



PERSPECTIVE

Tips for Powerhouse Dashboards



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Communicating information about cities to both leaders and citizens has become increasingly important as transparency is seen as a key to efficiency and the ability to garner trust. As a 2017 report from the Volcker Alliance put it, “Legislators, advocacy groups, executive branch officials, and citizens are at a huge disadvantage if it is extremely difficult or even impossible for them to dig out the data they need.”

One of the most useful ways for cities to provide just this kind of information is through dashboards, which can be graphically appealing ways to give users information they need in a quick, concise fashion. Multiple cultures have a saying similar to “a picture is worth a thousand words.” The parallel here is “a dashboard is worth a thousand data points.”

But creating powerful, useful information that will attract users isn’t easy, so we’ve turned to experts in the field to assemble the following list of ten concrete approaches that cities should consider when developing or improving their dashboards.

Knowing your audience is key

“The best piece of advice I have is to design from the outside in, not the inside out,” said Don Kettl, co-author (with William D. Eggers) of *BridgeBuilders: How Government Can Transcend Boundaries to Solve Big Problems* (Harvard Business Review Press, 2023). This is particularly important for city dashboards because they may be serving two very different audiences, or sometimes a combination of both: the government leaders who want an easy way to understand what’s happening in the institution they serve, and residents who want to understand more about their cities and the value they are getting from their tax dollars.

Be selective in the data you display

As Mark Funkhouser, founder and president of Funkhouser and Associates, said, “Too many dashboards are scattered with too many concepts, and sometimes even with a lot of different measures that don’t get to the core concepts.” One key to selecting the measures on which a dashboard focuses is to concentrate on the missions of the organization, and then

give careful thought to the information that people really want to see. “You can’t assume you know what the residents care about,” Funkhouser said. “So, you need to do the work of finding this out with an ongoing dialogue with residents,” and then design a dashboard that shows those things.

Let people drill down for more detail

Devin LuBean, user experience leader at Domo, a software company that helps people create data experiences, said: “Some people just say to keep it simple, but you may be dealing with complex data, so I like to think of it more like a kind of progressive disclosure. Users see one or two important things and then click to get to another part of the dashboard for more detail, rather than plopping them down to the destination.”

Refresh the dashboard regularly and provide the date of the latest refresh

Understaffed governments can easily allow dashboards to fall out of date—particularly when there’s a great deal of manual work involved in updating them frequently. But this can come at a cost. “When users see that a dashboard isn’t updated, they don’t check back,” said Julian Metcalf, partner of GPP Analytics Inc., a consulting firm in performance auditing, internal auditing, co-sourcing, and data analytics.

Rock Regan, alliance manager for system integrators at Qlik (a company that helps organizations turn data into action) and one-time chief information officer of Connecticut, said, “Anybody who builds a dashboard should have an indication of how fresh the data is.” Places that provide this kind of information are a step ahead of the pack. Consider the dashboard the City of Mesa, Arizona, built. It shows “computer-aided dispatch events,” or the calls for service dispatched to Mesa police patrol officers. A quick glance at the page shows when the data was last updated—which is particularly impressive as this information is typically refreshed daily.

Make your dashboards as dynamic as possible

Before the Internet, people thought of dashboards exclusively in the context of the control panels in automobiles that showed speed, miles traveled, fuel level,

and so on. But if any of those dials were stuck in one spot, they’d be worthless (if the gas gauge was fixed to “full,” the auto would eventually come to a grinding stop). The same thing is true with online performance dashboards, which must show the trend of performance indicators over time. “Data without context isn’t useful, and it’s important to have details about progress,” said Elizabeth Steward, vice president of research and marketing at Envisio, a performance management software company.

One excellent example is the New Orleans Library Operational Plan dashboard, which shows the status of individual projects like efforts to enhance opportunities for jobseekers and job creators. A quick glance at the dashboard shows the degree to which efforts like this are “on track,” “experiencing some disruption,” “experiencing major disruption,” “completed,” or “upcoming.”

Use colors carefully

Some websites are overloaded with a rainbow of colors, presumably with the idea that people will be attracted to a beautiful array of reds, greens, and blues. Color can be a powerful device in dashboards, but it should be used intentionally. Too many colors can obscure the message you’re trying to communicate. David Osborn, cofounder of ThirdLine, Inc., a company that helps governments with analytics, said: “You really want to use shades of black, white, and gray for most things, and color for the things you want to stand out. Grays and blacks with a dash of orange or blue will help the colored items stand out. I think for someone who doesn’t understand design, lots of colors seems fun. They’re trying to build a piece of art, but that’s not the goal.”

Consider the type of graphics that works best

For example, pie charts take up a great deal of space because they are circular, and the loss of the area around the pie can forfeit a lot of valuable real estate on a dashboard. A bar chart, on the other hand, takes up less space,” LuBean explained. And that’s just the beginning. For example, line charts may not have as much visual impact as bar charts because they don’t have as much visual mass,

but “line charts are fantastic when you’re trying to show things over time,” he added.

Help users translate the dashboard into different languages

“You want to communicate with all residents,” said Mike Bell, cofounder and chief executive officer of Envisio. “The early adopters are beginning to embrace this practice.” Bell points to the City of Denton, Texas, and its Strategic Plan’s dashboard as a strong example of a city that makes it easy to see lots of data in a number of languages, ranging from Spanish to Hindi to Korean to Arabic. A simple menu at the top of the home page offers dropdown options to select any of the 22 featured languages to make the translation process effortless.

Use the blur test

This is a recommendation from Domo’s LuBean, who explains that if a user squints and takes note of the element on a computer screen that they see first, that should be the most important item in front of them. “In most government organizations, people don’t have a lot of time,” he says. “So, the blur test is a pretty quick way to get a reasonably accurate idea of what people are going to see first.”

Make the dashboard comprehensible on a mobile device

According to Exploding Topics, a search engine optimization detection platform, 55 percent of website traffic comes from mobile devices, while 92 percent of users who access the Internet use a mobile phone. Yet it can be difficult cramming dashboards onto the tiny screens available on mobile phones—which is a problem, according to Mike Maciag, policy researcher and former data journalist. “Too often, displaying data on mobile devices is still an afterthought. Governments can greatly expand and broaden their reach by making dashboards mobile-friendly.” ■

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