Why Performance Measurement Matters
Why Performance Measurement Matters

“Above all… measurement is meant to enable us to take purposeful action based on knowledge rather than opinion or guesswork.”

-Peter F. Drucker in the *Practice of Management*
Welcome and Learning Objectives
• Why performance measurement and why now?
• The role of finance in performance measurement
• Principles of effective performance measurement
• The difference between benchmarking and performance accountability.
• Introduction to Results Based Accountability
• Special issues with performance measurement
• Special issues in data presentation
Why does Performance Measurement Matter to You?

• What ways have you, personally, started to use performance data in your day to day life?
  – Bathroom scale?
  – MER for mutual funds?
  – Map My Run, Strava, My Fitness Pal?
  – Score in LOTRO?

• Why do you care about any of these things?
Why does Performance Measurement Matter for Government?

- “Value for Money”
- Transparency
- Funders require data (Infrastructure Ontario)
Familiar Areas of Performance Measurement

• Internal
  – Staff performance appraisals
  – Budget Variance Report
  – Other?

• External
  – Strategic Plans
  – Benchmark Reports (FIR, MPMP, OMBI)
  – Economic Development Reports (eg: Economist Livability Index)
  – Other?
What Issues Arise when you Commit to a Performance Measurement Framework?

• What is the purpose of the reporting?
  – Pay for performance?
  – Budget cutting?
  – Optimizing performance?

• Who is the audience of the reports and how sophisticated are they?
  – Internal management?
  – Councillors?
  – Taxpayers?

• What do I want them to know and not know?
  – “telling Council is not going to me any good.”
Downsides of Performance Measurement

• Ideas?
What do we mean by Performance?

Examples of metrics regularly seen in “performance reports”

• Regular tracking of activity
  – eg: number of fire calls, number of performance appraisals completed, number of development applications received etc.

• Tracking of performance to targets
  – eg: budget to actuals variance, emergency call response times, number of development applications processed on time, etc.

• Monitoring of Indicators
  – eg: credit rating, air quality, precipitation, GDP, construction starts, etc.

• Benchmarking
  – eg: Municipal Performance Measurement Program (MPMP), Ontario Municipal Benchmarking Initiative (OMBI), National Water and Wastewater Benchmarking Initiative (NWWBI), etc.
• Why performance measurement and why now?
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Why Finance?

• Typical finance role in a private sector corporation
• Finance already handles MPMP and often OMBI – experience and systems in place.
• Finance professionals have background and skills in managing and analyzing large data sets.
• Finance is the dumping ground for everything else no one wants to do. (Joke?)
Why not Finance?

• Performance Measurement is linked to financial savings rather than performance optimization.

• “Why should I report to those pencil heads about my road quality data?” Privileging of financial analysis over other professionals (engineers, social workers, health workers, lawyers).

• Offloading of managerial responsibility to Finance rather than self-ownership – “Finance told me to do it that way.”
Finance *Leads*, Services *Own*

- Finance provides the leadership, tools and framework …..

**BUT**

- Service Owners are accountable and provide direction on appropriate metrics and methodologies.
Who else could lead a corporate performance measurement initiative?

- Ideas?
- How might the initiative be different?
• Why performance measurement and why now?
• The role of finance in performance measurement
• **Principles of effective performance measurement**
• The difference between benchmarking and performance accountability.
• Introduction to Results Based Accountability
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Principles of Successful Performance Measurement

Recommendations for Strengthening Performance Measurement / Management Systems
Presentation to GFOA by Harry Hatry – Urban Institute

1. Determining what information will be useful and how to obtain it
2. Analyzing that information
3. Using the information

New report on PM best practices (Free) expected on Urban Institute website in about four weeks
Website: http://www.urban.org
Melinda’s Principles of a Successful Performance Measurement Framework

1. **Quality data**
   Data meets minimum standards while being efficient to collect

2. **Consistency in Collection**
   People responsible for collection know what they are being asked to do

3. **Consistency in Reporting**
   Reporting tools are consistent and comparable over time

4. **Potential for Analytics**
   Information is collected and stored in a manner that make analysis possible

5. **Clarity for audience**
   Audience can understand and use the resulting data

