

THE PREREQUISITE

Human-Centered Design as
Infrastructure for Government
Service Delivery



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The Prerequisite: Human-Centered Design as Infrastructure for Government Service Delivery

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SEPTEMBER 2026

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Human-centered design, practiced in sequence and built into durable institutional infrastructure, is among the most effective tools government has for strengthening public trust and reducing administrative burden.



Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present *The Prerequisite: Human-Centered Design as Infrastructure for Government Service Delivery*, by Mark Lerner and Reilly Martin of Technologists for the Public Good.

Public trust in government institutions continues to decline, and the experiences people have with public services often impact that trend. Every form, portal, and eligibility check creates a burden for people: the time needed to learn how a program works, the effort required to comply with its requirements, or the stress of waiting through an opaque process. This works like a “time tax” that can fall hardest on those with the least margin to absorb additional costs.

These burdens carry real consequences. They determine whether eligible families receive disaster assistance, whether students complete financial aid applications and enroll in college, and whether residents see government as working for them. Reducing such burdens provides one of the most direct paths for government to improve service delivery.

The authors bring deep practitioner experience to the topic. They draw on service at the U.S. Digital Service, work embedded in city and state governments, and conversations with customer experience and design leaders across all levels of government. From that experience, they contend that human-centered design (HCD) works best as an ongoing process rather than as a one-time project or values statement. Their central insight appears in the report’s title: HCD constitutes a prerequisite for effective service delivery. The report explains how agencies can build the capacity to practice HCD effectively.

The report opens with an examination of administrative burden and the legal and policy architecture that shapes it. That architecture runs from the Paperwork Reduction Act to recent Office of Management and Budget guidance, executive orders, and the Government Service Delivery Improvement Act. The authors also introduce a new framework, the Human-Centered Design Readiness Ladder. They apply this framework to four case studies spanning federal, state, and local government: the Department of Homeland Security’s Customer Experience Directorate, Federal Student Aid’s response to the rollout of the 2024–25 Free Application for Federal Student Aid (FAFSA), the Colorado Digital Service’s operational toolbox, and the City of Long Beach’s Civic User Research Playbook.

The report describes several key issues. First, the Readiness Ladder offers a clear theory of change, with four levels that include technical foundations, iterative development, user-centricity, and service design. Each level builds upon the one before, and organizations that attempt to skip steps may find that their work fails to take root. Many maturity models benchmark technical capability; the Ladder instead centers on the organizational conditions that allow citizen-centered practice to become durable.



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Second, the case studies show how HCD takes hold under different circumstances. Together, they show that meaningful progress is possible at every level of government and with varying resources.

Third, the report addresses the growing role of artificial intelligence (AI) in service delivery. The authors observe that AI adoption without a human-centered design foundation tends to treat the human layer as a cost rather than as infrastructure. Two examples illustrate the alternative: Long Beach's careful evaluation of its generative AI chatbot pilot and Colorado's AI assistant for unemployment insurance claims. Both show how HCD practices can help agencies deploy emerging technologies that work better for the people using them.

The report closes with practical recommendations for scaling HCD. These include securing leadership support, building alliances with career staff, investing in senior design talent, and designing initiatives that last across administrations.

This report builds on a sustained body of IBM Center work on improving government service delivery. That work includes *Applying Design Thinking to Public Service Delivery* by Jeanne Liedtka and Randall Salzman, *Human Centricity in Digital Delivery: Enhancing Agile Governance*, and, most recently, *Agile and Adaptive Leadership in the Public Sector* by Ines Mergel. Lerner and Martin's report complements and extends this series by addressing the organizational sequence that determines whether human-centered methods endure. The Center will soon issue related reports focused on improving service delivery in the digital age.

This report provides a clear and actionable roadmap for making government work better for the public. We hope the report will offer value to a broad audience:

- Agency executives charged with improving customer experience
- Technology and digital leaders building modern delivery capacity
- Program officials seeking to reduce burden on the public
- State and local officials working with limited resources

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Introduction

The evolution of digital service delivery in government has reached a point where the mere provision of online forms can no longer meet the needs and expectations of the public. Given the continued decline in trust in government institutions, efficiency and accessibility of public services have emerged as critical levers for rebuilding trust. Currently, the experiences the public has with many services decrease their trust in government due to administrative burdens.

Administrative burdens involve the collective learning, compliance, and psychological costs that people must navigate to access public benefits and services. Traditional public administration has often prioritized internal policy logic and legal compliance to improve public services. Human-centered design (HCD) and research practices demonstrate that government can reduce administrative burdens by prioritizing user outcomes and experiences.

The internal focus had its own logic. Compliance and defensibility offered agencies a clear standard for measuring success and providing accountability mechanisms that oversight and legislative bodies understood. Agencies often assumed that a service built to the letter of the law was, by definition, built correctly.

This report examines the impact of HCD on administrative burdens, building on the administrative burden framework established by scholars Pamela Herd and Donald Moynihan.¹ This analysis examines the implementation factors and design principles employed by leading federal, state, and local entities, including the U.S. Department of Homeland Security (DHS), U.S. Department of Education Office of Federal Student Aid (FSA), the State of Colorado, and the City of Long Beach. It provides a roadmap for government executives to adopt HCD practices to reduce administrative burden, and shift the orientation of public services away from what government provides and toward what people actually experience.



1. Pamela Herd and Donald P. Moynihan, *Administrative Burden: Policymaking by Other Means* (New York: Russell Sage Foundation, 2018), <https://www.russellsage.org/publications/book/administrative-burden>.

