



Strategies for “Operationalizing” Your Asset Management Program

ESRI Leadership Forum: June 19th, 2009

Vancouver, BC

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Introduction

- Situation: PSAB and Asset Management groups are progressing at different paces: Risk of effort and data duplication
- Both are still project-based functions.
- How can an organization transform these programs into operational functions that occur as part of business?
- Hint: It is actually very challenging. No wonder this is a difficult undertaking.

PSAB Reporting
Group (and tools)

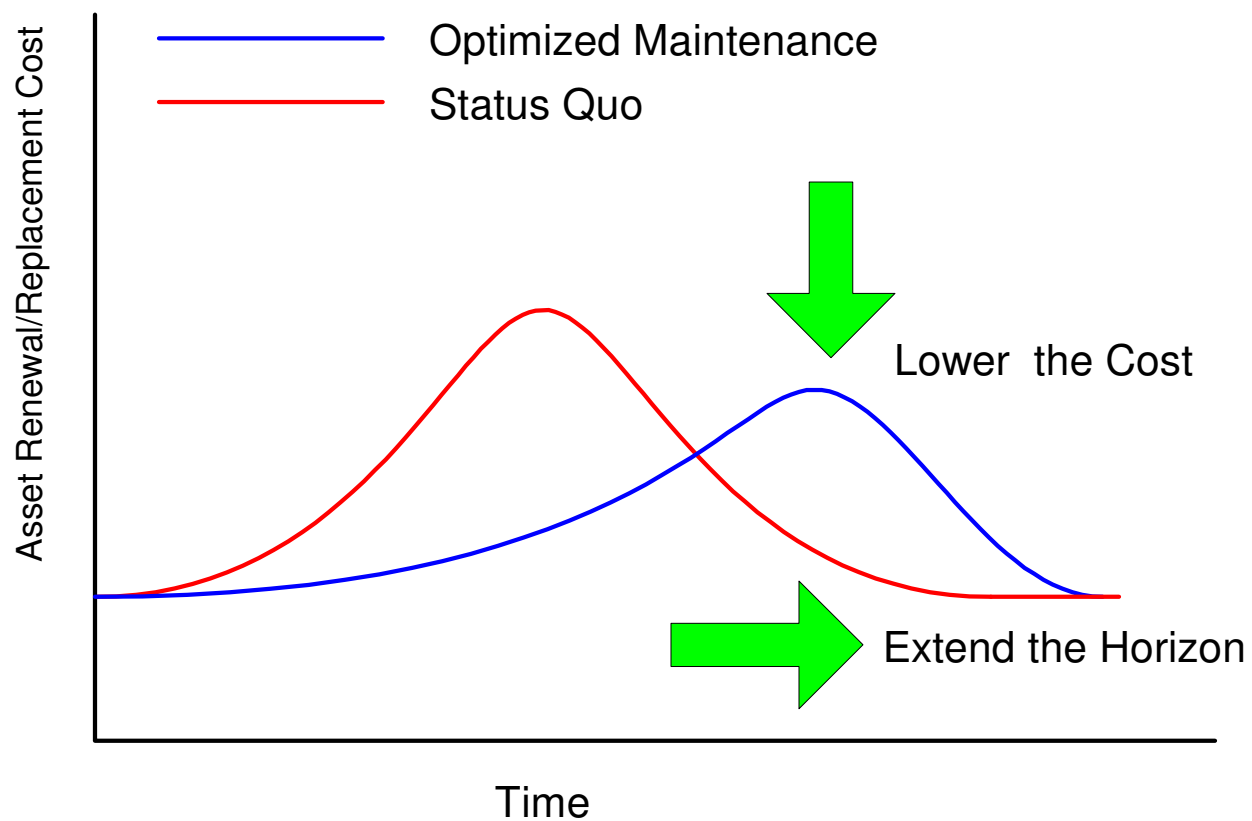


Asset
Management
Planning Group
(and tools)

Presentation Objectives

- Revisit the desired “benefits” of asset management.
- “Asset Management” has become (at least) three distinct functions:
 - Optimized Maintenance
 - Long Range Capital Planning
 - PSAB Reporting
- Highlight the critical role of Project Management, Business Casing, and Change Management, in asset management implementation.
- Provide some recommendations on phasing and scaling asset management implementation.

