

Fundamentals of Asset Management

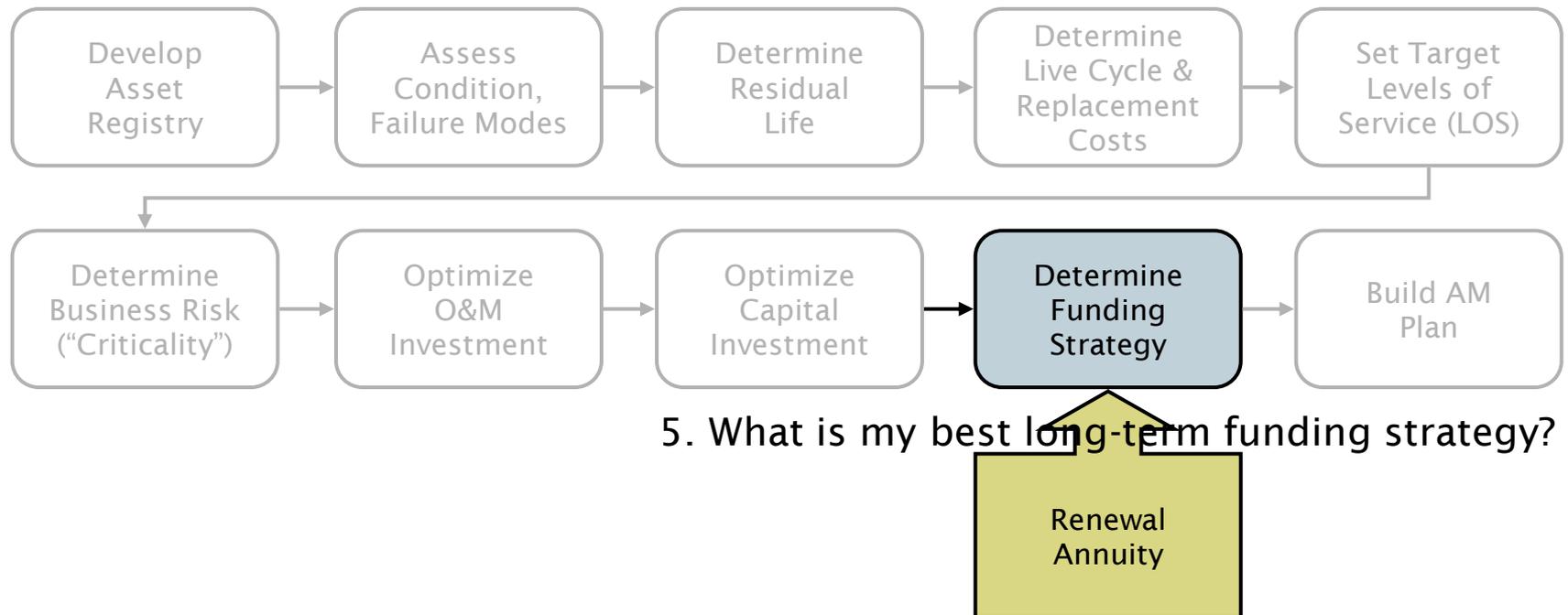
Step 9. Determine Funding Strategy

A Hands-On Approach

Fifth of 5 core questions

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

AM plan 10-step process

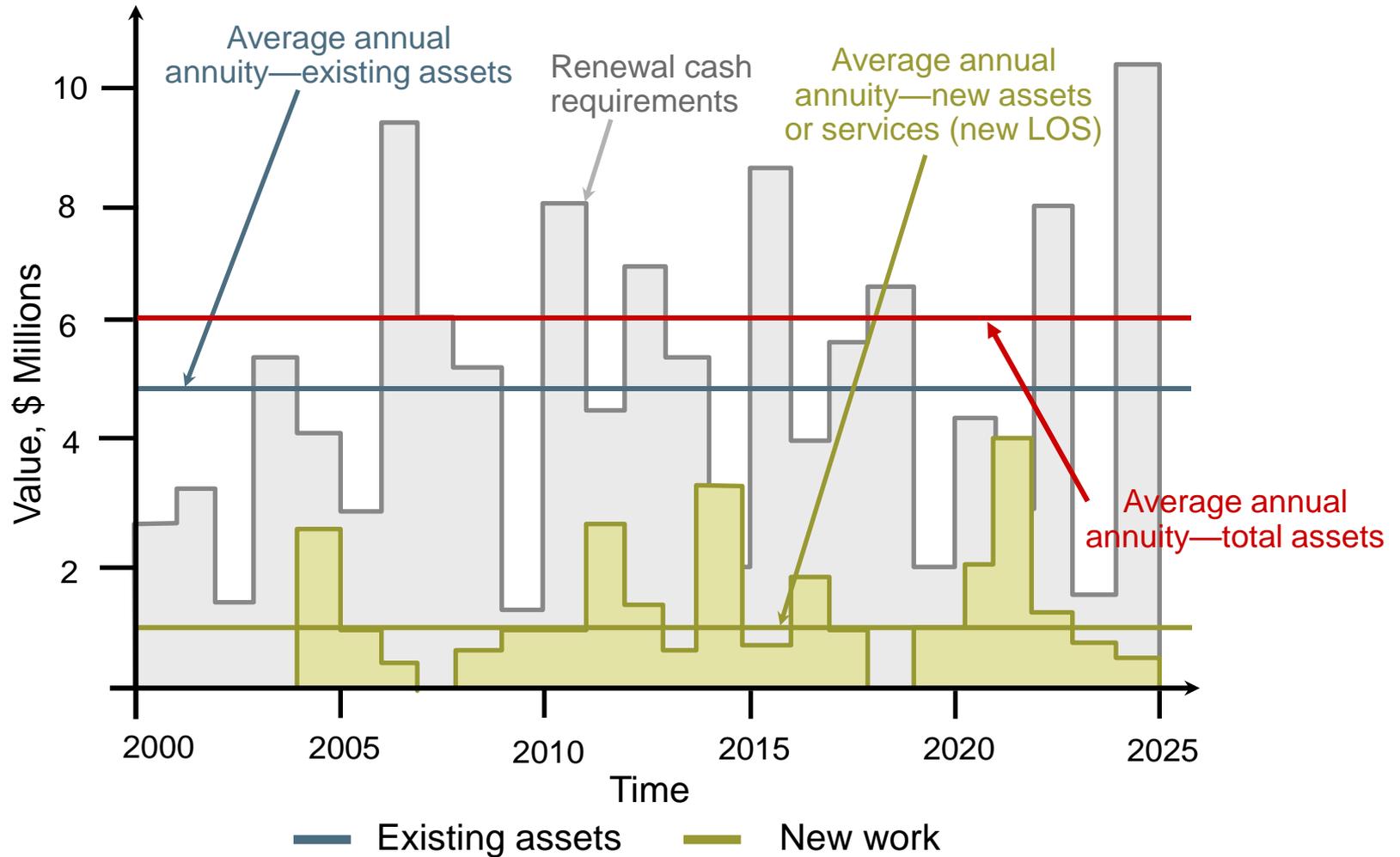


Asset management investment planning elements