A person is sitting at a desk, their back to the camera. They are wearing a blue and white plaid shirt. In front of them is a silver laptop. To the left of the laptop is a very large, messy stack of papers and documents, some of which are crumpled. The scene is lit with soft, natural light from a window on the left. The overall mood is one of being overwhelmed by paperwork.

What Are
Administrative
Burdens?

Administrative burdens are not simply an accidental byproduct of complex systems. They are a critical element of interacting with public services that shapes how the public experiences government. Herd and Moynihan define these burdens as a function of three distinct costs: **learning, compliance, and psychological costs**. These costs act as a “time tax” on the public, restricting positive outcomes by burdening the public through administrative complexity.

Defining the Three Pillars of Administrative Burden

- **Learning costs** include the time and effort required to discover a program, understand eligibility criteria, and navigate the initial information of the service. In the case of digital public services, these costs tend to manifest as poorly designed websites, lack of search-engine optimization, and jargon-heavy content. They also appear as fragmented or siloed web presences, each of which requires users to possess a high level of digital literacy.

Compounding this is the challenge of identifying a trustworthy source of truth when multiple websites, agencies, or organizations publish guidance on the same topic, sometimes with conflicting information that reflects genuine jurisdictional complexity rather than error. This problem occurs most during moments of disruption, for example—a disaster, a sudden loss of income, a change in family or immigration status, or when people navigate unfamiliar systems under stress and with little margin for confusion.

The rise of artificial intelligence has introduced a new dimension to this challenge. AI-powered tools can surface answers quickly and with apparent authority. These tools can also synthesize conflicting or outdated information in ways difficult for users to detect or verify, potentially deepening the learning burden.

- **Compliance costs** refer to the “doing” of the administrative process. This includes the energy spent providing documentation, filling out forms (such as redundant or unnecessary forms), and attending mandatory interviews. These costs are often exacerbated by a lack of data interoperability within the government, which forces users to provide the same information repeatedly to different agencies.
- **Psychological costs** represent the personal toll of an interaction. This includes the stigma that may be associated with applying for social safety net programs, the loss of autonomy that may result from intrusive government supervision, and the sheer frustration that can arise from navigating non-responsive systems. Opacity contributes significantly to this toll. When applicants cannot see their status in a process, what comes next, or whether the agency received their submission at all, the uncertainty itself can become a burden and generate sustained concern that compounds over weeks or months. These costs can accumulate to a point where eligible individuals may preemptively withdraw from a process.

Table 1: Administrative Burden and Its Impact on Digital Products and Users

Cost Category	Digital Manifestation	Human Impact
Learning Costs	Jargon-heavy websites; fragmented portals; poor search engine optimization (SEO).	Eligible users unaware of benefits; confusion over requirements.
Compliance Costs	Redundant data entry; manual documentation uploads.	Abandonment of applications; delay in receiving services.
Psychological Costs	Opaque error messages; stigmatizing language; confusion.	Loss of trust; distress; negative perception of government.

The Regulatory and Legal Architecture of Burden Reduction and Its Effect on Human-Centered Design

Congress originally designed the Paperwork Reduction Act (PRA) of 1980² to minimize the paperwork burden the federal government places on the public. Congress reauthorized the PRA in 1995, and the Office of Information and Regulatory Affairs (OIRA)³ within the Office of Management and Budget (OMB) administers it. Under the PRA, agencies must obtain OIRA approval before collecting information from 10 or more members of the public. OIRA also maintains an ongoing accounting, measured in hours, of the cumulative paperwork burden that federal agencies impose. According to OMB, there were an estimated 10.3 billion hours of paperwork burden in fiscal year 2022 alone.⁴

Despite its well-intentioned origins, the PRA's implementation has received criticism from practitioners working to improve government services. Jennifer Pahlka, former deputy U.S. chief technology officer and author of *Recoding America*, has extensively documented this problem. She argues that the PRA ironically creates a compliance process that impedes the iterative research and testing that modern service design requires, ultimately increasing administrative burdens for the public.⁵ This can force requests for approval from the OMB well before agencies finalize critical program details, and can obstruct the iterative improvement that modern service design requires.

2. *Paperwork Reduction Act of 1980*, Pub. L. No. 96-511, 94 Stat. 2812 (December 11, 1980), <https://www.govinfo.gov/content/pkg/STATUTE-94/pdf/STATUTE-94-Pg2812.pdf>.

3. Congressional Research Service, *The Office of Information and Regulatory Affairs (OIRA): Overview and Major Responsibilities*, R48546 (Washington, DC: Congressional Research Service, May 27, 2025), <https://www.congress.gov/crs-product/R48546>.

4. Congressional Research Service, *The Paperwork Reduction Act and Federal Collections of Information: A Brief Overview*, IF11837 (Washington, DC: Congressional Research Service, April 17, 2024), <https://www.congress.gov/crs-product/IF11837>.

5. Jennifer Pahlka, "Why the Paperwork Reduction Act Needs to Go, Part 1," *Eating Policy*, April 17, 2025, <https://www.eatingpolicy.com/p/why-the-paperwork-reduction-act-needs>.

