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

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- 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
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
Baltimore City Homicides and Shootings

1999
Baltimore City Homicides and Shootings

2001
2002

Baltimore City Homicides and Shootings
Baltimore City Homicides and Shootings

2003
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?”

All Bridges

Bridge Conditions
A New Way of Governing is Emerging

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A New Way of Governing is Emerging
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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
2010 Chesapeake Bay Health Report Card

C- 42
Chesapeake Bay Health Report Card

2011

D+ 38
2012
Chesapeake
Bay Health
Report Card

C

47
2014 Chesapeake Bay Health Report Card
2016
Chesapeake Bay Health Report Card

C 54
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