Tracking Boston’s Progress With Just One Number

By JESS BIDGOOD  OCT. 8, 2015

BOSTON — City Hall is humming with data.

Traffic engineers can draw on troves of it from a mapping app, Waze, as they seek to relieve rush-hour congestion here. The commissioner of public works has up-to-date statistics on potholes and burned-out streetlights. The city’s chief diversity officer can instantly look at the gender and racial breakdown of city employees on a digital dashboard.

Now city officials are hoping to corral their data on issues like crime, housing for veterans and Wi-Fi availability and turn them into a single numerical score intended to reflect the city’s overall performance.

The mayor’s chief of staff, Daniel Koh, is working with performance analysts to develop an algorithm that will determine this singular statistic, as well as a way to visualize it. Mr. Koh will announce the effort, which is called CityScore, on Thursday night during a talk at TEDxCambridge, a speaking event here.
“It’s a way for the mayor to say, in a given day, how well are we doing to meet our targets, or how much improvement do we need to meet our targets?” Mr. Koh said.

The effort, which experts say is among the first — if not the first — of its kind, seems a natural and brainy ambition for a city that prides itself on its growing innovation economy and its proximity to some of the nation’s top universities.

“This actionable overview of city metrics will help us improve city services and make our city safer and smarter,” Mayor Martin J. Walsh said in a statement.

But there are questions on how useful a single number can be to city government — an enterprise that is extremely complex — and on how vastly different metrics, like library visits and fire department responses, will be weighted within the same algorithm.

The initiative comes as many cities, including Los Angeles, New York and Houston, make data and analytics a hallmark of 21st-century governance.

“It’s building on two developments in big-city government in the U.S.,” said Anthony Townsend, the author of “Smart Cities: Big Data, Civic Hackers, and the Quest for A New Utopia.”

“The first is increased data collection within some agencies,” he said, “and an increased emphasis on performance-based management by mayors.”

Stephen Goldsmith, the director of Data-Smart City Solutions, an initiative by the Harvard Kennedy School’s Ash Center, said that cities were looking to statistics programs, using principles of open data and exploring how to visualize their findings with applications.

“What’s happened in Boston, I think,” Dr. Goldsmith said, “is that all of those things are coming together.”
Mr. Walsh has tried to emphasize data-driven governance: He and some of his cabinet members have personalized dashboards showing crucial metrics in their offices, which was inspired by a visit Mr. Walsh took to the office of former Mayor Michael R. Bloomberg of New York.

CityScore, Mr. Koh said, will try to take all that data and turn it into a useful statistic, though not one that is intended to supplant the mayor’s visits to neighborhoods or his conversations with residents. Appropriate for a sports-crazed city, the effort was inspired by baseball.

“It literally started with the conversation around the government batting average,” Mr. Koh said.

The score will be available to the public, as will the formulas that go into it, and other cities will be encouraged to use them.

The analysts have created scores for things like energy consumption and crime, based on whether city targets are being met or their numbers change over time, and they will roll those into a final score. It is not terribly complicated; the formula, said one city analyst, Stefanie Costa Leabo, “doesn’t go much beyond averages and standard deviations.”

They have not yet decided how to weight metrics against one another. Crime and public safety, the analysts said, will probably receive a higher weight. “We need to figure out the best way to weight these things, and there will be some that will be somewhat political,” Mr. Koh said, adding that those decisions could change later.

But Dr. Townsend, the author of “Smart Cities,” wondered how useful the final score would be. “It seems to me like an unnecessary oversimplification,” he said.

Mr. Koh said CityScore would be a useful way for a busy mayor leading a complicated city to gauge success or failure. “If we have the tools to better
measure our performance,” he said, “it’s our fiduciary duty to do that.”

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