Sustainable Approaches to Public Problem-Solving Require Intuitive Thinking— and Collaboration

BY JOSEPH A. CURTATONE AND DR. MARK ESPOSITO

For public officials, the law of unintended consequences needs no introduction. It's hard to find a better example than what happened to Somerville after Interstate 93 and the McGrath Highway's McCarthy Overpass were built through the city's heart decades ago.

The linear, engineering-based logic was simple: Highways free of traffic lights would eliminate traffic congestion for drivers heading in and out of Boston. But the impact on Somerville was complex, and the ensuing ripple effects were dynamic. Neighborhoods were cut off from one another. Numerous rail and trolley stops were eliminated. Economic development was stymied. Air pollution led to higher rates of heart disease, asthma and other ailments among people living in the shadows of the highways. Somerville became less walkable and bikeable, contributing to rising childhood obesity rates.

That the construction of I-93 and the overpass might lead to more childhood obesity seems obvious in hindsight. People know that an event or decision in one realm can cause ripple effects in other realms—it's intuitive. Yet in creating public policy, we frequently fail to think in terms of interrelated systems.

In Somerville, we're working to bring this kind of intuitive, systems-focused

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PHOTO BY ERIC KILBY

An aerial view shows the density of housing in Somerville, which sits just outside of Boston. The city is working with stakeholders to holistically examine complex, seemingly intractable issues such as housing affordability and opioid addiction.

thinking into the policy-making process in partnership with an internationally acclaimed systems-thinking course, now in its fourth year at Harvard University (scholar.harvard.edu/markesposito/classes/systems-thinking). Somerville's NEXUS (Network for Exploring and Understanding Systems) Policy Fellowship Program is bringing six "systems thinkers" trained at Harvard to Somerville, where they will work with stakeholders over the next year to holistically examine complex,

seemingly intractable issues the city and residents face, such as housing affordability and opioid addiction.

The NEXUS fellows will work with staff from the city's SomerStat Office of Innovation and Analytics, thinking holistically about how, for instance, a policy decision regarding affordable housing might affect education and public health, and vice versa. The program aims to eventually engage both city officials and

residents alike in thinking about issues facing the community not as isolated threads but as part of an interwoven community fabric.

This isn't a theoretical exercise. It's about applying this holistic way of thinking in a practical way to real-world problems. Opioid abuse and overdose, for example, is an urgent and critical issue facing Somerville and other cities, and intuitively we know that there are many factors driving the epidemic. It's a question that the fellows could examine with a wide-angle lens, trying to understand how this issue meshes with others such as education, housing and social cohesion within the community.

It's also another example of Somerville looking to collaborate with those outside municipal government, casting new perspectives on long-standing issues and recognizing what we've learned over the years: that changing the systems that shape the environment in which people live, work and play needs buy-in from everyone—from the grassroots to the mayor's office. A top-down plan cannot address the needs of a diverse community, nor can it be sustained over the long haul, because leadership has limited time to devote to any single program, and leadership changes over time. Cultivating a strong grassroots effort across public and private sectors is the only way that efforts to tackle the larger, systemic problems that a city faces can take root, be sustained and grow.

As for childhood obesity, Somerville has employed systems thinking and a collaborative, community-based approach to tackle that problem as well. The city's Shape Up Somerville program (www.somervillema.gov/departments/health/sus) instituted healthier school food menus and policies focused on getting kids active at school and beyond. The city's infrastructure, zoning and planning efforts aim to make the city more walkable and bikeable. Parks, open spaces and community events invite people out. Families have better access to healthier foods through Shape Up–approved restaurants as well as farmers markets and a year-round mobile market where people can use their SNAP and WIC benefits. And the city's urban-agriculture ordinance makes it easier to grow fresh, healthy foods at home. By attacking the problem of childhood obesity holistically, Somerville created a model that has achieved real, measurable results. Fewer Somerville children were obese or overweight after two full years of the intervention. Because of its results, Shape Up Somerville has been cited by First Lady Michelle Obama's "Let's Move" program.

We live in the era of Big Data. While number-tracking and crunching have deepened our understanding of issues, however, data analytics is mostly aimed at figuring out linear relationships. The other piece of the puzzle is discerning complex webs of *interrelationships*—the broader, more holistic approach to policymaking that we need to tackle problems that are rarely linear. ✸

original data collection, multi-method case studies, preference surveys, online databases, and U.S. Census Bureau studies. While all of these approaches provide useful information, the authors argue that each methodology has its limitations. The authors take lessons learned from previous methods and offer several lessons for the AARP to apply in their ongoing development of an index to measure community livability. To read the report, visit www.aarp.org/ppi and click Publications.

Social Media

A free report from IBM's Center for the Business of Government, *A Manager's Guide to Assessing the Impact of Government Social Media Interactions*, addresses the question of how governments should measure social media use. According to the author, Dr. Ines Mergel, the report will guide public managers through the process of understanding data and provide mission-relevant insights. Mergel argues that social media is an important signaling function for government organizations, and with small adjustments agencies can increase their successful social media interactions. The report presents the most common measurement practices used in government. They include breadth, depth, loyalty, sentiments through qualitative insights, and combining offline and online data. There is also a guide on how to make a business case with social media numbers to understand impact. One section lists the most common—and currently free—social media measurement tools. To download the thirty-eight-page free report, go to www.businessofgovernment.org; click Reports at top of page, and then enter the title of the report or author's name in the search box. ✸