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Reconceptualizing Public Procurement to Strengthen State Benefits Delivery and Improve Outcomes: Essay Collection

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For Diversity, Equity, Inclusion, and Accessibility in Government, Update Procurement Policies (Afua Bruce)

The Biden Administration, through an Executive Order signed on June 25, 2021, declared that "diversity, equity, inclusion, and accessibility are priorities for [the] Administration and benefit the entire Federal Government and the Nation." Although this particular Executive Order focused on procedures and priorities across the Federal workforce, the same principles should be extended and applied to procurement processes across all levels of government.

Efforts within and outside of government to propose ways of strengthening how the government functions and the efficacy of service delivery often include recommendations for improving technical systems. One way to influence the development and deployment of technology within the government agencies is to reform the procurement process, which is often a long, arduous, and opaque process that favors large, established companies operating with fixed and traditional—and sometimes outdated—activities.

Unfortunately, relying on larger and older companies results in a lack of diversity among the winners of procurement processes. In fact, less than 4% of Federal procurement dollars go to companies owned by Black or Latino individuals.¹ Furthermore, smaller entities, which in many cases are led by and are employing a greater diversity of individuals, are unsuccessful in the source selection process. Without the time, resources, and knowledge to dedicate to navigating procurement, these smaller entities may not be considered competitive for general government procurement spending.

The traditional government procurement process also rewards organizations whose procedures align with existing procedures and expectations within government. While this satisfies the risk-averse nature of government procurement, it dismisses newer business practices. As the number and success of organizations that successfully design technology for individuals in historically underserved communities increases, so do the various methodologies for centering communities in the development of technology systems that administer benefits. Additionally, these more inclusive processes often require additional time and intentional iterative design practices. It is difficult for these new methodologies, which require some amount of flexibility, to prove themselves in a procurement system based on past successes within government.

"Because," as Executive Order 14035 states, "advancing equity requires a systematic approach to embedding fairness in decision-making processes, executive departments and agencies (agencies) must recognize and work to redress inequities in their policies and programs that serve as barriers to equal

opportunity." Reforming the procurement process can support this goal. By building on recent efforts to diversify source selection, and by creating new procurement frameworks that explicitly allow for iteration and reward community involvement in technology design, all levels of government can begin to address diversity, equity, inclusion, and accessibility from the start—from the conception of the technology systems that ultimately drive how people interact with policies and receive government services.

Wisdom from the Ancient Greeks for Procurement Reform: First, Do No Harm (Mikey Dickerson)

By the 17th century, technological progress had equipped would-be doctors with a bewildering array of new tools. Armed with exotic chemicals, sharp instruments, and a can-do attitude, they set out to cure every disease and discomfort ailing humans, an organism whose complexity far exceeded their understanding. Their patients died by the thousands. As the practice fumbled towards respectability, they adopted a piece of wisdom from the ancient Greeks: *Primum non nocere*. First, do no harm.

Modern-day custodians of government services are in a similar predicament. Sprawling, human-machine hybrid systems typically span thousands of employees, dozens of distinct software products, at least one mainframe, and hundreds of connective macros and scripts. The way we build these systems allows us to add complexity regardless of whether we understand previous iterations or not. Over time, the result is a system that far exceeds the grasp of any single person.

I worked on a number of such systems, starting with Google, then healthcare.gov (which, contrary to reports, was much simpler than the government norm). In regards to the U.S. Digital Service, we did our best to improve core functions in Social Security, the IRS, FBI, Medicare, VA, and Department of Defense. I have studied similar overly-complex systems in California, Canada, Washington, Montenegro, and at a variety of nonprofits and corporations. The current state of business process automation follows a predictable pattern.

To take just one example, Medicare is governed, in theory, by tens of thousands of pages of regulations. These regulations are written by a complex rule-making process, and are not organized in any one place that can be read front to back. In practice, Medicare decisions are the emergent results of a thousand or so administrative staff and about 5,500 COBOL scripts that run each night. The system's complexity is no longer limited to what humans can understand, because machines keep repeating processes when their purpose has been forgotten. In time, the knowledge designed into automated systems is fragmented, diffused, and ultimately destroyed.

Updating or repairing such a system is analogous to medieval—and maybe even modern—surgery. We show up with a mixed bag of rusty old tools, shiny new tools that we partly understand, and superstitious rituals like "agility" that we carry because they worked once. Tactical interventions are possible. When the problem is a clogged tube, we have a good chance of finding and unclogging it. Usually, we can even prevent the metaphorical patient from metaphorically bleeding to death. But when we set out to redesign or "modernize" the whole thing, we are out of our depth. It's like asking a surgeon to fix your body so it is like a teenager's again.

From my experience, I've learned that:

- Most failed projects would have benefited from a smaller budget.
- Rigidly specified launch timelines and multi-fiscal year schedules for prescribed expenditures are never helpful and often lead to waste.
- Contract structures should not leave vendors unsupervised for long periods.
- Deliverables should be plain-English citizen-based outcomes, rather than defined in terms of arcane technical requirements.
- Agile contracts are not a magic bullet. When they work, it is because they break projects into increments that are small enough that they can be committed and built upon, or abandoned to be tried again.

However, the most important lesson that I can suggest to the people that have custody of such systems is to start from "first, do no harm."

This should be obvious, but it isn't. Multi-year, multibillion, stem-to-stern overhaul or "modernization" projects have no meaningful chance of success. They grind to a halt in the requirements gathering stage. As the years and the appropriated dollars evaporate, the harm to service delivery accumulates, as routine upgrades and maintenance are blocked by the "modernization" project. The two most common outcomes are that the modernization project is abandoned altogether, as when VA canceled Health-e-Vet in 2010 after spending \$600 million, or that the status quo becomes so unlivable that the agency is ready to accept any amount of risk to cut over to the new thing. This is how the FBI replaced its National Instant Criminal Background Check system. Policymakers can avoid these outcomes by injecting a little humility early in the process. (There should be ample supply lying around from past projects.) Maybe after a bit more trial and error, we will possess the organizational science to design a big bang replacement for Medicare billing or California unemployment insurance. But we have to survive this medieval period first and a little ancient Greek wisdom can guide us.

To Improve Benefit Delivery, States Should Adopt a Minimum Viable Procurement Process (Dahna Goldstein)

To capitalize on innovative approaches and the firms that bring them, states should take a page from the tech startup world to adopt a minimum viable product (MVP) process and apply it to procurement practices. MVP is an established technology development technique where a new product or website is developed with sufficient features to demonstrate the concept, but the complete set of features is only designed and developed after considering feedback from the product's or site's initial users.

The COVID pandemic continues to highlight the need for better and faster access to benefits, from pandemic relief funds to **unemployment benefits**. Existing state systems are cumbersome, complex, and sometimes **glitchy**. While both the **federal** and some **state** governments are trying to dedicate resources to modernizing systems, they will be best served by reforming procurement processes to invite and encourage innovative technological solutions to make access to benefits easier and more equitable.

There is an increasing recognition that innovative technology solutions can help beneficiaries access needed services, yet existing procurement processes all but exclude the types of companies that are best positioned to create innovative solutions. In addition, **overly complex and rigid requirements, unduly lengthy lists of terms and conditions, and long sales cycles** deter nimble startups from participating in government procurement processes, as does a perception that large incumbents hold an insurmountable advantage in RFP and procurement processes.

In this case, with state IT software solutions, governments could take a similar approach to design a scaled-back procurement process that would minimize submission requirements; streamline the application, review, and contracting processes; cut upfront cost commitments; and encourage innovation. This approach would make the process more competitive and more accessible to startups and smaller and M/WBE vendors, and enable the solution designers to validate an idea or concept in service delivery to better meet customer needs.