Why Asset Management?

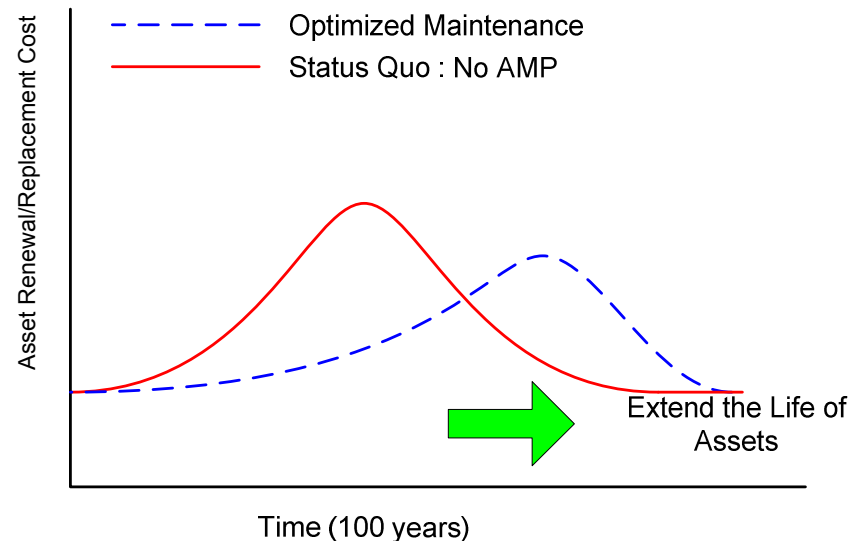


The Business Case for Asset Management

- We are asking our organization to make a considerable up front investment.
 - Do you know what your investment is?
 - Direct costs for outside services and/or products
 - Cost of Internal staff time
 - Other costs
- How and when will you recoup that investment?
 - Why should your organization spend all that money and go to all of this effort?
 - What is your expected “cost/benefit” ratio?

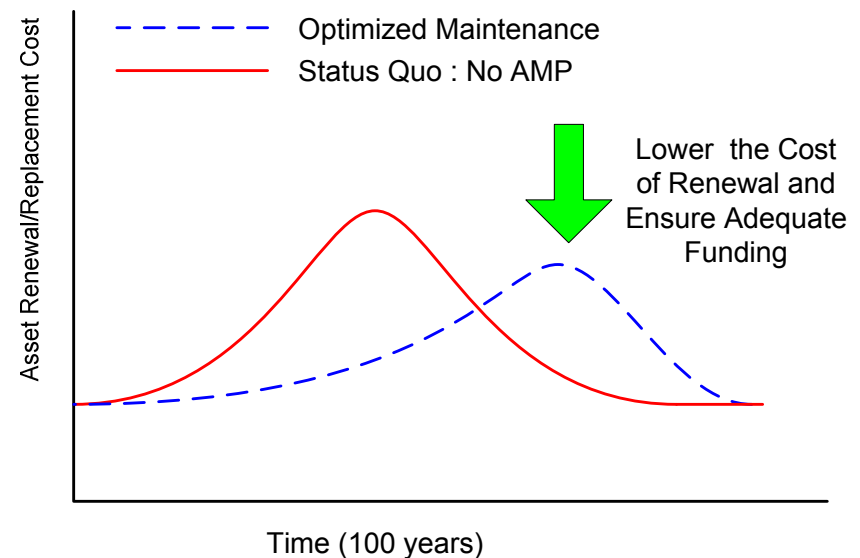
Benefits Part 1: Extending the Life of Assets Through Better Maintenance

- Optimized maintenance means assets will last longer.
- Defers the need for renewal spending
- Savings is in the time value of money
- Should result in fewer breakdowns and failures (but it is hard to prove savings from cost avoidance).



Benefits Part 2: Lowering the Cost of Overall Asset Renewal

- Should identify lower cost alternatives to reactive asset renewal and replacement
- Should provide the lead time required to plan renewal work better.
- Should communicate the need for renewal budgeting
- Good example is to be able to replace water, sewer and roads at the same time.



