TECH TALENT PROJECT

A PIVOTAL MOMENT FOR PHILANTHROPY:

Technology and Government in a Rapidly Changing World

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TECH TALENT PROJECT

The Tech Talent Project is a nonpartisan, nonprofit project dedicated to increasing the ability of the U.S. government to recruit modern technical leaders in order to achieve critical economic, policy and human outcomes. It was founded in 2017 by former technology leaders from the Obama and Trump White Houses. Tech Talent is pulling together a group of leaders who have the skills the government needs and a passion for serving their fellow citizens.

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PREFACE: AMERICAN GOVERNMENT AND THE CUSTOMER EXPERIENCE PROBLEM

Why Using Technology to Deliver Government Services Is So Urgent

Philanthropy takes on some of the biggest challenges facing society: public health, climate change, education, democracy. Yet there's a common thread among successfully scaled policies in each arena—technology, yes, but more importantly, technology implemented well.

The government's ability to competently build, use and explain its own technologies is a critical part of effective governance. The rollout of COVID-19 vaccines couldn't have happened without the tech savvy to reach every household in the United States. Decarbonized energy sources like solar panels employ the newest technologies. And, as we'll discuss below, the strength of our democracy is linked to how well citizens can use government services—from the voting booth to the DMV.

Technology touches everything.

Occasionally, as with artificial intelligence, that point becomes water cooler conversation. Other times—for example, when exploring how technology supports government services—the topic fades into the background. This is especially true of implementation, which cuts a humdrum figure in the policy world—until it fails. (See: HealthCare.gov, which served six people on launch day.)

That's a problem—not just for policymakers, but for every person living in the United States who interacts with the government.

> "What's valued in government isn't the nuts and bolts of implementation, but the rarefied work of policymaking," writes Jennifer Pahlka in *Recoding America*. "Digital work, which in our larger society commands so much attention … in government is reduced to an afterthought."

When the public sector isn't able to hire and support effective technological talent, the public loses trust in government. Policymakers are unable to design or deliver programs that meet the public's needs. And when the government struggles to deliver, our democracy weakens.

The chaos at the DMV, the unemployment website crashing or that inscrutable tax form? Technical expertise, implemented well, can often anticipate—and help solve—these issues. The people who need these services the most also suffer the most when the public sector fails to keep technological pace.

TECH TALENT PROJECT

EXECUTIVE SUMMARY
A PIVOTAL MOMENT FOR PHILANTHROPY AND SOCIETY

This is a critical juncture for the philanthropic community. Society is evolving at an unprecedented pace, propelled by exponential advances in technology, such as artificial intelligence and machine learning, that are fundamentally altering how we live, work and interact. These shifts are exposing preexisting gaps in the capacity of all levels of government to effectively deliver on their core missions, from federal agencies down to local municipalities.

In recent years, we have witnessed escalating polarization, the once-in-a-lifetime upheaval of the COVID-19 pandemic, and a long-overdue reckoning with racial inequities. At the same time, governments have taken promising steps to modernize: investing in technology and technical leadership, assembling digital teams, and collaborating with technical experts to meet the evolving needs of people in the United States. But the pace of change is accelerating across the board.

While many more Americans are now connected online, deep disparities persist in access to digital tools, resources and user-friendly government services. Consider Tara McGuiness and Hana Schank's findings in Michigan: Imagine you had to fill out a form with 1,204 questions just to see a doctor. Then you had to wait two more weeks for the appointment. Now imagine that's the only way you could get food that month.

That's what bad implementation of well-intended policy can look like. Poor implementation looks like hungry kids, stressed-out parents, and Americans who can't figure out how to get food, an ID or a vaccine for a deadly disease. In some cases, well-intentioned policy is barricaded behind obstacles that have been purposefully erected to make accessing government programming difficult, thereby discouraging use. This divide separates the digitally privileged from the digitally disadvantaged, the tech-savvy from the tech-struggling. As the chasm widens, so too does the opportunity gap.

Now is the time for philanthropy to step up. Of all the complex challenges facing our nation, few hold more potential for exponential impact than radically improving the technical and operational capacity of government at every level. At its core, this paper advocates for a model of effective governance with "success" defined as government possessing the actual capacity to deliver on its promises. We have an obligation to help engineer a capable, responsive and technologically advanced public sector that serves the diverse needs of all Americans—not just in the present, but for generations to come.

Philanthropy is poised to play a pivotal role in this transition—with principles as the guide and partnerships as the means. To achieve that vision, the philanthropic community must make concerted investments to evolve governance from a 20th-century compliance mentality to a 21st-century focus on effectiveness, outcomes and impact for all communities. In 2021, the innovative Public Interest Technology Infrastructure Fund served as a recent success on this front. The Ford Foundation and Siegel Family Endowment were joined by Schmidt Futures, Pivotal Ventures and the Patrick J. McGovern Foundation to establish the Public Interest Technology Infrastructure Fund to support co-investment in talent pathways, innovation and infrastructure for the emerging field of technologists using their skills to support the public.

Over the course of six months, and following a decade of encouraging progress in fields like public interest tech and gov tech, we engaged experts in public policy, public service and philanthropy to discuss these challenges and begin to prioritize opportunities. This paper offers an initial roadmap to guide philanthropists by highlighting promising opportunities, sharing stories of success, and proposing ways to support, guide and, where appropriate, accelerate the technological transformation already underway across the country.

THE PATH FORWARD: THREE PILLARS FOR CHANGE

Through extensive interviews with leaders across sectors, we identified three key pillars where progress is needed to build an effective, tech-enabled government. These pillars—Talent, Trust and Governing—represent opportunities for philanthropists and partners to drive transformational change.