An MVP process would:

• Shorten both RFPs and the sales cycle significantly by stripping out any requirements and terminology that create unnecessary barriers for startups, small businesses, or other companies not steeped in government contracting;

- **Modularize contracting** by breaking large contracts into their component pieces and offering microservices that leverage the most innovative solutions to specific elements of a given benefits delivery process. Smaller projects create opportunities for smaller players, rather than creating conditions that can be met only by large incumbents. This also enables government agencies to place smaller bets, thereby also encouraging innovative solutions; and
- **Implement agile contracting** to make the process more accessible to smaller companies that may not have the deep pockets and legal benches currently required to contract with many government agencies.

Contracting agencies could use the minimum viable procurement process to learn how best to facilitate innovation in designing, developing, and delivering new benefits systems. They would also need to adopt new key performance indicators (KPIs) to evaluate the progress and performance of the benefits systems.

Adopting a minimum viable procurement process is only one part of the solution to improving access to benefits. Benefits systems need to be human-centered while protecting data privacy and security, and integration with—or smooth migration from—legacy systems is challenging. But the need for better, faster, and more equitable access to benefits is too important not to create conditions for innovative startups to be part of the solution.

State IT Procurement Reform: Accessing Pro Bono Expertise and Best Practices in Service Delivery (Robert Gordon)

States are at an information disadvantage compared to their integrated benefits vendors. Vendors see across states, but states see only themselves. Vendors pay top salaries to secure top talent, but states often have challenges creating or filling positions. Vendors execute long-term strategies, but states often change priorities with elections.

In part to address these asymmetries, states sometimes engage major consulting firms. These firms have deep expertise in procurement and vendor management developed through decades of effective work with private companies. When engagements are successful, the firms can make state RFP processes more open, generate cost savings through contract renegotiation and smarter subcontracting, and improve vendor oversight to lower operating costs and improve outcomes. However, hiring consulting firms can itself be timeconsuming and expensive, and these firms are businesses, not public utilities. While they often share their expertise, it is not their job to make their learnings universally available at no cost.

Create an independent entity to assist states through the procurement

process: A major funder or pooled funding could provide resources to create an entity empowered to offer pro bono procurement support for the states. The entity would be staffed by cross-sector subject matter experts and veteran practitioners to develop and deploy deep expertise in vendor selection and management on behalf of and in concert states.

This work could begin with a loose group of perhaps six states which together rely on no more than two major vendors, and which seek better outcomes from their systems. If the work is philanthropically funded, states could participate easily without going through a procurement for a consulting firm themselves. In exchange for recommendations and implementation support from the new initiative, states could contribute in-kind by providing open access to documentation and staff time for interviews. High-level state commitment to the initiative would be key.

Ideally, all participating states would be aligned about the challenges they first wish to tackle, but first movers might center work in areas such as:

• **Cost challenges:** Detailed breakdowns of historical and current spending levels for benefits delivery, including the total cost of ownership across programs—what was spent and what was delivered, with

comparisons to benchmarks (total system costs, project rates, labor rates in time, and materials contracts) from other states and industries;

· Delivery challenges:

- Reviews of KPIs and other formal accountability metrics, their power and alignment with actual goals, and other contractual systems for holding vendors accountable;
- Review of operational oversight approach, including the division of labor between state staff and vendor staff, and on the state side, who is responsible for oversight, their approach (e.g., degree of true project management), and the level of independent judgment they can offer, versus simply channeling the vendor.
- **RFPs:** To address cost or quality challenges, or vendor lock-in over time, review of RFP terms and bids to determine reasons for outcomes and roads not taken

The project could initially provide recommendations and support only to participating states, but in time would make detailed playbooks and artifacts (such as cost comparison data) available to all states, or simply the public—the largest investor in government operations.

Starting with Procurement: As Governmental Agencies Increase the Role Technology Plays in Benefit Distribution, Inclusivity Must Remain at the Forefront (Kevin Harris, PhD)

Technology has often been referred to as a great equalizer. It is true that modern innovations including smart homes, smart cities, electronic banking, mobile computing, medical devices, and other internet of things (IoT) have had significant positive impacts. Unfortunately, certain segments of society face additional barriers due to limited access to technology or a lack of ability to utilize them. State and local government's procurement processes related to technology have the potential to contribute to the existing inequalities of many families. The procurement process is a primary vetting step, or some would say an opportunity to weed out certain types of organizations. Agencies must ensure contracting and purchasing disparities are not overlooked in the push to innovate the benefit delivery systems. If the procurement process can be improved, there will inevitably be a positive downstream impact.

As governmental agencies increase the role technology contributes to the benefit distribution process, it is imperative that inclusivity remains at the forefront. Diversity in technology platform image selections as well as representation in marketing campaigns is a first step. Pilot testing must include a similar representation of the population who will be using the platform in order to receive adequate feedback prior to implementation. While the ability to receive payments via bank accounts is a viable option for many, it remains a barrier for others. Government agencies should work with technology companies to innovate effective ways to distribute payments for individuals who do not have traditional bank accounts or mailing addresses. Training programs should be developed and delivered in multiple languages to not only ensure systems are implemented but constituents are aware and understand how to utilize them. The training should be delivered in multiple formats including print, online and in person. In addition to ensuring technologies are effectively designed, government agencies should also review internal procurement and contracting processes to identify inclusivity barriers. Without a diverse design team, it is difficult to develop a product that is meeting the needs of the community. The question of who design systems must remain at the forefront of discussions.

In addition, the receipt of benefits should not require users to relinquish privacy and be subject to undue surveillance. Any platform utilized for benefit distribution should be externally reviewed for potential privacy and surveillance vulnerabilities. Users should clearly be made aware of any data collection even if it is aggregated. In no way should benefits be tied to the release of data. Strong data collection frameworks surrounding benefit technology platforms should be developed and adopted by state and local governments to protect recipients. Additionally, an accessibility component should be included to ensure implementations have an accommodations review. Communities that are often in need of alternative ways to seek information because of impairments or other needs can be overlooked when technology implementations are made without an accommodations review.

Creating a strong framework and developing platforms with both innovation and ethics as core components will not only allow the effective distribution of benefits but build stronger communities of trust. Traditional government procurement policies encourage the status quo by focusing on low-bids which often translates to large organizations that can purchase in bulk and respond quickly to electronic RFPs. The opportunity to engage with quality underserved businesses should be embraced, potentially leading to a stronger platform. Diversity elements should be included in the selection criteria for new vendors as well as new contracts with existing vendors. It is critical agencies remove the norm of what a technology partner is by ensuring an equitable selection criterion. An early focus on inclusivity during the product/vendor procurement process builds a strong foundation that government agencies can build upon throughout the remaining development and implementation stages.

Two Transformative Movements in Procurement: Creating an Ecosystem for Dialogue & Experimentation and Pursuing Outcome-Oriented Results (Sascha Haselmayer)

I have a passion for procurement—it is simultaneously simple and complex. There are two big actionable movements that will ignite change.

Recommendation 1: Create an Ecosystem for Dialogue and Experimentation for Procurement Reform

Most forms of public procurement are a linear process, in which a group of people scope out specifications with only minimal input from stakeholders and potential vendors. The result: inflated specifications, either tailored to the offering of a specific preferred vendor, or an almost unworkable sheet of requirements, which often leaves procurement contracts big, all or nothing bets with high failure rates.

Nothing prescribes procurement to work in this way. A more effective way to think about procurement of benefits is to think of it as managing an ecosystem of ideas and vendors, funneled through selection into deployment. This approach is more promising because it doesn't reduce vendors to simply deliver a scope at lowest cost, but encourages new ideas to emerge that can better serve citizens.

What is needed to make this happen?

• Create a space where procurement/government needs can be openly presented to potential vendors, and where vendors can get access to experts, benefit users, and administrators to better understand their needs. This can happen in an environment with clear rules about sharing information, data, and designs, where vendors share their discovery and raise questions about different approaches, ways of organizing priorities or dividing up modules. Buyers should not be afraid to allocate budgets, in the form of small grants or stipends, to this process.