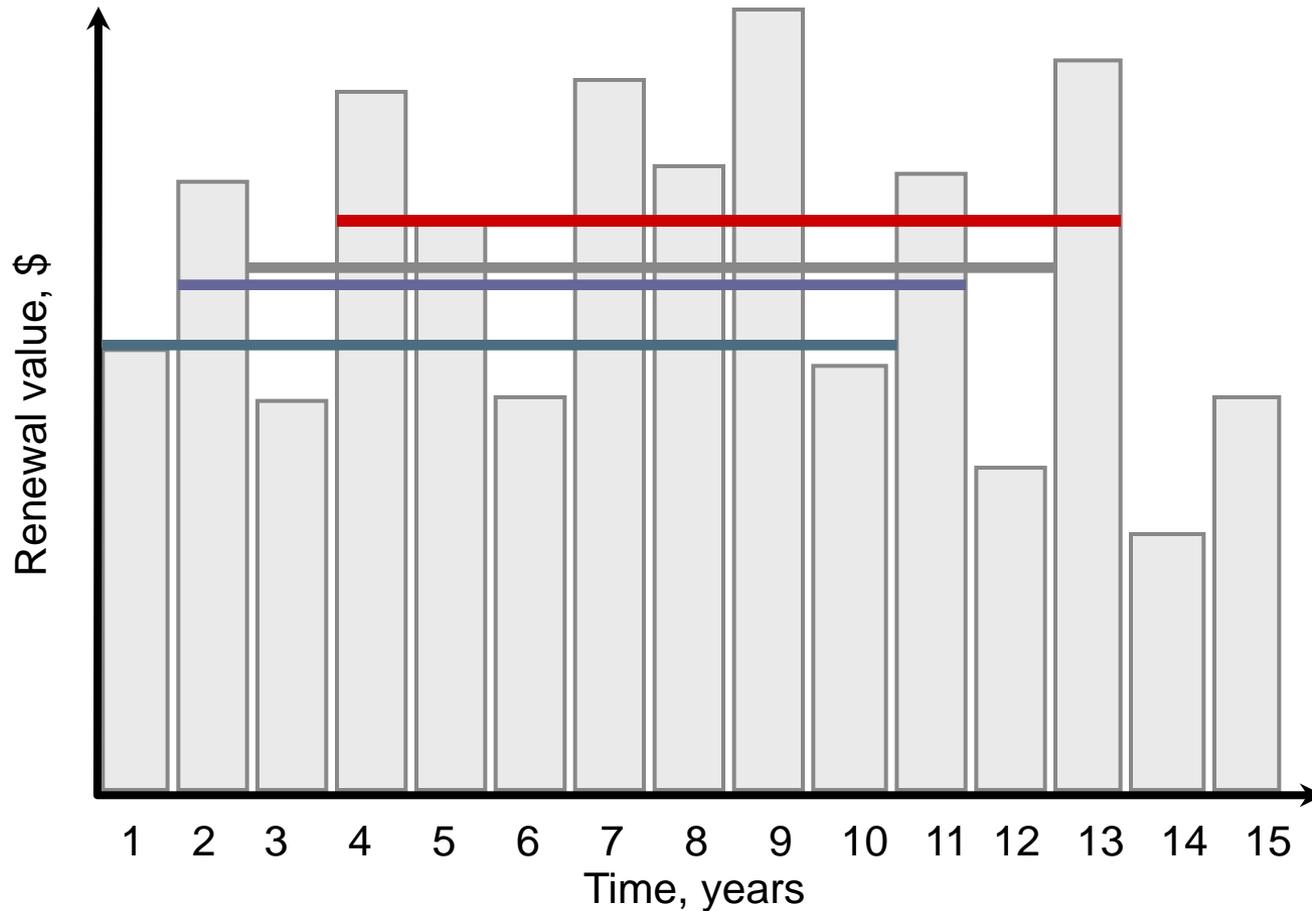
- Capital investment
 - Renewal (repair, refurbish, replace)
 - Augmentation (capacity, functionality)
- Maintenance investment
 - Planned
 - Preventive
 - Predictive
 - Corrective
 - Unplanned
- Operations investment
 - Operations cost trends