6. **Clarity of Purpose**
   Staff, managers, councillors know why you are collecting and reporting performance data and understand their roles.
### Consistency in Collection and Reporting

<table>
<thead>
<tr>
<th>Department</th>
<th>Service</th>
<th>Metric Type</th>
<th>COV Metric</th>
<th>2009</th>
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<th>2011</th>
<th>2012</th>
<th>2013F</th>
<th>2013</th>
<th>2013-12 variance</th>
<th>2013F - 2013A variance</th>
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<tbody>
<tr>
<td>Community Services</td>
<td>Social Supports Operations</td>
<td>Quantity</td>
<td>Carnegie Meals at Special Events</td>
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<td>3856.7%</td>
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<tr>
<td>Community Services</td>
<td>Social Supports Operations</td>
<td>Quantity</td>
<td>Carnegie Total Meals Served</td>
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<tr>
<td>References, Guidelines, Technical Support</td>
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Potential for Analytics

The Government Finance Officers Association found in 2013 that advanced technology was not widely used for performance analysis and one CIO refused to implement advanced dashboards until they had learned to collect and use the data they had.

Lessons from Performance Measurement Leaders:
A Sample of Larger Local Governments in North America


Simple Excel Based Data Collection Tool
<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can we make it happen?</td>
<td>Event correlation</td>
</tr>
<tr>
<td>What will happen?</td>
<td>Traffic impact, Weighted hotspot</td>
</tr>
<tr>
<td>What happened and why?</td>
<td>Pattern discoverer, Hotspot, Anomaly detection, GPS analysis</td>
</tr>
<tr>
<td>How are things going?</td>
<td>Dashboard, Scheduled report</td>
</tr>
</tbody>
</table>
Compared to other municipalities, Vancouver has more “good” pavements.

In the past 10 years, Vancouver has seen an increase in the quality of its priority pavements: Arterial, Bus Routes and Bike Routes.
Who knew? RT @andreareimer: Interesting budget tidbit from service metrics: apparently Calgary has the most "good pavement" in the country.
Clarity of Purpose

MPMP – Provincial Mandatory Monitoring Program
OMBI – Voluntary Benchmarking Sharing Program
Performance Appraisals – Staff Engagement and Improvement
Pay for Performance – Management Evaluation and Accountability
Other?
## Clarity of Purpose - Elements of an Accountability Framework

<table>
<thead>
<tr>
<th>Senior Leadership Ownership</th>
<th>Buy In is not enough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable Framework</td>
<td>No one wants to be accountable to unreliable data</td>
</tr>
<tr>
<td>Regular Reporting</td>
<td>Annual metrics in the budget report never get looked at</td>
</tr>
<tr>
<td>Local Reflection on benchmark data</td>
<td>OMBI (NWWBI, MPMP, etc.) is no replacement for local data with local interpretation</td>
</tr>
<tr>
<td>Vigorous Debate</td>
<td>Challenge the meaning of the results and push to find ways to “turn the curve” on poor results</td>
</tr>
<tr>
<td>Follow Up</td>
<td>Even without “targets” service owners need to be charged to demonstrate improvement over time.</td>
</tr>
<tr>
<td>AVOID</td>
<td>Tying performance results to pay, jobs, or other personal benefits.</td>
</tr>
</tbody>
</table>
Accountability Examples

• New York and Baltimore CityStat, Boston About Results, Results Minneapolis – meetings every two weeks.
• Vancouver – three “variance” meetings per year: year-end, Q2 Service Reviews and Q3 pre-budget.
• Windsor – annual Corporate Strategic Action Plan Report Card.
• OMBI – annual performance report publicized and circulated to all members
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Benchmarks – what are they good for?