• Use prototypes and pilots in which vendors can work with real-life constituents to create experience prototypes or modules, by providing access to designated pilot sites like towns or neighborhoods in cities. Such prototyping also has the added benefit that, instead of writing complex specifications, answers and integrations can be explored on the ground. Again, grants and small pilot budgets can be disbursed to level the playing field for smaller vendors.

There are several benefits of taking an ecosystem approach.

- Lower risk: By encouraging vendors to directly engage with users and specifications, there is a lower risk of deploying a solution that doesn't work. This can be strengthened further by creating citizen panels to provide feedback and co-create solutions.
- Encourage greater competition: Creating an incubation stage opens the door for procurement contracts to more vendors with different skill sets, encouraging more competition and innovation. Whereas benefit contracts are traditionally open only to the largest of vendors who can claim to meet all the complex requirements, the ideas and prototyping stage can be open to smaller consulting firms with skills in design, concept development, and user engagement. With comparatively small amounts of funding, this incubation stage can be open and attractive to a diverse group of small vendors and teams to develop and demonstrate creative new solutions.

The result?

An ecosystem of solutions and options that gives buyers greater choice, while evening the playing field between vendors by increasing transparency and dialogue during the RFP process. There are many options to design such an ecosystem approach: it can allow for a high degree of competitive secrecy or mandate that all knowledge and technology created be open and shared. Buyers can also choose to allow small vendors to compete for delivery contracts, encourage partnerships, or separate the design and prototyping from final deployment contracts.

Recommendation 2: Creating Social Value: Tackle the Root Causes with Outcome-Oriented Procurement

As with any public services, benefits are a problem that can be served or solved. Procurement is an important demonstration of a government's intention.

An example: Many waste management contracts will pay a vendor according to the amount of waste they corrected and the completion of collection routes stipulated in a contract. Vendors deploy equipment and staff on the ground to carry out the task.

The problem: These types of contracts do nothing to reduce waste, a goal of communities everywhere. Instead of waste management vendors using their assets to help change behaviors in communities, they are incentivized to do the opposite by being paid per ton of waste collected.

Public procurement offers different opportunities to tackle challenges, through:

• **Outcome Oriented Procurement:** It starts with defining the objective of a system, tool, or program. Is it there to only manually process a benefit, or can it do more, like proactively engaging people who may have the right to benefits, but have not applied? Can it be connected to other signals about needs for benefit or other services, to get closer to a user?

For example, as more communities do daily counts of people experiencing homelessness, how can this information and case management be correlated with benefits applications and payments? Or vice versa, what can we learn from benefits applications to signal a risk of homelessness?

In other sectors, like public transit, governments have begun to develop holistic models to capture the economic value of solving a variety of problems in their community like reducing waiting times or improving safety. By modeling a wider set of interconnected needs, buyers and contract managers can reward the added value of tackling root causes or solving related problems. This also involves collecting good data on the performance of existing services as a baseline for progress.

To return to the example of waste management, vendors can do a lot in the way of encouraging behaviors that avoid waste or increase separation in the communities they serve, and should be rewarded for progress accordingly.

• **Contract management:** Contract management is often an afterthought, focusing more on deployment milestones than service outcomes.

Governments in the U.K. and elsewhere have begun to invest in contract management as a critical process to improve performance. The focus here is less on adversarial enforcement of contract terms, but on using every opportunity to collaborate with the vendor to improve service outcomes. Central to this process is the collection, at high intervals (e.g. weekly or monthly), of service performance data and a mandate to respond with some flexibility to opportunities to improve outcomes. This agility in contract management, especially on large or long-term contracts, can lead to truly transformative results.

Rewiring the Procurement Black Box (Without Being the Bottleneck on Change) (Bruce Haupt)

Procurement is a black box of NDAs, secret evaluation committees, and obscure and complex processes. **It's notoriously boring.* * What's more, many political donations come from longtime and potential contractors, and politicians and civil servants can face consequences for meddling in procurement. It's messy, but the playing field is ripe with opportunity.

Procurement is where value can most easily be unlocked via improvements to service delivery and in terms of savings and revenues.

We literally buy better outcomes via procurement. But where to start? At a high level, I think about leadership and data.

1. Co-creating a vision for procurement that harnesses diversity and empowers teams to enact real change

Leaders don't have the time or know-how to fix the challenges of procurement on their own. Even if they did, the changes they might drive (or force, or micromanage) to implementation often snap back to business-as-usual after leaders focus elsewhere or leave (and they may be out the door sooner for their efforts).

The leader's role is framing the problem, getting the right people to the table, setting the tempo for action, and asking for more.

To understand the complex governmental onion that is procurement, it is critical that leaders draw in an eclectic and diverse mix of people with a broad range of expertise and perspectives—and then empower them to make real change. While the outcome will become less certain when loosening the reins of control, something better and more sustainable for your organization and community will likely transpire. You'll certainly understand the problem in more well-rounded ways than you would otherwise.

What does empowering your people look like?

- Don't tell your procurement team to do or achieve differently with the same limited resources. Dedicate full-time staff to these issues and involve government leadership, purchasing, and operating departments. Then invest in them.
- Ask what you can do to enable the team. What do they need from you? Do they have the skills and expertise? Is the mission clear? (e.g., have you asked them to focus on all of the following simultaneously: compliance, process management, timelines, reducing costs, service performance,

innovation) How are they rewarded? How much risk are they exposed to? What's their exposure to senior leaders and strategy? Are you actually listening to them? (you are not solving the problem, they are!)

• **Find innovative peers and latch on.** Innovation is a lonely journey. You'll go farther with mentors and companions. If there's a network, invest time there (you and a cross-section of your people), and share as much or more than you get in return. Openness and trust begets openness and trust, which gets you knowledge and support for implementing complex change.

When Houston kicked off our procurement transformation effort and partnered with one of the top global consulting firms for expertise, departments and staff were excited to improve processes and build out staff capabilities. While we didn't fully realize this ideal (largely because we paid our advisors on contingency—a percent of actual realized savings—which unsurprisingly led to a focus on reducing contract spending), we did catch a glimpse of best-in-class capability-building offerings.

Our people have so much to offer too, and Houston's Lean Six Sigma program demonstrated that. Outside of our procurement effort, we built an internal program that trained ~3,000 staff, achieved accreditation, and generated dramatic process improvements and millions in impact (and new career trajectories for many!). If you can't empower people and scale up your number of change agents, then the bottleneck on positive change is you.

2. Data is power

Peter Drucker said, "What's measured is managed." We often don't *really* measure procurement, or ask what's important. When Houston built a performance management and reporting program in 2012, the first step was to survey 15 leading cities nationwide on various approaches to performance management and what worked (and didn't) for peer cities.

For instance:

- Less measures > hundreds or thousands of measures.
- A problem solving way of working > accountability (gotcha) culture.

We also learned how many city programs were evolving into hands-on internal consulting efforts to drive change (which is how we started), and how cities like New Orleans were pioneering subject matter specific "CitiStat" programs (e.g., **BlightStat**). It was in these conversations that we also learned how a city like ours could build its own "lean" capability building center (i.e., thank you for the idea Denver).

A few lessons learned from our experiences:

Build a Targeted and Data-Driven Procurement Transformation.

BlightStat, for example, puts executive and organizational attention on specific problems, gathering all relevant data, and assembling a cross-functional and extra-governmental group to tackle a problem on a regular basis. Hands down, it's much easier to drive change when you are anchoring yourself to data (both quantitative and qualitative).

Invest in Data and Tech. Data was key as we tackled procurement in Houston. We pushed our business intelligence environment to its limit. With highly skilled analysts and buy-in from our departments and purchasing team, we were able to extract atomic-level data on our procurements. We could then slice and dice the data to see how many paper clips and Adobe licenses we had citywide, and who was getting the best deal on them.

In Harris County now, we're far from the finish line and one of our significant challenges is data and reporting capabilities. Currently, I can only get purchase order (PO) or contract-level data. That doesn't cut it (but we are working on it).