1. Tech Talent: Technical Capacity and the Talent Imperative

If "technology touches everything," we need people who understand relevant technology designing and delivering it in order to best serve the public interest. Senior political leaders need to understand why tech matters and sometimes how it works. For too long, though, government and philanthropy have—by and large—ignored this issue. As a result, not only is the public sector in dire need of technical talent to design and implement policies that use tech effectively, but the government's antiquated hiring processes must be updated to meet the speed and competitiveness of today's talent market.

2. Trust: Addressing the Tech Trust Deficit

Government failures to effectively build, use and explain its own technology have eroded public trust. To rebuild confidence, government must leverage tech transparently, meet people's needs, and align with shared democratic values. Philanthropy can support organizations that advance accountability efforts and communication campaigns to demystify government.

3. Governing: From Policymaking to Implementation

Getting policy right is just the first step. Where do things fall apart between policy and implementation? How does public policy, as written, snowball into poor implementation? What are the real-world pain points when implementation fails? We need public service-oriented technologists and technology-oriented public servants embedded throughout the process—from drafting bills to delivering services—to execute policies successfully.

PHILANTHROPY'S PIVOTAL ROLE

Philanthropy plays a crucial role: Funding organizations, partnerships and advocacy that can help to ensure that government has the capacity to use technology in a way that serves the public interest—from resourcing systemic change efforts to mitigating the pacing problem. But it doesn't have enough money to solve these problems on its own.

This paper explores each of these pillars as an avenue to strengthen governing in the 21st century. The path ahead will not be easy, but the opportunities for impact are immense. And there is no time to lose—government must be equipped to adequately serve the public interest in a rapidly changing society. With commitment, collaboration and urgency, we can build state capacity that is capable, responsive and prepared to empower people in this new era.

RECOMMENDATIONS

Based on insights shared by dozens of experts, we recommend funders focus on five key areas:

1. Support Nonprofits Bolstering Delivery and Technical Capacity

Multiple nonprofits are already working effectively to shore up government's digital capacity—including around AI. But they aren't doing the work at scale. Funders should provide multiyear support to expand programs matching technologists with public service roles, modernizing archaic systems to focus on delivering services effectively, and training civil servants. Long-term general operating grants give nonprofits the flexibility to meet rapidly evolving needs.

2. Invest in Modern Tools and Training

Philanthropy can fund organizations that have or can develop technical tools, trainings and educational exchanges tailored to government's needs. Resources can create the capacity to build data and AI expertise across agencies, develop interfaces improving constituent experience and build the capacity for effective regulation. Sharing solutions between agencies and sectors can promote efficient progress.

3. Back Research on Effective Governing

Supporting research on governing in the digital age elevates awareness and spreads promising models. Studies could cover hiring, human-centered policymaking, equitable service delivery, technology regulation, and other key issues at the intersection of tech and the public good. Findings should inform policies and community-centered solutions.

4. Sponsor Tech Policy Fellowships

Sponsoring fellows with the technology expertise to advise Congress and federal agencies fosters direct exchange of expertise where it is lacking. Fellows gain policy experience while infusing technical perspectives into government. Intergovernmental Personnel Act placements also allow temporary staff sharing among nonprofits, academia and governments.

5. Raise Public Awareness

Raising public awareness is essential to driving change. Funders can spotlight gaps in effective governing through storytelling—media campaigns, documentaries and investigative journalism. Op-eds, events and pop culture partnerships are other avenues for engaging diverse constituencies on the urgency of the pacing crisis.

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INTRODUCTION

Government moves slowly—and that is not always a negative. Sometimes slow processes can ensure stability, allow time for debate or precaution, and protect against unintended consequences. But today, technological acceleration has widened the chasm between the slow pace of government and the exponential development of technology in society. This widening gap has created a crisis of capacity in government at all levels, hindering its ability to serve the public interest.

From national security to delivering basic services, governments now struggle to keep up with rapid tech transformations. Outdated systems, lack of technical expertise and resistance to change have resulted in critical failures and vulnerabilities: crippling cyberattacks on federal agencies, collapsed unemployment systems during COVID-19, and IT projects that run decades over deadline and billions over budget.

The consequences of what experts term the government's "pacing problem" extend throughout public life. Antiquated citizen engagement models cannot leverage today's tools to meaningfully involve diverse voices. Science agencies lack modeling capabilities to analyze complex, 21st-century threats like climate change. Lawmakers grapple to regulate technologies they scarcely understand while passing laws that in many cases are technically impossible to implement.

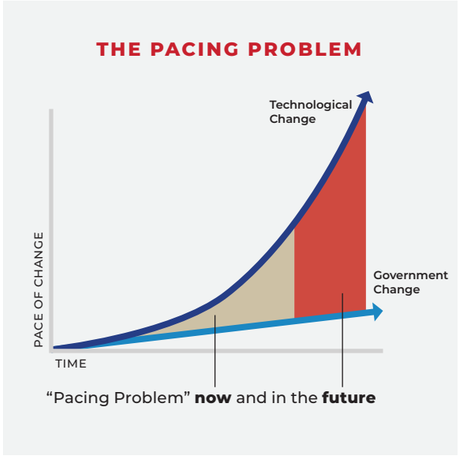
The costs of this crisis of governance are difficult to overstate. Public trust deteriorates as government services falter. Inequities deepen as the disconnected find it harder to access assistance. Outpaced and outmatched, the state loses its ability to protect the people it is meant to serve, leaving us exposed at a time of accelerating change.

