



Transforming IT Procurement: A Four-Part Series

Part 1: Framing the Problem

This is the first of a four-part series on transforming government IT procurement. Future installments will discuss understanding the market and expanding competition, writing the RFP, and getting results.

Authors: Sarah Mostafa and Greg Wass

Contributors: Kailey Burger Ayogu, Elena Hoffnagle, Kate Mertz, and Hope Patterson

Last year, state and local governments spent nearly \$120 billion on information technology (IT),¹ much of which was purchased from the private sector in the form of software subscriptions and maintenance, systems integration, infrastructure, and managed services across a multitude of segments, from health and human services to transportation to education. IT spending continues to rise every year as governments prioritize cybersecurity, data governance, and application and infrastructure modernization.

Yet while IT may be critical to government operations, it can also be one of the most difficult things for state and local governments to procure. Many high-profile failures of government IT have their roots in faulty requirements gathering, procurement, and contract management. For example, some of the early issues with state-level implementation of the Affordable Care Act were a result of a hurried procurement phase and a lack of market capacity.^{2,3} Some troubled systems projects at the state and local level last for years and far exceed their initial budgets because of changes in

1. <https://www.govtech.com/budget-finance/heres-the-technology-government-needs-in-2021.html>

2. <https://www.propublica.org/article/epic-fail-where-four-state-health-exchanges-went-wrong>

3. <https://www.gao.gov/assets/gao-15-238.pdf>

scope, requirements, and deliverables that were initially set during the RFP and contracting stages.⁴ In some major projects, application upgrades or redesigns can even result in less functionality and less flexibility than the legacy systems they replace.

Some of the common challenges we see governments facing today in IT procurement include:

- **Fragmented coordination among buyers, program management, and IT staff resulting in either vague or overly prescriptive RFPs.** IT procurement responsibilities are often fragmented among IT departments, program management staff, and procurement staff. Lack of early involvement from purchasing staff can mean that evaluation criteria, contract type, or payment schedules are not structured appropriately to align vendor incentives with customer needs. Lack of involvement from IT can lead to tech purchases that don't work with existing infrastructure, comply with IT standards, or fit the IT strategy. A lack of proper engagement with program staff may result in solutions that don't respond to real business needs or consider the user or customer perspective—or, at the other extreme, produce a long list of requirements that essentially replicate existing systems and processes.
- **A rigid compliance-driven contract management approach resulting in delays and change orders.** Complex IT projects may take months or years to implement in multiple phases. To mitigate risk, governments often take a rigid approach that loads the contract with requirements and emphasizes compliance, as opposed to a more collaborative approach that prioritizes outcomes and is adaptive to change. Sometimes governments take the position that the vendor is being paid a large sum of (public) money and is therefore solely responsible to satisfy all requirements *and* deliver a successful solution. But rather than shifting risk, a compliance-driven approach can be a prescription for missed deadlines, cost overruns, and projects that fail to meet user needs, because this approach assumes the government and vendor understood exactly what was needed, and how to build it, right from the beginning (which is rarely the case).
- **Limited knowledge of current technology and aversion to risk resulting in a lack of innovation or requirements rooted in legacy systems.** IT leaders with significant day-to-day operational responsibilities may not have the time to stay current with changing technology. They may rely on long-time vendor partners for solutions or may be susceptible to the latest “magic bullet” technology that promises to solve all their problems. If an RFP is issued at all, it might be so specific that it disqualifies all but the favored vendor. Alternatively, IT leaders may try to reduce risk by sticking with what they know and avoiding viable, innovative solutions. This could mean focusing on new “front ends” for legacy systems or writing requirements around

existing system capabilities rather than user needs. All these approaches can discourage qualified vendors from applying or limit the solutions a vendor may have otherwise supplied, stifling innovation.

Using Design Thinking to Develop User-Centered Problem Statements

A problem statement identifies the gap between the current state and the future state. While a problem statement can include the broader business challenges you want to address, it should ideally be rooted in how the user experiences the current-future state gap. Here, using principles of design thinking, specifically in the “Empathize” and “Define” phases of design thinking, can help you dig deep into the human experience to frame problem statements.