Painting the current state procurement picture likely will require front-end IT investment. Until you have data, look to your most painful processes and biggest contracts. Probe the tried-and-true categories (e.g., electricity, fleet, cell phones, chemicals, temp staffing contracts, etc.). Know, though, that you'll have difficulty seeing the forest or trees until you have the right systems and perspectives from your data.

Reality-check your data and priorities. Don't lose yourself in the data and specific opportunities. This is why engagement with diverse stakeholders is important. Explore with your community and partners how procurement intersects with your strategy (check out **Sascha Haselmayer's work** for more). Also continue to check-in with your peers and with networks of other innovators.

It's important to note that you won't "fix procurement" in six or 18 months. However, you can obtain many victories on the road to long-term transformation. Remind your stakeholders of the vision. Give them what they need. Keep the pressure on. Celebrate successes.

Extra points if you can lead the procurement transformation without saying the word "procurement". Good luck!

Government Procurement: Reconceptualizing Public Interest for Public Lawyers (Michael Karanicolas)

Across every agency at the federal, state and local level, there is an army of lawyers that helps develop, guide, and implement public policy. When it comes to procurement, lawyers play a critical role in every step of the process including drafting RFPs, defining requirements, contracting, vetting vendors, and supporting compliance. There are obvious differences between, say, a litigator defending Pepsi, and a civil servant advising the government on distributing disability benefits. However, these distinctions are not always reflected in how the profession views itself. For all lawyers representing organizational clients, their basic duty is to "**act in a manner reasonably calculated to advance the lawful objectives of the client entity as defined by persons authorized to instruct the lawyer on behalf of the client.**"

Public lawyers tend to be cautious: In practical terms, this duty means public lawyers are focused on fidelity to their "client", particularly in terms of limiting risk to the officials above them. In any large bureaucracy, from the Army to the Department of Agriculture, efficiency depends on an effective chain of command and centralized coordination. Cleaving to the interests and directives of senior officials creates a simple formula for public lawyers to follow. By contrast, having every employee work towards their own personal definition of what is best for the country is a recipe for dysfunction. At the same time, it is easy to imagine cases where the interests of senior officials might diverge from those of the public who they are meant to be serving, or where a focus on risk management may create a barrier to innovation or experimentation that could lead to improved outcomes. Government lawyers may feel inclined to stick to legacy processes and vendors, since the benefits of innovation would be externalized, while any risks are internal.

Transparency is another example where lawyers may counsel that the safest course for management is to closely guard information about internal workings. There are structural benefits to transparency, which is not only **fundamental to democratic accountability**, but can also help to **root out waste and mismanagement**. But individual employees may deprioritize these broad public benefits against the personal and professional challenges that accompany close public scrutiny of their work.

Public lawyers can operate with less scrutiny: Government lawyers whose role is mainly focused on public policy also operate outside of the traditional adversarial process. **According to the American Bar Foundation**, 28 percent of federal government lawyers report that they are not practicing law. In adversarial adjudication, the attorneys are each under an obligation to present

facts in the manner most consistent with their client's position, on the assumption that these two accounts will, together, lead to the truth of the matter. Outside of this process, government lawyers lack the same accountability against interpretations of the law which are overly creative **or tortured**. In other words, government lawyers have an especially free hand to push law or policy in new directions, making their understanding of whose interests they serve of paramount importance. Instead of focusing purely on advancing the interests of their agencies and superiors, government lawyers, including those dealing with procurement, should be centering efforts on improving access and outcomes for communities.

The unique role of transparency and public accountability to government lawyering argues for a reconceptualization of what it means to be a government lawyer, and who government lawyers serve. This may include specific changes to how secrecy and privilege apply, allowing government lawyers more freedom to **speak out on questions of public concern**, including when systems, processes, and vendors aren't meeting the needs of those they are meant to be serving. But, more generally, it is important to grapple with ethical and professional responsibility questions around how government lawyers can orient their duties and obligations in support of the public they ultimately are meant to be working for.

IT Procurement: A Critical Enabler for Improving Government Service Delivery (Ryan Ko)

Very few (less than 15 percent) large government IT projects successfully complete on-time, on-budget, while still on-scope, serving intended needs. At Code for America we have worked with dozens of states across the United States, witnessing this firsthand, and advised and counseled dozens more, particularly in the context of Integrated Benefits (e.g., SNAP, TANF, Medicaid, WIC, LIHEAP) delivery, where IT procurement shows up in many different places, from maintaining benefits applications, backend data systems, to customer support contact centers. Traditional status-quo IT procurement and vendor management often leads to suboptimal service delivery outcomes, in addition to time and budget overruns. Here are five recommendations to combat this, based on our experience.

1. Work towards paying for actual program outcomes, not requirements or technology outputs. Benefits systems, such as integrated application portals, IED (integrated eligibility systems), MMIS (Medicaid management information systems), and many others, are often outsourced to IT vendors, rather than built in-house. This in and of itself is not a problem, however, it leads to a dynamic where vendors are paid for the output of delivering a functional system according to requirements in a contract, which is a different incentive than an in-house delivery team which, by nature of being one step closer to the program, can share in the accountability of program outcomes. This is still possible in an outsourced environment, and we have noticed the field is experimenting and learning together on how to do this better, including building capacity with government IT, finance, and procurement staff to align outcomes and truly partner with vendors. For example:

- Align the vendor to the mission: Instead of procuring technology that meets a list of requirements, procure technology that meets program goals. By focusing vendors on actual desired outcomes, governments can avoid the costly game of telephone that can follow.
- Structure contracts so that vendors are not paid by the work hour but by the business outcome: Focus on the business outcomes to achieve, using shorter (about six months to one year) firm fixed price contracts that gradually build up to a full system, rather than a monolithic multi-year build.

2. Avoid vendor lock-in.

are not limited to:

- Purchase technology that is not vendor-specific: This can be open source technology but doesn't necessarily have to be. Many private source, off-the-shelf technologies are commonly used (e.g., Salesforce, Airtable, Wordpress), and thus, many vendors can build and maintain systems based on them.
- Ask vendors for modularity: This means building the technology in different distinct parts that can be taken out, swapped, and used interoperably. Modularity is important: It allows for best-of-breed operations by having different vendors build different parts of systems. Notably, CMS recently attached modularity requirements to all MMIS systems and noticed that states have started working interoperably with each other, while more vendors have started specializing on various modules.
- **Insist on proper documentation of the system:** Documentation is useful in case anyone else must maintain or operate the system in a time of emergency—such as in-house technical staff or another vendor.

3. Insist that vendors bring best practices of technology development. Insist that vendors provide best practices from their industry, and ask that they are open and transparent about their practices. These best practices include, but

- **Product management:** This is not the same as project management traditionally found in government IT. A **product manager** focuses on building a delightful, easy-to-use, efficient piece of technology, as opposed to overseeing complex project plans, timelines, requirements, and deliverables.
- **Usability testing:** All vendors must test their products. However, this can often be limited to "user acceptance testing" which is more of a box-checking exercise. Rather, testing should be focused on **usability** to ensure that the experience for all users (whether that's public servants, clients, or anyone else who may come into contact with the system) is easy to use and efficient.
- DevOps, release management, modularity, security, and other best practices: There are many industry-proven practices in the field of software development.

4. Insist that vendors work in an agile, iterative, continuously improving manner, while putting people first. These are some of our fundamental Code for America principles:

- Work with an iterative approach: Agile may seem like a buzzword, but at its core it simply means that software should start small, with low-fidelity prototypes, and gradually test and iterate and improve, rather than trying to plan the entire system ahead of time, build it, and launch it all at once.
- Qualitative user research: Qualitative user research is fundamental to developing government services that better and more equitably meet the needs of communities by truly seeking to understand the fundamental needs of people who use government services.