Benchmarks are used in at least two ways in government performance measurement:

1. Comparisons to minimum standards whether set internally or externally

2. Comparisons to peer organizations
Comparison to External Standards

INDIVIDUAL HOME RESULTS

**Home Name:** HURON LODGE MUNICIPAL LONG TERM CARE HOME

**Local Health Integration Network:** Erie St. Clair

**City:** WINDSOR

**Postal Code:** N9G 1C7

**LTC Home Website:**

**Number of Beds:** 224

**Indicator results for this home**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PERCENTAGE OF RESIDENTS WHO HAD A RECENT FALL</th>
<th>PERCENTAGE OF RESIDENTS WITH WORSENING BLADDER CONTROL</th>
<th>PERCENTAGE OF RESIDENTS WHO HAD A PRESSURE ULCER THAT RECENTLY GOT WORSE</th>
<th>PERCENTAGE OF RESIDENTS WHO WERE PHYSICALLY RESTRAINED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>13.0 %</td>
<td>26.9 %</td>
<td>4.4 %</td>
<td>18.5 %</td>
</tr>
<tr>
<td>2011-12</td>
<td>14.5 %</td>
<td>26.3 %</td>
<td>3.6 %</td>
<td>19.1 %</td>
</tr>
<tr>
<td>Provincial Average 2012/13</td>
<td>13.6%</td>
<td>19.3%</td>
<td>2.9%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Benchmark</td>
<td>9%</td>
<td>12%</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Legend:**
- N/A: This home was not publicly reporting during the given year.
- -: Indicator result is not publicly reported. Indicators can only be calculated and publicly reported if the denominator meets a certain size (minimum of 30 resident assessments). Small homes may not always meet this reporting criterion.

**What is a benchmark?**
Benchmarks are markers of excellence to which organizations can aspire. HQO used an evidence-informed process and expert panel, composed of Ontario-based LTC home operators, clinicians and researchers, to produce Ontario benchmarks that represent good resident outcomes and high quality care. Additional information about benchmarks can be found in the Resources for Long-Term Care Homes section.
Comparison to Peers (OMBI)

**Investment Management**

What is the investment yield on an internally managed portfolio?

*Fig 15.1 Gross Percent Realized Return on the Total Internally Managed Investment Portfolio (based on the Average Adjusted Book Value)*

<table>
<thead>
<tr>
<th>Year</th>
<th>BAR</th>
<th>CAL</th>
<th>DUR</th>
<th>HAL</th>
<th>HAM</th>
<th>LON</th>
<th>MUSK</th>
<th>NIAG</th>
<th>OTT</th>
<th>SUD</th>
<th>TBAY</th>
<th>TOR</th>
<th>WAT</th>
<th>WIND</th>
<th>WINN</th>
<th>YORK</th>
<th>MED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2.55%</td>
<td>0.80%</td>
<td>2.11%</td>
<td>4.64%</td>
<td>4.60%</td>
<td>1.09%</td>
<td>N/A</td>
<td>2.58%</td>
<td>2.18%</td>
<td>3.32%</td>
<td>N/A</td>
<td>4.15%</td>
<td>4.03%</td>
<td>0.55%</td>
<td>N/A</td>
<td>5.02%</td>
<td>2.58%</td>
</tr>
<tr>
<td>2011</td>
<td>2.27%</td>
<td>1.26%</td>
<td>2.22%</td>
<td>4.97%</td>
<td>4.30%</td>
<td>1.40%</td>
<td>N/A</td>
<td>3.25%</td>
<td>2.20%</td>
<td>3.75%</td>
<td>N/A</td>
<td>4.16%</td>
<td>4.09%</td>
<td>1.12%</td>
<td>1.15%</td>
<td>5.05%</td>
<td>2.76%</td>
</tr>
<tr>
<td>2012</td>
<td>2.15%</td>
<td>1.29%</td>
<td>2.23%</td>
<td>4.90%</td>
<td>3.44%</td>
<td>1.40%</td>
<td>N/A</td>
<td>3.13%</td>
<td>1.90%</td>
<td>2.58%</td>
<td>N/A</td>
<td>3.91%</td>
<td>4.05%</td>
<td>1.34%</td>
<td>1.60%</td>
<td>4.26%</td>
<td>2.41%</td>
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</tbody>
</table>

Source: INVIT312 (Efficiency)
Comparison to Peers (NWWBI)

Waterworks Benchmark Results
(National Water and Wastewater Benchmarking Initiative)
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## Performance Measurement Frameworks

<table>
<thead>
<tr>
<th>Ontario Municipal Benchmarking Iniative</th>
<th>Harvard Balanced Scorecard</th>
<th>Results Based Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Level</td>
<td>Financial Performance</td>
<td>How much did you do?</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Efficiency</td>
<td>How well did you do it?</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Satisfaction (customer / stakeholder)</td>
<td>Is anyone better off?</td>
</tr>
<tr>
<td>Community Impact</td>
<td>Knowledge and Innovation</td>
<td>How much did it cost? (my add on)</td>
</tr>
</tbody>
</table>
How would these metrics sort on the frameworks from the previous slide?