Two specific strategies that you can easily employ are:

- **Asking the Four W's:** Work with your team to understand fundamental questions around the user: 1) *who* is experiencing the problem? 2) *what* is the problem, as you've observed it or heard it from users? 3) *where* does the problem occur, in terms of context? and 4) *why* does it matter to the user (and to your department or agency) that this problem be addressed?
- **Asking the Five Whys:** Often what appears to be the why of a problem is not the actual root cause of the problem. Five Whys helps you dig into root causes of the problem by repeatedly asking *why* to problem statements until a root cause is identified.

Consider the following snippets of user-centered problem statements.

- “Elderly residents need a quick, virtual way to pay their monthly city utility bills that does not require access to a computer.”
- “Residents need a convenient way to report instances and location of graffiti in real-time with city officials.”

For more information on the Four W's and Five Whys techniques, check out our publication **Digging Beneath the Surface: Techniques for Identifying the Root Causes of Procurement Problems.**

Results-driven IT procurement and contracting

To tackle the challenges above, we've developed several strategies, which are part of the Government Performance Lab's technical assistance to governments that want to apply a more results-driven approach to procurement and contracting. These strategies move government procurement away

4. <https://www.auditor.ca.gov/reports/2021-039/index.html>

from a mainly compliance-driven effort to a more active and collaborative process that helps governments achieve the outcomes they desire in partnership with vendors. The principles of a results-driven IT procurement framework are as follows:

Results-Driven Contracting Principle	Description
Problem-based and solution-agnostic	Design the procurement around the problem and allow flexibility for vendors to propose innovative solutions, as opposed to taking an overly prescriptive approach based on excessive requirements or a specific solution.
Early alignment with internal stakeholders	Help procurement, program and IT staff get aligned at the outset and share in the mission and vision of the procurement.
Agile and performance-based project management	Articulate the goals and success metrics intended for the project with the vendor and manage over time via a collaborative, iterative project management approach.

Successful IT procurements begin with the development of the competitive solicitation, with the aim of inviting talented and qualified vendors to submit their best approach to governments' challenges. A results-driven RFP that factors in these principles can mean the difference between enabling top-notch vendors to propose their best solutions or discouraging their participation.

Strategies for results-driven IT procurements

Here we lay out some strategies for assembling a successful RFP using a results-driven framework in conjunction with the three principles articulated above.

Developing the Problem Statement

Governments are fundamentally in the business of improving service delivery design. Whether it's fixing potholes or dispatching public safety personnel, every technology solution aims to solve a problem for a range of internal and/or external users. Understanding the current user experience is core to a results-driven procurement of IT systems because it is rooted in the idea that government should seek *to purchase technology solutions to problems, instead of purchasing predetermined solutions with predetermined requirements.*

Try These Strategies: One of the first steps in drafting an RFP is to work with the RFP team to develop problem statements that articulate the challenges faced by the current end user that the technology aims to serve. A common trap that governments fall into is defining the problem as the absence of a specific IT solution. Rather, a true problem-based approach is solution-agnostic and takes a more human-centered approach. It asks: *what are the challenges our end users face?* To answer this question, the RFP team should include program managers, buyers, and IT staff, all of whom bring different perspectives in fostering clarity and alignment on who the end users are and what their current pain points are. For internal-facing technology, users may be government staff, such as public safety personnel or case managers.

For a resident-facing technology, the problem statement will be centered around gathering residents' current experience with a key service through focus groups, surveys, field observation, and data analysis to avoid making incorrect assumptions of the problem. It can take anywhere from days or months to document existing pain points and emerge with a clear set of problem statements. We encourage governments to not rush through this step.