5. Make it easy to work with governments.

- **Clearly communicate the end goal:** Vendors sometimes find it difficult to understand context about what is really being asked for and why. By communicating the true program outcome, not just the technology requirements, governments can help vendors become collaborative partners.
- **Establish shared vision:** Work with the vendor to establish a shared vision, which may include values, hopes and dreams, fears, and challenges. Clearly communicating these will help the vendor understand the government context, and solve appropriately for them.
- Eliminate burdens that make it difficult for vendors to participate: There are common procurement requirements written into RFPs that preclude many vendors from bidding on government IT projects. The result is that the same large vendor incumbents keep winning contracts, leaving no room for other vendors—who may be smaller, more local, and have new innovative ideas for solving government technology problems to compete.

Five Systemic Ways to Radically Reform Procurement to Improve Government Services (Reilly Martin)

The time for fundamental change in U.S. procurement is now.

Despite **one-in-three dollars being spent on public procurement**, government agencies at the federal, state, and local levels don't seem to know what they're buying or from whom. Procurement has long failed to deliver real value for communities, and existing inequities and inefficiencies have only been exacerbated by the pandemic.

It doesn't have to be like this; we need to buy better to build back better. We need to **think differently** and reimagine both the purpose and entire process of procurement. A system in which we work together to plan and deliver services not only for communities, but with communities.

We see five key opportunities to do this:

- **Design for equity and inclusion:** Make procurement at all levels of government more equitable and easier to access by putting the needs of the community at the center of **contract outreach**, **design**, **and management**, particularly for small, medium, women, and/or minority businesses. The City of Austin **estimates** that doing procurement differently could result in over 40 percent of the city's contract spending going to historically disadvantaged or excluded businesses, versus less than 10 percent currently.
- Focus on green sustainability as a baseline requirement: Build more green and fair supply chains by not only changing what governments buy, but how they use innovation and data to promote carbon reduction and better jobs. The City of Des Moines is changing how it will buy by reforming its local procurement ordinance, policies, and processes, while incorporating goals for increased outreach and contracts with local companies with their own sustainability and equity goals.
- **Purchase for best value, not only lowest cost:** Move beyond solely selecting the lowest cost good or service and evaluate bids based on the best partner or product, particularly when buying for good or services that directly affect people's lives, such as **nutritious food in Philadelphia** or **buying technology that manages social services in the State of Colorado.**

- **Open up contracting and spend data:** Provide public access to data and decisions about where taxpayer money is being spent on projects from planning through implementation. The **Open Contracting Data Standard** can help and has led to **change**. San Mateo County, Calif., and cities in the county spend \$750 million, and could be saving at least \$108 million a year by just sharing and coordinating better within the county on purchases.
- **Go digital:** Let's not take existing paper-based, analog transactions online, but rather rethink the entire business process behind procurement for the digital environment to simplify and automate routine tasks and improve decision making. One of the biggest misconceptions that government makes is that businesses want to do business with them. But businesses won't unless they see governments shift focus to an improved user experience for procurement that makes it fairer and faster to participate.

Done better, public procurement can be a lever for change; left unchanged, it will be more of a brake. So, let's think big and partner to move public procurement from a paper-based, compliance-driven chore that benefits the few, to an open, results-driven, digital service that delivers value for all.

Our State's First Agile Development Services Procurement (Giuseppe Morgana)

When we founded the New Jersey Office of Innovation in 2018, we realized we couldn't transform government benefits and services without rethinking procurement. What if we applied the same iterative, human-centered design principles from our work as technologists to the process of procuring agile development contracts?

In 2021, we procured agile development services, a first for the state, to scale our work to improve the **experience of businesses interacting with government**. Most recently, we applied the same methods to rebuild New Jersey's Unemployment Insurance system. We completed these procurements in a fraction of the time versus what was typically experienced for other technology initiatives.

Here are the top five lessons we've learned so far:

1. "Procurement is broken" isn't actionable

"Procurement is broken" is often a catch-all for a wide number of challenges, but it is too vague and high-level to be actionable.

Consider how you can break down issues into smaller pieces. Try running lowcost, time-bound experiments to get a pulse on the organization's readiness, and willingness, for change. What's working? Where are the bottlenecks? Who can help create momentum? Do senior leaders support and enable this work?

A clear understanding of the context can help you develop thoughtful strategies to address root cause issues and move the work forward. As a check, does your approach:

- · Clearly define the problem, vision and goals?
- Consider the readiness of the organization to translate a successful procurement into the desired outcomes?
- · Meet all government contracting requirements?
- Include a framework for evaluating each proposal objectively, based on your goals?
- · Set the future team (and product/service) up for success?

These questions help to frame the problem more holistically and ensure that attention is placed both on the underlying procurement processes and the supporting environment.

2. Take partnership seriously

Collaborate closely with agency subject-matter experts who understand the intricacies of the state and procurement rules and regulations.

We took a "one team" approach with our agency partners throughout the entire end-to-end procurement process—Innovation team members with product, design, and engineering expertise worked alongside leading subject-matter experts from the Office of Information Technology and the Department of the Treasury who understand the intricacies of state technology and procurement rules and regulations.

Partnering with state and procurement experts can help you uncover not only what is required, but also what channels are already available. In our case, using the pre-existing process for procuring via the GSA Schedule offered an effective way to access talent and services. We could follow a standard process while completing it within a fraction of the time similar procurements normally take.

3. Use meaningful evaluation criteria and practices

Evaluating proposals requires a deep commitment from the team to extensively review responses according to objective criteria.

We requested case studies, resumes, and code samples to inform our understanding of each vendor's track record and experience in providing similar services. In addition to allowing time for independent reviews, highly structured evaluation sessions allowed the evaluation committee to combine perspectives, informing the ultimate selection.

We recommend resisting the pressure to spread out the evaluations over many weeks—a dedicated evaluation period kept everyone aligned and up-to-date on context. Streamlined scorecards and collaborative evaluation processes—like shared note-taking templates restating goals and evaluation criteria—also kept us on track during the evaluation period.

4. Remember you don't have to start from scratch

Because we had other teams' work to build from when we started, we could spend more time navigating challenges and opportunities specific to New Jersey.

Our first procurement started substantially with the U.S. Department of Veterans Affairs Request for Procurement (RFP) linked below—and, to the extent they are helpful, we encourage others to use our **documents** as a starting point.

A few resources that were immensely helpful to our team:

- TechFAR samples
- Department of Veterans Affairs procurements
- 18F procurement materials

5. Expect to keep iterating

A key lesson learned during our first procurement: We can't make a contingency plan for every scenario. Instead, we worked alongside our procurement teammates to create the first Request for Quotation (RFQ), merging together external materials and standard New Jersey materials. After our first procurement, an after-action process (similar to a retrospective) allowed us to capture lessons that directly informed our **second procurement**. We are now working to further streamline our processes. We believe these improvements will create internal efficiencies and also promote competition and interest in future procurements by reducing the burden on vendors.

The Harry Potter Approach to Procurement (It's the Long Game) (Marina Nitze)

Procurement reform does not happen overnight, but taking small steps can create large-scale change. Harry Potter beat Voldemort piece (horcrux) by piece, breaking down the unimaginable task into more manageable steps. Instead of spending years trying to document every last requirement for every nook and cranny of your existing legacy system before you update it, spend six months replacing and improving one well-defined piece of it. Then repeat. In much less time, you'll have made huge progress.