Solutions are within reach, but they require urgent action. We must rapidly equip government with 21st-century tools and talent. The pages ahead explore this pacing crisis, its far-reaching impacts, and what we can do to enable governance that is capable, responsive and prepared to serve the diverse needs of the public in a new technological era.

THE "PACING PROBLEM"

Government's inability to keep pace with technological change impacts all Americans.

The "pacing problem" refers to the accelerating gap between the speed of technological change in society and government's plodding, linear pace of adaptation. As POPVOX Foundation Executive Director Marci Harris has explained, this problem manifests both externally, as government struggles to keep up with private sector innovation, and internally, as antiquated systems constrain agencies' ability to serve the public effectively.



External Pacing Problems

Externally, the pacing problem has severely hampered government's ability to understand and regulate new technologies. Some lawmakers considering bills addressing complex innovations like cryptocurrency and facial recognition scarcely grasp how these technologies work. Policies often lag years behind the issues they aim to address.

This knowledge gap also threatens national security. New forms of warfare and cyberattacks put sensitive and classified data and critical infrastructure at risk. Outpaced regulators lead to unchecked threats.

The costs of the external pacing problem are difficult to exaggerate—outmatched by technological forces, government loses its ability to protect and empower the public.

Internal Pacing Problems

Internally, the pacing problem manifests as chronic underinvestment in effective technology infrastructure and human capital. The result is a government that cannot effectively serve the public in the digital age.

While people in the U.S. expect government services to be accessible online, agencies must contend with decades-old, cobwebbed IT approaches and obsolete legacy tech. Procuring new tools is notoriously arduous.

The government workforce has less than 4% of its workforce under 30 and often has technical skills lagging the private sector. Strapped budgets offer little incentive for tech professionals to serve.

Consequently, government services remain disjointed, confusing and difficult to access. Websites are dated and dysfunctional. Avoidable failures proliferate, from benefit application backlogs to unchecked data breaches.

In Michigan, as Tara McGuinness and Hana Schank detail in Power to the Public: The Promise of Public Interest Technology, as recently as 2015, applicants for emergency aid had to fill out a form with 1,204 questions. (If each of these questions took only one minute, an applicant would need 20 hours to complete the form.)

Ultimately, those failed most by government's internal technological shortcomings are everyday Americans relying on essential programs and services.

Two Sides, One Problem

External and internal manifestations of the pacing problem may seem disconnected. But at their core, they stem from the same deficiencies—lack of resources, expertise and urgency. Lasting solutions must address both dimensions of this crisis in governing capacity.

Philanthropy has a crucial role: It can help to ensure that government has the capacity to use technology in a way that serves the public interest—from resourcing systemic change efforts to mitigating the pacing problem. But it doesn't have enough money to solve these problems on its own. We must act now, before the gap widens into an unbridgeable chasm.

Reasons for Hope

We've made progress in closing pacing gaps:

- As McGuinness and Schank reported, a nonprofit design studio called Civilla conducted user research and partnered with the state of Michigan to cut its aid form length by 80%.
- TechCongress was instrumental to the creation of the House Digital Service, which is beginning to address technical pacing problems in Congress.
- The federal government used a simple website and accurate address information to get COVID-19 tests into people's mailboxes all across America—and child tax credits right in most folks' bank accounts—in a timely fashion.

"The government is quite good at things when it wants to be," says Dan Tangherlini, managing director at Emerson Collective and former administrator of the General Services Administration. He pointed to 18F, the United States Digital Service and the Presidential Innovation Fellows program—all of which coalesced in the wake of HealthCare.gov—as examples.

Tangherlini, who ran D.C.'s city operations from 2006 to 2009, says citizens are right to have antipathy toward systems that "favor the retired, the rich and those that can hire other people." His team modernized the agency so almost all DMV work could be done online "on your time, on your terms."

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CHAPTER 1: TECHNICAL CAPACITY AND THE TALENT IMPERATIVE

HOW TO FIND, PERSUADE AND KEEP TECH TALENT IN GOVERNMENT ROLES

Effective technology inside government is crucial to alleviate the struggle of civil servants and to help them implement policy—delivering services outside government "walls." (Well-intentioned policy doesn't suffice.) Tech-savvy people are critical at the policy table—and in every implementation process. Building tech capacity is critical for government to close the widening gap between the exponential pace of technological change and its own linear speed of adaptation.

On the external front, policymakers urgently need greater fluency in emerging technologies like AI to craft effective regulations and oversight. A lack of technical expertise at the table results in policies that fail to address complex challenges.

THE TECH TALENT TRAP

In 2019, a 25-year-old software engineer with management experience wanted to serve her country and applied for an open digital role in the federal government. Despite being precisely the technical talent government so desperately needs, she never heard back after submitting her application.

"The hiring process was just horrible. It deters 40 to 50% of people … it deterred me," she recalled.

But this technologist was determined. She found a workaround through a Congressional Innovation Fellowship. By January 2020, she was embedded in House Speaker Nancy Pelosi's office—just in time for the onset of the pandemic.

Though all legislative staffers focus on policy analysis, her digital expertise lent unique value, informing efforts around disinformation and data privacy. Despite only serving in a 12-month fellowship, she made an outsized impact.

This story highlights the paradoxical barriers technical talent faces entering public service, despite government's urgent need for those skills. Until ineffective hiring practices change, many potential civil servants' passion for public impact will continue being blocked.

Internally, government needs both tech-savvy leaders to modernize systems and operations, as well as hands-on engineers, designers and product managers to actually implement and deploy technology. Without modern digital infrastructure and talent driving improvements, service delivery remains fragmented, confusing and detached from people's needs.

