Smarter Government — the Data, the Map, & the Method

University of Virginia
Data Science for the Public
Good Forum
Distinguished Speaker Series

Governor Martin O’Malley
Democrat
Maryland 2007–2015
The ability to model, measure, and map our built and our natural environment — in real-time — in ways all can see...
The ability to manage dynamic systems — regardless of scale — in order to achieve better results for individual people.
In this new way of governing, collaboration is the new competition.
“It is from the numberless diverse acts of courage and belief that human history is shaped. Each time a man stands up for others, or strikes out against injustice, he sends forth a tiny ripple of hope.”

– Robert Kennedy
Belief Space and the Internet of Things
A new way of leadership

- Entrepreneurial
- Performance Measured
- Interactive
- COLLABORATIVE
The Changing Nature of Leadership
Transforming organizations

AUTHORITY

TRUTH

Shared Understanding
Old Tenets of City Government

- If the Mayor really wants to know, we can find out. But we’ll have to pull all of our people off their other jobs. And it will take weeks.
If the Mayor really wants to know, we can find out. But we’ll have to pull all of our people off their other jobs. And it will take weeks.

We’ll get to that as soon as we can, but it will take a few months because our budget was cut last year.
Old Tenets of City Government

- If the Mayor really wants to know, we can find out. But we’ll have to pull all of our people off their other jobs. And it will take weeks.
- We’ll get to that as soon as we can, but it will take a few months because our budget was cut last year.
- That wouldn’t work, here, because: a) This is the way we’ve always done it; b) We’re already doing that; or c) We tried that once and it didn’t work.
Old Tenets of City Government

- If the Mayor really wants to know, we can find out. But we’ll have to pull all of our people off their other jobs. And it will take weeks.
- We’ll get to that as soon as we can, but it will take a few months because our budget was cut last year.
- That wouldn’t work here because: a) This is the way we’ve always done it; b) We’re already doing that; or c) We tried that once and it didn’t work.
- I hope everyone forgets about this question before next year’s annual budget hearing...
CitiStat Tenets

- Accurate and timely intelligence shared by all
- Rapid deployment of resources
- Effective tactics and strategies
- Relentless follow-up and assessment
Strategic Goals with Public Deadlines
# Public Facing Dashboards

### Overall Progress

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland Jobs Recovered Since Great Recession Bottom</td>
<td>144,000</td>
</tr>
<tr>
<td>Maryland Unemployment Rate</td>
<td>6.0%</td>
</tr>
<tr>
<td>National Unemployment Rate</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

### Total Annual Skills Training Completions

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>42,099</td>
</tr>
<tr>
<td>FY 2012</td>
<td>36,513</td>
</tr>
</tbody>
</table>

### Credit-Based Enrollments at Community Colleges

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>145,085</td>
</tr>
<tr>
<td>FY 2009</td>
<td>128,093</td>
</tr>
</tbody>
</table>

### Associate's Degrees Awarded by Community Colleges

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>14,269</td>
</tr>
<tr>
<td>FY 2003</td>
<td>10,371</td>
</tr>
</tbody>
</table>

### Maryland Veterans Unemployment Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2013</td>
<td>5.9%</td>
</tr>
<tr>
<td>CY 2012</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

### Veterans Placed into Jobs by One-Stop Career Centers

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>5,372</td>
</tr>
<tr>
<td>FY 2009</td>
<td>5,651</td>
</tr>
</tbody>
</table>

### Veterans Unemployment Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2013</td>
<td>5.9%</td>
</tr>
<tr>
<td>FY 2009</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

This site was last updated on December 3, 2014.
But, here’s the thing,...

None of this works unless the leader insists — *and drives* — a repeating cadence of collaboration and follow-up.
Repeating Cadence of Collaboration
Improving Public Safety
We deployed police to where crime was actually happening...

200 Police thru COPS
1999 Baltimore City Homicides and Shootings
Baltimore City Homicides and Shootings

2000
Baltimore City Homicides and Shootings

2001
2002

Baltimore City
Homicides and Shootings
Baltimore City Homicides and Shootings

2003
Baltimore City Homicides and Shootings

2004
Baltimore City Homicides and Shootings

2005
Baltimore City Homicides and Shootings

2006
Baltimore City Homicides and Shootings

2007
Results: From 2000 – 2009
Baltimore Achieved the Biggest Reduction in Part One Crime of any Major City in America

Managing by politics and excuses....
...giving way to managing for better results
Data-driven Decision Making

LAPD’s data-driven crime fighting evolution

- Stove-piped
- Intuition based
- Query based
- Map-Making

2012

Shared by All
- Evidence based
- Alert based
- Analytics

2017
Repairing Roads and Bridges
Minnesota's I-35w Bridge Collapse
Evening Rush Hour
August 1, 2007
A New Way of Governing is Emerging

Focused on results; driven by “what works?”
A New Way of Governing is Emerging

Focused on results; driven by “what works?”
A New Way of Governing is Emerging

Focused on results; driven by “what works?”
A New Way of Governing is Emerging

Focused on results; driven by “what works?”

- All Bridges
- Bridge Conditions
- Traffic Volume
- Bridge Investments
Clean Water
Predictive Analytics

Restoring the health of the bay
2007 Chesapeake Bay Health Report Card

C- 40
2008
Chesapeake
Bay Health
Report Card
C - 43
2009 Chesapeake Bay Health Report Card

C

46
2010
Chesapeake Bay Health Report Card

C-
42
2011
Chesapeake Bay Health Report Card

D+ 38
2014
Chesapeake Bay Health Report Card
2016 Chesapeake Bay Health Report Card
2017 Chesapeake Bay Health Report Card
Chesapeake Bay health shows a significantly improving trend despite many pressures on the Bay and its watershed. From 2006 to 2017, the overall average grade improved from a D+ to a C. For more information, visit chesapeakebay.ecoreportcard.org.
So,...

Embrace a radical commitment to openness and transparency.

Measure Performance to lift up your leaders.

Have the courage to set Public Goals with Deadlines.
Start, and don’t stop.
Getting things done
Citizens Affecting Real Change