



A Key Role

Why economists offer an essential skill set to local governments

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Local governments often spend thousands (if not millions) of dollars on research. In many instances, cities hire traditional analysts from diverse backgrounds to perform accounting, budgeting, and financial policy analysis—and still, they often need to hire consulting firms to conduct research.

The field of economics teaches a data-driven approach to problem-solving that can be lacking in other disciplines. Examples of municipal governments with “in-house economists” suggest that their skills and training enhance a city’s proficiency in analyzing policy and reduce its dependence on consulting firms. For instance, upon hiring an economist, the City of Columbia, Missouri, performed an in-house cost-of-service study for their water utility. Based on this study, they were able to adopt a water rate increase in the FY23 budget. In this case, the city not only reduced its consulting expenses, but the finance department collaborated with the Department of Water and Light to develop an ongoing relationship and the work was finished promptly. This example highlights how economists can be especially helpful to cities that manage utilities, airports, parking, and other business-like activities.

Economics in governmental budgeting and fiscal policy analysis

“Economics” and “finance” are often seen as synonymous; however, they are not quite the same. While both are concerned with the distribution and movement of money and assets, finance fundamentally refers to the techniques used to manage money and resources, whereas economics is the broader study of decision-making. In the context of local government, the finance department serves two key roles: maintaining balance sheets and budgeting. An accounting team is vital to performing the former, but including an economist can bring academic rigor to the latter by improving accuracy in the budget process and expanding the applications of traditional budgeting functions throughout the city, resulting in a more data-driven approach to decision-making.

An economic division can add valuable input for fact-based decision-making. Economists have a widely applicable skill set that makes them valuable as in-house consultants for policy analysis and quantitative projects of any sort. Economists have a competitive advantage over traditional analysts when it comes to forecasting revenue.¹ This skill set can be leveraged to help accountants with tasks such as building the demographic and retail sales tables

needed for the annual comprehensive financial report (ACFR). Because of this, many cities have already established an economic division or added duties that are traditionally performed by an economist.

A vital role of the finance department is keeping track of the organization’s finances to meet federal regulations and credit rating agency targets. Organizations often need more than basic accounting expertise to ensure that they fully understand the decisions they make. This principle is doubly important in the context of public finance, where staff are entrusted with the financial resources of their neighbors. Finance officers have an obligation to make data-driven decisions, pursue sound objectives, and operate efficiently. Economists are trained to perform these tasks and are equipped with the skill set needed to execute them.

Lessons learned from private-sector economists

The private sector has embraced a research-based approach to decision-making. For instance, the economics team at Wal-Mart informs the organization’s staffing, stocking, and promotional decisions with time-series forecasting models.² Economists at Google, Uber, Amazon, and other tech

giants use the firms' vast troves of data to answer strategic questions regarding everything from marketing to budgeting and even anti-trust lawsuits. Their economists operate as one of the critical components for enterprise-level planning and management. They also act as a medium through which many departments work together to meet their organization's strategic goals.

In some cases, the public sector is less likely to adopt quantitative methods like those discussed in this article, but some private-sector approaches can be useful to local government. Robust forecasting and analysis, for example, are essential to a city's financial health, and greater collaboration among city departments and the finance office can improve financial management, even if it works well already.

Balancing the priorities of departments, agencies, and enterprises, along with the values of residence and other constituencies, like local business interests, can be challenging. A dedicated economic division or a staff economist can help introduce better empirical tools that can be used for informed decision-making and help effectively employ and integrate these ideas across the entire government. While economists typically shy away from direct policymaking, they readily

provide input and prepare useful predictions and what-if scenarios. City managers or the mayor can work with an economist to evaluate their priorities, justify their decisions, and implement policies.

An example of use tax, water rate increase, and adult-use marijuana sales tax

Instead of just defining what use tax is, an economist, in collaboration with the finance director at the City of Columbia, conducted an in-depth forecasting of the additional use tax revenue and specified how that would be used in public safety and infrastructure. Unlike in 2018, in 2022, the citizens embraced the detailed information and voted "yes" to a use tax.³ (See Exhibit 1.) Since it was passed the city's sales tax revenue is anticipated to increase annually by \$5 million.

Columbia's economist collaborated closely with the city's Department of Water and Light to develop a water utility revenue-expenditure forecasting model, which was extensively used to analyze several alternative rate structures. During the process, the economist regularly consulted with the city council to ensure that the rate structure was congruent with the diverse needs of the populace. The council adopted the

rate change with the FY23 budget, and the subsequent revenue is expected to increase by \$1 million annually.⁴

When the State of Missouri legalized adult-use marijuana in 2022, the City of Columbia reached out to the City of Boulder, Colorado, to learn from their experience in 2014. The economic analyst estimated that Columbia might collect an additional \$400,000 to \$1 million in revenue annually in the form of a three percent selective sales tax on recreational marijuana. The estimate was subsequently used to design a spending agenda for the new revenue, which was later approved by the voters.⁵

The broader role of a city economist

Simple forecasting methods and budget analysis are sufficient for smaller municipalities, but growing cities should treat the data available to them with the same reverence as private organizations. Larger populations bring higher revenue and expenditures, more extensive administration, and more sophisticated projects and services. All of this requires greater accountability to these constituencies, which often means more frequent budget and policy reports that go beyond the normal subject matter to include analyses of the city's social and economic trends.

