Fundamentals of Asset Management

Step 9. Determine Funding Strategy

A Hands-On Approach
Tom’s bad day…
Fifth of 5 core questions

5. What is my best long-term funding strategy?
AM plan 10-step process

Develop Asset Registry → Assess Condition, Failure Modes → Determine Residual Life → Determine Live Cycle & Replacement Costs → Set Target Levels of Service (LOS)

Determine Business Risk (“Criticality”) → Optimize O&M Investment → Optimize Capital Investment → Determine Funding Strategy → Build AM Plan

5. What is my best long-term funding strategy?

Renewal Annuity
Asset management investment planning elements

- Capital investment
  - Renewal (repair, refurbish, replace)
  - Augmentation (capacity, functionality)

- Maintenance investment
  - Planned
    - Preventive
    - Predictive
    - Corrective
  - Unplanned

- Operations investment
  Operations cost trends

Life-cycle projected costs
Rolling annuities – 10 year example
Renewal – Treatment Plants
Total projected renewal costs – “legacy costs”

Predicted future renewal of all existing assets

- CIP - Current
- Replacements - Total
- Rehabilitation - Total

Year

Expenditure - $M (Current Dollars)
Future Growth and LOS
Operations and Maintenance
Total projected (optimized) costs
Financing strategies

- “Pay as you go” – current revenues
  - Dedicated reserve account (‘hands off’)
  - Replacement/renewal recovery fee embedded in rate structure

- “Pay as you use” – debt service
  - “slice of debt service”
  - “intergenerational equity”
  - Interest as an expense that reduces available capital
Cash flow projections

![Excel spreadsheet showing cash flow projections for Water and Sewer CIP-based NOI Projections. The spreadsheet includes columns for years 2001 to 2009, with projected revenues and expenses.](image)
Cash impact by scenario

Available annual cash to fund CIP

- No Rate Increase
- Full $600 Million CIP
- Staged Debt Service
- Without CIP
Projected rates over time by financing scenario
Key points from this session

What is my best long term funding strategy?

Key Points:
- “Full economic cost” is the foundation concept from which effective financial decision-making is made.
- Replacement and refurbishment cost, not historic depreciation, is key to good financial decision-making.
- “Long-term Annualized Renewal Annuity” provides the baseline funding for sustained performance.
- Telling the asset consumption “story” in simple, effective, big-picture terms sets the stage for LOS discussion and business risk based decision-making.

Associated Techniques:
- Valuation techniques
- Net Present Value
- Optimized replacement cost tables
- Optimized portfolio-wide, life-cycle financial projections
- Capital investment strategies
- Telling the story with confidence
Tom’s spreadsheet