Procurement may not be appreciated as the most sexy topic in public administration, but it is one of the areas most ripe for seismic transformation. Here are six ideas that can be implemented now:

- The best procurements are tied to Key Performance Indicators (KPIs) that impact real people (constituents or employees- ideally, both). Nobody cares how many lines of code are in your application or what programming language it's written in. Can you measure what your contract deliverables are achieving? (That's deliverable #1: instrumentation) Is this achievement objectively better than before? If not, why are you doing it? You cannot improve an IT system without improving its associated business processes. This makes for a more complicated and intertwined development process, but infinitely better outcomes.
- Beware of poorly-defined goals like "modernization." In fact, ban that word altogether. In 2008, the U.S. Department of Labor gave states \$500M to "modernize" their unemployment systems. It may surprise you to learn that during the COVID-19 pandemic, more than half of states boasted that their UI systems were "fully modernized." Did it seem that way? No. This disconnect was because the definition of "modernized," for purposes of receiving this funding, was "capable of calculating an Alternate Base Period" as opposed to getting the majority of deserving claimants their money within days, letting constituents check their own claim status, or having a website without business hours. The Administration for Children and Families (ACF) is similarly hemorrhaging cash by failing to define "modernization" for child welfare IT systems at all, so the same vendors are pocketing hundreds of millions of dollars to rewrite the same bad processes and forms from Pascal into Java, instead of achieving improved outcomes for children or families.

- **Internal talent comes first.** A great procurement doesn't require you to have all the expertise on the inside; if you had that, you wouldn't need to procure it. But you need *enough* internal expertise to write accurate, achievable, yet ambitious requirements and performance goals; to vet applicants; to fairly negotiate with vendors when changes inevitably need to be made; and to hold vendors accountable for performance. If you don't have at least that much, focus on filling that internal talent gap before you award \$100 million to outsiders whom you literally can't evaluate.
- **Contracting officers are not robots—they're human beings who want to be part of achieving your goals and mission.** The single best piece of professional advice I've ever received was from my predecessor at the VA, Peter Levin, who told me I should drive to VA's Technical Acquisition Center (TAC) in Eatontown, New Jersey and buy everyone lunch. I eventually stumbled my way north to them and fretted far too long on how to determine what they liked to eat. We ended up discovering a shared love of Brussels sprouts *and* helping veterans, and my team never did a procurement without going in person to New Jersey from that point on.
- The lawyers, budget analysts, contracting officers, and others who work on procurements all have their own risk and incentive frameworks. I have learned the hard way that "number of dead veterans" or "number of homeless foster children" are not criteria on most approval forms. You can complain about this, or you can fill out the required form so there will be fewer dead veterans and homeless children. Find out what criteria will de-risk your mission-critical procurement (proof points from other governments? ISO certifications? adherence to NIST IAL2/AAL2 standards?) from the perspective of your decisionmakers, and fulfill them.
- If you want to change how the big vendors perform, you first have to change contract performance criteria. These kinds of antiquated criteria don't de-risk your project; they *introduce* risk by guaranteeing you'll only get old guard applicants. Instead, removing requirements that unfairly keep out new entrants, like the minimum number of years in business or millions of dollars of past performance, will help increase the playing field and create more alternatives to existing vendors. If you don't know what's keeping new entrants from bidding, ask them.

We don't have to change everything all at once. Let's pick a few of the above practices and start measuring major procurements against them on a **dashboard**, a form of "positive peer pressure" *(Ten points for Gryffindor!)* I've found it useful in child welfare. Then, make it drop-dead simple to adopt each practice, such as with copy-and-pastable contract language from other states.

What We Can Learn from NYC Procurement Reform: Prioritize Transparency, Accountability, and Analytics in Public Procurement (Albert Pulido)

Why would state leaders care about procurement best practices that have been learned in the city of New York? In Fiscal 2021, New York City adopted an \$88.2 billion-dollar budget, making the City a larger procuring entity **than most states**. In the past 8 years, New York City has taken transformative leaps to improve procurement processes, and the following recommendations represent NYC's efforts:

- 1. Digitize the Procurement Process: Nearly all stakeholders have experienced government procurement to be a black box comprised of countless rules, laws, policies, and interpretations. In 2021, New York City launched PASSPort (the Procurement and Sourcing Solutions Portal)—a product that introduced an unprecedented degree of transparency and citywide standards to NYC procurement. In its first release, the City saw immediate results—including reducing the time spent on vendor background checks from about seven weeks to three days and vendor disclosure filing from about 30 days to one. Through transparency, the new systems will: 1) further enable the City to procure and deliver services faster; 2) create new avenues for accountability within government; and 3) demystify the experience for vendors, opening opportunities for new vendors.
- 2. Develop a Master Contract for Digital Services: For over twenty years, New York City's 40+ agencies have individually raced to develop digital services for its residents. In 2018, the City embarked on an effort to 1) streamline the City's procurement of digital and service design services, 2) leverage the City's buying power to get better deals, and 3) bring citywide standards to services through a new master contract called Government x Design. Through the contract, companies could apply to join a pool of pre-approved vendors, so City agencies could have speedy access to the pre-approved pool and individual agencies would no longer need to release lengthy RFPs for new digital products. This effort is ongoing and provides an opportunity for the City to include standard contract language on cybersecurity, accessibility, privacy, equity, etc.
- 3. Increase M/WBE Discretionary Spending Thresholds: In 2016, NYC recognized the importance of increasing opportunity for minority

and women-owned businesses (M/WBEs). The City successfully lobbied state legislators to increase the discretionary spending threshold set for M/WBEs from \$20,000 to \$150,000 in 2017, and then to \$500,000 in 2019. Put another way, before 2017, City agencies could quickly and non-competitively procure \$20,000-worth of goods and services from M/WBEs, and in 2019, that threshold increased 25 times to \$500,000. This policy has been a win-win for City agencies who are always looking to procure high-quality goods and services quickly, and for M/WBEs interested in working with the City.

4. **Unlock the Capital Budget for Modern Technology Purchasing:** In 2019, the NYC Comptroller **issued a directive** to all City agencies updating the City's policy on capital budget eligibility for technology purchases. The City's capital budget covers large long-term investments in facilities & infrastructure, while the expense budget covers everything else. Prior to 2019, the capital budget allowed for extremely narrow technology purchasing, (e.g., on-prem servers), but the 2019 Directive expanded capital purchasing eligibility to include subscription-based services in the cloud, taking pressure off of the expense budget and further unlocking the City's ability to upgrade its aging technical infrastructure.

Better Data Sharing for Benefits Delivery (Chris Sadler and Claire Park)

Introduction

Robust federal assistance programs and social services are essential to a thriving society. This is especially the case as people continue to contend with the fallout from the COVID-19 pandemic, which jeopardized livelihoods and put millions out of employment. Government benefits at the federal, state, and local level help people across the country pay for food, housing, health care, and other basic living expenses. But more work is required at the federal level to ensure that these benefits reach everyone in need. For instance, the historic \$1.2 trillion Infrastructure Investment and Jobs Act signed into law last year included a \$14.2 billion program called the Affordable Connectivity Program (ACP) to help qualifying low-income households pay for internet service. While the program is off to a strong start, improved data sharing between federal agencies, state and local governments, and institutions can leverage existing data from other benefits programs to streamline eligibility processes and ensure those who qualify receive the benefit. Expanding data sharing for benefits eligibility also aligns with one of the goals in the recent executive order to advance racial equity.

We discuss how data sharing could be improved, as well as other steps that the federal government can take to maximize the impact of this benefit on the digital divide. The solutions outlined here can be applied to both current and future programs that help people find **housing**, **prepare** children for school, and ensure everyone has enough to **eat**.

What Does Data Sharing Look Like Now for Broadband Affordability?

The Affordable Connectivity Program (ACP) builds off of the temporary **Emergency Broadband Benefit (EBB)**, which used the **National Verifier**—a centralized application system established by the Federal Communications Commission (FCC) and operated by the Universal Service Administrative Company (USAC) for the **Lifeline** program—to **confirm** applicants' eligibility. Eligibility is often confirmed through one's participation in other federal assistance programs—including Medicaid, Federal Public Housing Assistance, and the Bureau of Indian Affairs' General Assistance, among **others**—which qualify applicants for both Lifeline and EBB benefits. Both the EBB and ACP widened eligibility criteria beyond those qualifying categories for the Lifeline program so a wider number of low-income households could afford internet service during the pandemic. Doing so, however, meant that the FCC and USAC would need to access additional data sources to determine eligibility under new categories. The Lifeline National Verifier (LNV) currently has automated connections at the federal level to the Federal Public Housing Assistance and

Medicaid databases, as well as connections with **22 state and territory databases**, but the USAC is working on expanding the LNV's connections to various federal, state and local databases for expedited benefits delivery. Applications that cannot be verified through currently available databases require manual reviews of submitted documentation, which can slow down application approvals and benefits.

