“Working Together - Finance and Engineer Perspective”

Asset Management Symposium – March 26, 2014
Who Are We?

- Population – 12,800
- Mixture of urban and rural landscapes
- Bedroom community to City of London and City of St. Thomas
- Largely agricultural base

The Municipality of Central Elgin is located within the County of Elgin in Southwestern Ontario
Context

• Services / Assets
  – Roads
  – Water
  – Waste Water
  – Fire Protection
  – Parks and Beaches
  – Arenas
Administration Philosophy

• “Team Approach” to major project implementation
  – Allows for a variety of “perspectives” for a given issue
  – Shares the work load between departments and staff
  – Allows a project to be undertaken and be the basis of further projects that may or may not be a departments responsibility (ie. PSAB)
History of Working Cooperatively

• Water Needs and Rate Analysis (2001, 2006)
  – Reviewed operating and projected capital expenses of Water System

• Waste Water Needs and Rate Analysis (2002)
  – Reviewed operating and projected capital expenses of Waste Water System
History of Working Cooperatively

• Master Finance Plan (2004)
  – Tax supported infrastructure
    • Roads
    • Non Roads – facilities, 2 arenas, 4 fire halls, street lighting
  – Supported by Engineering study
    • Roads Needs Study
    • Bridge Needs Study
    • Facility Condition Audit
      – Structural, Mechanical, Electrical
History of Working Cooperatively

• PSAB 3150
  – Mandated by the Province in 2010
  – Director of Finance requested that a steering committee of senior staff and management be struck to implement PSAB 3150 requirements
    • CAO
    • Director of Finance
    • Director of Physical Services
    • Asset Management/GIS Technician
    • Municipal Auditor
Transition from PSAB to Asset Management

• Engineering staff participated in the PSAB 3150 process
  – Limited value to engineering or for long range capital planning
  – Already had very detailed inventory and condition rating of major assets
    • Roads
    • Bridges
    • Water Systems
    • Waste Water Systems
    • Facilities
Transition from PSAB to Asset Management

– Forced engineering staff to fill data gaps on other items
  • Street Lighting
  • Parks Facilities and Structures
  • IT Computer Equipment
# Municipal Asset Replacement Value by Type

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Historical Cost</th>
<th>Accumulated Amortization 12/31/2012</th>
<th>Net Book Value 12/31/2012</th>
<th>Replacement Cost 2013 $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads and Bridges (Tax Supported)</td>
<td>$50,367,674</td>
<td>$15,558,518</td>
<td>$34,809,156</td>
<td>$100,881,380</td>
</tr>
<tr>
<td>Water System (Water Rate Supported)</td>
<td>$28,917,095</td>
<td>$4,793,630</td>
<td>$24,123,465</td>
<td>$51,383,771</td>
</tr>
<tr>
<td>Waste Water System (Waste Water Rate Supported)</td>
<td>$18,747,357</td>
<td>$4,409,783</td>
<td>$14,337,577</td>
<td>$31,765,467</td>
</tr>
<tr>
<td><strong>Total of Mandated Assets for Asset Management Plan</strong></td>
<td><strong>$98,032,126</strong></td>
<td><strong>$24,761,931</strong></td>
<td><strong>$73,270,198</strong></td>
<td><strong>$184,030,618</strong></td>
</tr>
</tbody>
</table>

- **Waste Water System** - $31,765,467 (17%)
- **Water System** - $51,383,771 (28%)
- **Roads and Bridges** - $100,881,380 (55%)
## Municipal Asset Replacement Value Roads (Tax Supported)

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<th>Replacement Cost 2013$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridges</td>
<td>4,507,067</td>
<td>1,652,201</td>
<td>2,854,867</td>
<td>10,678,556</td>
</tr>
<tr>
<td>Bridge Deck</td>
<td>756,874</td>
<td>103,413</td>
<td>653,460</td>
<td>2,337,900</td>
</tr>
<tr>
<td>Road Bases</td>
<td>36,158,119</td>
<td>7,999,325</td>
<td>28,158,795</td>
<td>69,527,852</td>
</tr>
<tr>
<td>Road Surfaces</td>
<td>8,945,614</td>
<td>5,803,579</td>
<td>3,142,034</td>
<td>18,337,071</td>
</tr>
<tr>
<td><strong>Total Tax Supported Capital Assets</strong></td>
<td><strong>$ 50,367,674</strong></td>
<td><strong>$ 15,558,518</strong></td>
<td><strong>$ 34,809,156</strong></td>
<td><strong>$ 100,881,380</strong></td>
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### Pie Chart:
- **69%** Bridges
- **18%** Road Bases
- **2%** Road Surfaces
- **2%** Bridge Deck

