Position Yourself For Infrastructure Funding With An Asset Management/Capital Improvement Plan

Hosted by:

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What we will discuss today:

01. What is Asset Management

02. What is a Capital Improvement Plan

03. How Does This Planning Help With Funding?

04. Where Do I Start?
What is Asset Management?
The Problem...

> Short-term Decisions On Long-term Investments
> Result: Underfunding Asset Maintenance, Renewals And Replacements
> Solution: AM And CIP
   > Funds For Capital Investment Without Large Rate Increases
> Properly Calculated Reserve = Revenue Stability
Why manage assets?

> Major Public/Private Investment
> Increased Knowledge = Better Financial Decisions
> Efficient And Cost-effective Operation
> Reliable Infrastructure = Economic Development
> Essential To Public Health And Safety
> Access To Financial Assistance
> Promote System Reliability, Resilience And Sustainability
What are typically considered assets?

> Assets = Something Useful or of Value
> Municipal Infrastructure Generally Include
  > Visible Infrastructure
  > Underground Infrastructure.
> Assets have a Life Cycle
Visible Infrastructure Assets

> Visible Assets Can Be Very Broad
> Visible Assets Could Include:
  > Roadways
  > Buildings
  > Swimming Pools and Recreational Facilities
  > Equipment and Vehicles
> These Assets are Easier Assess (Can Be Seen)
Non-Visible Infrastructure Assets

- Typically Consist of Underground Utilities
- Non-Visible Assets Could Include:
  - Sewer and Water Lines
  - Stormwater Piping
  - Gas Lines
- Harder To Assess Because They Are Not Visible.
- Also Easier to Neglect.
- May Not Have Good Records or Mapping
Pipeline Failure Curve

A projected deterioration pattern for 100 year pipe

Condition Classification

Excellent

Good

Fair

Poor

Very Poor

Percentage of Effective Life Elapsed

0 2 12 22 32 42 52 62 72 82 92

0.2 0.4 0.6 0.8 1

HRG

page 09
The Condition Of Underground Pipelines Continues To Deteriorate.

![Percentage of Pipe by Classification](image)

**Figure 2–8:** Shift in the Likely Condition Associated with the Aging Miles of Pipe in the Network (percentage of pipe by classification)
Roadway Failure Curve

PCI Rating Scale

100
Good
85
Satisfactory
70
Fair
55
Poor
40
Very Poor
25
Serious
10
Failed

Target PCI = 78
2016 SST PCI = 76
$1 for Rehabilitation Here
Significant Drop in Condition
Critical PCI = 63
Small % of Pavement Life

Will Cost $6 to $10 Here
Practical First Steps Toward Asset Management

While no formula is right for all systems, the following steps will leave you poised to better handle the future of your utility:

> Identify Assets, Age And Cost
> Rate The Condition Of Each Asset
> Determine The Expected Useful Life Of Each Asset
> Evaluate The Risk Exposure
> Develop Your Renewal Strategies
> Estimate The Required Expense
> Determine Year For Renewal
Identify assets and age

> Determine Location of Assets
  > Utilize GIS to Manage Effort
  > Separate Each Asset into Appropriate Plans
> Utilize Historical Records and Knowledge
  > Public Works Staff
  > Historical Mapping
Identify asset costs

> Cost Information
  > Purchase Price
  > Historical Bidding Information as Available
  > Replacement Costs
  > Operation and Maintenance Costs
Rate the condition of each asset

- Rating Criteria Varies Based on Asset
- Pavement/Roadway Conditions
  - PASER
  - Pavement Condition Index
- Pipeline Condition
  - NASSCO Rating Criteria
- Condition Assessment Can be Self Determined
Examples of condition assessment