1. Number of mothers seen at Well-baby clinic
2. Violent Crime Rate
3. Number of water main breaks per km of pipe
4. Non-driver error collisions per vehicle-km
5. Children ready for school using Early Development Instrument
6. Cost per open library hour
7. Number of graduates of job training obtaining employment
8. Percentage of people placed in supportive housing remaining in housing for more than one year.
What other related metrics would you need to see to explain these ones?

1. Number of mothers seen at Well-baby clinic
2. Violent Crime Rate
3. Number of water main breaks per km of pipe
4. Non-driver error collisions per vehicle-km
5. Children ready for school using Early Development Instrument
6. Cost per open library hour
7. Number of graduates of job training obtaining employment
8. Percentage of people placed in supportive housing remaining in housing for more than one year.
Introduction to Results Based Accountability™

- Designed for the public sector
- Acknowledges the difference between “population” and “performance” accountability
- Focus on outcomes – “turning the curve” to improve the lives of children, families and adults in our communities
- Recognizes the dependence of public sector agents on community partners
- Recognizes the urgency of change while maintaining the rigour of measuring outcomes

Results Based Accountability as developed by Mark Friedman in his book *Trying Hard is Not Good Enough*
Population v. Performance Accountability

Whole Communities
Multiple Stakeholders
Complex Factors

Agency Performance
Client Community
More Direct Control
Is it Population or Performance Accountability?

1. Number of mothers seen at Well-baby clinic
2. Violent Crime Rate
3. Number of water main breaks per km of pipe
4. Non-driver error collisions per vehicle-km
5. Children ready for school using Early Development Instrument
6. Cost per open library hour
7. Number of graduates of job training obtaining employment
8. Percentage of people placed in supportive housing remaining in housing for more than one year.
The Seven Population Accountability Questions

1. What are the quality of life conditions that we want for the children, families and adults in our community?
2. What would these conditions look like if we could see them?
3. How can we measure these conditions?
4. How are we doing on the most important of these measures?
5. Who are the partners that have a role to play in doing better?
6. What works to do better, including no-cost and low-cost ideas?
7. What do we propose to do?
The Seven Performance Accountability Questions

1. Who are our customers (consider primary and secondary customers)?
2. How can we measure if our customers are better off?
3. How can we measure if we are delivering services well?
4. How are we doing on the most important of these measures?
5. Who are the partners that have a role to play in doing better?
6. What works to do better, including no-cost and low-cost ideas?
7. What do we propose to do?
The larger an organization’s jurisdiction the more likely that these measures will be “Population” measures

Results Based Accountability Framework

<table>
<thead>
<tr>
<th>Effort</th>
<th>Quantity</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How much did you do?</td>
<td>How well did you do it?</td>
</tr>
<tr>
<td></td>
<td>Is anyone better off?</td>
<td>How much change / effect did you produce?</td>
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</tbody>
</table>

# | %
Results Based Accountability Framework in Action

<table>
<thead>
<tr>
<th>Effort</th>
<th>Quantity</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much did you do?</td>
<td>How well did you do it?</td>
<td></td>
</tr>
<tr>
<td># of mothers at well-baby clinic</td>
<td>% of mother returning to clinic more than once</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect</th>
<th>Is anyone better off?</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much change / effect did you produce?</td>
<td>What quality of change / effect did you produce?</td>
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<tr>
<td>#</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td># of babies who met height / weight milestones</td>
<td>% of babies who met height / weight milestones</td>
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</tbody>
</table>
## Results Based Accountability Framework in Action

<table>
<thead>
<tr>
<th>Effort</th>
<th>Quantity</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much did you do?</td>
<td>How well did you do it?</td>
<td></td>
</tr>
<tr>
<td># of violent crime calls to 911</td>
<td>% of violent crime calls responded within standard response rate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect</th>
<th>Is anyone better off?</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much change / effect did you produce?</td>
<td>What quality of change / effect did you produce?</td>
<td></td>
</tr>
<tr>
<td># Change in total number of violent crimes charged</td>
<td>% % change in violent crimes charged</td>
<td></td>
</tr>
</tbody>
</table>
Video on Issues in Community Service Performance Reliability