Two Fundamentally Different Asset Management System “Bits”

1. Asset Maintenance Management (0 to 3 years)
 - Work Order Management
 - Work History
 - Maintenance Planning
2. Long Range Capital Forecasting/Planning (3 to 100 years)
 - When will assets require renewal and how much money is required
 - What can be done to ensure that renewal spending is optimally planned
 - Ability to quickly model difference renewal scenarios

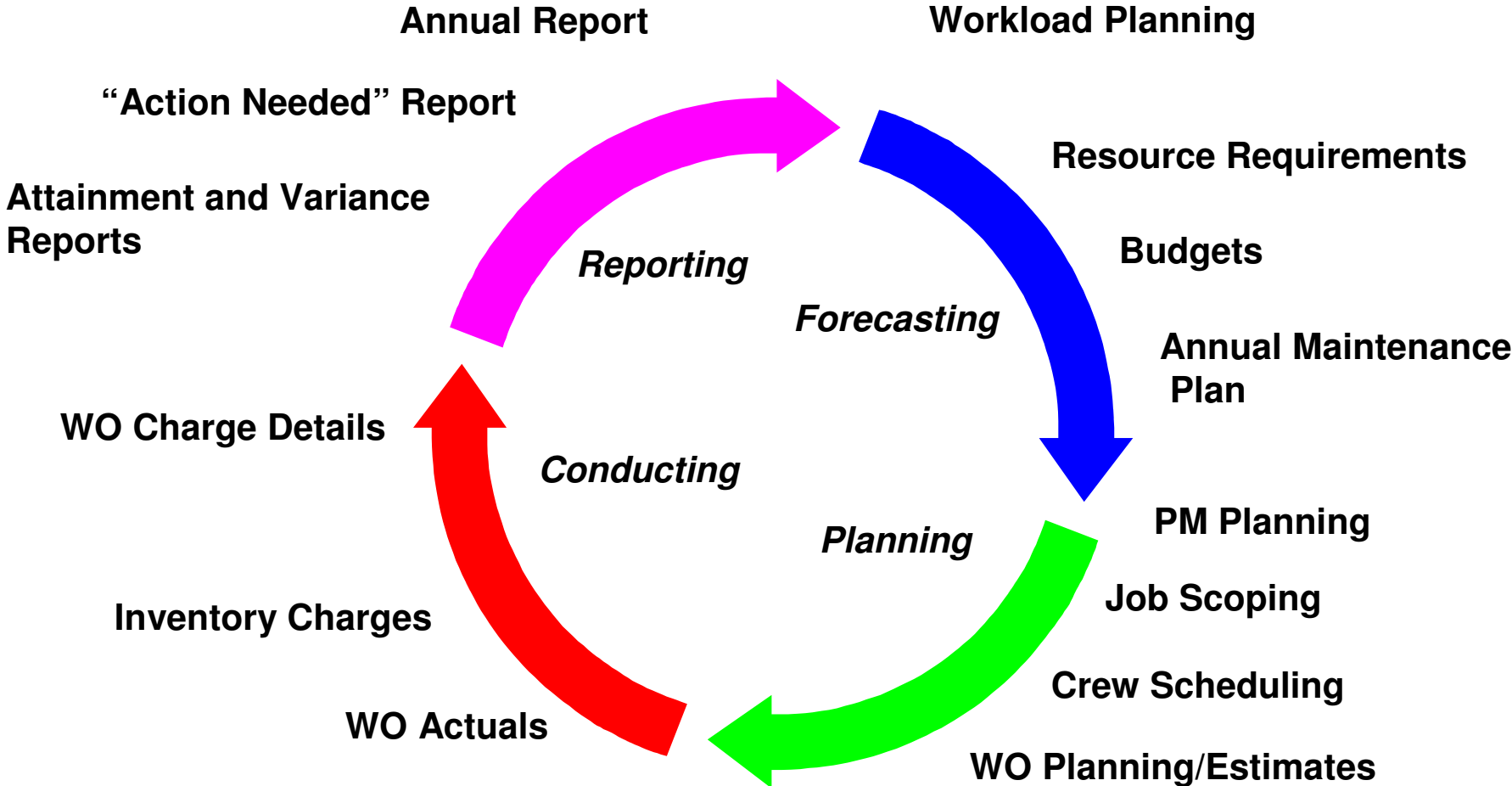
Part 1: Asset Maintenance Management

- Best Practice for Maintenance Management: At least 60 years old. Very well documented
- Most importantly, maintenance management is a process that is enabled with accurate and timely data.
- Asset maintenance costs are an input for asset management planning
- Computerized maintenance management is a benefit only when the planning processes are well understood
- Risk that CMMS can solve business process related problems.