> Roadway Condition Index

<table>
<thead>
<tr>
<th>Condition</th>
<th>PCI Range</th>
<th>General Maintenance and Rehabilitation Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>86 - 100</td>
<td>Minor maintenance to prolong condition</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>71 - 85</td>
<td>Routine maintenance to prolong condition</td>
</tr>
<tr>
<td>Fair</td>
<td>56 - 70</td>
<td>Maintenance and resurfacing required</td>
</tr>
<tr>
<td>Poor</td>
<td>41 - 55</td>
<td>Rehabilitation and resurfacing required</td>
</tr>
<tr>
<td>Very Poor</td>
<td>26 - 40</td>
<td>Major rehabilitation, resurfacing, and/or reconstruction required</td>
</tr>
<tr>
<td>Serious</td>
<td>11 – 25</td>
<td>Reconstruction required</td>
</tr>
<tr>
<td>Failed</td>
<td>0 – 10</td>
<td>Roadway has failed and requires reconstruction</td>
</tr>
</tbody>
</table>
Examples of condition assessment

> Generic Condition Index

<table>
<thead>
<tr>
<th>Condition Assessment</th>
<th>Rating</th>
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<tr>
<td>New Condition</td>
<td>5</td>
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<tr>
<td>Slight Deterioration</td>
<td>4</td>
</tr>
<tr>
<td>Moderate Deterioration</td>
<td>3</td>
</tr>
<tr>
<td>Significant Deterioration</td>
<td>2</td>
</tr>
<tr>
<td>Inoperable/Unserviceable</td>
<td>1</td>
</tr>
</tbody>
</table>
Practical first steps toward asset management

While no formula is right for all r systems, the following steps will leave you poised to better handle the future of your utility:

> Identify Assets, Age And Cost
> Rate The Condition Of Each Asset
> **Determine The Expected Useful Life Of Each Asset**
> Evaluate The Risk Exposure
> Develop Your Renewal Strategies
> Estimate The Required Expense
> Determine Year For Renewal
Determine the expected useful life of each asset

Useful Life Can Vary Based On Multiple Factors:
> Age/Material of System
> Current and Future Capacity of the System
> Asset Environment/Soil Conditions
> Traffic Impact
> Type of Use
Identifying risk exposure

Key factors to determining the Exposure Rating:

> **Redundancy** - What equipment backs up key assets within your utility? Redundancy = Reduced Risk.

> **Age of Asset** - Older assets nearing the end of their useful life have a higher probability of failure and increase the risk.

> **Consequence of Failure** - Would the failure cause the entire utility to stop delivering service, partial loss of service, or just reduce overall capacity? Greater impact to customer’s service = greater risk.
Preservation vs. Rehabilitation

PMP GOAL: “Applying the right treatment at the right time.”
Practical First Steps Toward Asset Management

While no formula is right for all systems, the following steps will leave you poised to better handle the future of your utility:

> Identify Assets, Age And Cost
> Rate The Condition Of Each Asset
> Determine The Expected Useful Life Of Each Asset
> Evaluate The Risk Exposure
> **Develop Your Renewal Strategies**
> Estimate The Required Expense
> Determine Year For Renewal

\[ \text{Capital Improvement Plan} \]
Develop Renewal Strategy

Strategies May Include:
> Increased Maintenance And Monitoring
> Change In Way Equipment Is Operated
> Repair
> Refurbish/ Rehabilitate
> Replace With Similar Item Or Improved Item
> Initiate Formal Study To Identify Most Cost Effective Options
What is A Capital Improvement Plan?
Practical First Steps Toward Asset Management

While no formula is right for all systems, the following steps will leave you poised to better handle the future of your utility:

> Identify Assets, Age And Cost
> Rate The Condition Of Each Asset
> Determine The Expected Useful Life Of Each Asset
> Evaluate The Risk Exposure
> Develop Your Renewal Strategies
> **Estimate The Required Expense**
> **Determine Year For Renewal**

"He who fails to plan is planning to fail."