Life-cycle projected costs

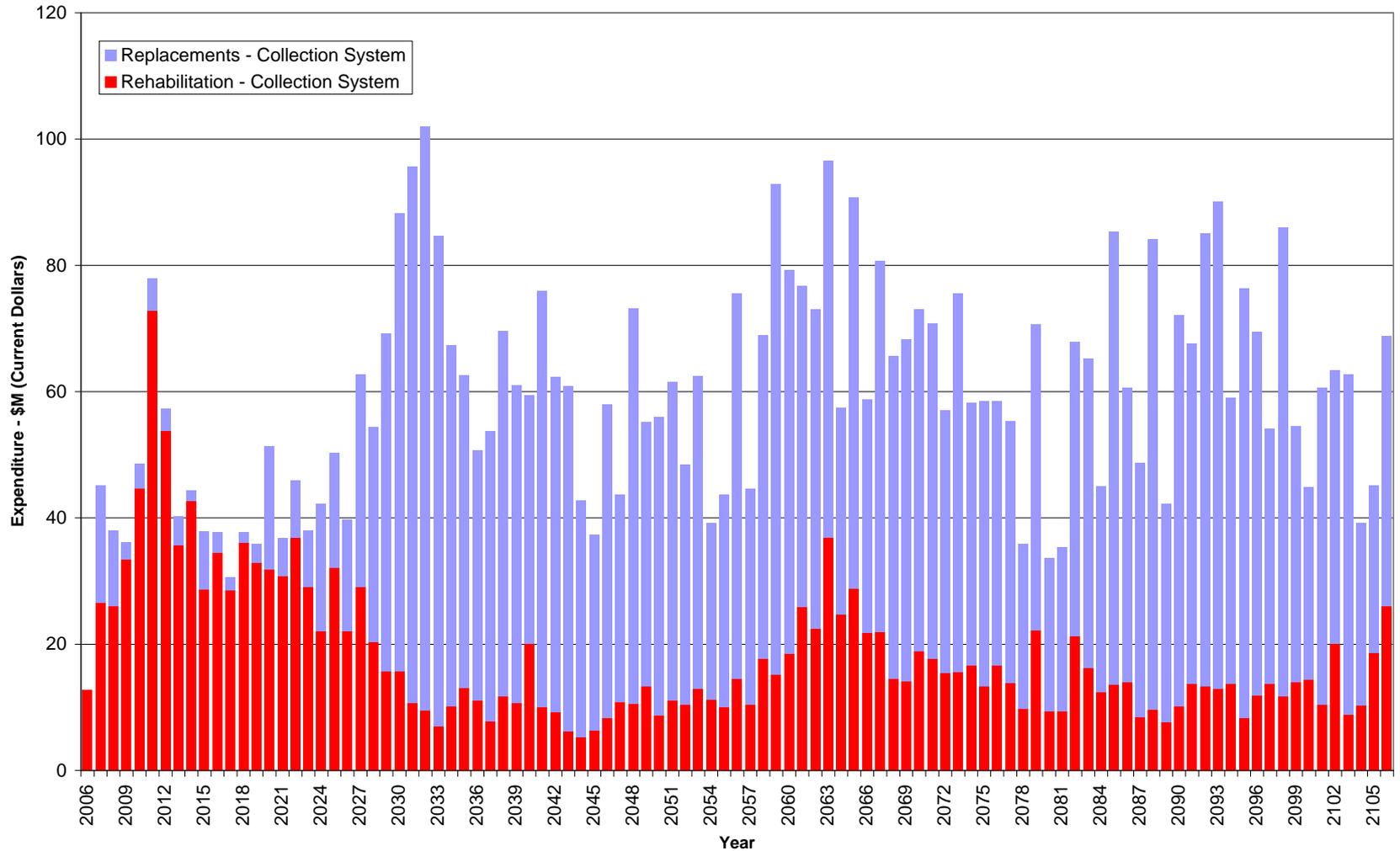
Renewal programs



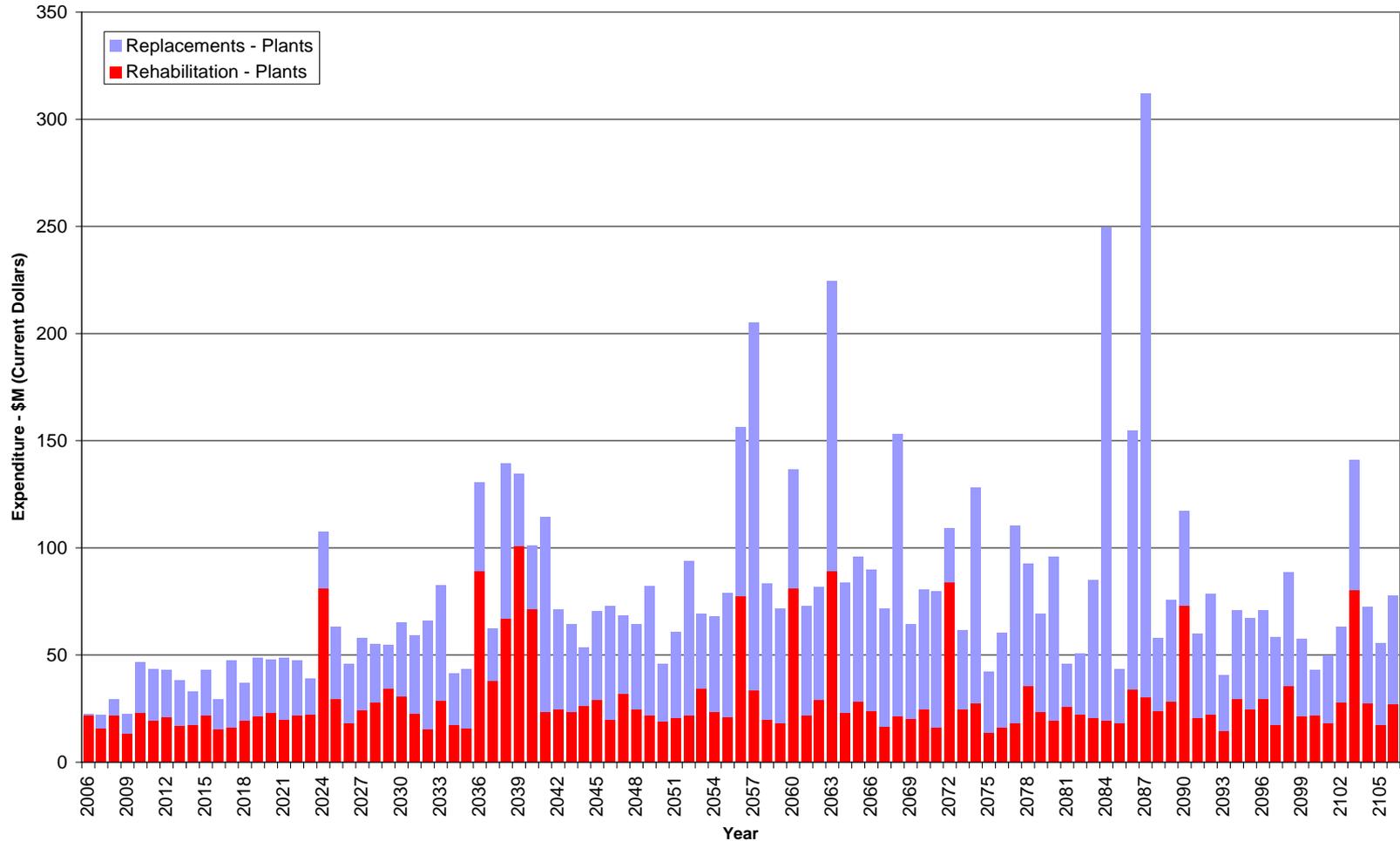