Perhaps most consequentially for practitioners attempting to improve service delivery, the PRA has often functioned in practice as a significant constraint on user research, which helps public servants reduce administrative burden on the public. USDS co-founder Erie Meyer, writing in her influential essay on fixing the PRA's implementation,⁶ diagnosed this as a culture problem. She explains that agency general counsels and PRA officers have incentives to route everything through OIRA review, even when exemptions apply. The cost of an unnecessary review is invisible, while the cost of skipping a required one can be significant. Pahlka and Ben Bain elaborated on this dynamic in a November 2024 piece for the Niskanen Center. They explain that the implementation of the PRA has been subject to a cascade of rigidity, in which well-meaning legislation changes as it filters through layers of bureaucracy. Both narrow and overly broad interpretations build up over time, resulting in outcomes entirely different from those intended.⁷

The U.S. Government Accountability Office (GAO)⁸ and the Administrative Conference of the United States (ACUS)⁹ have weighed in as well. ACUS adopted formal recommendations in December 2023 encouraging OMB to provide agencies with additional guidance on using PRA flexibilities to conduct user experience research. Meanwhile, the U.S. Digital Service published a series of case studies demonstrating how agencies conducted valuable user research that did not require PRA approval. These concrete examples showed that thoughtful user research could lawfully transform service delivery without triggering the clearance process that had long restrained design teams.¹⁰

In April 2022, OMB issued new guidance (M-22-10),¹¹ which drew correlations of the information collection review process to the broader Herd-Moynihan burden reduction framework. For the first time, OMB formally encouraged agencies to measure and reduce learning, compliance, and psychological costs across their interactions with the public—rather than merely count the hours spent filling out forms.

That same year, OMB Circular A-11, Section 280 was updated to embed customer experience priorities as a central theme in agency planning. The update directed agencies to take inventory of service delivery touchpoints and offers concrete guidance on service redesign.¹² The updated guidance reminded federal agencies of their responsibility to accurately estimate the burdens experienced by the public when accessing benefit programs. It placed particular emphasis on historically underserved communities.

6. Erie Meyer, "How to Fix (the Implementation of) the Paperwork Reduction Act," *Medium*, November 29, 2020, <https://eriemeyer.medium.com/how-to-fix-the-implementation-of-the-paperwork-reduction-act-62d8ab6918cb>.

7. Ben Bain and Jennifer Pahlka, "A Win for Good Government and Commonsense: New Guidance on the Paperwork Reduction Act," Niskanen Center, November 26, 2024, <https://www.niskanencenter.org/a-win-for-good-government-and-commonsense-new-guidance-on-the-paperwork-reduction-act/>.

8. U.S. Government Accountability Office, *Administrative Burden: OMB Should Update Instructions to Help Agency Assessment Efforts* (Washington, DC: GAO, 2025), <https://www.gao.gov/products/gao-25-107239>.

9. Administrative Conference of the United States, *Identifying and Reducing Burdens on the Public in Administrative Processes*, Recommendation 2023-6 (Washington, DC: Administrative Conference of the United States, December 14, 2023), <https://www.acus.gov/document/identifying-and-reducing-burdens-public-administrative-processes>.

10. U.S. Digital Service, "User Research and the Paperwork Reduction Act," August 20, 2024, <https://www.usds.gov/news-and-blog/user-research-and-the-paperwork-reduction-act>.

11. Office of Management and Budget, *M-22-10: Improving Access to Public Benefits Programs Through the Paperwork Reduction Act* (Washington, DC: OMB, April 13, 2022), <https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-10.pdf>.

12. Office of Management and Budget, *Circular No. A-11, Section 280: Managing Customer Experience and Improving Service Delivery* (Washington, DC: OMB, 2024), <https://bidenwhitehouse.archives.gov/wp-content/uploads/2018/06/s280.pdf>.

Most recently, a November 2024 OIRA guidance update¹³ clarified longstanding confusion about whether usability testing and user research required PRA clearance. The updated Section 280 (2025 edition) reaffirmed the use of three-year umbrella clearances to reduce burden and speed responsible customer research and feedback collection. It also outlined PRA flexibilities for common engagement activities and explicitly permitted agencies to compensate research participants for their time.

Federal Policy Responses to Administrative Burden

These regulatory changes contributed to a broader and deliberate policy agenda to reorient government service delivery around the lived experiences of the people served. This policy agenda has evolved significantly across administrations.

Executive Order 13985,¹⁴ signed in January 2021, required agencies to recognize and work to redress inequities in their policies and programs that serve as barriers to equal opportunity. The order explicitly acknowledged that administrative burdens fall disproportionately on underserved communities. Executive Order 14058,¹⁵ signed later that year, directed agencies to design and deliver services with the public's needs, rather than organizational convenience, as the primary organizing principle. The order identified High Impact Service Providers (HISPs) across the federal government and required each to develop customer experience improvement plans with measurable targets.

Most HISP action plans emphasized digital improvements, such as creating new mobile applications or redesigning existing websites. The plans also included non-digital improvements. For example, the TSA added in-person passenger feedback channels at airports, and the Office of Personnel Management's Retirement Services consolidated resources into a single quick-reference guide for retirees. The Veterans Health Administration also created clearer informational materials for patient discharge.

The Government Service Delivery Improvement Act of 2025 codified many of these priorities into law.¹⁶ The Act establishes clear roles and accountability for service delivery across government, including the designation of a Federal Government Service Delivery Lead at OMB. The Federal Chief Information Officer served in that inaugural role. This Act requires agencies to review delivery processes against values including ease, efficiency, transparency, accessibility, fairness, and burden reduction. Agencies must also collect both qualitative and quantitative data on service delivery on an ongoing basis. The most recent update to OMB Circular A-11, Section 280¹⁷ implements the Act in practice. It establishes FY2026 milestones for capacity assessments, priority service designation, and action planning. The update also strengthens the use of post-transaction feedback collection using a common governmentwide survey framework.

13. Office of Management and Budget, "Supporting Usability Testing Through Paperwork Reduction Act Flexibilities, November 2024," <https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/11/PRA-Usability-Testing-Guidance-Memo.pdf>.