*Municipality of Central Elgin*
## Water Assets (Rate Supported)

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<tr>
<td>Water Meters</td>
<td>593,482</td>
<td>433,332</td>
<td>160,150</td>
<td>973,119</td>
</tr>
<tr>
<td>Water Mains</td>
<td>22,003,279</td>
<td>3,029,443</td>
<td>18,973,836</td>
<td>41,997,789</td>
</tr>
<tr>
<td>SCADA</td>
<td>1,191,142</td>
<td>279,557</td>
<td>911,585</td>
<td>1,393,509</td>
</tr>
<tr>
<td>Water Chambers</td>
<td>915,267</td>
<td>111,390</td>
<td>803,877</td>
<td>1,284,423</td>
</tr>
<tr>
<td>Water Facilities</td>
<td>4,213,924</td>
<td>939,908</td>
<td>3,274,016</td>
<td>5,734,931</td>
</tr>
<tr>
<td><strong>Total Water Capital Assets</strong></td>
<td><strong>$ 28,917,095</strong></td>
<td><strong>$ 4,793,630</strong></td>
<td><strong>$ 24,123,465</strong></td>
<td><strong>$ 51,383,771</strong></td>
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![Pie chart showing the distribution of water assets]
# Waste Water Assets

## Asset Type

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<tr>
<td>Wastewater Man Holes</td>
<td>919,841</td>
<td>191,933</td>
<td>727,908</td>
<td>2,224,348</td>
</tr>
<tr>
<td>Wastewater Mains</td>
<td>6,289,497</td>
<td>1,356,303</td>
<td>4,933,195</td>
<td>12,850,913</td>
</tr>
<tr>
<td>Wastewater Facilities</td>
<td>11,538,019</td>
<td>2,861,548</td>
<td>8,676,475</td>
<td>16,690,205</td>
</tr>
<tr>
<td><strong>Total Wastewater Capital Assets</strong></td>
<td><strong>$ 18,747,357</strong></td>
<td><strong>$ 4,409,783</strong></td>
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![Pie chart showing the distribution of assets](chart.png)

- **Wastewater Man Holes**: 53%
- **Wastewater Mains**: 40%
- **Wastewater Facilities**: 7%
Conclusions of Asset Management Plan

• Tax supported infrastructure (Roads and Bridges) reach sustainability in 10 years
  – 4% increase in Tax Levy every year for next 5 years
  – 2% increase in Tax Levy for years 6 to 10

• Water infrastructure
  – 3.6% increase annually (keeping with Rate Study)

• Waste Water infrastructure
  – 13.9% increase for first 4 years
  – 2.3% increase every year after
Next Steps

• Complete Phase two of the Asset Management Plan for Non mandated assets
  – Facilities
    • Buildings (Library, Medical Centre, 4 Fire Halls Operations Buildings)
    • 2 Arenas
  – Parks and Equipment
  – Fleet
  – Street Lighting
“Take Aways” of Working Collaboratively

• Able to share perspective and have a more viable deliverable in the end
• Workload gets distributed among departments
• Like it or not Engineering and Finance are intertwined and dependant on one another
• By working together it may be easier to provide a more comprehensive program that is based on degradation not depreciation
“Take Aways” (cont.’d)

• Engineering requires the expertise of finance to assist in identifying funding streams:
  – Development Charges
  – Rates
  – Taxation
  – Reserves

• Finance requires the expertise of engineering to provide adequate detail in the development of actual expenses to be funded
“Take Aways” (Cont.d)

• Provincial process for Asset Management contemplates Engineering and Finance working collaboratively.
  – State of Local Infrastructure
  – Desired Levels of Service
  – Asset Management Strategy
  – Financing Strategy
Thank You!

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Questions?