Rolling annuities – 10 year example



Renewal - Collection

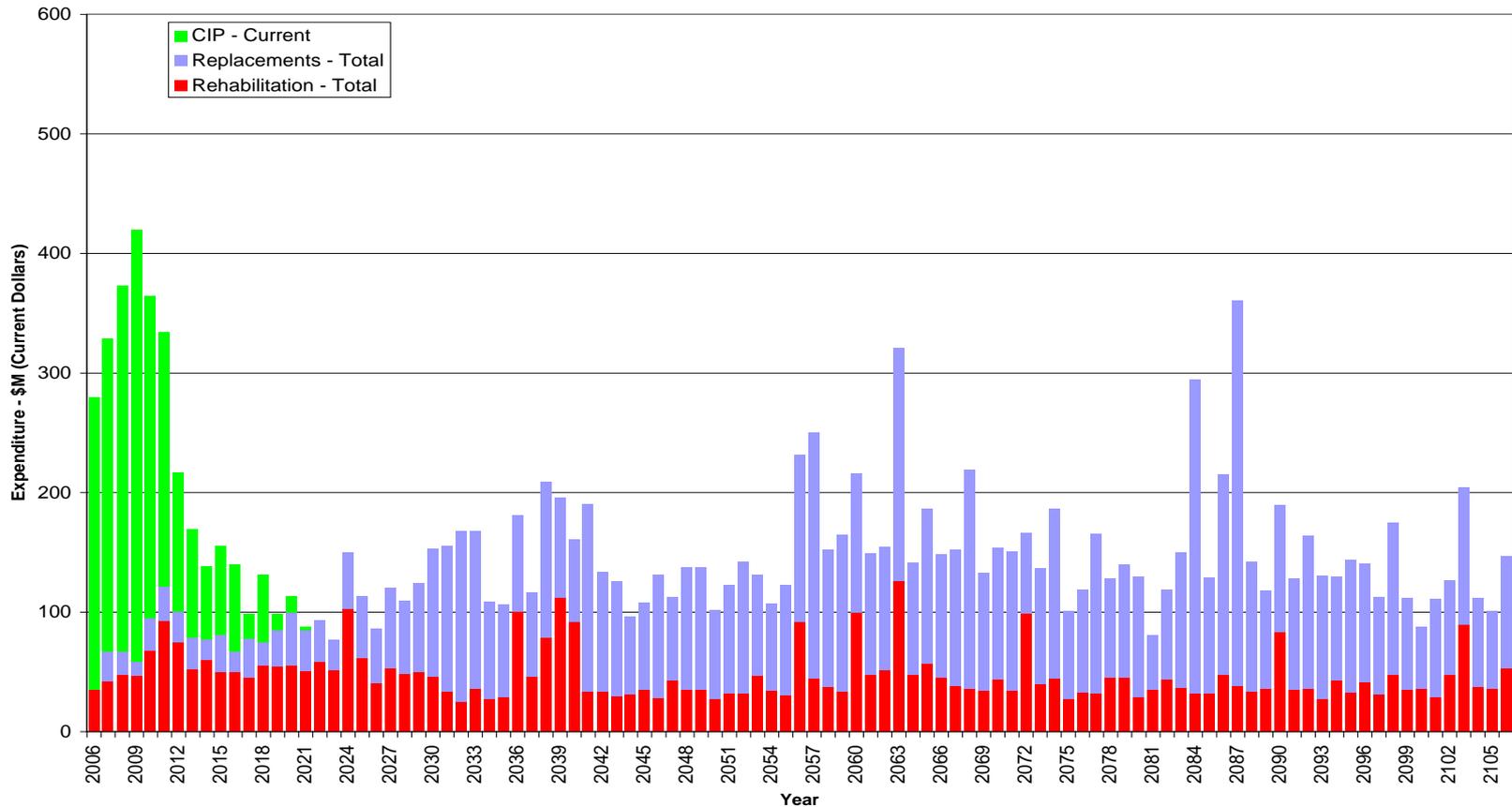


