



Asset Optimization

The Missing Link in Risk Mitigation

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ICMA Conference Presenter



Asset Optimization

- Panel Introduction
- Asset optimization...what is that?
- Understanding the asset risk relationship
- Getting the most from your assets with spending the least

Panel Intro

- Dennis Yates, CFM, F.SAME **ATKINS**
- Dave McFarlane, NEBB CP **ATKINS**
- Scott McDonald **ATKINS**

Asset Management vs. Optimization

- Asset management IS
 - The decisions you make based on knowing what you have, where it is, what shape it is in, plus how much, when, why...and on and on
- Asset management IS NOT an IT system
 - An IT system is an asset management tool
 - The decisions you make using MANY tools is the core of asset management

Asset Management vs. Optimization

- Asset optimization IS
 - Adding key elements to asset management and using those elements to make assets work better and cost less
- Examples
 - Dependency index – how important to your mission?
 - Performance criteria – is it an energy hog?
 - Redundancy – do you even still need it?
 - Suitability – does it fulfill the intended need?

Asset risk relationship

- The fire hydrant story
- Is someone out there incurring risk on your behalf?
- Is “taking risk in infrastructure” really “putting risk on citizens”?

WNCN Investigates

Raleigh using new technology to track aging hydrants

Posted: Feb 14, 2013 5:18 PM CST
Updated: Apr 23, 2013 11:43 AM CDT

By Jonathan Carlson - [bio](#) | [email](#)



RALEIGH, N.C. - A year ago, WNCN covered an apartment fire in Raleigh. A broken fire hydrant dating back 70 years prevented firefighters from getting to the blaze faster and possibly saving the apartment from destruction.

Since then, we've been asking questions, and staying on top of the city to see what improvements they've made to make sure the more 20,000 hydrants in the city are working properly.

"We try to get them once a year," said one of the men of Raleigh's public utilities department. WNCN Investigates followed crews as they checked on residential hydrants.



Risk

- Know what it is and how it can affect you



Personal risk
can harm you
professionally

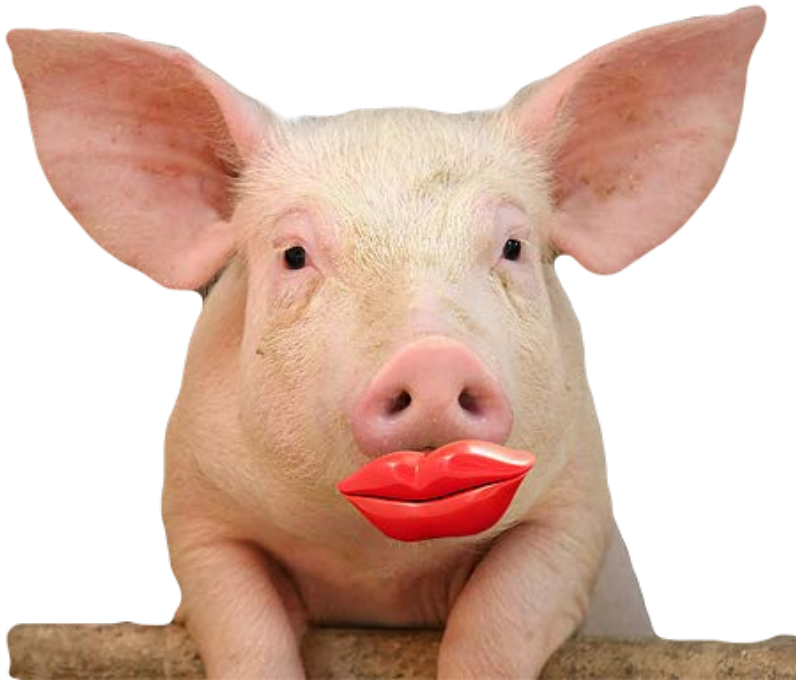


Personal risk
can harm you
personally



Professional risk
can harm you
professionally,
personally and a
whole lot more

So what do I do about it?



Avoid putting lipstick on the pig

- Know what you have, how old it is, what shape it is in
- Prioritize it, know strengths and weaknesses
- Know how it can fail and the impact of failure

So what do I do about it?