Maintenance Management Planning Cycle: Generic Management Loop



Maintenance Management Planning Cycle: Example Activity Detail

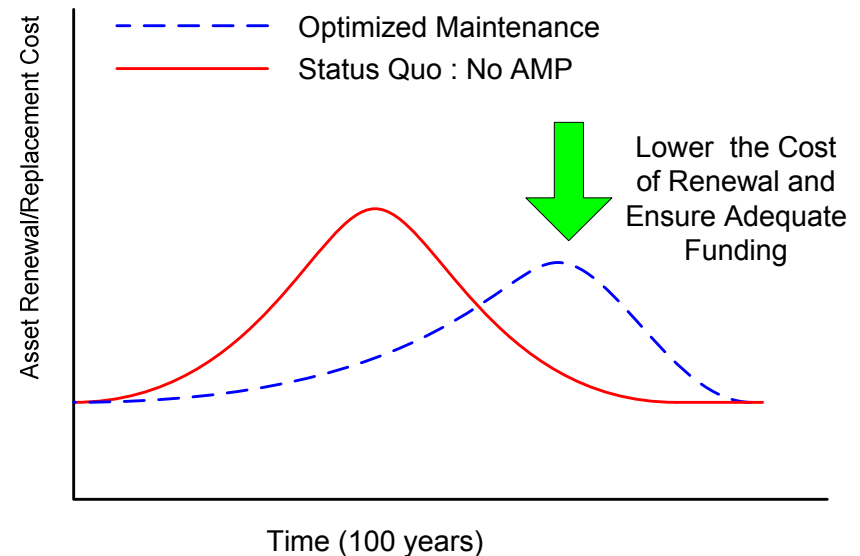


Information Requirements for Optimized Maintenance

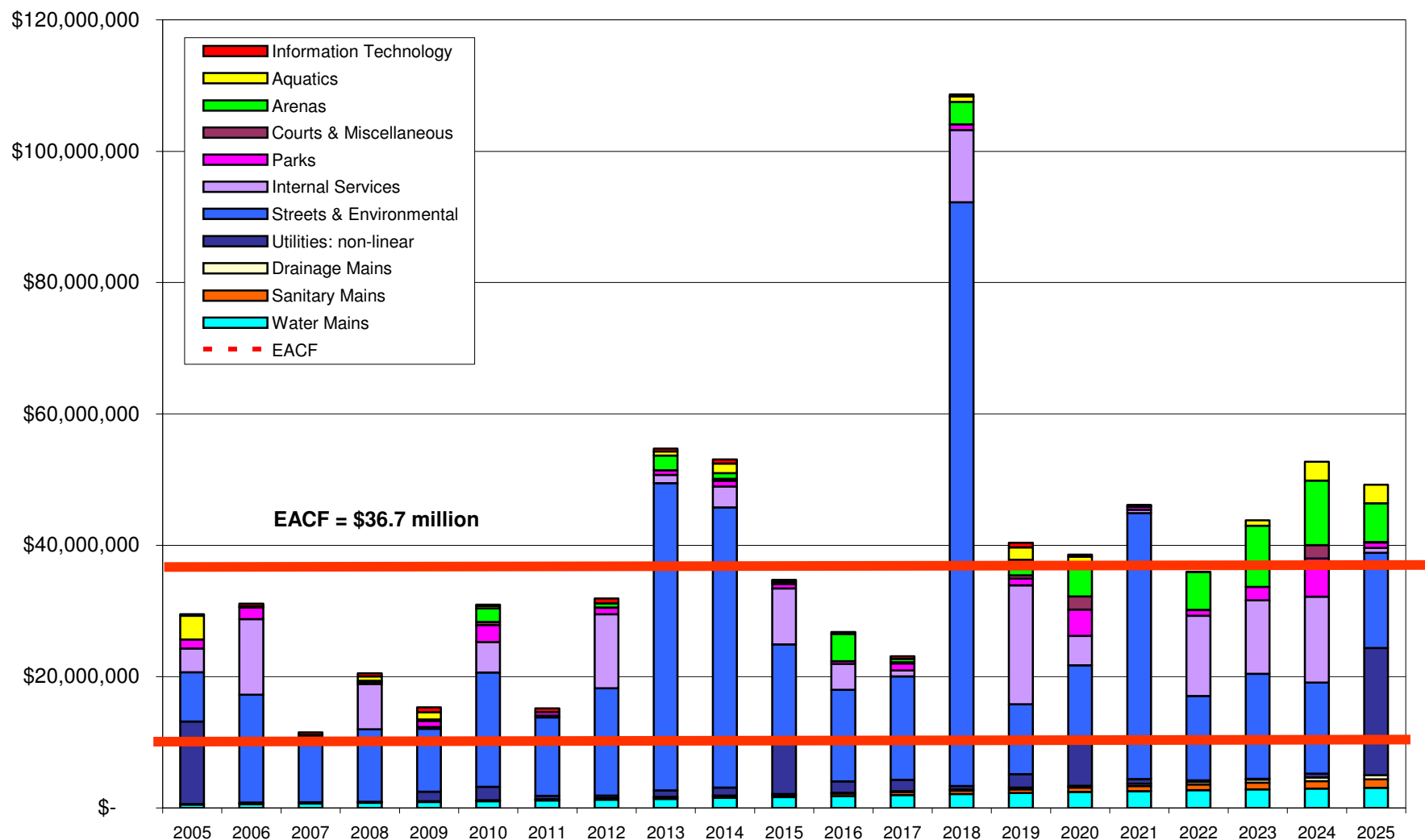
- Rolled up to Asset:
 - Asset descriptors (specifications, condition, criticality, etc.)