- Mark Friedman on How to Prove Community Impact
Exercise

• Using one of the performance measures we have looked at before answer these questions:
  – Is the measure a population or performance measure? Can it be both?
  – What other measures would you want to capture to help you decide what to do, or tell the story of the measure?
  – Using the Population or Performance accountability questions, brainstorm some ideas for what your municipality could do to improve the results of the measure.
Metrics for Exercise on Previous Slide

1. Number of mothers seen at Well-baby clinic
2. Violent Crime Rate
3. Number of water main breaks per km of pipe
4. Non-driver error collisions per vehicle-km
5. Children ready for school using Early Development Instrument
6. Cost per open library hour
7. Number of graduates of job training obtaining employment
8. Percentage of people placed in supportive housing remaining in housing for more than one year.
• Why performance measurement and why now?
• The role of finance in performance measurement
• Principles of effective performance measurement
• The difference between benchmarking and performance accountability.
• Introduction to Results Based Accountability
• Special issues with performance measurement
• Special issues in data presentation
“I don’t make predictions. I never have and I never will.” Tony Blair

Forecasting and Predictability

- High Forecast Value
  - Low Target Value

- High Forecast Value
  - High Target Value

- Low Forecast Value
  - Low Target Value

There shouldn’t be any metrics here
Exercise

Using the metrics we have used before plot them for predictability and controllability and explain why.
Leading, Lagging and Proxy Indicators

• **Leading indicators**
  – Measures of steps in the process to results
  – Eg: number of days I go to the gym; closure rate on police files

• **Lagging indicators**
  – Measures showing evidence of the result
  – Eg: # of pounds lost; percent change in crime rate

• **Proxy indicators**
  – Measures that suggest the presence of something else
  – Eg: BMI is a proxy for good health crime rate is a proxy for feeling safe
Leading, Lagging and Proxy Indicators

Example of a Logic Model

1. Leading
   - Sessions Publicized
     - # Announcements
   - Smokers Enroll
     - # Enrolled
   - Improved Long-Term Health
     - # with Smoking-related Illnesses
   - Complete The Program
     - # Completing
   - Stopped Smoking
     - # Who Stopped Smoking

2. Leading
   - Proxy

3. Leading

Figure 1
Exercise

Using the metrics list identify which ones are leading indicators, lagging indicators and proxies (of what).
• Why performance measurement and why now?
• The role of finance in performance measurement
• Principles of effective performance measurement
• The difference between benchmarking and performance accountability.
• Introduction to Results Based Accountability
• Special issues with performance measurement
• Special issues in data presentation
Who is the Audience?

• Public
  – Range of sophistication
  – Mostly no time to drill into the details

• Council
  – Range of sophistication
  – Mostly no time to drill into details
  – Often an agenda for the meaning of the data

• Senior Administrators
  – Higher sophistication
  – More time to drill into details (and more motivation)
  – Accountability for results and desire to present favourably
### Minneapolis Example of Audience / Message Evaluation

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Accountability – Monitor progress on strategic &amp; business plans</th>
<th>Resource allocation ($ and people)</th>
<th>Community transparency</th>
<th>Strategy &amp; policy development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td>Electeds, residents</td>
<td>Dept. leaders, electeds, staff</td>
<td>Residents</td>
<td>Dept. leaders, electeds, staff</td>
</tr>
<tr>
<td>Tool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Community indicators</td>
<td>X (residents)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>- Business planning</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>- Results Minneapolis</td>
<td>X (electeds)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- Budget process</td>
<td>X (annual, long-term)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>- Intelligent Operations Platform (IOP)</td>
<td></td>
<td>X (daily)</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Data Presentation Tips and Tricks

1. Only 3-4 chunks of information can be stored in working memory and therefore understood at a glance.

2. There are 3 attributes of a typical data presentation (excluding motion)
   - Form
     • Length, width, orientation, shape, size, enclosure
   - Colour
     • Hue, intensity
   - Spatial position in 2 dimensions
     • Right, centre, left, up, down

3. Therefore, using more than three forms for multiple points of data becomes difficult for the audience to quickly understand: eg: colour, name, size, shape, position.

