Organizational Culture & Asset Management

Canadian 2016 Public Sector Lean Summit

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Vision for Asset Management

What do we want to achieve?

How are we trying to achieve it?

How well are we doing?
OUR COMMON FUTURE

THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT
Municipal Infrastructure – The Backbone of Society
Toronto Board of Trade:

$6 Billion per year lost productivity

$15 Billion per year by 2031
FIGURE 2: BILLIONS OF DOLLARS IN DAMAGES FROM INCREASING FREQUENCY OF EXTREME WEATHER EVENTS IN THE UNITED STATES BETWEEN 1980 AND 2012

• Replacement value of municipal infrastructure = $80,000 per Canadian Household
• 34% is in fair, poor or very poor condition
## Figure 4: Target Reinvestment Rates vs Current Reinvestment Rate

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Lower Target Reinvestment Rate</th>
<th>Upper Target Reinvestment Rate</th>
<th>Current Reinvestment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potable Water (linear)</td>
<td>1.0%</td>
<td>1.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Potable Water (non-linear)</td>
<td>1.7%</td>
<td>2.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Wastewater (linear)</td>
<td>1.0%</td>
<td>1.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Wastewater (non-linear)</td>
<td>1.7%</td>
<td>2.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Stormwater (linear)</td>
<td>1.0%</td>
<td>1.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Stormwater (non-linear)</td>
<td>1.7%</td>
<td>2.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Roads and Sidewalks</td>
<td>2.0%</td>
<td>3.0%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Bridges</td>
<td>1.0%</td>
<td>1.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Buildings</td>
<td>1.7%</td>
<td>2.5%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Sport and Recreation</td>
<td>1.7%</td>
<td>2.5%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>
• Replacement value of municipal infrastructure = $73,000 per household in a large municipalities (over 100,000 pop) and $85,000 per household in small municipalities
• Only 19% of municipalities have a formal practice to consider climate change

• So….the needs could be even bigger than what has been reported
Infrastructure Lasts for Multiple Generations

We are building 2050 and beyond today!

“Don’t get stuck on stupid”
- LTG Russell Honoré, First Army, 2nd Infantry Division (Retired)
Vision for Asset Management

What do we want to achieve?

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Vision for Asset Management

Asset Management Processes should strive to...

- Lower infrastructure value per capita
- Give us infrastructure that can adapt to the effects of climate change
- Help in our efforts to mitigate climate change
- Procure infrastructure that provides the best value to our communities
- Measure sustainable performance of infrastructure systems
Vision for Asset Management

Asset Management is the practical mechanism in Canadian municipalities to make our communities sustainable.
Organizational Culture & Asset Management
• Lower cost
• Reduced environmental impact
• Minimal disruption to traffic during construction

Reusing 1900s vintage bridge piers
• Lower life cycle costs
• Long term planning horizon (50 to 100 years)
• Reduced risk of overflows into creeks/Lake Ontario
• Reduced risk of basement flooding
Reduced natural resource consumption
• Lower carbon footprint
• Reduced energy consumption
• Minimized social disruption (faster construction time)
• Increased worker safety (asphalt not as hot, less fumes)
• AND less expensive

Innovation in road reconstruction
Sustainability of infrastructure

Degree of collaborative decision making in a municipality

Research by Amy Vaillancourt at UNB
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Asset Management Processes should strive to...

- Encourage risk taking associated with innovative ideas
- Break down silos
- Learn from mistakes/poor practices
- Combat perception of the Gravy Train
Organizational Culture & Asset Management

Organizational Culture is key to achieving your Vision for Asset Management.
Leadership

Strong and effective leadership:

1) enables a team to establish a Vision for Asset Management, and

2) creates an Organizational Culture to achieve the Vision.
So...is your organizational culture ready to achieve your vision for Asset Management?
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For every complex problem there is an answer that is clear, simple, and wrong.

- H.L. Mencken