



Introduction to Asset Management

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Session Objectives

- Understand the reality of infrastructure funding today
- Learn about asset management, a best practice for water systems



In the Old Days...

- Water systems took advantage of the federal government's ambitious construction grants program of the 1970s and 1980s
- Everybody loved their “free” money



Capital Finance Today

- The money never really was “free”—it came from tax dollars
- Today, there is a different philosophy of how to pay for water system capital improvements...



Capital Finance Today

- You pay (no sense in sugar-coating this)
- The reality is that water and wastewater infrastructure is expensive, regardless of the size of your system. Smaller or poorer systems will likely have a hard time paying for capital improvements



<http://efc.web.unc.edu/2015/09/09/four-trends-government-spending-water/>

Graphed by the Environmental Finance Center at the University of North Carolina, Chapel Hill.
Source: Congressional Budget Office supplemental data for the *Public Spending on Transportation and Water Infrastructure, 1956 to 2014* report (March 2015). Displays public spending on supply systems for distributing potable water as well as wastewater and sewage treatment systems and plants. Real spending is shown after adjusting nominal spending to their 2014 dollar equivalent using infrastructure-specific price indexes.

Four Trends in Government Spending on Water and Wastewater Utilities Since 1956

SEPTEMBER 9, 2015 / SHADI ESKAF / 0 COMMENTS

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According to data collected and published by the Congressional Budget Office (CBO), federal, state and local governments in the United States spent more than \$2.2 trillion in the last 59 years on operations, maintenance and capital infrastructure of water and wastewater utilities. That equates to more than \$4 131 000 000 000 in 2014 dollars adjusting for inflation of infrastructure-



REPORT CARD

Aviation	D	Ports	e
Bridges	e+	Public Parks	e-
Dams	D	Rail	e+
Drinking Water	D	Roads	D
Energy	D+	Schools	D
Hazardous Waste	D	Solid Waste	B-
Inland Waterways	D-	Transit	D
Levees	D-	Wastewater	D



www.ercnetwork.org

<http://www.infrastructurereportcard.org/>



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So what do we do?





Working **smarter** *not harder* is the essence of Effective Management / Asset Management

Let's hear from a practitioner...



Mike Daly, White Cliffs, NM **Video Profile**



Asset management helps you have the most impact in your system by spending your limited dollars in the best way possible



Five Core Components of AM



Current State of the Assets



Level of Service



Criticality



Life Cycle Costing

Long-Term Funding





Current State of the Assets

- What do I own?
- Where are the assets?
- What condition are they in?
- How much useful life is remaining?
- What is the replacement value?



Level of Service

Involve
Customers



Measurable
Goals: Internal
and External



Track Progress
Towards
Meeting Goals

Involve
Staff



What would my customers want?



Asset Criticality

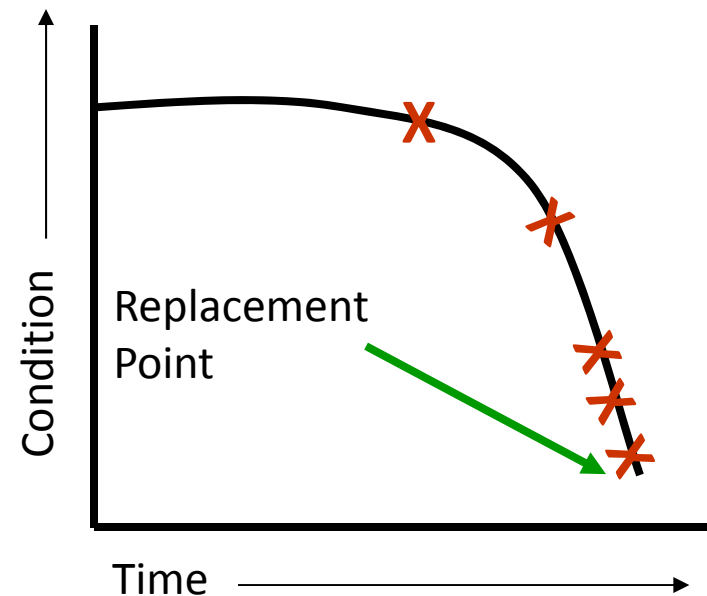
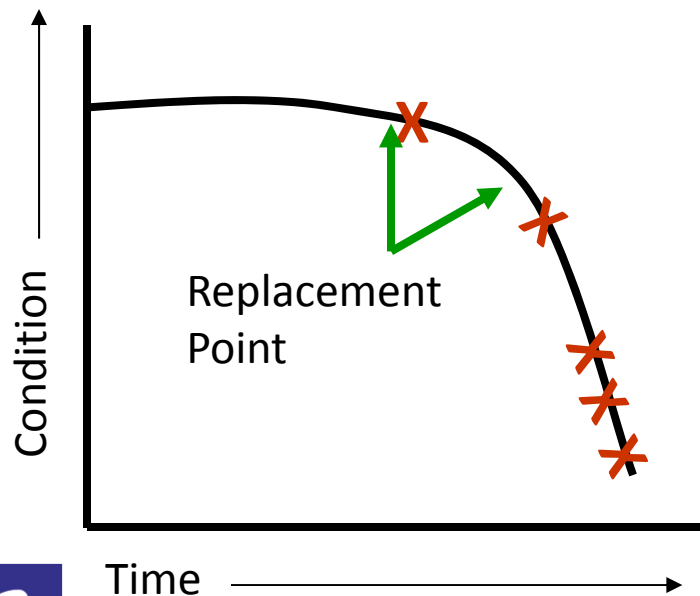




Life Cycle Costing & Risk

High risk : replace assets early, before failure

Low risk assets: run to failure and replace afterwards





Long Term Funding

- This is where capital planning comes in
- Once you figure out how to get the longest life out of your assets, plan to have the money you need to replace them when necessary



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