Source: Show Me the Numbers 2nd Ed. Stephen Few, 2012
### The ten most expensive cities in the world

<table>
<thead>
<tr>
<th>City</th>
<th>WCOL Index</th>
<th>Rank Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>130</td>
<td>+5</td>
</tr>
<tr>
<td>Paris</td>
<td>129</td>
<td>+6</td>
</tr>
<tr>
<td>Oslo</td>
<td>128</td>
<td>+1</td>
</tr>
<tr>
<td>Zurich</td>
<td>125</td>
<td>+3</td>
</tr>
<tr>
<td>Sydney</td>
<td>120</td>
<td>-2</td>
</tr>
<tr>
<td>Caracas</td>
<td>118</td>
<td>+3</td>
</tr>
<tr>
<td>Geneva</td>
<td>118</td>
<td>+4</td>
</tr>
<tr>
<td>Melbourne</td>
<td>118</td>
<td>-2</td>
</tr>
<tr>
<td>Tokyo</td>
<td>118</td>
<td>-5</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>117</td>
<td>+5</td>
</tr>
</tbody>
</table>

**Note:** WCOL index (New York=100).  
**Source:** The Economist Intelligence Unit.
How many injuries and fatalities resulted from residential fires?

*Fig 10.2 Residential Fire Related Injuries and Fatalities per 100,000 Population (Urban and Rural)*

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Residential Fire Related Injuries per 100,000 Population (Urban and Rural) (FIRE105)</th>
<th>Residential Fire Related Fatalities per 100,000 Population (Urban and Rural) (FIRE110)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrie</td>
<td>4.26</td>
<td>4.26</td>
</tr>
<tr>
<td>Calgary</td>
<td>2.61</td>
<td>1.74</td>
</tr>
<tr>
<td>Hamilton</td>
<td>7.76</td>
<td>6.97</td>
</tr>
<tr>
<td>London</td>
<td>6.57</td>
<td>10.10</td>
</tr>
<tr>
<td>Ottawa</td>
<td>2.83</td>
<td>2.80</td>
</tr>
<tr>
<td>Greater Sudbury</td>
<td>5.66</td>
<td>4.37</td>
</tr>
<tr>
<td>Thunder Bay</td>
<td>9.17</td>
<td>11.99</td>
</tr>
<tr>
<td>Toronto</td>
<td>1.98</td>
<td>2.90</td>
</tr>
<tr>
<td>Windsor</td>
<td>9.70</td>
<td>16.12</td>
</tr>
<tr>
<td>Median</td>
<td>5.66</td>
<td>4.37</td>
</tr>
</tbody>
</table>

*Source: FIRE105, FIRE110 (Community Impact)*
To better understand the satisfaction levels among businesses, and enable comparison to 2013, an additional sample of 289 business owners in Vancouver were asked about their overall level of satisfaction with the City (this time using the same 5pt scale of satisfaction used in Budget 2013) as well as the reasons behind their ratings.

The satisfaction results using the 5-point scale are equivalent to those for Budget 2013.
The following table summarizes the year-to-year budget figures from 2010 to 2013 and the 2014 proposed budget.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programs</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Police Parking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Recoveries, Grants and Donations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Recoveries</td>
<td>12.0</td>
<td>11.4</td>
<td>12.0</td>
<td>12.3</td>
<td>12.1</td>
</tr>
<tr>
<td>Other</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Miscellaneous Revenue</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$13.6</td>
<td>$12.9</td>
<td>$13.5</td>
<td>$13.8</td>
<td>$13.9</td>
</tr>
<tr>
<td>Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patrol</td>
<td>100.4</td>
<td>101.7</td>
<td>107.9</td>
<td>115.6</td>
<td>116.9</td>
</tr>
<tr>
<td>Investigations</td>
<td>61.0</td>
<td>61.3</td>
<td>67.6</td>
<td>68.3</td>
<td>68.2</td>
</tr>
<tr>
<td>Operational Services</td>
<td>34.4</td>
<td>37.9</td>
<td>38.6</td>
<td>37.5</td>
<td>38.4</td>
</tr>
<tr>
<td>Administration</td>
<td>10.8</td>
<td>10.8</td>
<td>12.3</td>
<td>11.5</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>$206.8</td>
<td>$211.7</td>
<td>$226.5</td>
<td>$232.8</td>
<td>$234.9</td>
</tr>
<tr>
<td><strong>Net Operating Budget</strong></td>
<td>$ (193.2)</td>
<td>$ (198.8)</td>
<td>$ (213.0)</td>
<td>$ (219.0)</td>
<td>$ (221.0)</td>
</tr>
<tr>
<td><strong>Capital Budget</strong></td>
<td>$ 46.9</td>
<td>$ 11.7</td>
<td>$ 2.2</td>
<td>$ 1.4</td>
<td>$ 0.3</td>
</tr>
</tbody>
</table>

