





Visualizing Data for Residents of Los Angeles By RON GALPERIN

he Office of the Controller for the City of Los Angeles, California manages vast amounts of dataparticularly open data and financial data. The team's work is based on three Ts: Transparency, Trust and Transformation, with the goal of making Los Angeles the most transparent city in the United States. Years ago, organizations that rank the transparency of governments placed Los Angeles at the bottom of the list. Today, the city is ranked at the top. Greater transparency, which creates greater accountability, can help build the public's trust, which is vital to continuing democracy. And then, of course, there's transformation. Thanks to technology, the daily activities of city departments have changed and are changing radically, increasing efficiency in operations and in the delivery of vital services. We must continue to be innovative and bring technology to city government, along with different ways of thinking about it.

Exhibit 1 illustrates the role of open data in local government. There's a variety of uses for data, including modernizing operations, building awareness, and improving policymaking. Data is no longer just about producing audits or reports for other decision-makers in the city; it's about conveying information through visualizations and connecting communities in new ways.

When I was first elected to office in 2013, I was surprised by just how technologically behind we were, so my goal was to bring the Office of the Controller into the 21st century. I had been told by colleagues that it would take two years and cost millions of dollars to launch an open data portal, but the first version was completed in a matter of months at a fraction of the expected cost. ControlPanel LA, as we now call it, is the city's gateway to raw financial data, data stories and maps, and dashboards (see Exhibit 2). It has approximately 1,000 data sets, charts, graphs, maps, and more, including filters for all city funds,

EXHIBIT 1 | ROLE OF DATA IN LOCAL GOVERNMENT



and, in some cases, it tracks data in real time. While financial data may not always be exciting to the public, this site has had millions of page views, which shows that people find this information useful.

FILTERING RAW DATA

Every purchase the city makes is shown in its virtual checkbook, CheckbookLA (see Exhibit 3), which includes details about many of those expenditures. Users can search by keyword, vendor, price, and more. While making this information public is vital to an honest government, it also provides an opportunity for more companies to bid on city contracts, thereby increasing competition and benchmarking the city against other jurisdictions and the private sector.

It's important to note that the nature of L.A.'s audits and reports has significantly changed in the last few years, along with the number of people who are engaging with them and the results we get. This is why the treasurer's office works to find different ways to present information (see Exhibit 4)—to "bring it to life"—so people are actually learning something, because we all know that many government reports are not necessarily as engaging as they could be.

The City of Los Angeles produces an annual financial report and, like many others, it's a lengthy 430 pages. To make that information more accessible and engaging, we've created an interactive version of it that contains more than 60 charts, graphs, and metrics (see Exhibit 5). Over the years, we've seen how popular it's been with the public, which goes to show that visual elements have the power to convey data and information in a way that would have been difficult even a few years ago. (View the Annual Financial Report at lacontroller.org/financial-reports/cafr2020/).

In addition to citizen engagement, it's about holding individual city departments accountable and making sure we know what our own expectations are by visualizing performance metrics (see Exhibit 6). For example, data about library visitors and the number of materials checked out gives us insight into the department's operations and what improvements, if any, could be made. Being able to visualize

ControlPanel LA, L.A.'s first open data website, is a gateway to raw data, data stories and maps and data dashboards.

EXHIBIT 2 | CENTRALIZING INFORMATION

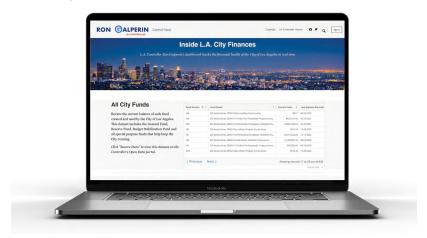


EXHIBIT 3 | FILTERING RAW DATA



EXHIBIT 4 | VISUALIZING FINANCIAL DATA





this information helps residents understand how their city operates and how it meets—or doesn't meet—its goals.

REVENUE FORECASTING

One of the things the Office of the Controller is required to do, according to the city charter, is revenue forecasting (see Exhibit 7). The treasurer's office's annual Revenue Forecast Report includes information gathered from city departments, recent regional economic reports, and meetings with local economists. The report covers revenue estimates for the remainder of the current fiscal year and also includes projections for the coming fiscal year. Although forecasts inherently involve a level of uncertainty—as exemplified by what occurred as a result of the COVID-19 pandemic-our report offers our best estimates based on the available information and seeks to promote practical and responsible budgeting in the year ahead. In addition to a

written report, my office illustrated projections in an interactive way for the city council, the mayor's office, and the general public.