In larger cities, such as Chicago, Illinois,⁶ the Office of Budget and Management serves as a central hub for the data from departments, enterprises, and agencies that comprise local administration. No one step can be taken to immediately improve the depth and breadth of a city's analysis; this sort of evolution takes time and effort. One step that can be taken, however, is adding staff who are responsible for pursuing this change. An economist can develop interdepartmental ties and enhance the capabilities of the budget office beyond just producing a budget.

Consider an unpopular policy change such as a utility rate hike or a tax increase. Both will almost certainly be met with some resistance—which is not unwarranted. People may ask several reasonable questions, including why is this necessary, how will it affect us, what will this achieve, is it fair, and how do we budget for this? Traditionally, local governments would spend significant

EXHIBIT 1 | VOTERS APPROVED A CITY OF COLUMBIA, MISSOURI, USE TAX



time and money hiring consultants to answer these questions.

A dedicated economist can apply their skillset to present this data intuitively and craft a coherent story from it that accurately reflects reality. In pursuing the strategic goal of greater transparency, the economist at the City of Columbia created a dashboard to represent the city's monthly sales tax revenue.⁷ An economist can provide forecasting and what-if scenario analyses to make more confident assertions about the future and manage expectations in a scientific manner.

Questions that are financial in nature can go unanswered because of a lack of in-house expertise. For example: what happens if the airport moves from free parking to a paid system? How would a new parking pricing scheme affect congestion downtown? What are the most effective options to offset financial loss due to a decline in tax revenue collection? What are the total costs and benefits of expanding public health services? How do socioeconomic factors vary across the city, and does the chosen funding allocation reflect the corresponding priorities?

The wide range of topics for which a government might use economic consultation means that having an in-house economist can produce faster and less expensive recommendations. Municipalities have extensive inventories of data, and connecting these data sources can push the boundaries of what types of questions can be answered. Having an existing relationship with an expert on empirical analysis can help governments channel good ideas into innovative applications. Another, less obvious benefit is that city economists can act as a bridge between departments. Establishing a permanent economic consultant with a widely applicable skillset opens the door to new



The above photo is of the downtown parking structure operated by the City of Columbia, Missouri. There is always potential to increase parking revenue by implementing a variable rate structure. A city economist can perform the analysis required to implement such rate structures.

relationships, greater transparency, and new projects among departments.

This collaborative aspect goes beyond city limits. A wider network of dedicated economic analysts can facilitate inter-city collaboration and help local governments adapt more effectively in a rapidly evolving world. For instance, the data sharing between Columbia and Boulder produced a sound and useful estimate for Columbia's future marijuana tax revenue. Be it an innovative methodology, a best practice, or simply sharing a government's experience and data, collaboration between governments is beneficial and a natural extension of an economist skillset.

Size matters

Smaller governments often face fewer policy-related decisions than larger organizations, so the impact of an in-house economist is likely diminished in

smaller municipalities. Based on the preliminary experience observed, the impact of an in-house economist is most valuable in fast growing communities and/or those with populations greater than 100,000. As cities grow, the need to expand the depth and breadth of financial reporting and policy analysis will grow hand-in-hand. Citizens, businesses, and city administrations can benefit from greater transparency, insightful analysis, and decision-making that is rooted in an objective analysis that methodically ties a city's policies to its strategic goals. ■

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¹ Economist at the City of Columbia uses time series econometrics ARIMA model to forecast monthly sales tax. (app.powerbigov.us/view?r=eyJrjoiZGlyODk2ZWUtODQzNS00YTU1LTkxYzctNzA1ZDUxYmMzMdDhliwidCI6ImM5MzZTA2LTUyYTA1NDE3NC04NviGE5LTl3MWlwZDVlODgxMjI9)

² Data + AI Summit 2022 North America/Virtual sessions on YouTube are available at databricks.com/session_na21/demand-forecasting-platform-at-scale-that-drives-operational-efficiency-reduces-waste-at-walmart.

³ The text of Prop One is available at comogov/wp-content/uploads/2021/12/Ordinance-6.pdf.

⁴ The City of Columbia's adopted FY2023 budget is available at comogov/wp-content/uploads/2022/10/FY-23-Adopted-Budget-FINAL-DRAFT-9-28-22.pdf.

⁵ Learn more about the City of Columbia's Prop 1 marijuana tax at comogov/wp-content/uploads/2023/02/Marijuana-Tax-Report.pdf.

⁶ See the City of Chicago's data portal at <https://data.cityofchicago.org/>.

⁷ See a government data portal at app.powerbigov.us/view?r=eyJrjoiZGlyODk2ZWUtODQzNS00YTU1LTkxYzctNzA1ZDUxYmMzMdDhliwidCI6ImM5MzZTA2LTUyYTA1NDE3NC04NviGE5LTl3MWlwZDVlODgxMjI9.