In addition to articulating the problem statement, it's good practice to include a brief description of the current IT environment. The following is an example of the problem statement from an RFP by the City of Portland, Oregon that effectively and succinctly outlines the business challenges faced by the city.⁵

City of Portland Integrated Tax System Software and Implementation RFP

The City of Portland seeks an integrated tax software to address our current business challenges:

- "Information sharing among applications is infrequent, arduous, and highly manual. We are missing opportunities for cross-compliance, increased revenues, and centralized customer service because Revenue cannot easily see its entire tax account landscape."
- "Revenue's legacy applications have been custom developed in-house over the past two decades and supported by a small pool of developers. The systems are written with unique business rules in Access and .NET and are not easily maintainable. This poses a critical support and maintenance risk for our core operations."

5. <https://procure.portlandoregon.gov/bs0/external/bidDetail.sdo?docId=00001061&external=true&parentUrl=bid>

Developing Clear Goal and Outcome Statements

Flowing from the problem statement are the goals, or desired outcomes, of the IT solution. Goals provide a clear definition of long-term success upon implementation of the system. Good goal statements inform how you will select vendors, what metrics you will track over the course of the contract, how you will structure the contract, and how you will design your procurement.

Try These Strategies: Avoid the common pitfall of making the goal statement about implementing the IT system on time and on budget or about completing specific tasks (e.g., “maintain an accurate data log of all citizen complaints over a 6-month period”).

Instead, ask yourself: *Who* will be better off in the long-run and *how* will they be better off? Think about the measurable way that residents will benefit from this IT solution. If this is an RFP for an internal product that will help government staff complete their work, think about how internal processes will become more effective and efficient. Goal statements should be quantifiable, centered around a target user group, and centered on the “*what*” instead of the “*how*.”

The example on the next page draws from an RFP released by the Gilbert, Arizona, Fire and Rescue Department (GFRD) for a new Fire Record Management System. The goals on page 7 are easily measurable given existing reporting capabilities and map onto the town’s multi-year strategic plan for GFRD.

Adopting these strategies for framing the problem—first writing the problem statement and then articulating desired outcomes—will set the course for what is to come: an IT procurement that is problem-based, solution-agnostic, engages users, and establishes the structure for a collaborative, iterative, performance-driven, successful project.

Gilbert Fire and Rescue Department (GFRD) has a number of desired outcomes it seeks to achieve through this implementation. The Fire RMS and ePCR system will help the GRFD to:

1. Reduce response times to resident emergencies through data analysis of deployment strategies, crew performance, and external impacts to meet the relevant accreditation standards;
2. Reduce incidents of emergencies by using data to create targeted community risk reduction programs (e.g., falls per capita);
3. Optimize deployment of resources (human, technology, and physical assets) through improved use of data collection to facilitate long-term data-driven decision making;
4. Meet all regulatory requirements, including town, state, and national reporting National Fire Incident Reporting System (NFIRS); and
5. In accordance with the Town of Gilbert’s “City of the Future” initiative, fostering an environment of innovation across the GFRD to develop an efficient and best-in-class service delivery model to serve the citizens of Gilbert.

The **Procurement Excellence Network** is an initiative of the Government Performance Lab designed to help public sector leaders use government procurement as a tool to improve resident outcomes and advance equity. The **Government Performance Lab**, housed at the Taubman Center for State and Local Government at the Harvard Kennedy School, conducts research on how governments can improve the results they achieve for their citizens. An important part of this research model involves providing hands-on technical assistance to state and local governments. Through this involvement, we gain insights into the barriers that governments face and the solutions that can overcome these barriers. By engaging current students and recent graduates in this effort, we are able to provide experiential learning as well.

The Government Performance Lab is grateful for support from Bloomberg Philanthropies.

What Works Cities Certification provides cities at all points in their data journey with a standard of excellence that shows how investing in data and evidence practices can lead to better and more equitable results for residents. This guide includes strategies in alignment with the following What Works Cities Certification criteria:

- Results-Driven Contracting (RDC) 1: Defining Goals for Key Procurements
- Results-Driven Contracting (RDC) 2: Measuring Outcomes for Key Procurements

Learn more about how to get your city Certified.

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