Capital Improvement Plan
Capital Improvement Planning -> Cost Effectively Maintaining Your Assets

- Proper planning provides a sound basis to cost effectively maintain facilities.
- Needed repairs often deferred until grant or subsidized interest funding is available → resulting in an increase in emergency repairs and larger scale replacement projects.
- Information and communication are the keys to successful Capital Improvement Planning.
- You need to:
  - Assess the current condition of your infrastructure.
  - Identify ways to avoid premature and/or emergency failures.
  - Develop effective ways of communicating the need for system investments.
  - Calculate the costs to adequately operate your facilities, meet the public’s service expectations and comply with local, state, and federal requirements.
In an effort to keep costs/taxes/fees low, there is a tendency to make short term decisions and defer action on long term investments. Several factors contribute to this approach:

- The long service lives of assets and the effects of delayed/deferred maintenance or renewal/replacement do not become immediately apparent.
- Many assets are below ground or in locations where their condition cannot be readily established or easily monitored.
- Increased costs resulting from degraded asset conditions are difficult to quantify and assign to specific assets.

These factors often result in putting off asset maintenance/renewals/replacements.
Benefits of Capital Improvement Planning

✓ Defines scale of needs

✓ Provides link between planning docs and annual budgets

✓ Allows for systematic, simultaneous evaluation of potential projects

✓ Allows for prioritization and scheduling

✓ It pays for itself!
Key Steps to CI Planning

- Evaluate all assets and determine improvement needs
  - Condition
  - Age
  - Ability to meet current/future regulations
- Compile project listing
- Define preliminary improvement scope and rough cost
- Prioritize and schedule projects
- Consider risk, schedule, timing from AM Planning
- Establishes overall magnitude of need - $$
- Develop financing strategy
How Does Capital Improvement Planning Help With Funding?
Develop a Funding Strategy

- Utility's Financial Picture
  - Cash on hand
  - Outstanding debt
  - Investment needs

- Budgeting/Financing

- Project Understanding
  - Need
  - Benefits
  - Delimitations of delay
  - Priority: municipal needs
    - county/regional initiatives
  - True cost and schedule

- Leverage of Funds

- Subsidized Programs
  - Goals/initiatives
  - Requirements

- Packaging Projects/Marketing Plan

- Political Climate

**Financing Strategy Development**
Benefits of Capital Improvement Plans-Budgeting

> Synchronizes Capital And Operating Budgets
> Systematically Evaluates Competing Demands For Resources
> Prioritization That Reflects The Entity’s Long-term Goals And Objectives
> Identifies, Prioritizes, And Optimizes The Financing Of Capital Projects
> Projects are Forgotten
> Less Impacts From Political Changes
Benefits of Capital Improvement Plans-Support

- Shows Community Where and How Money is Spent
  > Build Support for Project
  > Show Fiscal Responsibility
  > Accountability
- Try to Make the Community a Stakeholder in the Process
Benefits of Capital Improvement Plans-Existing Revenue

Good Planning Allows Municipalities To:

> Fund Projects with Efficient use Existing Revues
> Plan Maintenance Improvements To Get Ahead Of The Lifecycle Curve
> Maintenance At The RIGHT TIME, With RIGHT SOLUTION!
  > Excessive Maintenance = Wasted Money
  > Indecision = Delay And Increased Cost
Benefits of Capital Improvement Plans-Future Revenue

Good Planning Helps Municipalities:
> Plan Future Revenue Needs
  > Justification and Accountability in Tax/Rate Increases
  > Ensures that Large Emergency Increases are Minimized
  > Take Advantage of Low Interest Rates
> Take Advantage of Efficiencies /Opportunities
  > Coordination With Other Work to Save Costs
  > Easier Utility Coordination
> Private Investment/Development
Benefits of Capital Improvement Plans-Grant Funding

Good Planning Helps Municipalities:
> Leverage Budgeted Funds
> Accurate Project Cost Estimates
> Match the Right Grants With the Right Projects
> Plan Grant Applications Within Appropriate Timeline
> More Opportunities for Community Support
Where do I Start?
Coordinate Your Asset Management and Capital Improvement Plans

• AM feeds into your CIP, helping to determine which projects should be done and when they should occur.
• CIP provides an overview of all anticipated projects over a period of time.
• Allows for the review of upcoming monetary needs against projected revenues and reserve fund levels to determine where additional and/or alternative funding will be needed.
• Allows for projects to be bundled together to facilitate financing/funding decisions.
Review Existing Management/Planning Practices