 - Schedule of Preventative Maintenance activities
 - Historical record of corrective maintenance activities
 - Complete record of conducted Work Orders and cost detail (for all maintenance work)
 - Variance data and analysis: Did you accomplish all of your required maintenance work? If not, why not?

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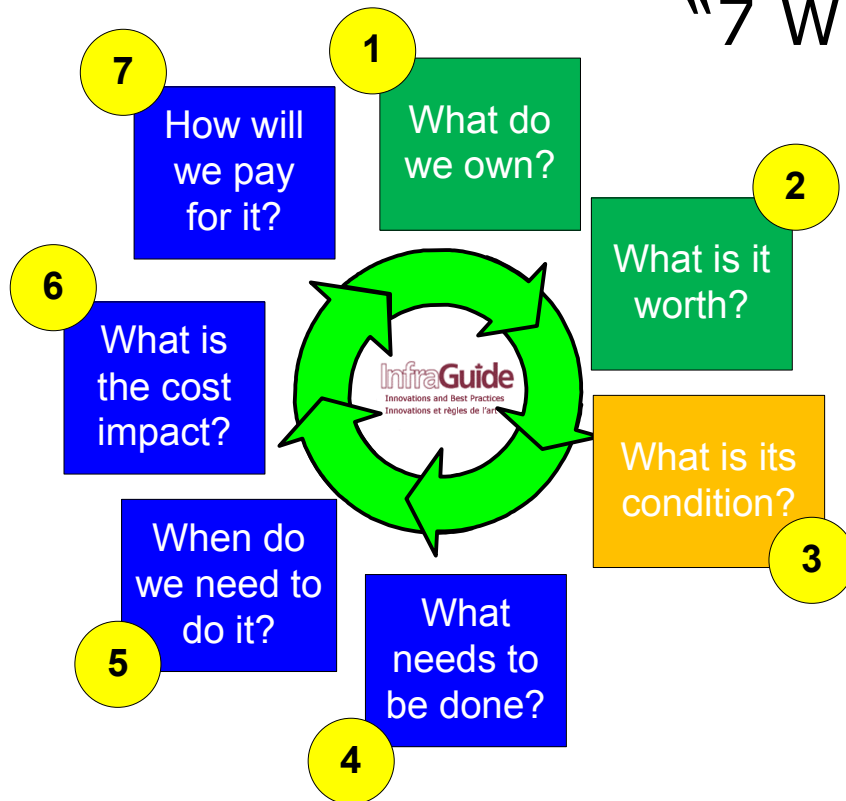