Renewal – Treatment Plants

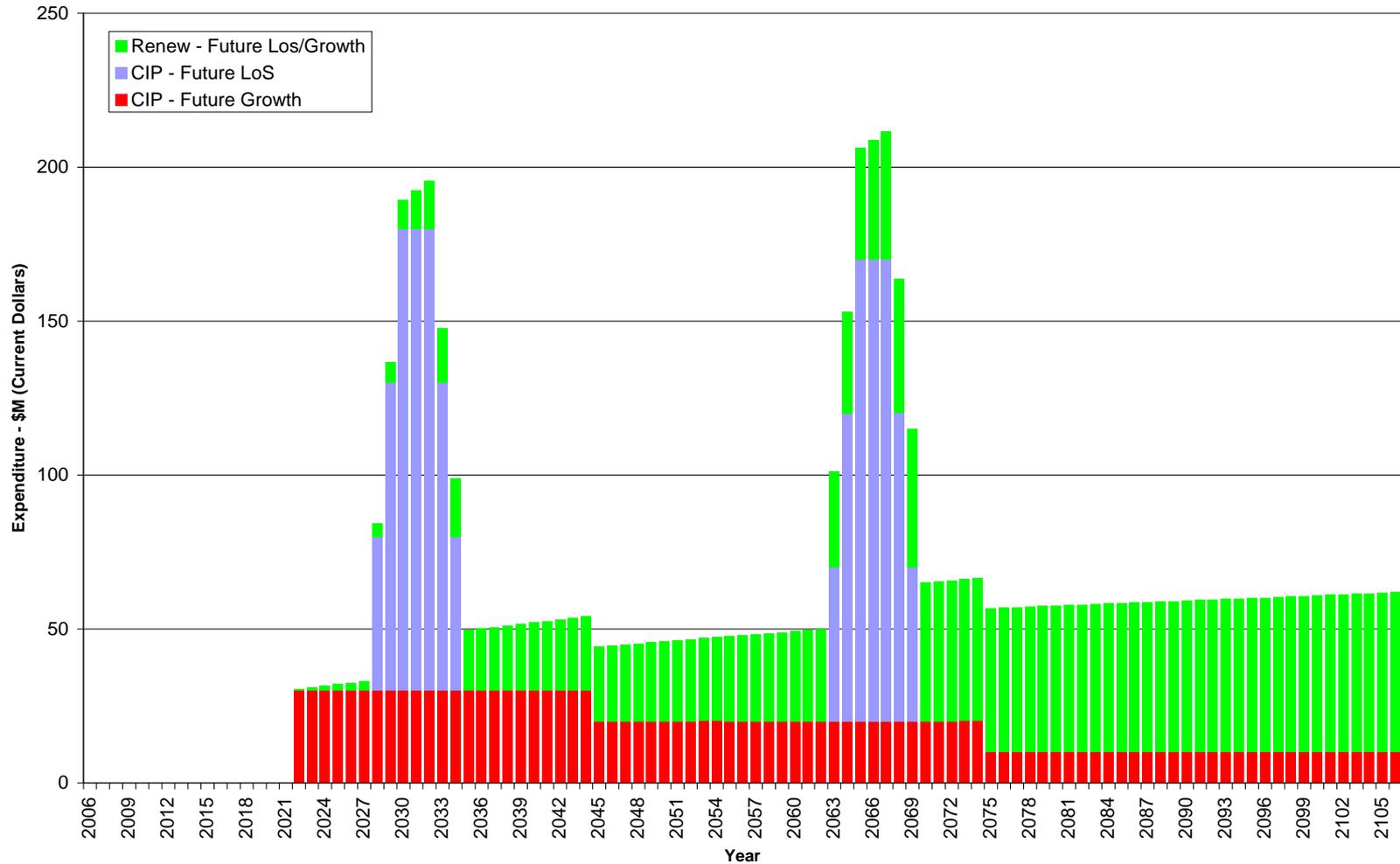


Total projected renewal costs – “legacy costs”

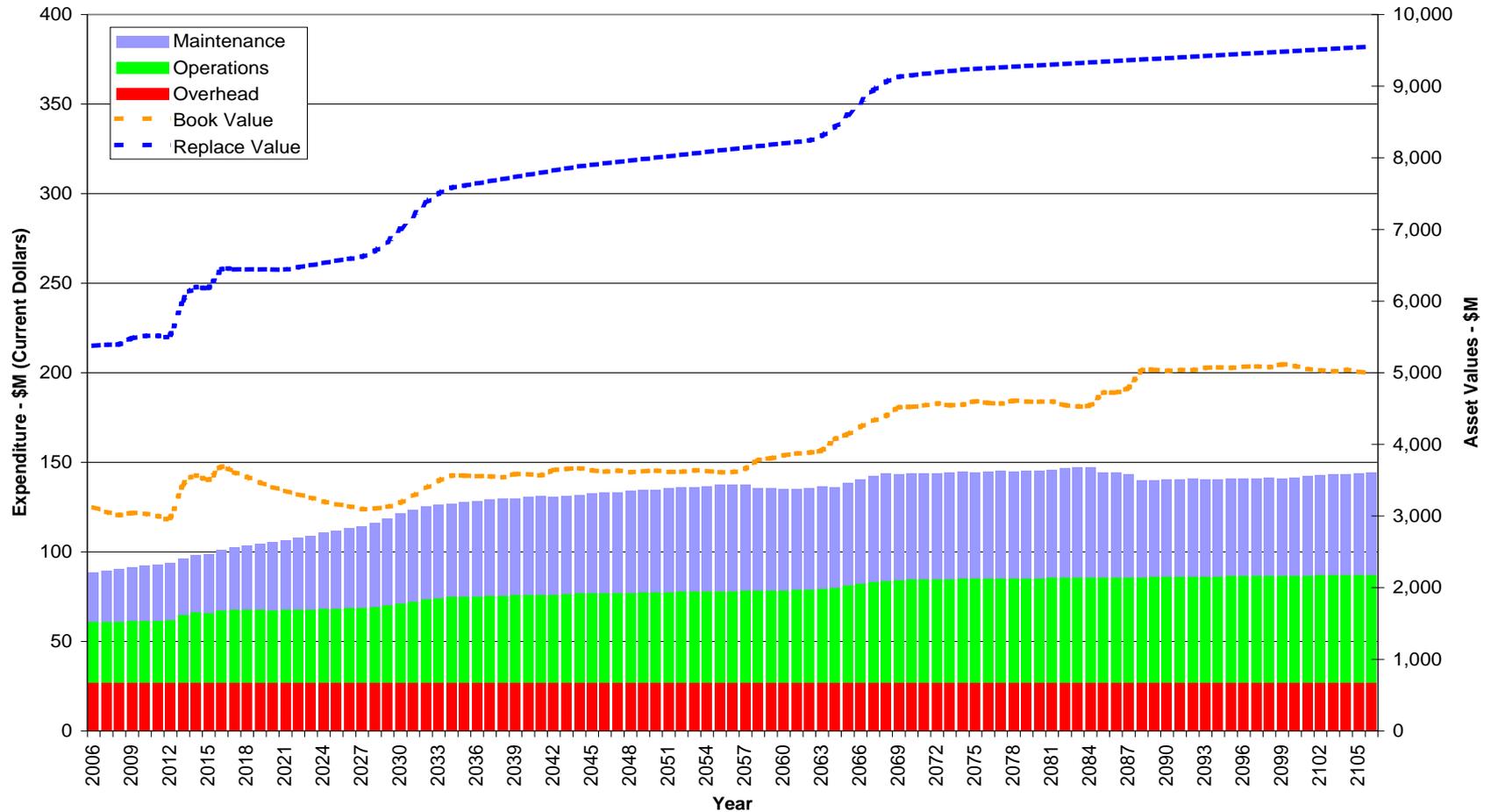
Predicted future renewal of all existing assets