At the beginning of March 2020, we had a pretty good idea of what revenues were going to look like, and we had been consistently accurate over the previous few years. The pandemic changed those numbers completely. We issued a revised revenue forecast and updated our projections with lower numbers, as so many of the revenue sources that we depend upon were down significantly. Major industries like travel and tourism, retail sales, and many others were hit hard.

The city went into the pandemic with strong reserves and several special purpose funds we could borrow from, if necessary, going into FY 2020-2021. Indeed, it was necessary for us to borrow and/or transfer from these funds to maintain city operations and provide critical emergency services to Angelenos. And in response to an ever-

changing revenue outlook, the city passed a "placeholder budget" to be revised throughout the year to match the city's needs and actual revenues. Because of our adherence to reserve fund policies, and assistance from the federal government through President Biden's American Rescue Plan, we were able to weather the storm and are now pushing ahead with several programs and initiatives aimed at promoting a strong economic recovery.

MAPPING

I also believe in harnessing the power of data in a different visual way that people don't usually associate with numbers—mapping. My office uses maps to explain, pose questions, generate ideas and give answers. We use mapping to contextualize information we have in our possession that we need to tell people about (see Exhibit 8). For example, we created a map of all the LGBTQ+ resources in the city of Los Angeles, which is a way to connect LGBTQ+ individuals

who need help with services, but don't know where to look or start. We also have a map of the noise generated by Los Angeles International Airport, tracking every plane that takes off and lands, and noise emissions. The purpose of this was to change some of the conversation about noise, and how it's possible to accommodate nearby residents while also maintaining a vibrant airport. We've also mapped locations for free tax preparation services, parking tickets, oil wells, affordable housing projects, summer youth programs, and more.

Another important map we've created is Property Panel (see Exhibit 9). The city of Los Angeles government is the largest owner of real estate in the city.

We own approximately 7,500 parcels including small lots, parks, municipal buildings, and commercial, industrial, residential, and even retail parcels. Property Panel maps every public property within the City of Los Angeles, including those owned by the county, the state, the federal government, the Los Angeles Unified School District, and the Los Angeles Metropolitan Transportation Authority.

This was meant to really change the way that the city thinks about its portfolio of real estate assets. We have a great need for community development and for affordable housing for those experiencing homelessness, and one of the best ways to create more of it is to utilize our own properties. When we

undertook this project, the city didn't even know what it owned until we started mapping these properties. This information has been a catalyst for a conversation about how a new entity can be created to better manage this real estate and the vast opportunities these properties can provide. And Los Angeles isn't the only city with a lot of real estate assets, so this is something other communities should also consider.

When the pandemic hit in March 2020, the Controller's Office wanted to help Angelenos—especially working and low-income individuals and families—find useful resources to help them get by. Our first step in addressing this problem was to map

EXHIBIT 5 | ANNUAL FINANCIAL REPORT



EXHIBIT 6 | MEASURING CITY PERFORMANCE



EXHIBIT 7 | REVENUE FORECASTING



EXHIBIT 8 | DATA STORIES AND MAPS



EXHIBIT 9 | PROPERTY PANEL

EXHIBIT 10 | CONNECTING RESIDENTS TO SERVICES





all the food banks, food pantries and emergency food distribution centers in the city. We then expanded that to all the resources in the county, and then in the state of California (see Exhibit 10). Ultimately, we mapped 1,800 of these resources, which we are keeping updated, and this is the number one feature on our website to date.

CONCLUSION

Finance officers often don't dabble with data visualizations because the process seems difficult or seems like it requires a lot of resources to get done. But this isn't the case. Platforms, software and tools are available to make the process much easier than you might think. In my office, we've also engaged several student interns—young people who are interested in data and technology and want to provide their services for free to improve our city—and they do a very good job at tackling many of our data projects. This is something you can do without spending a lot of money, and it's important because data and transparency lead to a better government that works for everybody. By running our governments well and using all the resources we have at our disposal, we can make that happen. 🖪

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