Example Asset Management Top Down Output



Information Requirements for Asset Management

“7 Whats of Asset Management”



InfraGuide
 Innovations and Best Practices
 Innovations et règles de l'art

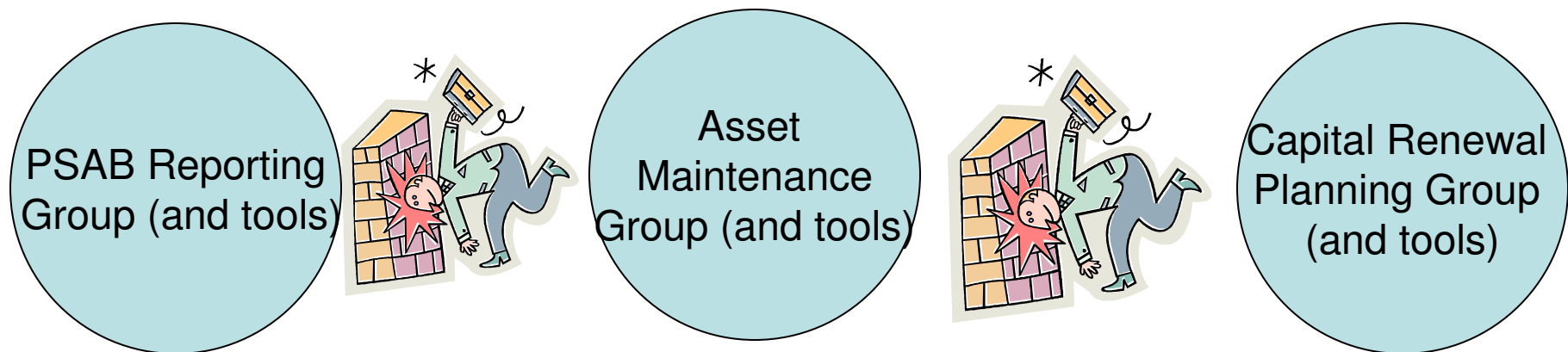
Asset Management Implementation Problems

- The two asset management “functions” are very different
 - Different staff involvement (operations vs planning)
 - Different outputs
 - Entirely different business processes
- We are tempted to try and use the same computerized data management system to solve each.
 - At the high level, both functions roll back to “assets”

PSAB 3150 Has Placed A New Driver on Asset Based Reporting

- Financial accounting reporting regarding tangible capital assets
- There are linkages to the other two asset management functions, but they are still vague:
 - Some types of maintenance work could be considered as betterments, and thus need to be reported in accordance with PSAB
 - PSAB asset data is very related to the data required for long range capital renewal planning

Worst Case Scenario: Three different workgroups with different tools for each Asset Management function



- Excess internal costs
- Excess data management costs
- Data duplication and high possibility of errors
- Poor overall results at high cost

Strategies to Advance your Implementation

- Each of these functions are complex in themselves
- Tackling all three at once is challenging and can easily overwhelm an organization where resources are limited.
- Your implementation plan must be scaled to match the resources that you have available.
 - How can you phase your implementation?
 - Where should you start?
 - How should each of these three important functions be consolidated?