14. Executive Order 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," January 20, 2021, <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>.

15. Executive Order 14058, "Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government," December 13, 2021, <https://www.federalregister.gov/documents/2021/12/16/2021-27380/transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government>.

16. U.S. Congress, *Government Service Delivery Improvement Act*, H.R. 5887, 118th Cong., enacted as Pub. L. No. 118-231, January 4, 2025, <https://www.congress.gov/bills/118th-congress/house-bill/5887>.

17. Office of Management and Budget, *Circular No. A-11, Section 280: Managing Customer Experience and Improving Service Delivery* (Washington, DC: OMB, 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/08/s280.pdf>.



The Present and Future of Burden Reduction

The transition to the Trump administration in January 2025 introduced significant change into this policy landscape. As presented, the administration's Department of Government Efficiency (DOGE) initiative shared rhetorical common ground with the burden reduction agenda as both emphasized efficiency, waste elimination, and modernizing government technology. The Trump administration's executive order establishing DOGE¹⁸ directed agencies to promote interoperability between agency networks and systems, ensure data integrity, and facilitate responsible data collection and synchronization.

The Trump administration's 2025 President's Management Agenda included language about ensuring that "digital-first services" are "built for real people, not bureaucracy." The new PMA did not include customer experience as a standalone priority goal, a significant change from both the Biden-era PMA and Trump's first-term management agenda.¹⁹ This added to reductions in agency teams focused on data, evaluation, and customer experience that had worked to reduce bureaucratic red tape, modernize human-centered service delivery, and bring in critical tech talent. Many of these teams were built under administrations from both parties and included organizations like 18F.²⁰ The organization functioned as an internal design consultancy, helping agencies improve their digital services and websites and making government more accessible to the public.²¹

18. Executive Order 14158, "Establishing and Implementing the President's 'Department of Government Efficiency,'" January 20, 2025, <https://www.whitehouse.gov/presidential-actions/2025/01/establishing-and-implementing-the-presidents-department-of-government-efficiency/>.

19. Office of Management and Budget, *M-26-03: President's Management Agenda* (Washington, DC: OMB, December 8, 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/12/M-26-03-Presidents-Management-Agenda.pdf>.

20. U.S. General Services Administration, "At 10 Years, GSA's Tech Consulting Team (18F) Celebrates Over 450 Projects to Make Government Work Better," March 19, 2024, <https://www.gsa.gov/about-gsa/newsroom/news-releases/at-10-years-gsas-tech-consulting-team-18f-cele-03192024>.

21. For more perspectives on this trend, see this February 2025 analysis from former government officials and experts. Harvard Kennedy School, "Analyzing DOGE Actions One Month into Trump's Second Administration," February 19, 2025, <https://www.hks.harvard.edu/faculty-research/policy-topics/democracy-governance/analyzing-doge-actions-one-month-trumps-second>.

There are, also signals of continuity. In August 2025, the Trump administration signed an executive order establishing a National Design Studio.²² The order gave the studio a mandate to make public-facing federal services more efficient and accessible and established a chief design officer reporting to the White House chief of staff. The updated Section 280 of OMB Circular A-11, released in September 2025, positions federal customer experience as “a core strategy.” It describes that strategy as making government services “more efficient, accessible, and responsive to the needs of all Americans.”

Research by former U.S. deputy chief technology officer Nick Sinai and colleagues at the Harvard Kennedy School’s Belfer Center examines how the VA’s digital service team operated across presidential transitions, and offers a useful framework.²³ Their analysis found that the team’s longevity was rooted in clear veteran-facing outcomes that transcended a single administration and broad internal alliances built across career staff. The team also benefited from a leadership structure that embedded digital expertise within the agency rather than relying on externally positioned innovation teams. These conditions of outcome clarity, internal embeddedness, and broad-based alliances align with what the current moment demands of any HCD initiative seeking to outlast the next transition.

Practitioners and researchers are working to sustain and scale human-centered government service delivery. In this environment, the kind of applied research proposed in this report is not merely useful, but urgent. The policy architecture exists. Government practitioners now need an evidence base to make the case across administrations. That evidence can demonstrate that investing in human-centered service design represents one of the most effective tools government has for strengthening public trust.

The Policy Dimensions of Administrative Burden

Another element of the administrative burden framework involves the consideration that administrative burdens are a manifestation of policy choices. Whereas some administrative burdens may result from unintentional decisions, others are a function of “hidden policy choices” where a government restricts a particular program through complexity rather than direct policy or legislation.

For any given administrative burden in a public service, agencies can continue to let the public incur the costs of those burdens, or can shift the costs imposed by those burdens onto the government. For example, if a program decides to automatically renew a benefit given to the public, that shifts the compliance cost from the user to the agency. Conversely, if the government requires paper-based verification for update or change to a benefit, that shifts the cost to the user. Herd and Moynihan argue that political leaders can purposefully apply administrative burdens to programs. They can use those burdens to alter the course of a public program outside traditional legislative or programmatic means. Such politically driven decisions do not cause all administrative burdens. However, this dimension explains why design improvements could meet resistance from stakeholders who advance their objectives by maintaining high burdens.

22. Executive Order 14338, “Improving Our Nation Through Better Design,” August 21, 2025, <https://www.white-house.gov/presidential-actions/2025/08/improving-our-nation-through-better-design/>.

23. Nick Sinai, David Leftwich, Kelly O'Connor, and Alex Loehr, “Improving Veterans’ Digital Experience Across Presidential Administrations,” Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2020, <https://www.belfercenter.org/publication/improving-veterans-digital-experience-across-presidential-administrations>.



