Capital Projects Prioritization Process Overview

Presented to the Metropolitan Water Pollution Abatement Advisory Committee
October 18, 2017
Today’s Presentation

- Why Project Portfolio Management?
- Sub-portfolios
- Project Prioritization Criteria
- Implementation Schedules
Project Portfolio Management

- WTD is initiating activities for the introduction of Project Portfolio Management into our infrastructure investments.
- Standards:
  - *The Standard for Portfolio Management*, Project Management Institute (PMI)
Project Portfolio Management

- Improve existing project prioritization
- Allocate resources (($) & 😉) to the Right Projects at the Right Time
- Objective process to prioritize / balance / sequence investments
- Transparent decision making
- Tools to document and communicate the investment decisions
## Benefits of Portfolio Management Practices

<table>
<thead>
<tr>
<th>Current Practice</th>
<th>Portfolio Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritize different types of projects in one big “bucket” using common criteria.</td>
<td>Create “buckets” of similar type projects and prioritize projects based on each bucket’s unique criteria.</td>
</tr>
<tr>
<td>Prioritization criteria aligned to agency strategy: • Difficult to track how investments align with a strategy.</td>
<td>Buckets aligned with WTD strategy: • Prioritization criteria aligned with individual bucket strategies • Ensures strategies are funded and implemented.</td>
</tr>
<tr>
<td>Project priority is not programmatically reassessed at each project gate.</td>
<td>Reassess project priority at each gate. Has priority changed? (continue/hold/cancel)</td>
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</table>
Sub-Portfolios - “Buckets”

- Five sub-portfolios identified at a WTD workshop
- Each sub-portfolio is aligned to different WTD strategies
- Funds will be allocated to each sub-portfolio by the Director and Senior Management
Asset Management

Regulatory

Resources & Energy

Operational Enhancements

Capacity Improvement

WTD Capital Sub-Portfolios
Portfolio Prioritization

- Multi-Criteria Analysis – Objective/measurable
- Example: Asset Management Sub-portfolio
  - Multi-criteria:
    - Condition of Asset
    - Asset Risk
    - Obsolescence
    - Organizational Impacts
<table>
<thead>
<tr>
<th>Rating</th>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>Full Operating Condition</td>
<td>The asset is functionally operational and predictive maintenance/failure rate does not indicate it is within 6 years of its predicted end of life.</td>
</tr>
<tr>
<td>2.0</td>
<td>Good Condition</td>
<td>The asset is functionally operational and predictive maintenance/failure rate indicates it is outside of the 6 years of its predicted end of life with some deficiencies noted but is not in need of immediate corrective action.</td>
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<tr>
<td>4.0</td>
<td>Fair Condition</td>
<td>The asset is functionally operational and predictive maintenance/failure rate indicates it is within 6 years of its predicted end of service life with some deficiencies noted and service life could be extended outside of the 6-year window through enhanced upkeep, refurbishment, shift in operational strategy, and/or enhanced maintenance.</td>
</tr>
<tr>
<td>6.0</td>
<td>Poor Condition</td>
<td>The asset is not reliably meeting its designed functionality in an acceptable manner and predictive maintenance/failure rate indicates it is within 2 years of the end of service life with many deficiencies noted and is in need of replacement/refurbishment. Service life could be extended outside of the 2-year window through enhanced upkeep, refurbishment, shift in operational strategy, and/or enhanced maintenance.</td>
</tr>
<tr>
<td>8.0</td>
<td>Very Poor Condition</td>
<td>The asset is not reliably meeting its designed functionality in an acceptable manner and predictive maintenance/failure rate indicates it is within 2 years of the end of service life with many deficiencies noted and is in need of replacement/refurbishment. Service life cannot be extended outside of the 2-year window through enhanced upkeep, refurbishment, shift in operational strategy, and/or enhanced maintenance.</td>
</tr>
<tr>
<td>10.0</td>
<td>Unserviceable Condition</td>
<td>The asset is in an unserviceable condition, has met or exceeded its usable service life, and is in a state of disrepair such that it cannot be recovered to any usable condition. The asset is no longer providing the beneficial service and originally designed functionality, which may include emergent issues.</td>
</tr>
</tbody>
</table>
Project Gate Reviews

- Capital projects are reviewed at 4 gates:
  - Gate 1 - Receive authorization to move forward with alternative analysis.
  - Gate 2 – Review alternatives and approve preferred alternative to move forward
  - Gate 3 – Review project baselines (scope, schedule, budget) and approval to proceed
  - Gate 4 – Project closeout report (project performance, lessons learned)
Project Gate Reviews

- To ensure the best investments, the following will be added to gates 1, 2, & 3:
  - Re-evaluate project priority relative to all other projects in its sub-portfolio
  - Decide to continue, put on hold, or cancel
Planned Implementation

Phased Approach:

  - October 2017 through February 2018

- Long-term: full buildout and integration of processes and procedures into structured program
  - March 2018 through September 2018
Interim/short-term processes

October - December 2017

- Identify all projects (already approved and new projects)
- Categorize projects into sub-portfolios
- Develop sub-portfolio ranking criteria
  - Five teams of subject matter experts
  - Consultant facilitating to ensure consistency across sub-portfolios
- Finalize sub-portfolio ranking criteria
- Prioritize all projects using sub-portfolio ranking criteria
Interim/short-term processes

January – February 2018

- Set initial capital expenditure to be included in the rate recommendation
- Review and revise based on various rate scenarios
- Set sub-portfolio allocations
- Balance sub-portfolios
Long-Term Buildout
March – September 2018

- Review lessons learned from 2019/2020 budget development
- Develop Portfolio Management decision structure
- Develop plan to replace existing decision structure
- Develop work plan for full Portfolio Management implementation
Long-Term Buildout

September 2018 – March 2019
  • Implement Portfolio Management work plan

March 2019
  • Achieve full implementation of Portfolio Management processes

March 2019 – Beyond
  • Continuous improvement
Questions?