- Year-to-year planning/budgeting
- “What did we do last year?”
- Record-keeping
  - Paper
  - Individual electronic files
  - “What if Ed retires?”
Review Existing Management/Planning Practices

Questions to discuss:

• Who in your organization has the information/records/resources to facilitate planning? And in what format?
• Does your planning/budgeting process extend into the next five to ten years to accurately assess required renewal investments?
• Do your revenues adequately provide support for full life cycle costs?
• Are your community leaders engaged in an active, informed dialog regarding the planning and investments required to sustain your infrastructure?

→ Decide upon most appropriate method!
## Sample Roadway Inventory, Condition, and Ranking

<table>
<thead>
<tr>
<th>Roadway Name</th>
<th>From</th>
<th>To</th>
<th>Length (mile)</th>
<th>Ranking</th>
<th>Description</th>
<th>Comments</th>
<th>Date Repaved</th>
<th>Repaving Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center</td>
<td>Dead End</td>
<td>35th</td>
<td>0.05</td>
<td>1</td>
<td>Terrible Major cracking, actual crumbling, sections disintegrating, bricks below showing, major patching.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farragut</td>
<td>Dead End</td>
<td>Brighton</td>
<td>0.47</td>
<td>1</td>
<td>Terrible Complete loss of surface integrity, basically dirt. Half by Brighton, better about a 7.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple</td>
<td>Euclid</td>
<td>Bryant</td>
<td>0.03</td>
<td>1</td>
<td>Terrible Raveling over more than 50%. Multiple potholes developing, almost no surface area left.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple</td>
<td>Bryant</td>
<td>Dead End</td>
<td>0.03</td>
<td>1</td>
<td>Terrible Raveling over more than 50%. Multiple potholes developing, almost no surface area left.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Fremont</td>
<td>Forest</td>
<td>Forest</td>
<td>0.05</td>
<td>1</td>
<td>Terrible Massive cracking, multiple potholes forming. Several patches, mostly not holding, severe raveling in middle.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brighton</td>
<td>Summercr</td>
<td>Farragut</td>
<td>0.26</td>
<td>2</td>
<td>Bad Cross walk needs attention. Major longitudinal cracking, patching separating from base. Edges separating from sides.</td>
<td>2016 Scheduled for repaving, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crawford</td>
<td>Dead End</td>
<td>35th</td>
<td>0.06</td>
<td>2</td>
<td>Bad Multiple patches, transverse and longitudinal cracks, multiple potholes along edges.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crawford</td>
<td>35th</td>
<td>Kendall</td>
<td>0.03</td>
<td>2</td>
<td>Bad Spider cracking, multiple patches, transverse and longitudinal cracks.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lincoln</td>
<td>S.R. 4012</td>
<td>S.R. 4012</td>
<td>0.01</td>
<td>2</td>
<td>Bad Major cracking and raveling. Several potholes filled and separating, several more developing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple</td>
<td>Harrison</td>
<td>Euclid</td>
<td>0.03</td>
<td>2</td>
<td>Bad Major bloc and spider cracking, several potholes forming and raveling occurring often.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Fremont</td>
<td>Forest</td>
<td>Municipal Line</td>
<td>0.05</td>
<td>2</td>
<td>Bad Severe longitudinal and spider cracking, raveling in center. Potholes developing. Ross side much better.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. Fremont</td>
<td>Division</td>
<td>Jefferson</td>
<td>0.04</td>
<td>2</td>
<td>Bad Major spider cracking, some raveling, potholes developing in several areas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan</td>
<td>Madison</td>
<td>Jefferson</td>
<td>0.04</td>
<td>2</td>
<td>Bad Significant cracking, patching and separation, potholes developing and significant raveling. Intersection with Madison same.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woods</td>
<td>North</td>
<td>Tingley</td>
<td>0.06</td>
<td>2</td>
<td>Bad Major cracking, patching and separation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barr</td>
<td>Rhome</td>
<td>Greenvale</td>
<td>0.03</td>
<td>3</td>
<td>Poor Major spider cracking, much patching, some of which is separating, raveling and potholes forming.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barr</td>
<td>Greenvalle</td>
<td>Longmore</td>
<td>0.04</td>
<td>3</td>
<td>Poor Major spider cracking, much patching, some of which is separating, raveling and potholes forming.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barr</td>
<td>Longmore</td>
<td>Watson</td>
<td>0.05</td>
<td>3</td>
<td>Poor Major spider cracking, much patching, some of which is separating, raveling and potholes forming.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brighton</td>
<td>Watkins</td>
<td>Summer</td>
<td>0.08</td>
<td>3</td>
<td>Poor Major longitudinal cracking with some spider cracking causing potholes to develop.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division</td>
<td>Harrison</td>
<td>Fremont</td>
<td>0.05</td>
<td>3</td>
<td>Poor Major cracking and patching, several potholes developing, mostly near fremont and raveling along sides.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dunbar</td>
<td>Textor</td>
<td>Watkins</td>
<td>0.09</td>
<td>3</td>
<td>Poor Major cracking much of it sealed, top coming up from bedrock at sides, major patching some of which is cracking. Potholes developing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest</td>
<td>Dakota</td>
<td>Ralph</td>
<td>0.07</td>
<td>3</td>
<td>Poor Poor. Major cracking, some serious potholes, some patching, spider cracks that are separating from base Section by balph repaved. Like New. Intersection with balph good. Has some patch, but they are holding up well, some cracks but only minor. (Block cracking and some spider cracking. Some sealing, most needs to be done. Minor patching. Potholes by intersection with Lincoln. Crosswalk good.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawley</td>
<td>Lincoln</td>
<td>Bayne</td>
<td>0.06</td>
<td>3</td>
<td>Poor Poor. Major cracking, some serious potholes, some patching, spider cracks that are separating from base Section by balph repaved. Like New. Intersection with balph good. Has some patch, but they are holding up well, some cracks but only minor. (Block cracking and some spider cracking. Some sealing, most needs to be done. Minor patching. Potholes by intersection with Lincoln. Crosswalk good.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Sample Roadway Inventory, Condition, and Ranking