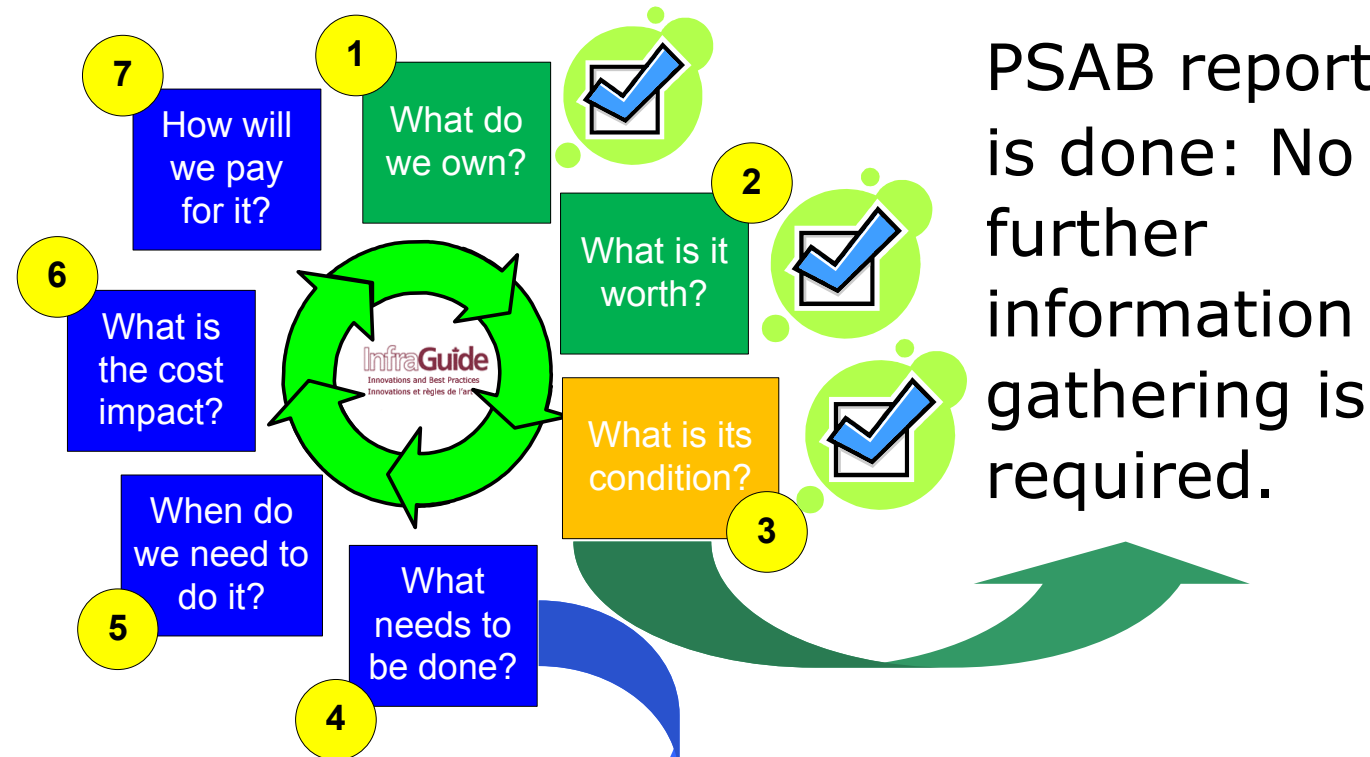
Using PSAB as a “flashpoint” to initiate Capital Renewal-based Asset Management

- PSAB is mandatory, so it must be done.
- Data Requirements for PSAB are closely related to data requirements to initiate Capital Renewal-based Asset Management.

But

- Need to ensure that Accounting and Finance fully understand (and support with funding) the need to go beyond PSAB for asset management attainment.
- PSAB reporting forms only a small portion of Capital renewal-based Asset Management.