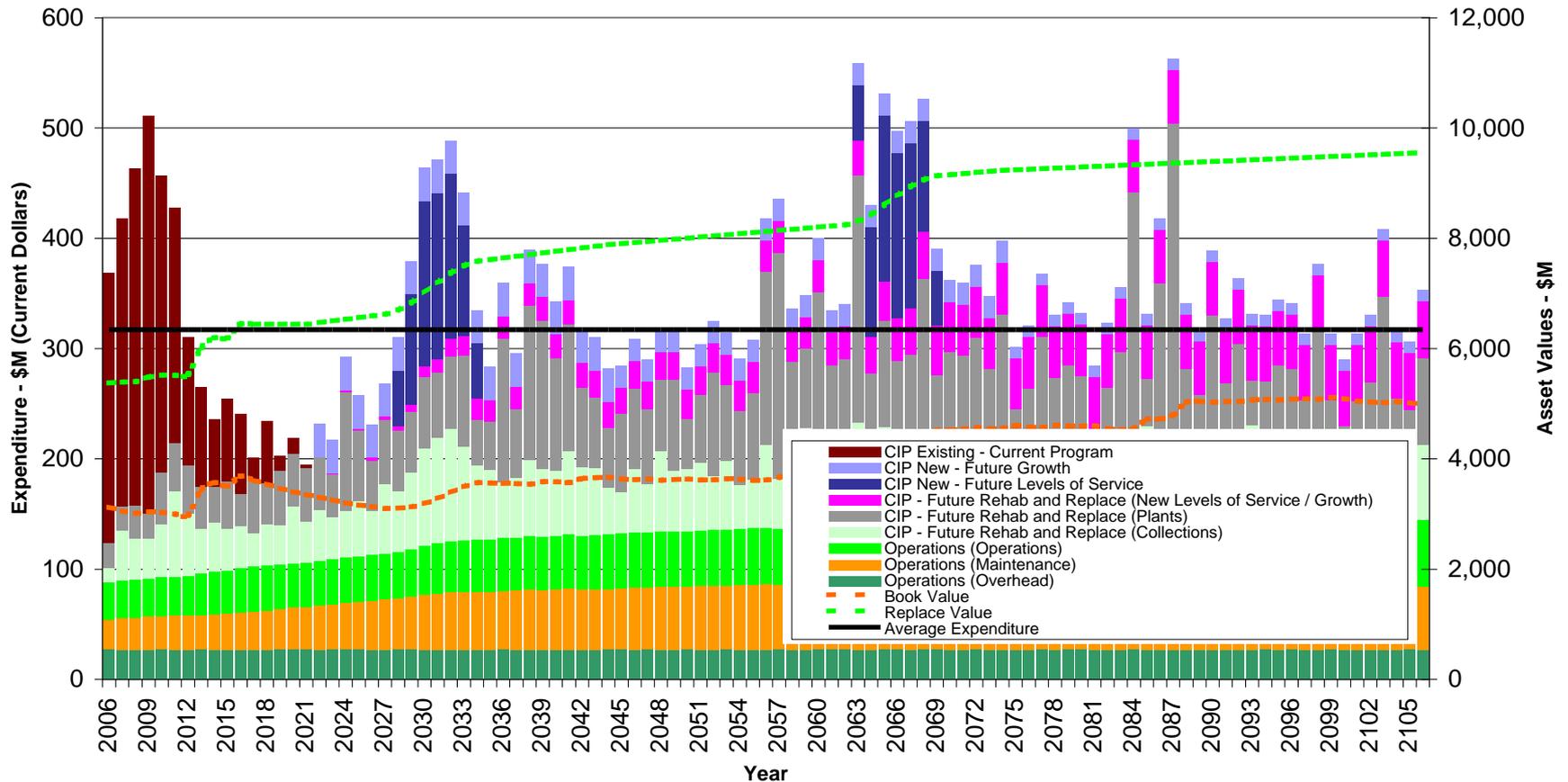
Future Growth and LOS



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

Microsoft Excel - 2003 CIP Cash-NOI Projections-Bill.xls

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Type a question for help

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	2001	2002	2003	2004	2005	2006	2007	2008	2009
Water and Sewer CIP-based NOI Projections									
Fund 201 revenues									
<i>Fund 201 subtotal</i>	\$88,482,397	\$95,049,926	\$95,662,617	\$99,584,413	\$103,666,988	\$107,916,933	\$112,341,109	\$125,125,161	\$130,254,841
Fund 203 revenues									
<i>subtotal 203 revenues</i>	\$7,538,877	\$5,674,403	\$6,429,081	\$7,856,104	\$7,991,148	\$8,131,593	\$8,277,656	\$8,429,561	\$8,387,543
subtotal interest income	\$9,822,418	\$6,056,600	\$3,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Total 201 and 203 revenues	\$105,843,692	\$106,780,929	\$105,091,698	\$109,440,517	\$113,658,136	\$118,048,526	\$122,618,765	\$135,554,722	\$140,642,384
<LESS> TOTAL PROJECTED EXPENSES	\$74,802,839	\$77,319,840	\$82,626,226	\$90,619,705	\$95,605,227	\$97,771,069	\$100,319,584	\$114,059,922	\$116,468,325
<LESS> MANDATORY BOND COVERAGE RESERVE	\$2,445,205	\$2,445,205	\$2,445,000	\$2,445,000	\$2,445,500	\$2,444,500	\$2,445,200	\$2,445,000	\$2,445,400
<LESS> Contingency			\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Revenue Overage / Shortfall	33,486,088	27,015,854	18,020,172	14,375,813	13,667,463	15,832,957	17,853,561	17,045,800	15,728,658
New Debt Service Impact - Scenario 1 - NRI									
Additional Debt Service				\$15,376,425	\$15,376,425	\$15,376,425	\$15,376,425	\$15,376,425	\$15,376,425
Additional Bond Coverage Reserve Requirement				\$1,537,643	\$1,537,643	\$1,537,643	\$1,537,643	\$1,537,643	\$1,537,643
<ADD> Total New (additional) Disbursements				\$16,914,068	\$16,914,068	\$16,914,068	\$16,914,068	\$16,914,068	\$16,914,068