<table>
<thead>
<tr>
<th>Project #</th>
<th>Direction</th>
<th>Road Name</th>
<th>Road Type</th>
<th>MSJ/RDC</th>
<th>Distress Type</th>
<th>Volume Factor</th>
<th>Roadway Dimensions</th>
<th>$15.25</th>
<th>$10.00</th>
<th>$15.25</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SPRUCE</td>
<td>39816</td>
<td>3 80</td>
<td>1</td>
<td>1.50 3 15</td>
<td>1.23</td>
<td>$72.25</td>
<td>$72.2</td>
<td>$39.83</td>
<td>$72.2</td>
<td>$188.3</td>
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<td>2</td>
<td>SPRUCE</td>
<td>40097</td>
<td>3 85</td>
<td>1</td>
<td>1.50 2 20</td>
<td>1.35</td>
<td>$72.75</td>
<td>$72.7</td>
<td>$45.25</td>
<td>$72.7</td>
<td>$187.4</td>
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<tr>
<td>3</td>
<td>SPRUCE</td>
<td>39817</td>
<td>3 80</td>
<td>1</td>
<td>1.50 2 20</td>
<td>1.35</td>
<td>$69.25</td>
<td>$69.2</td>
<td>$33.75</td>
<td>$69.2</td>
<td>$162.0</td>
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<td>4</td>
<td>HILLSIDE</td>
<td>39729</td>
<td>3 80</td>
<td>2</td>
<td>1.35 2 20</td>
<td>1.35</td>
<td>$67.25</td>
<td>$67.2</td>
<td>$33.75</td>
<td>$67.2</td>
<td>$162.0</td>
</tr>
<tr>
<td>5</td>
<td>PARK CIRCLE</td>
<td>39726</td>
<td>3 80</td>
<td>2</td>
<td>1.35 2 20</td>
<td>1.35</td>
<td>$67.25</td>
<td>$67.2</td>
<td>$33.75</td>
<td>$67.2</td>
<td>$162.0</td>
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<tr>
<td>6</td>
<td>SPARKLE</td>
<td>39833</td>
<td>3 80</td>
<td>1</td>
<td>1      2 20</td>
<td>1.35</td>
<td>$59.50</td>
<td>$59.5</td>
<td>$28.25</td>
<td>$59.5</td>
<td>$142.5</td>
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<td>BRICKCLIFF</td>
<td>39908</td>
<td>3 80</td>
<td>1</td>
<td>1      2 20</td>
<td>1.35</td>
<td>$59.50</td>
<td>$59.5</td>
<td>$28.25</td>
<td>$59.5</td>
<td>$142.5</td>
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<td>8</td>
<td>MALL</td>
<td>89294</td>
<td>3 85</td>
<td>1</td>
<td>1      40 3 1</td>
<td>1.35</td>
<td>$75.75</td>
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<td>$35.85</td>
<td>$75.7</td>
<td>$174.0</td>
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<td>1</td>
<td>1      2 20</td>
<td>1.35</td>
<td>$75.75</td>
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<td>$35.85</td>
<td>$75.7</td>
<td>$174.0</td>
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<td>39819</td>
<td>3 80</td>
<td>1</td>
<td>1      2 20</td>
<td>1.35</td>
<td>$56.50</td>
<td>$56.5</td>
<td>$25.80</td>
<td>$56.5</td>
<td>$138.0</td>
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<tr>
<td>11</td>
<td>ASPEN</td>
<td>40002</td>
<td>2 80</td>
<td>1</td>
<td>1      1 1</td>
<td>1.35</td>
<td>$56.50</td>
<td>$56.5</td>
<td>$25.80</td>
<td>$56.5</td>
<td>$138.0</td>
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<tr>
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<td>ANNN</td>
<td>41323</td>
<td>3 80</td>
<td>1</td>
<td>1      2 20</td>
<td>1.35</td>
<td>$45.00</td>
<td>$45.0</td>
<td>$20.25</td>
<td>$45.0</td>
<td>$101.0</td>
</tr>
<tr>
<td>13</td>
<td>ANNN</td>
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**HRG Horner Reasoning & Consulting**