Note: Some figures may not add due to rounding

* The 2013 Operating Budget has been restated for re-organizations between departments to
## Vancouver Water Dashboard

### Annual Precipitation (Vancouver.weatherstats.ca)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1224.2</td>
<td>1025.8</td>
<td>1090.6</td>
<td>1207</td>
<td>1068.5</td>
<td>1211.3</td>
<td>N/A</td>
<td>943.5</td>
</tr>
</tbody>
</table>

### Water Consumption Per Capita - Residential

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

### Linear (Water Consumed Per Capita - Residential)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

### Maximum Water Pipe Length (NDA):

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17.3</td>
<td>12.45</td>
<td>12.45</td>
<td>12.45</td>
<td>12.45</td>
<td>12.45</td>
<td>12.45</td>
<td>12.45</td>
</tr>
</tbody>
</table>

### Number of Water Connections Replaced

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

### Water Quality

- % of samples with turbidity within Health Canada acceptable range
- Water Consumed Per Capita (litres) - Residential
- Water Consumed Per Capita (litres) - Total
- Km of Water Pipe Replaced

### Water Quantity

- Water Consumed Per Capita - Residential
- Water Consumed Per Capita - Total
- Water Connections Replaced

### Water Dashboard

- # of main breaks
- # of Service Connection Breaks
- Preferred Trend for Metric (Up/Down/Neutral/NA)
- Level of metric predictability (High/Medium/Low)
- Level of metric controllability (High/Medium/Low)
- Reporting Schedule

### Water Quality

- % of samples with turbidity within Health Canada acceptable range
- Water Consumed Per Capita (litres) - Residential
- Water Consumed Per Capita (litres) - Total
- Km of Water Pipe Replaced

### Water Quantity

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- Water Consumed Per Capita - Total
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- Water Consumed Per Capita (litres) - Total
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### Water Quantity

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- Water Consumed Per Capita - Total
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- Level of metric predictability (High/Medium/Low)
- Level of metric controllability (High/Medium/Low)
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- Water Consumed Per Capita (litres) - Total
- Km of Water Pipe Replaced

### Water Quantity

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- Water Consumed Per Capita - Total
- Water Connections Replaced

### Water Dashboard

- # of main breaks
- # of Service Connection Breaks
- Preferred Trend for Metric (Up/Down/Neutral/NA)
- Level of metric predictability (High/Medium/Low)
- Level of metric controllability (High/Medium/Low)
- Reporting Schedule
Infant Mortality rates by neighborhoods, 2001-2010

Infant mortality rates per 1000 live births
- 0.0 - 2.5
- 2.6 - 4.4
- 4.5 - 6.0
- 6.7 - 8.6
- 8.7 - 21.0

Created on: 10/26/12  Source: Minnesota Department of Health
Infant Mortality Rates by Race/Ethnicity
(Number of Infant Deaths per 1,000 Live Births)

Source: Minnesota Department of Health
Conviction Rate on Domestic Violence Cases

Source: CAO
“The Quiet Movement to Make Government Fail Less Often”

“None of this work is sexy. Rigorous evaluation, randomized trials and social impact bonds will never stir the political passion that calls for universal health insurance or lower taxes do. If anything, measurement and accountability are destined to provoke more opposition – from interest groups that have something to lose – than support. (This opposition often takes the form of, “Measurement is hard,” as if that were a reason to skip it.)”

Thanks!

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