In short, the pacing problem has two dimensions—external and internal—and both require bolstering government's technical talent as an indispensable part of the solution. A responsive, high-performing public sector requires policymakers conversant in the technologies they are governing and technologists embedded throughout agencies to upgrade capabilities. In order to bring this talent on board, federal hiring practices must be addressed.

Hiring can be quite onerous for many civil service posts, taking nine to 18 months or more. If you manage to crack the code, putting the right keywords in a 12-page "government resume" and ranking yourself highly enough in your self-assessment, you may arrive at your first day of work to find an antiquated computer, perhaps loaded up with obsolete, out-of-use software.

Incentives are complicated: Instead of being celebrated for improving systems, well-intentioned government staffers may be asked to just follow the rules and check boxes—even at times when the system itself is obviously broken. "Creativity is not rewarded," said one federal employee we interviewed.

THE PAY GAP

Salary is important to job seekers—but a red herring, argues Tech Talent Project Executive Director Jennifer Anastasoff. Trailing hot behind salary as priorities, a recent Gallup poll suggests, are work/life balance and a role that plays to their strengths.

The public sector possesses the vocabulary to recruit tech talent:

- "Scale." "Impact." "Mission." The words have successfully attracted tech sector leaders into political and civil service roles. The United States Digital Service—improving tech in federal agencies—is additional proof.
- The nuts and bolts of implementation are often thrilling to engineers, content strategists and operations specialists. For example, the bedeviled launch of HealthCare.gov galvanized Google engineers to help.

Talented tech sector workers will take pay cuts—if you prioritize scale, service, civic duty and mission.

THE STATE OF (HIRING) AFFAIRS

Insidery, inscrutable and bureaucratically bloated

The labyrinthine process of securing a government job deters many qualified applicants, especially technical talent, from public service. Often opaque and convoluted, federal hiring presents unnecessary barriers for those hoping to serve.

Consider the typical experience of an applicant. They might:

- Wait nine to 18 months just to receive a response, with silence being common.
- Be expected to submit a government resume up to 12 pages long.
- Hire expensive resume writers to decode the process, a luxury not available to all.
- Complete self-assessments claiming mastery of every required skill.
- If hired, perhaps wait months more for security clearances before starting.

If “technology touches everything,” we need people to design and deliver it in order to best serve the public interest. This antiquated, insular system shuts out qualified candidates, particularly technical experts suited for government’s urgent needs. The resulting costs are immeasurable, as critical positions go unfilled and talent flows elsewhere.

Meaningful reform is long overdue. To secure the best and brightest for public service, government must make hiring transparent, streamlined and applicant-friendly. Doing so will allow nonprofits and other partners to match suitable candidates with opportunities to make an impact when it is needed most. Current hiring approaches present a problem.

“I’M #1! I’M #1!”

The self-assessment problem

A major challenge in onboarding tech talent? Self-assessment of expertise. Because of an interpretation of U.S. code as recently as 2021, 90% of competitive, open-to-the-public job announcements across the federal government relied solely “on an applicant’s answers to a self-assessment questionnaire” and “an HR resume review to determine whether their experience made them eligible for the position.” Applicants simply assert mastery of all the required competencies, with little to no verification. Or, as Jennifer Pahlka wrote, “We have essentially one way to determine if candidates are qualified—we ask them.”

Imagine if an interview consisted of an applicant proclaiming: “I’m a master scheduler, detail-oriented worker, design expert, strategic thinker and communication guru, and will excel in this role.” Yet with self-assessments, this is essentially how candidates can land technical positions without relevant skills or experience.

By relying solely on applicants’ own unchecked claims, critical government roles can go to unqualified candidates. Even worse, biased self-perception could facilitate discrimination in hiring.

This is precisely the sort of self-administered skill review that could land you in a technical government role *without* technical experience. Thankfully, some agencies are shifting toward skills-based assessments and interviews, sometimes cooperating to hire technical talent in groups. But lasting change requires making the hiring process more effective and meritocratic across all of government. Applicants should have to demonstrate—not just declare—their abilities to adequately serve the public interest.

REASONS FOR HOPE

Closing the gap between policy and implementation

While government hiring in action clearly needs to improve, promising steps are being taken to modernize recruitment and attract qualified technical talent. Some encouraging signs include:

- Skills assessments replacing self-evaluations for some roles, thanks to collaboration between the U.S. Digital Service and Office of Personnel Management. This makes the process more meritocratic.
- Specialized fellowships like TechCongress’, giving technologists a clear pathway into public service. These can serve as recruitment pipelines for civil servants.
- Nonprofits actively seeding tech talent in government and providing critical human capital.
- Agencies adopting competitive pay scales, like the VA’s new IT compensation model. Salary alone isn’t everything, but it removes a barrier.
- Awards initiatives that confer prestige on public service tech, energizing technologists to contribute their skills.

There are no silver bullets, but each of these approaches expands the avenues through which passionate, patriotic technical talent can serve. Sustained focus on recruitment, compensation, training and culture change can steadily move government in the right direction.

With urgency and commitment from philanthropic partners, even more can be done to connect skilled technologists to opportunities for impact when expertise is needed most.

RECRUITING AT EVERY LEVEL

We need techies at every stage of their careers

Nearly every expert we spoke with agreed that it’s crucial to hire public servants at all career stages, from recent graduates to senior leadership. But how can we effectively recruit technical talent to serve?

Clarence Wardell III, who served as senior advisor for policy implementation and delivery on the Domestic Policy Council in the Biden administration, says we need “senior leadership that truly understands what quality service delivery looks like and what’s needed to enable that … You have to understand that it’s important, give space and remove blockers.”

