆ Specific
- ◆ Measurable
- ◆ Attainable
- ◆ Realistic
- ◆ Timely