What Is Human-Centered Design?

Human-centered design is a methodology for solving problems that prioritizes the lived experience of people interacting with a product or service at every stage of the design process. This includes both the customers at the end of the service and the operators that support the process throughout. In a government context, HCD practices represent a transition from making decisions based on theoretical legal interpretations to making decisions based on behavioral insights and user feedback.

Elements of Human-Centered Design

In “Applying Design Thinking to Public Service Delivery,”²⁴ scholars Jeanne Liedtka and Randall Salzman defined five elements to design thinking in the context of public services:

1. **Understanding User Needs and Context through Empathy:** HCD requires more than just quantitative surveys. It demands a “profound and personal, almost sensory, immersion into the subjective realities of individual stakeholders.”
2. **Formation of Diverse Teams:** Effective HCD requires bringing varied perspectives into the conversation and expanding the skillsets to enhance the collective imagination and enable creative solutions.
3. **Dialogue Versus Debate:** Successful design conversations focus on understanding differing perspectives and perceptions. They use techniques that surface assumptions and clarify experiences, and reject any temptations to argue for specific perspectives or explanations.
4. **Iterative and Experimental Process:** Critical to the success of human-centered processes is the rapid experimentation of multiple solutions, iterating on new concepts and ideas in quick succession. This minimizes investment risk while providing abundant opportunities to learn from new ideas.
5. **Structured Process and Tool Kit:** The field of human-centered research and design has developed a large set of structured methods for enabling testing, learning, and experimentation. An organization that invests in design and research operations can provide safe pathways through the uncertainty of creating something new.

Nick Sinai and colleagues David Leftwich and Ben McGuire extended this thinking in their Belfer Center paper “Human-Centered Policymaking” (2020).²⁵ They argue that HCD should not be confined to digital products and service interfaces and should also apply to the policy-making process itself.

Their case study of Center for Medicare and Medicaid Services (CMS) and the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) demonstrates that even complex federal rulemaking can successfully incorporate human-centered design and agile development methods. The case study also shows that doing so can build lasting converts to the methodology rather than isolated successes. The implication is significant: if administrative burden results in part from how rules are written as well as how they are delivered, then HCD practice must extend upstream into the regulatory process, not just downstream into service design.

24. Jeanne Liedtka and Randall Salzman, *Applying Design Thinking to Public Service Delivery* (Washington, DC: IBM Center for The Business of Government, 2018), <https://www.businessofgovernment.org/reports/applying-design-thinking-public-service-delivery>.

25. Nick Sinai, David Leftwich, and Ben McGuire, “Human-Centered Policymaking,” Belfer Center for Science and International Affairs, Harvard Kennedy School, April 2020, <https://www.belfercenter.org/publication/human-centered-policy-making>.

A Framework for Maturity: The Human-Centered Design Readiness Ladder

The question of how government organizations build the capacity to do human-centered design well is strategic, not merely tactical. Answering this question requires a framework and a shared vocabulary for describing where an organization currently stands, what it must build next, and what failure looks like when steps are skipped. Over the past decade, practitioners and researchers have developed a family of maturity models for government digital services. Understanding this landscape and where a new framework for HCD readiness sits within it provides essential context for the case studies that follow.

The Landscape of Government Digital Maturity Models

The Colorado Digital Service's Modern Software Delivery Maturity Matrix (2020)²⁶ assesses eight categories: team culture, purchasing versus procurement, modular contracting, user-centered approach, product ownership, agile software development, DevSecOps, and building with loosely coupled parts. Each category is scored on a low-to-high scale. It is diagnostic rather than sequential. Rather than asking what stage an organization is at overall, this matrix maps how mature the organization is across each dimension simultaneously. Notably, it places team culture first, reflecting the conviction that “the human layer is the foundation that needs to be in place before a team can operate effectively.”

The United Kingdom (UK) Government Digital Service Service Standard²⁷ operates as a gate-based compliance framework for individual services. Teams must pass formal assessments at the end of each delivery phase: Discovery, Alpha, Beta, and Live, before they can proceed. Enormously influential globally, the UK has inspired digital service standards in Australia, Canada, and the United States. Its strength is enforcing delivery quality at the service level, whereas its limitation is that it is a compliance framework rather than a capacity-building one. A team can determine whether its service meets the standard but cannot identify the organizational journey required to build the culture and skills that make meeting the standard possible.

Two further tools round out the landscape at different scales. The World Bank's GovTech Maturity Index,²⁸ most recently updated in 2025, benchmarks digital transformation across 198 economies across four focus areas and 48 indicators invaluable for international comparison, but too high-altitude for organizational practice. Closer to home, the U.S. Web Design System (USWDS) Maturity Model²⁹ offers a practical three-level framework for federal web teams adopting the U.S. Web Design System, scoped specifically to design system compliance rather than broader organizational capacity.

26. Colorado Digital Service, “Modern Software Delivery Maturity Index,” GitHub, 2020, <https://github.com/coloradodigital/service/modern-software-delivery-maturity-index>.

27. Government Digital Service, “Service Standard,” GOV.UK, accessed September 2, 2026, <https://www.gov.uk/service-manual/service-standard>.

28. World Bank, “GovTech Maturity Index (GTMI),” updated 2025, <https://www.worldbank.org/en/programs/govtech/gtmi>.

29. U.S. General Services Administration, “USWDS Maturity Model,” U.S. Web Design System, accessed September 2, 2026, <https://designsystem.digital.gov/maturity-model/>.