He added, “You can have all the talent you want, but if leadership isn’t supporting and enabling that work, the timeline [for progress] is drastically degraded.”

“The need is tremendous” for senior tech leaders, especially in AI, added one former federal employee. Rather than critiquing from the sidelines, tech leaders could make an enormous difference by actively advising and working within government. “People from the tech community are oriented toward scale,” says John Bailey, non-resident senior fellow at the American Enterprise Institute. So are employees working in government.

HOW DO WE RECRUIT? FIRST, KNOW HOW TO TALK TO FOLKS

Here are some pitches that work:

- “Are you going to make a difference?” asks Goldman School of Public Policy Dean David C. Wilson. Leverage technologists’ desire for impact.
- “You can alleviate human pain,” says Jimmy Chen, who founded Propel to help Americans access food stamps, among other services, more easily. Emphasize the direct impact on people’s lives.
- “Mission,” says Jennifer Pahlka. For many, a sense of purpose is the ultimate motivator.

When added to broader recruiting, academic pipelines create a sustained talent flow. And campaigns like the Partnership for Public Service’s “Service to America” medals boost public service’s prestige. With urgency and creativity, government can attract technical talent at all levels to fulfill its mission.

HOW DO WE RETAIN TALENT?

Soften the landing. Improve employee experience

There are, of course, talented tech-savvy folks already in government roles. This workforce is in a position to effect change, but doesn’t work within an environment to effect change. There are exceptions within the USDS, the VA, Health and Human Services (HHS) and other agencies starting to lean more on tech.

Great people already inside the system need support

- There are plenty of folks with tech fluency currently holding government positions, battling 50-year-old systems that don’t reward inventiveness or change.
- Lots of career public servants are inventive and tech-fluent, but battling old equipment and systems. With enough hubbub, systems get upgrades, as when this DoD letter went viral.

Tim Carlberg, managing director of the Skoll Foundation, notes, “It’s essential that within government there are individuals and leaders who have deep technical expertise, are close to the opportunities and challenges that tech presents, and are therefore able to create policy, manage oversight and execute programs with the best possible effectiveness for leveraging technology.”

As for new hires from the tech sector, Zach Graves, executive director of the Foundation of American Innovation and a National Security Institute fellow, said, “An important role for civil society organizations is to help provide training and talent pipelines. Technologists and engineers have a certain approach to problem-solving that can work well in government but can also butt against the process.”

In Congress in particular, Graves says, “policymaking is not generally top-down,” but is “much more stakeholder-oriented.” He adds, “It’s important that people calibrate correctly going in if they want to be effective in these kinds of roles … In many ways, it’s a kludgy, bureaucratic, analog set of institutions, and people from Silicon Valley tend to easily get frustrated.”

THE TECH TALENT TRAP *continued*

Despite barriers, some remain determined to do a “tour of duty” in government, and to return. After a stint outside of government, the young engineer is back in civil service—a director at a federal agency—made possible by the Intergovernmental Personnel Act, that allows nonprofit employees to be placed in federal agencies. Given the chance to serve (with the support of philanthropy and a nonprofit working to improve government capacity), she took it.

Graves thinks training and mentorship opportunities are key. “You can’t just throw people in, pluck them out of tech companies, and expect them to be effective.” He adds, “The other thing we’ve seen is that it’s been difficult training technologists to communicate effectively. Writing well is often a less emphasized skill in that field.”

Philanthropy can address that pain point. For example, through the Public Interest Technology University Network, funders including Ford Foundation, Hewlett Foundation and the Mastercard Center for Inclusive Growth have secured a commitment from more than 60 American institutions of higher education to tear down the silos between how we’re training tech and humanities graduates.

CHAPTER 2: ADDRESSING THE TECH TRUST DEFICIT

TECH, TRUST AND GOVERNING

Trust in government is alarmingly low. A recent study showed that only four in 10 Americans say they trust the federal government to do what is right. This crisis of faith poses an existential threat to democracy.

Technological failures exacerbate this trust deficit. High-profile failures like state unemployment systems collapsing during COVID-19 erode faith in government's capability. When governments can't deliver—or they communicate poorly—because of a lack of tech fluency, the problem compounds. Public trust in institutions takes a hit.

Trust depends on three pillars, explains Dean Wilson of the Goldman School of Public Policy:

1. **Competence**
   "I must know that you have expert knowledge, that you are skilled and committed."

2. **Care**
   "I must know that if you are well-meaning that you care about me, or you care about whatever issue exists, and that ostensibly you're going to look out for me because it's the right thing to do."

3. **Values**
   "I must know that we share values related to honesty and decency, and even if we disagree, we are on the same page of standards of good and bad and right and wrong."

With commitment, technology can help repair government's connection to the people. But this urgent work requires recognizing technologists' role in earning public confidence while simultaneously delivering competently and compassionately at a challenging time for our democracy.

COMPETENCE

How competence and transparency can build trust in our democracy

When implemented effectively, technology can build public trust by demonstrating government's competence and capability. As Andrea Sáenz of the Chicago Community Trust notes, "When technology is used to enable good communication and fast service delivery, it can absolutely build trust." But the opposite also holds true. High-profile system failures severely damage confidence in government's skill and reliability.

Transparency is key to restoring faith. Carrie Davis of the Joyce Foundation explains that when systems make processes easy to understand—like ballot tracking for voters—they foster trust. But opacity breeds suspicion and distrust.

A June 2019 GAO report highlighted critical legacy systems in need of upgrades. These critical federal legacy systems are so sensitive, the GAO wouldn't even name the systems.