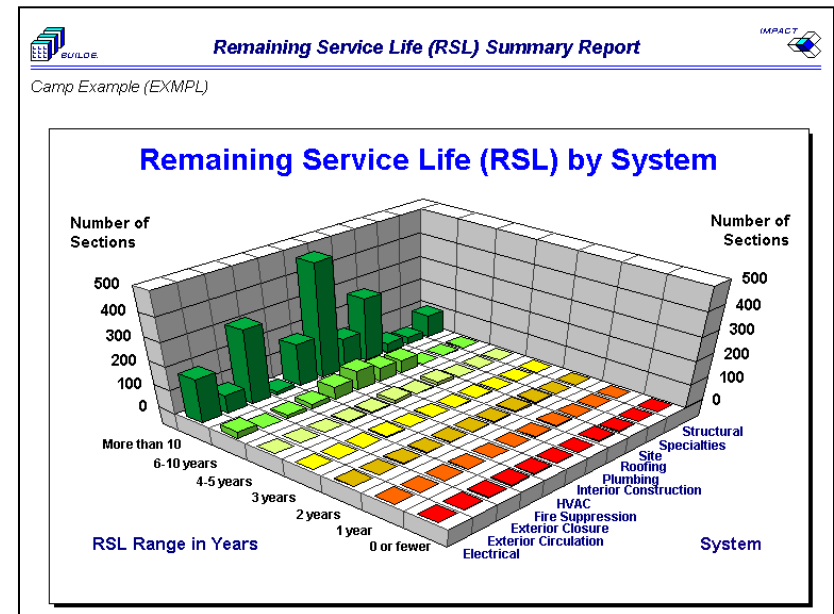
Performance improvement is all about knowing, measuring, and tuning

Keep the good stuff good with:

- Good maintenance
- Periodic retrocommissioning
- Ongoing assessment to sustain assets
- Optimize, optimize, optimize

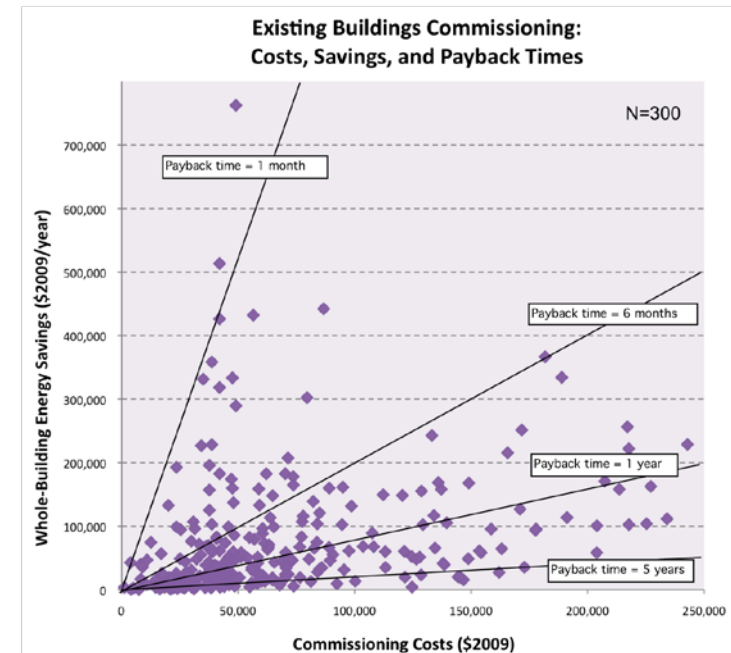
Some notes about...

- Sustainment Management Systems - SMS
 - Different than Computerized Maintenance Management
 - Tool to sustaining infrastructure investment
 - Uses condition, functionality, and remaining service life
 - Develop short and long-range work plans based on sound investment strategies, prioritization criteria, and budget constraints
 - Penalty costs reduced allowing more work to be accomplished with improvement in operational readiness
 - Simulations can be run to show the future impact of current M&R decisions
 - Result: a flexible list of work items expected to be accomplished based on actual funding levels



Some notes about...

- Facility Retro-commissioning
 - Systematic, documented process that identifies and implements low cost operational and maintenance improvements which improve building efficiency and allow the building to meet the design requirements for the current usage.
 - Doesn't replace good maintenance, but supports it and can help recover from deferred maintenance
 - Energy savings ~ 18% annually
 - Paybacks over large range...better if proper facilities selected
 - Our experience averages 1.2 years



Thank you



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Questions/Comments?

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