Code for Australia's Digital Maturity Indicator (DMI)³⁰ offers a further international data point. Applied across New South Wales government agencies beginning in 2019, the DMI assesses agencies across six markers of digital capability and co-designs prioritized improvement actions. The approach is diagnostic and contextual rather than prescriptive. Its findings from early engagements echo themes that appear throughout this report. Political and executive support is essential for unlocking new methods, and knowledge transfer between specialist contractors and agency staff rarely happens without being explicitly required. Staff at all levels consistently express interest in human-centered design while struggling to know where to start.

Finally, a 2025 academic review by Åsa Waara published in *Administrative Sciences* examined 18 digital government maturity models and found a striking pattern: 17 percent did not mention citizens at all, 33 percent referenced them minimally, and only 50 percent integrated citizen considerations extensively.³¹ The review identified seven themes through which citizens appear in these models when they do appear: maturity stages, areas of focus, enablers, constraints, metrics, insights, and recommendations. The findings carry a pointed implication for this report: most government digital maturity models are supply-side and technology-focused. They focus on what government can do rather than taking a citizen-centric approach oriented around what people actually experience. This gap between models that measure an organization's technical and organizational capabilities, and models that center on the lived experience of the people served by those capabilities, is precisely the gap that human-centered design practice can close.

The Human-Centered Design Readiness Ladder

With this background, the framework of the Human-Centered Design Readiness Ladder emerged from conversations with various practitioners and leaders of customer experience and human-centered design practices across government. No individual practitioner or leader formally used this model. Instead, the framework grew from knowledge built through their collective experience.

The ladder has four sequential levels. The sequencing is not arbitrary or conventional, but rather reflects a theory of organizational change grounded in years of practitioner experience. Each level constitutes a genuine prerequisite for the next. Teams that attempt to skip levels discover that the work cannot take root absent a prior foundation. For example, they may jump to user research before stabilizing systems or to service design before practicing iterative development. Teams that focus on improved human-centered design, customer experience, and digital services can help agencies move faster through the ladder, but they cannot help them skip it.

Level 1: Technical Foundations. An organization at this level focuses on the baseline of ensuring that its systems are stable, that services do not crash, and that basic digital infrastructure is in place. This provides the prerequisite for everything else. No amount of user research or service design can improve a system that users cannot reliably access. Practitioners entering an organization at this level should resist the urge to begin user research or redesign work before confirming stability. Level 1 completion does not stem from a finished modernization roadmap, but a shared organizational understanding of what “good enough” looks like, and a commitment to communicating and holding that standard with stakeholders.

30. Code for Australia, “Digital Maturity Indicator,” accessed September 2, 2026, <https://www.codeforaustralia.org/digital-maturity-indicator/>.

31. Åsa Waara, “Examining Digital Government Maturity Models: Evaluating the Inclusion of Citizens,” *Administrative Sciences* 15, no. 3 (2025): 73, <https://www.mdpi.com/2076-3387/15/3/73>.

Useful early actions include:

- Conducting a baseline audit of system uptime, incident frequency, and help desk ticket volume;
- Inventorying the technologies used to build and support existing systems and the staffing or contracts currently supporting them;
- Making targeted staffing or contracting adjustments accordingly; and
- Establishing a plan for system maintenance and continuity that can sustain operations while the organization looks forward.

Failure to achieve Technical Foundations before attempting higher-level work produces a characteristic failure mode. Teams may create beautiful designs that they cannot implement because the underlying systems will not support them, or produce user research findings they cannot act on because the team has no capacity to ship changes. A technology department typically owns this level, whether standalone or housed within a broader administrative office. A Chief Information Officer (CIO), Chief Digital Officer, Director of Enterprise Systems, or equivalent technology leader typically leads the work in partnership with IT operations, security teams, and vendors managing core platforms.

Level 2: Iterative Development. Once systems are stable, an organization must develop the practice of making frequent, small improvements, such as moving from the waterfall model of large periodic releases to an agile model of continuous iteration. This is not merely a technical change, but also a cultural one.³² Iterative development requires teams empowered to make decisions, leadership that at minimum tolerates experimentation and occasional failure (and even better encourages it), and measurement practices that shift from milestone-based to outcome-based.

A common blocker at this level involves contract structure. Many government technology contracts focus on large deliverables rather than continuous improvement, making it structurally difficult to release incrementally. Practitioners should work with contracting officers early to explore procurement options and arrangements, and treat the release cadence itself as evidence of cultural change. Without this foundation, user research findings have nowhere to go. A team that cannot ship changes is unable to act on what it learns from users, and thus cannot deliver on better services or expectations for the public.

32. Project Management Institute, "Manifesto for Enterprise Agility," 2026, <https://www.pmi.org/learning/agile/manifesto-for-enterprise-agility>.

A product manager³³ or delivery lead embedded within the agency can drive this level forward, supported by a CIO or deputy who can protect the team's autonomy. Engineering, quality assurance, procurement, and legal teams are key functions to bring along from the beginning of the work. It is also wise to bring the legislature along³⁴ in the learning process, given their involvement in budgeting processes.

Level 3: User-Centricity. With stable systems and iterative development in place, an organization can fully invest in human-centered and research-driven design. At this level, user research, usability testing, accessibility evaluation, and co-design practices become core parts of the product development cycle rather than occasional add-ons. Organizations at this level make design decisions based on observed user behavior and stated user needs rather than internal assumptions or policy compliance logic alone. User research findings can surface tension with existing policy or legal constraints, and teams need a clear escalation path for those moments. Key staffing functions to engage at this stage include program staff, communications teams, and legal or policy advisors.