TABLE 1: THE 10 MOST CRITICAL FEDERAL LEGACY SYSTEMS IN NEED OF MODERNIZATION

Agency	System name[a]	Age of system, in years	Age of oldest hardware, in years	System criticality (according to agency)	Security risk (according to agency)
Department of Defense	System 1	14	3	Moderately high	Moderate
Department of Education	System 2	46	3	High	High
Department of Health and Human Services	System 3	50	Unknown[b]	High	High
Department of Homeland Security	System 4	8–11[c]	11	High	High
Department of the Interior	System 5	18	18	High	Moderately high
Department of the Treasury	System 6	51	4	High	Moderately low
Department of Transportation	System 7	35	7	High	Moderately high
Office of Personnel Management	System 8	34	14	High	Moderately low
Small Business Administration	System 9	17	10	High	Moderately high
Social Security Administration	System 10	45	5	High	Moderate

Source: GAO analysis of agency data. | GAO-19-471

Effective technology and approaches can showcase government's competence if governments double down on transparency and successfully execute policies. But persistent failures will continue to erode public confidence. We must effectively leverage tech to deliver capable, accountable governance.

CARE

How the feeling that the government doesn't care about you can eradicate trust

Trust also depends on people's sense of political efficacy—the feeling that government is responsive to people's needs and works for their benefit. When public services are delivered with empathy and meet individual needs, it conveys care and strengthens efficacy. But unresponsive bureaucracy erodes this perception.

"The relationship between people and their government depends a lot on the *feeling* that the government is working for them—that it delivers." One person we spoke to with a long track record working in human rights spoke of her experience as a citizen of the Cherokee Nation. Though she hadn't grown up on a reservation and said it was a group she'd been only "tangentially related to," the Cherokee Nation helped vaccinate her whole family during the COVID-19 crisis—when California demand was so high that she wasn't able to secure shots in a timely fashion.

"They were so friendly and nice and helpful when I called," she said. She ended up flying to Oklahoma to get shots through the group. They called to ensure she got both her second dose and her booster. "They were looking out for us … It felt really individualized." She felt cared for—and held—by her tribal government.

Such individualized care happens with civil servants. But recipients often don't connect positive experiences to the larger government. As one academic leader told us, "Part of the problem is that Government is an entity, but government is actually thousands of people working every day."

Max Stier of the Partnership for Public Service explains the value of the Partnership's "Service to America" medals recognizing civil servants: "Our research shows that the needle [of public opinion] gets moved dramatically" through storytelling about civil servants. "On the center-right, there's a huge difference if you tell the story of our government through stories [of] individual civil servants."

VALUES

Tech + government = a conversation about shared values

At the intersection of technology and government lies a values question: What principles guide technology's use in the public interest? There is insufficient public dialogue about the values we optimize for when using technology in government.

Absent such discourse, "tech for good" claims ring hollow. We must ask: good for whom? As another strategist observed, trust gaps often stem from misaligned values and deficient integrity in how tech is applied. For instance, many police departments rely on private tech vendors to shape key policies. How can affected communities become centered in strategies employing such technologies?

Beyond talking about getting tech talent into government, we need public conversations about using technology to advance democratic values. Language elevating technical competence must speak to humans, not just insiders. Even if red and blue states aren't aligned on everything—or anything—it seems critical to start talking publicly about the importance of building technical capacity in governments.

With technology rapidly evolving via AI, scenario planning and guardrails are essential to build trust, provide space for innovation and protect rights. Failures like flawed social media regulation can be avoided by openly addressing values upfront. Effective, ethical governance shows democracy's worth. We must urgently bridge tech fluency and democratic principles to reinforce trust in institutions.

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All of this is particularly crucial as AI changes the landscape of what is possible by the day. That presents challenges, what with an already diminished public trust in government.

CHAPTER 3: GOVERNING, FROM POLICYMAKING TO IMPLEMENTATION

"YOU CAN HAVE THE MOST AMAZING POLICY CHANGE. IF YOU CAN'T ACTUALLY IMPLEMENT IT, IT'S USELESS."

Elections rightly seize public attention, but effective policy implementation is the less glamorous backbone of government capacity. And that capacity is urgently threatened by gaps between technological change and government's technical ability.

There are plenty of opportunities for philanthropists to resource, research and address problems in the hiring and trust spheres; the nuts and bolts of governance are perhaps the most complicated. And it's easy to get distracted, given the tempting sheen of policy—and news cycles that pull us in other directions.

One expert calls implementation failures, or failures of state capacity, a "cancer" silently undermining government, less eye-catching than election woes but just as insidious. Twenty-first-century tools and approaches offer solutions, but only if public-service-oriented technologists are embedded at each phase—from drafting bills to deploying public interfaces for services.

We already see well-intentioned legislation passed without input from experts who must operationalize reforms. Technologists are brought in late, struggling to modernize aged systems not designed for new demands. At each junction of policy development, the technological comprehension and execution capability of the state is tested—and in many cases found wanting.

Technology, implemented well, can help those who need government services. Clarence Wardell III, who worked as a tech lead in the White House on and off for a decade, talked about the child tax credit families received during the height of COVID-19, the national eviction prevention program, and loan forgiveness for public servants. Tech helped implement policy in each of those scenarios.

Just as democracy's health depends on free and fair elections, its sustenance requires delivering policies that improve lives. Philanthropy can help fulfill government's promise by investing in organizations that support effective implementation and digitally fluent leadership. These investments might bolster technology and public policy undergraduate programs to create a pipeline of future talent while simultaneously supporting the work of organizations like Coding It Forward, Tech Talent Project and United States Digital Response to prepare active technologists for roles in public service. Failure to do so will result in a widening chasm between glowing political rhetoric and the lived experience of people awaiting competent, empowering services.