Revised Coverage/Shortfall (reserve drawdown)	33,486,088	27,015,854	18,020,172	\$2,538,855	\$3,366,633	\$1,681,111	\$533,314	\$135,733	\$2,814,531
New Debt Service Impact - Scenario 2 - ALL CIP									
Additional Debt Service				\$47,800,000	\$47,800,000	\$47,800,000	\$47,800,000	\$47,800,000	\$47,800,000
Additional Bond Coverage Reserve Requirement				\$4,780,000	\$4,780,000	\$4,780,000	\$4,780,000	\$4,780,000	\$4,780,000
<ADD> Total New (additional) Disbursements				\$52,580,000	\$52,580,000	\$52,580,000	\$52,580,000	\$52,580,000	\$52,580,000
Revised Coverage/Shortfall (reserve drawdown)	33,486,088	27,015,854	18,020,172	\$38,264,467	\$38,572,531	\$36,747,043	\$34,726,615	\$35,536,266	\$32,851,342
New Debt Service Impact - Scenario 3 - Staged DS									
Additional Debt Service				\$9,375,000	\$9,375,000	\$9,375,000	\$17,879,564	\$17,879,564	\$17,879,564
Additional Bond Coverage Reserve Requirement				\$937,500	\$937,500	\$937,500	\$1,787,956	\$1,787,956	\$1,787,956
<ADD> Total New (additional) Disbursements				\$10,312,500	\$10,312,500	\$10,312,500	\$19,667,520	\$19,667,520	\$19,667,520
Revised Coverage/Shortfall (reserve drawdown)	33,486,088	27,015,854	18,020,172	\$4,063,613	\$3,294,363	\$5,526,457	\$1,813,535	\$2,617,726	\$61,138
Parameters:									
Growth in customer-base									
Sewer		2.5%	3.0%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%
Water		4.0%	4.5%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%
Connection fee rate increase			100.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Rate Increase Assumptions									
Sewer				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Water				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
South Fulton water Purchase in 2008								125%	
## Cauley creek Reuse revenue is based on Cont									

Charts W-WW Revs & Totals Debt Service Calculator W-WW Expenses Cash Flow

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