The Role of Data Sharing and "Cross Enrollments" In Improving Assistance Programs

Leveraging eligibility data from other government programs and promoting "cross enrollments" is a baseline necessity to maximizing benefits. Crossenrollments link existing data and/or eligibility determinations from one public benefit program to determine eligibility for another program, reducing both administrative steps and burdensome enrollment procedures. This also allows applicants to bypass having to manually provide some or all of the necessary documentation. In the case of the ACP's National Verifier system, USAC already shares data with the U.S. Department of Housing and Urban Development (HUD) to verify participation in the Federal Public Housing Assistance program (FPHA) and with the Centers for Medicare and Medicaid Services (CMS) to verify participation in Medicaid. Cross-enrollment would allow qualified FPHA or Medicaid recipients to automatically be certified for Lifeline and ACP. In order to add new eligibility categories for the ACP, such as participation in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), USAC would need to identify and establish connections with databases that could be used to automatically verify eligibility based on participation in WIC. This means that USAC might have to enter into memoranda of understanding (MOU) or computer/data matching agreements (CMA) with each state and local agency to automate the process of verifying applicants and administering the benefit. USAC would also need to enter into interconnection security agreements with relevant state and local agencies to ensure the data being accessed will be protected in accordance with federal standards for privacy and information security to protect the personal information of WIC participants.

Data linkages can also help with renewal of program benefits. Most programs require periodic re-verification of eligibility, usually annually. This can be an onerous process resulting in eligible participants **losing their benefits**. Through data sharing, recertification from one assistance program can be used to extend eligibility for another program.

Identifying Barriers to Sharing Data for Better Benefits Delivery

Legal issues, capacity constraints, fragmented data systems, and privacy concerns across federal and state governments can pose significant challenges to sharing data that would streamline cross-enrollments for many benefits programs.

- **Perceived legal and privacy barriers:** Many government administrators are **wary** of developing data-sharing agreements with other agencies for fear of legal concerns or issues of privacy in data sharing. These concerns, **often unfounded**, can delay MOUs and other types of sharing agreements.
- **Outdated and incompatible legacy data infrastructure:** Just as benefits programs have been developed in fragmented ways, the systems developed to support them were implemented in fragmented ways. Many parts of the government data infrastructure at the federal and **state** level are outdated and unable to effectively keep up with data demands from new programs like ACP. This is not a new issue; the Government Accountability Office in a **2016 report** described the federal government's heavy reliance on legacy systems.² State eligibility systems are in need of modernization as well, as past efforts such as the funding of integrated eligibility systems (IESs) have had **mixed success**.
- **Capacity constraints:** Agencies often lack clear procedures for sharing administrative data. Navigating this process, which includes issues of data quality, lack of data documentation, and interoperability and compatibility for linking data lead to capacity and budget constraints that hinder data sharing.

Improving Data Sharing and Infrastructure Is Key for Greater Assistance

The challenges of improving government data sharing and infrastructure are not new. Various attempts have been made over the last three decades to improve and better integrate government data systems, through periodic legislation enacted to address the issue, such as the **Paperwork Reduction Act of 1995** and the **E-Government Act of 2002**, and other administrative programs and pilots, such as the federal **State Systems Interoperability and Integration Project**. However, there are currently a number of promising legislative and technical initiatives to improve government data sharing, including the following:

• The COVID-19 pandemic highlighted the need to improve and accelerate government data sharing, and sparked efforts to improve the public data landscape, such as CDC's **Data Modernization Initiative (DMI)**, a large-scale project to modernize the data infrastructure of federal and state agencies. The DMI aims to standardize data use and sharing agreements, transform legacy public data systems, and improve interoperability across federal and local data systems. Though the goal of the DMI is to improve sharing and reporting of health data, the establishment of this framework would positively impact sharing of benefits eligibility data as well.

- The current Federal Data Strategy Action Plan calls for accelerating practices that "increase the sharing and use of data for federal decision-making and operational needs," and the recently solicited feedback on how best to achieve that goal.
- Improving data matching algorithms for data sharing, an important aspect of streamlining data linkages, is currently being addressed by 18F, a special technology and design consultancy within the General Services Administration. They have launched an **Eligibility APIs Initiative** to develop application programming interfaces (APIs) to help federal, state, and local governments update their benefits systems when policy changes. When new benefits programs that require data across various agencies and states—such as ACP—are created, APIs can allow for clearer communication and data linkages for eligibility determinations. Beyond the API work of 18F, capabilities are also needed in the government to employ emerging analytical methods for matching data that may drive more accurate data linkages, including machine learning and neural networks.

Improving data sharing to enable more cross-enrollments will involve solving challenges in several areas:

• A culture and clear framework that enables benefits data sharing: Federal law and most states authorize data sharing for appropriate governmental purposes, including benefits administration. However, legal and privacy concerns are **consistently identified** as a significant barrier to creating data sharing agreements. While this sometimes results from misinterpretation of laws and policies, it is often due to ambiguous or inconsistent federal and state laws, and absence of clear regulations. This ambiguity gives rise to a culture that is risk averse beyond the actual risks posed by legal rules, leaving a status quo of ad hoc data sharing and lengthy sharing agreement processes. There is a need for clear legal and organizational policies that create a foundation to support the sharing of data while protecting privacy.

Now that federal agencies and **most states** have chief data officers, CDOs can provide the leadership to establish a culture of data sharing through setting the tone and direction, prioritizing sharing and collaboration, and developing clear data and privacy policies that can accelerate the formation of data sharing agreements.

The **Federal CDO Council** and the **State Chief Data Officers Network** are well positioned to build a culture of data sharing in government and to provide guidance and clarification on appropriate data linkages. The CDO Council has a **Data Sharing working group**, and the State Network is

engaging in projects such as **generalizing MOU language** to streamline the sharing of data. We recommend both groups prioritize facilitating data sharing for purposes of benefits cross-enrollments in their work. This work should include cataloging the regulatory and legal restrictions on data sharing for benefits eligibility and renewal, providing sample data sharing templates that agencies can use in developing their data sharing practices, and identifying **opportunities for cross-enrollment**. The chief data officer groups should draw from the expertise of organizations such as **Actionable Intelligence for Social Policy (AISP)**, which works with state and local governments to develop data sharing capacities.

• Building capacity and an interoperable data infrastructure: Lack of data documentation can make data sharing processes difficult and time consuming. Many agencies do provide useful data dictionaries and documentation, but there is a lack of standardization for data documentation across government, as well as gaps in updating shifting data definitions and other important data changes over time. Sharing data can thus require significant time investment from personnel, who may need to acquire knowledge about key data attributes and variables across datasets. Current government data standardization initiatives, such as the **Data Standards Repository** (established by the 2020 Federal Data Action Plan) and the **National Information Exchange Model**, should be leveraged to streamline data sharing for benefits eligibility.

To enable and streamline data linkages, we recommend the development of further cross-government projects (such as the aforementioned API Eligibility Initiative), as well as innovative projects to develop tools and applications that allow for enrollment in more than one benefit at once.

Funding, of course, is an **oft-cited barrier to data sharing**, and increasing data sharing for benefits eligibility will require significant investments in building a more interoperable data infrastructure, modernizing systems (such as state integrated eligibility systems), and developing administrative capacity for linking data.

What about Privacy?

Privacy must be a priority in efforts to streamline benefits eligibility through expanding data linkages. Vulnerable populations served by benefits programs, who may be wary of data sharing, need to know that strong privacy protections are in place. In expanding cross-enrollment, programs should generally:

• **Minimize data collected:** People should only need to share the minimum information necessary for determining eligibility. The less

information collected from the start, the less personal information is available to be misused and circulated beyond the user's control.