IMPLEMENTATION: FROM POLICY TO IMPACT

"Good" policy is insufficient. Implementation is the bridge to actually helping people

Lynn Overmann, who worked in technology, strategy and delivery at the White House for more than a decade, puts it this way: "When the government owns all or a portion of the end-to-end delivery of service to an individual, community or business, we should nail that." She pointed to specific improvements at the Internal Revenue Service and Veterans Affairs as "two really good examples of where seamless, modern digital delivery and where getting it right has an outsized impact on millions of Americans." The VA has been embracing tech, and has a new app with a 4.8-star rating on Apple that had 1.6 million downloads just last year.

Overmann also noted "how much more good work could be done in critical benefits programs where the federal government serves more as a funder or administrator, like SNAP, WIC and unemployment," where state partners administer benefits. That implementation "can vary dramatically state by state," she said. Ultimately, there is "good work in that space. And that good work should help inform broader improvements." She says it's an area "where tech should be making a bigger difference—and by not leveraging federal funding and guidance more effectively, we are collectively getting in our own way."

In Chicago, Andrea Sáenz routinely encountered officials blocking actions based on misinterpretations of written policies. She said "that kind of thing happens all the time" on the local level. She'd be told, "No, you're not allowed to do that," and would have to counter it with, "Show me where that's written down." Fixing these breakdowns requires underscoring that well-intentioned policy alone cannot improve lives. The bridge between policy and success is effective implementation.

Philanthropy can help address this by supporting organizations navigating complex bureaucratic systems to directly aid people. And where government owns implementation, philanthropists can invest in organizations with the technologies, training and talent to overcome hurdles. With empathy, inclusion and digital proficiency, we can move from policies that sound nice to impacts that tangibly uplift lives. Our benchmark must be real change that people feel, not processes dotted and bureaucratic boxes checked.

BRING TECHNICAL EXPERTS TO THE POLICYMAKING TABLE

Give technologists a seat at policymaking and implementation tables

Imagine baking a cake, skipping the leavening agent at the mixing phase, then dumping bitter baking soda on the flat, cooked cake—expecting it to rise.

A similar thing happens when tech-savvy folks aren't invited to the policymaking table. You can't just "add tech later, and they'll make it happen." Anyone who has spent time in the private tech sector knows engineers find it excruciating when they are not involved in the design stage.

Carrie Davis offered another example: Legislators pass well-intentioned but impractical policies without consulting implementers, leading to unintended negative consequences. Avoiding this requires proactively embedding technical experts at the policy development table.

> "Policymakers may be well-intended; they will draft policies or legislation of 'Here's what we want to do!' But they haven't talked with an elected official. Then they're surprised when this policy that was well-intended has all sorts of unintended consequences."

Marci Harris of the POPVOX Foundation spoke of "Obama bringing in the nerds" in the wake of the disappointing HealthCare.gov launch. While many remain in agencies today, too few are involved legislatively to modify the statutory hurdles Congress oversees.

> "Many of the people who entered government service during the Obama years … came into government and started picking every bit of low-hanging fruit in sight: fixing websites, improving user experience, building dashboards, introducing agile techniques and user-centered design and all the things. That's been wonderful and transformative … [but] much of that work did not touch policy."

Today, she says, a lot of those folks remain in government, and have spent a decade in the executive branch. "They've experienced hurdles, blocks, policies that are statutory or inherent to the ways these policies were designed—baked in the '60s, '70s, '80s … There are lots of people in Congress who would like to change them. But there's no pipeline for [Congress] taking those learnings."

And Congress, many folks agreed, is in dire need of tech at the table. "Congress is where the most bang for the buck exists," said Harris.

MOVE FROM DATA TO SOLUTIONS

Quality data, data experts and a human story

As McGuinness and Schank detail in Power to the Public, having data about a problem is not enough. It has to be the right kind of data, and the right brains need to be available to interpret it and act to solve it.

The authors wrote of a homelessness issue in New York City: Homeless people weren't taking vouchers for a free room in a house. The city brought on an outside consulting agency that reported that "for whatever reason, people simply did not want to take the vouchers."

This basic analysis sat poorly with the chief analytics officer in the Mayor's Office of Data and Analytics, so he called his brother, who worked at a nonprofit running several Brooklyn shelters.

"When you're in a shelter, you get three hots and a cot. When you get a room, you get a bed and are on your own with food," his brother told him. It was an eye-opening moment for the analytics officer, whose data hadn't been enough to comprehend the on-the-ground, human story.

As New York City's homelessness challenge showed, even extensive data failed to explain why people avoided housing vouchers. The key breakthrough came when the chief analytics officer connected with an on-the-ground expert to grasp the human realities.

Too often, governments fixate on amassing data versus connecting insights to solutions. Data alone cannot reduce homelessness, improve schools or deliver any outcome. Numbers must spark dialogue, response and change.

Beyond engineers, governments need diverse experts in research, design, operations and product management to translate data into measurable improvements or to build a foundation for effective AI. Philanthropy can help bridge data collection with results by fostering collaborations between community voices and technical specialists skilled at transforming information into impact.

With urgency, inclusion and multidisciplinary teams centered on public benefit, data can improve lives. Numbers merely quantify problems; people solve them.

LOOKING AHEAD: OPPORTUNITIES AND CHALLENGES OF EMERGING TECH

While this report has focused largely on current governance gaps, the pace of technological change requires that we also look ahead to innovations on the horizon that are shaping society.