Reaching this level often requires new staffing, changes in roles or responsibilities, or contracts specifically structured to support design and research work.

Importantly, not everyone doing this work needs to be a trained designer or researcher. The organization does need someone with that experience embedded in the organization to mentor and coach others throughout. This could be a dedicated design and research lead, ideally a senior designer or researcher with government experience. Leadership must also make room in the product development cycle for findings that may slow or redirect work already underway.

Additionally, tools that can support early momentum include building a pool of research participants and making usability test recordings visible to non-design staff, though these are supporting resources rather than the most critical early investments. This is also the level at which the cultural work of democratizing design becomes most productive, for example training staff, building communities of practice, and changing the language through which teams talk about their work.

Level 4: Service Design. The highest level of the ladder involves rethinking entire service ecosystems. This involves more than just improving individual forms or transactions—rather, mapping the full journey a person takes across multiple touch points, agencies, and channels to accomplish a goal. Service design efforts are most durable when they are tied to a specific measurable outcome, such as reducing the time to access a benefit or increasing completion rates for a multi-agency process, and not to a redesign effort defined by scope alone.

Useful organizing tools at this level include service blueprints,³⁵ which map both the resident-facing journey and the backstage operations that support it, making visible the gaps and redundancies that no single team can see from its own vantage point. Equally important is a thorough assessment and documentation of all preexisting technology and the services they power. Agencies should also inventory priority services, legislation under consideration that may require new or tweaked technology, and an overarching product and service map that shows how all of these elements intertwine.

33. InnovateUS, "Adopting the Product Model in the Public Sector: Introduction to the Product Model," January 29, 2025, <https://innovate-us.org/adopting-the-product-model-in-the-public-sector-introduction-to-the-product-model/>.

34. POPVOX Foundation, "Tech That Works: Unlocking Better Models for Digital Government," May 12, 2025, <https://www.popvox.org/events/tech-that-works>.

35. Genevieve Gaudet and Kelli Ho, "How to Create a Service Blueprinting Facilitation Guide," Nava, October 1, 2019, <https://www.navapbc.com/toolkits/service-blueprinting-facilitation-guide>.

Service design at this level requires organizational capabilities that are genuinely difficult to build: cross-agency collaboration, data sharing, and sustained investment over multi-year timeframes. Critically, the authority required here extends beyond redesigning interfaces. Teams need the ability to update both backend and frontend systems, not just what residents see on the surface. Effective service design requires the license to completely reimagine how a service is delivered, unconstrained by current approaches.

Because this work spans multiple handoffs, systems, and institutional owners, no single program office can lead it alone. It is often best owned by a subject-matter-specific agency in partnership with an office of customer experience, innovation, information, or technology. These agencies can draw on data governance teams, senior policy officials, legislative affairs staff, and frontline staff whose operational knowledge of failure points is irreplaceable. Cross-functional working groups can at times be a helpful tool for convening the right stakeholders, though they work best when leaders pair them with a clear institutional home and decision-making authority.

The ladder's most important practical implication is that the sequencing matters more than the speed. An organization that methodically builds Level 2 capabilities with unreliable systems does not make progress, but rather accumulates technical debt in a new domain. An organization that commissions a large-scale service design effort before it has developed iterative development practices will produce research findings and future-state visions that gather dust, because the organization has no muscle memory for acting on what it learns. This is not a theoretical warning—the pattern has repeated itself across multiple high-profile federal digital initiatives.

Table 2: Human-Centered Design Readiness Ladder

Maturity Stage	Description	Critical Success Factor
1. Technical Foundations	Reliable hardware and stable codebases.	System uptime and performance.
2. Iterative Development	Agile workflows and rapid release cycles.	Culture of frequent, small updates.
3. User-Centricity	Behavior-led research and usability testing.	Willingness to listen to user pain points.
4. Service Design	Holistic redesign of cross-agency journeys.	Coordination across diverse stakeholders.

Situating the HCD Readiness Ladder in the Broader Landscape

The HCD Readiness Ladder shares important features with predecessor models while making a distinct contribution.

Where the Colorado matrix diagnoses project-level technical maturity across multiple dimensions and the GDS standard assesses individual service delivery quality, the Readiness Ladder addresses a question neither directly answers: In what sequence must an organization build the internal capabilities required to do human-centered design well? It is, in a precise sense, a prerequisite model. Rather than a ranking of quality, the Ladder provides a roadmap of sequential steps that build upon each other, and organizations cannot skip or complete those steps out of sequence.

Like the Colorado matrix, the Ladder takes culture seriously, focusing on organizational behavior as much as technical infrastructure. Like the GDS standard, teams must demonstrate user needs before making design decisions. But the Ladder differs from all of them in a critical respect. It focuses specifically on the organizational conditions required for human-centered design to take root and produce lasting change, not on the quality of digital delivery generally.

The 2025 Waara review's finding that most maturity models fail to adequately integrate citizen perspectives also offers insights here. The HCD Readiness Ladder, in a fundamental sense, responds to that gap. It describes the organizational journey required to build capacity to center on the people who the government serves—not as a compliance checkbox, but as a genuine practice. In that respect, the Ladder is less a tool for benchmarking organizational performance and more a theory of change. It maps what to build and in what order for citizen-centered service delivery to become not just possible but durable.

This HCD Readiness Ladder offers this framework for the field to move from practice to theory. While not the final word on government HCD maturity, the Ladder offers an invitation to a conversation. The case studies in the following sections illustrate this objective in action.