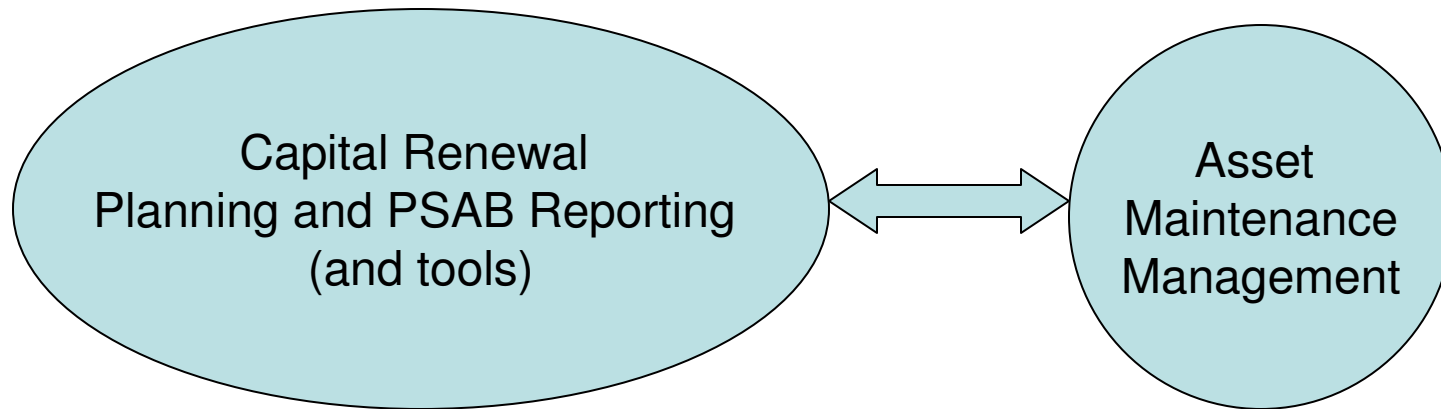
Information Requirements for Asset Management



PSAB reporting is done: No further information gathering is required.

Asset management-based Capital Renewal planning can commence

Suggested Target Solution: Linked Planning and Operations Programs



- Asset Planning and Asset Operations focus
- Manageable in terms of complexity
- Consolidation of asset related data
- Still a difficult undertaking

Capital Renewal-based Asset Management

- Best practices now very well documented.
- Information management strategies for PSAB and Capital renewal-based asset management can be consolidated.
- Well organized asset hierarchies are a key starting point:
 - ESRI Water network model is a god example
 - Be careful with GIS: many assets do not belong in the GIS system (fleets, recreation centres, water treatment plants, etc.), but still need to be included in the analysis.

Asset Maintenance Management: CMMS Implementation

- Though many brands of good software are available, integrated implementation is much harder than for Capital Renewal Planning systems.
- Internal staff effort requirements always seems to be underestimated
- Major change management aspect to CMMS, and is rarely addressed well
- Integration with Corporate Finance system is always difficult.
- Thorough implementations will take two or more years; make sure you plan accordingly.

In All Cases, Regardless of your Approach:

- Your Asset Management Business Case must include how and when you will accrue tangible benefits:
 - Risk of frustration that “nothing is happening”
- Define tangible milestones with realistic dates, and follow up with regular progress reporting.
- Project Manager must be able to “visualize” and communicate the desired outcome.
- Do not underestimate the Change Management aspect of asset management. This will affect the jobs of many staff.

Recommendations for Practitioners

- You need a well defined project plan (or “road map”)
- You need superb Project Management, ideally from within your organization.
- You need a clear Business Case, that defines how and when benefits will accrue.
- You will need an internal and external communication plan, as project enthusiasm will wane as time goes on. How do you retain organizational buy-in over time?
- Recognize that an asset management program is an organizational challenge more so than a technical challenge.

Finally, My Pep Talk to You as Practitioners

- If this was easy, we wouldn't need Seminars like this. There are no quick solutions here, and there is a lot of hard work required by many within your team.
- There will be times when you want to give up. Do you have a support group?
 - Might I suggest the newly formed BC Local Government Asset Management Working Group
- As silly as it might sound, your objective is truly noble: A financially sustainable community. It is important to take time to reflect on this.

Great Best Practice Resources (Free)

- InfraGuide Best Practices still available for free on web
<http://sustainablecommunities.fcm.ca/infraguide/>
- Municipal Guide for Accounting for Tangible Capital Assets (Ontario Municipal Benchmarking Initiative)
www.ombi.ca/docs/db2file.asp?fileid=183

Questions?

You can download an electronic copy of this presentation from:

<http://www.nationalbenchmarking.ca/>