**AN EMPLOYEE-OWNED COMPANY**
# Desktop/"Manual" Planning Practices

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<th>Year Installed</th>
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<th>Original Planned Replacement Year</th>
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<th>Priority Rating</th>
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Electronic Planning Practices - GIS

• More Than Just “Mapping”
• Stormwater/MS4
• Utility Locations/Records/Real-time Updates
• Maintenance and Capital Planning – Asset Management
• Data Storage/Network
• Roadway/Pavement Records and Planning
• Regulatory Reporting
Capital Improvement Planning Makes Projects Happen

- Known magnitude of improvements puts community leaders at ease.
  - Negates concerns of unknown needs and expenditures
  - Informs revenue decisions.
- Budgeting for projects is easier since a plan is already in place.
- Allows for project bundling for construction or financing efficiencies.
- Funding can be strategically secured and leveraged
  - Capital Improvement Planning pays for itself
Final Goal – Develop Financial Strategy

Financing Strategy Development

- CIP
- Leveraging of Funds
- Subsidized Programs
  - Goals/Initiatives
  - Requirements
- Packaging Projects/Marketing Plan
- Political Climate
- Project Understanding
  - Need
  - Benefits
  - Detriments of delay
  - Priority: municipal needs
  - County/regional initiatives
  - True cost and schedule
- Budgeting/Financing
- Financial Picture
  - Cash on hand
  - Outstanding debt
  - Investment needs
The Southwestern Pennsylvania Commission (SPC) Water Resource Center (WRC) will promote regional collaboration on water topics; be a leader in facilitating coordination and education; and provide technical assistance to its member governments.

More information can be found at: www.spcwater.org