- **Restrict data sharing:** Data should only be shared and circulated to fulfill program purposes. Restrictions around how data circulates also improve privacy, as fewer parties having access to people's information makes this information less likely to fall into the wrong hands.
- **Inform and make transparent how data will be used and shared:** Users should know how their data will be used and shared ahead of sharing that data. Notice and consent certainly isn't **sufficient** by itself, but people should have a baseline understanding of what's happening to their data, and transparency into these processes.

Currently, under the CMPPA, linking electronic records for administrative purposes related to financial benefits requires agencies to assess the risk of data linkage and develop procedures to protect the data. For privacy protections, this is generally interpreted to mean adhering to data minimization principles, establishing clear data retention guidelines, and ensuring that shared data is linked in a secure environment with access strictly limited to authorized personnel for reasons related to program administration. As government data linkages increase, however, continuing to maintain public trust that data privacy is adequately protected requires adopting emerging privacy technologies as they become available.

A large part of the answer to this challenge may come from work started by the (CEP), which looks at the country's data challenges as a whole, studies potential solutions, and provides recommendations. While the commission is exclusively concerned with data that would be used for statistical purposes, its work may ultimately drive improvements in administrative data sharing for benefit eligibility, including improved privacy protections. The Evidence Act signed into **law in 2019** made many important changes, such as mandating that federal agencies appoint chief data officers and requiring agencies to make data more open and accessible—with data presumed to be sharable unless prohibited by law or regulation. The CEP also recommended establishing a National Secure Data Service (NSDS) that could conduct temporary data linkages between agencies. Moving forward, benefits programs such as the ACP can further strengthen privacy by taking advantage of the forthcoming privacy designs of an NSDS.

Another one of the CEP committee's **recommendations** for a secure data service is to model best practices for secure data linkages by piloting the adoption of privacy-enhancing technologies.³ A particular emerging privacy technology cited by the committee is **secure multiparty computation (SMC)**. SMC allows two (or more) parties to perform calculations and functions involving all of their data sources, without any party having to reveal their private data to anyone else.

SMC relies on cryptography to compute answers over distributed data sources while keeping data encrypted at all times, without any party able (or needing) to see individual records of the other. Programs like the ACP could potentially use a special case of multiparty computation known as a **private set intersection** (PSI), running a protocol periodically to determine whether individuals match the criteria for benefit eligibility without having to reveal any underlying information.

For eligibility verification in ACP and other programs, another emerging cryptographic method known as **zero-knowledge proofs** could potentially be used to enable verifications without the need to transfer any personal information. Zero-knowledge proofs work by passing a number of values from the person needing verification (such as an applicant to the ACP program) to the verifier (such as the National Verifier). The values passed are meaningless if intercepted, but they are values that only someone actually possessing the correct personal information, such as an SSN, could generate (as part of a cryptographic computation). The verifier checks these values to confirm a match with the person—all without the need to transmit any personal information.

Conclusion

Streamlining enrollment processes through sharing data across programs can help individuals and families receive benefits from ACP and other programs without burdensome, redundant applications, eligibility screenings, and verifications. At the same time, reducing steps in eligibility determination and recertification can realize administrative savings through increased efficiencies and the reduction of improper payments. The COVID-19 pandemic has changed the status quo by highlighting obstacles to government data sharing and the need to enable and accelerate better sharing.

At all levels of government, the lack of clear guidelines for data sharing combined with penalties for improper data use—results in a reticence to share data and inhibits the completion of data sharing agreements in a timely manner. Establishing clear legal and leadership guidance at both the federal and state levels on allowable data sharing and data disclosures, while working to improve data interoperability and infrastructure, can help build more efficient benefit verification processes and **increase** program enrollments to deliver vital help to those in need.

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Invest in People and Infrastructure: Practical Tips for Teams and Longer-Term Recommendations to Change the Culture of Procurement in Digital Service Delivery (Shelby Switzer)

We need to invest in procurement expertise as a core part of a digital service delivery team, as well as infrastructure to support better procurement. Luckily, there are practical steps that teams can take now to change how they think about and implement procurement and acquisition during a project lifecycle.

- Include procurement at the table during program goal setting. Procurement needs to be on the same page as the program's objectives, so that they can shape the contract around those specific and measurable objectives. This is also an opportunity to make sure the procurement specialist understands your team's values, existing skill sets, and work environment, which might inform their recommendations for contract scope as well as help you advocate for inclusion of principles such as agile delivery or open source creation.
- Spend time creatively solutioning and researching without assuming a new contract is necessary. Are there SaaS products out there that can solve your problem and help you reach your objectives? Are there open source solutions that solve your problem, which might change your procurement needs to a hosting solution for that open source tool, instead of an entire product build? Lean on resources like Airtable, Zapier, and IfThisThenThat (IFTTT) to help you in your process.
- **Don't assume you have to go this alone.** Call your counterparts in other cities, counties, or states/territories and ask what their experiences have been with this problem and how they solved for it. Check open platforms such as CoProcure for joint procurement opportunities, or reach out to communities of practice such as the Intergovernmental Software Collaborative for help finding collaborative solutions.
- If a new procurement is necessary, create a design challenge to vet the capabilities and work practices of vendors. Don't let vendors tell you what they can do: make them *show* you. As part of an RFP response, require that a vendor submit code for a prototype that solves a specific, well-scoped problem in the problem space of the contract. The prototype should show that the vendor can engage in user research and humancentered design, and that they follow best practices for a modern software development lifecycle.

Beyond these hands-on recommendations to start improving how you do procurement now, there are broader systemic and cultural challenges that need to be addressed if we are to make serious change.

The first is talent. In order to most effectively implement the recommendations above, your program team needs some amount of technical expertise. That role could be filled by a technically-minded product owner, a solutions architect, or software developer. This staff would create and vet responses to a design challenge, as well as implement other common recommendations for improved procurement such as modular contracting for a technical project. While governments are increasingly hiring for technologists, it's unfortunately still not the norm.

There is also a lack of procurement talent, especially those trained in digital fundamentals. The pipeline into procurement is small and the initial training long. A typical certification process takes 3-4 years, and training for tech-focused skills such as **DITAP** are an additional time investment. We need to expand the pipeline through programs at the university level as well as clear, supported career-pivot pathways for technologists or other professionals to transition into procurement roles. We should also invest in upleveling the people already in the field, through more programs like DITAP and OCP's **Lift program**. Likewise, we can support existing procurement professionals by training product / digital service teams in procurement basics, so that as procurement, technologists, and program folks start working more closely together, the entire team is speaking the same language and can therefore move more quickly and more in sync.

The second big bucket ripe for change is collaboration and transparency. We need more ways to collaborate across jurisdictions. State and local governments are often solving the same problems in similar ways, but don't tend to build or buy across state borders. Collaboration takes relationships and trust, and often benefits from an existing community of practice that is proactively managed and invested in. As governments increasingly create open source technology, we can improve the discoverability and replicability of these projects, so that new procurements aren't always necessary.

To support collaboration, we can also invest in shared procurement infrastructure, such as best practice guides, sample contract language, and other resources, as well as tools like shared contract vehicles (e.g. GSA schedules) and centralized solution authorization mechanisms like **FedRAMP**, which take a lot of the work out of doing a new procurement or project build. A lot of great infrastructure exists and continues to be invested in at the federal level for federal agencies to take advantage of, but state/territorial and more local governments are missing out. We need to create resources and services specifically targeted to them, and provide clearer guidance on how and when they can utilize the federal tools that already exist.

Notes

1 https://www.aspeninstitute.org/blog-posts/ procurement-lessons-from-the-worlds-biggestpurchaser/

2 Three years later, the agency found that only three out of the 12 agencies they had examined had implemented their recommendation and made progress in planning to modernize their legacy systems.

3 p. 12.



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