Artificial intelligence is one such technology that presents both profound opportunities and risks. As algorithms grow more powerful and autonomous, AI could help automate rote tasks in areas like public health and social services, freeing humans to do more meaningful work. Large language models could make finding government information easier or even more accurate, in time. But without planning and testing, or thoughtful oversight and governance, AI also threatens to further entrench societal biases and breach privacy on an unprecedented scale.

We must create space for open testing as well as deliberation on the risks and tradeoffs. No single sector has all the answers; meeting this challenge demands a chorus of diverse voices. By recognizing both the perils and the possibilities, and putting communities first, we can steer emerging technologies toward enhancing life in a truly democratic society. The choices we make today will shape everything that comes after—so we must choose wisely.

CHAPTER 4: PHILANTHROPY'S PIVOTAL ROLE

PHILANTHROPIC "CO-POWERING" AND PARTNERSHIPS

Government's tech crisis eclipses any one funder's resources. Only by combining forces can we close the widening pacing gap. As Michelle Shevin of Ford Foundation noted:

> "What philanthropic funders and nonprofits do best is co-power … We need to take the resources and opportunities you have as a funder in combination with the deep relationships on the ground that nonprofits have. Funders talk about a theory of change; nonprofits talk in a coordinated way; siloed are the people with the experience … How do you make visible the people you have impacted by a policy and center them in your strategy or intervention?"

Partnerships leverage nonprofits' local knowledge and funders' resources. The exponential growth of AI—just in 2023—means that we can't move as slowly as government and philanthropy traditionally do. "We do a lot to sort of uncritically accept a sci-fi future," Shevin says. "It's a paradigm shift moment. We need funders who think about how we shift the entire operating system under which we're acting as a society."

Zeenat Rahman, executive director of the Institute of Politics at the University of Chicago, has observed a tendency among some philanthropists who seem to think, "We can solve this issue alone." But it's got to be "a multi-stakeholder partnership," she adds.

SPREADING SOLUTIONS

What's working right now?

Imagine taking your car to the mechanic because something urgent is wrong with it—then doing nothing to actually fix it. Simply identifying problems without solving them is absurd. Yet often governments excel at analysis while falling short on implementation. Asking how technology can serve the public interest is progress, but insufficient.

The good news is that philanthropy has begun to accelerate the tech transformation already underway in governments across the country by:

- Supporting academic pipelines developing digitally fluent civil servants.
- Funding nonprofits successfully placing technical experts into government.
- Underwriting research on governing with technology.
- Partnering with agencies to deliver on tech-focused initiatives.
- Advocating for modernization through media campaigns.
- Exploring a "technology peace corps" to strengthen digital capacity per Shaun Donovan, the former HUD secretary who directed the response to Hurricane Sandy.
- Supporting research—such as this $30 million Knight Foundation initiative—about the intersection of governing and technology.
- Partnering with government agencies, as the Rockefeller Foundation did after Hurricane Sandy, teaming up with the U.S. Department of Housing and Urban Development and creating a design competition to foster coastal resilience strategies.

These and other promising ideas need implementation at scale. Philanthropy excels at spotlighting critical but overlooked issues through storytelling. By investing in and showcasing solutions and impacts, funders can build momentum for investment.

RECOMMENDATIONS FOR PHILANTHROPIC ACTION

Government's inability to keep pace with technological change has created a crisis in government. As this report has described, the stakes for our democracy could not be higher. Philanthropy is uniquely positioned to help close widening gaps in state capacity.

Based on insights shared by dozens of experts, we recommend funders focus on five key areas:

1. Support Nonprofits Bolstering Delivery and Technical Capacity

Multiple nonprofits are already working effectively to shore up government's digital capacity—including AI. But they aren't doing the work at scale. Funders should provide multiyear support to expand programs matching technologists with public service roles, modernizing archaic systems to focus on delivering services effectively, and training civil servants. Long-term general operating grants give nonprofits the flexibility to meet rapidly evolving needs.

2. Invest in Modern Tools and Training

Philanthropy can fund organizations that have or can develop technical tools, trainings and educational exchanges tailored to government's needs. Resources can create the capacity to: build data and AI expertise across agencies, develop interfaces improving constituent experience and build the capacity for effective regulation. Sharing solutions between agencies and sectors can promote efficient progress.

3. Back Research on Effective Governing

Supporting research on governing in the digital age elevates awareness and spreads promising models. Studies could cover hiring, human-centered policymaking, equitable service delivery, technology regulation, and other key issues at the intersection of tech and the public good. Findings should inform policies and community-centered solutions.

PHILANTHROPIC ACTION

- *Support Nonprofits Bolstering Delivery and Technical Capacity*
- *Invest in Modern Tools and Training*
- *Back Research on Effective Governing*
- *Sponsor Tech Policy Fellowships*
- *Raise Public Awareness*

4. Sponsor Tech Policy Fellowships

Sponsoring fellows with the technology expertise to advise Congress and federal agencies fosters direct exchange of expertise where it is lacking. Fellows gain policy experience while infusing technical perspectives into government. Intergovernmental Personnel Act placements also allow temporary staff sharing among nonprofits, academia and governments.

5. Raise Public Awareness

Raising public awareness is essential to driving change. Funders can spotlight gaps in effective governing through storytelling—media campaigns, documentaries and investigative journalism. Op-eds, events and pop culture partnerships are other avenues for engaging diverse constituencies on the urgency of the pacing crisis.

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This pivotal moment demands all stakeholders—philanthropists, government and nonprofits—align around inclusive, ambitious solutions. We can empower government to effectively serve the public interest in the 21st century. There is no time to lose.

TECH TALENT PROJECT

APPENDIX A
ACKNOWLEDGEMENTS

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