Case Studies



With both administrative burdens and human-centered design defined, and the HCD Readiness Ladder introduced as a framework for organizational maturity, several case studies animate and test these ideas. Each case examines a specific team within a larger government organization that attempted to bring human-centered research and design practices to reduce administrative burdens and improve public services. Each case study appears through the lens of the maturity ladder: where was the organization when the work began, how did the team move through the levels, and what enabled or impeded their progress?

Case Study: U.S. DHS Customer Experience and Culture Change

The Customer Experience Directorate (CXD) at the Department of Homeland Security (DHS) provides a landmark case study in scaling HCD across a high-stakes federal agency. DHS is a tremendously complex government agency, serving the public in domains as varied as immigration, emergency preparedness and response, customs, and airport security. Their recruiting website³⁶ describes the challenge: “Millions of people each year come to the United States with insufficient guidance or confusing forms. Many do not know where to turn. Others resort to paths that are burdensome and time-taxing, making them miss work, rely on caregivers, pay legal fees, or simply give up without getting access to services and benefits they deserve and need.”

The effort to transform that experience started at the top. In March 2022, DHS Chief Information Officer Eric Hysen signed the DHS Burden Reduction Initiative memo,³⁷ setting a target of reducing DHS’s estimated 190 million annual hours of public burden by at least 20 million hours by May 2023. Critically, rather than imposing a single top-down approach, the initiative assigned each component agency a target of 10 percent of its current burden hours³⁸ and allowed each to determine how best to improve its customers’ experience. This decentralized, component-driven model with headquarters providing support rather than mandates was indicative of the philosophy of the broader CXD effort.

By May 2023, DHS announced³⁹ it had met its milestone by simplifying online paperwork through automatic renewals and short forms, enabling online submission, and pre-populating forms with existing government data. The results were tangible: more than 100,000 disaster survivors received \$559 million in additional Federal Emergency Management Agency (FEMA) assistance after DHS simplified burden-of-proof requirements for proving residency; U.S. Customs and Border Protection (CBP) streamlined vessel entry at seaports, saving trade companies an estimated \$18 million per year; and U.S. Citizenship and Immigration Services (USCIS) significantly reduced processing times for immigration benefits.

36. U.S. Department of Homeland Security, “Customer Experience,” accessed September 2, 2026, <https://www.dhs.gov/cx>.

37. Eric Hysen, *Paperwork Reduction Act Burden Reduction Initiative*, memorandum to DHS component and office heads (Washington, DC: U.S. Department of Homeland Security, March 22, 2022), https://www.dhs.gov/sites/default/files/2022-05/Burden_Reduction_Initiative_Memo_Final%20PDF%20CIO%20signed.pdf.

38. U.S. Department of Homeland Security, “How to Start Burden Reduction,” accessed September 2, 2026, <https://www.dhs.gov/cx/initiatives/burden-reduction/how-to-start-burden-reduction>.

39. U.S. Department of Homeland Security, “DHS Improves Customer Experience by Simplifying Services Used by the Public,” May 30, 2023, <https://www.dhs.gov/archive/news/2023/05/30/dhs-improves-customer-experience-simplifying-services-used-public>.

With this foundation in place, DHS formally established the permanent Customer Experience Directorate within the Office of the Chief Information Officer on September 13, 2023.⁴⁰

Enabling Design Practices

To build on this foundation, DHS CXD focused on culture change by democratizing design skills across the department. The team did not dictate from headquarters how human-centered design should be structured in each of DHS's components. Instead, they ran a human-centered process with component leaders to determine what would work in each context. These processes included how to get each agency within DHS to yes, where to position customer experience in the organization chart, and what support they needed.

As Dana Chisnell, head of the DHS Customer Experience Directorate, observed: "Culture is what you tolerate, encourage, and reward. It's also what you don't tolerate, what you discourage, and what you punish. You don't want to be in the position of oversight and compliance, that's punishing, which is awful for everyone. Instead, lean on the best intentions of the public servants. Support them in taking baby steps."

Meanwhile, DHS Chief Information Officer Eric Hysen was clear about headquarters' role.⁴¹ A one-size-fits-all approach was not going to work in a department as large as DHS. He noted that their role at headquarters was to try to create a culture and practice across the department and to provide really targeted support in a few areas. He also noted that success would depend on the ability to build a human-centered design practice within each component agency.

By 2024, the team had recorded more than 24,000 training touchpoints with DHS personnel, allowing staff to be "at least aware of what human-centered design is, how doing it makes government services better, and how easy it is to get started."⁴² Through this work, the team built a community of practice that grew to 500 members across DHS, including contractors, and gave practitioners language for work so many of them had been doing in isolation. This work also built something that had not previously existed: direct relationships between customer experience leaders across DHS agencies, many of whom had never previously spoken with a counterpart from another DHS agency.

The Readiness Ladder in Practice

As the Customer Experience Directorate worked with teams across the department, they developed a tool to help them understand where each individual subagency and service was in its own development of human-centered design practices and customer experience (CX) skillsets. They built a hands-on workshop, pulling from lessons and experiences in other maturity models and frameworks, that they then administered to teams to understand their current state and their needs. They gave their clients a set of color-coded cards, each of which represented a particular design practice, and asked teams to pick out which practices they were already using. The practices were simple, clear, and context specific.

40. U.S. Department of Homeland Security, "DHS Establishes New Customer Experience Office," September 13, 2023, <https://www.dhs.gov/archive/news/2023/09/13/dhs-establishes-new-customer-experience-office>.

41. Justin Doubleday, "DHS Launching New 'Customer Experience' Directorate This Month," *Federal News Network*, June 20, 2023, <https://federalnewsnetwork.com/management/2023/06/dhs-launching-new-customer-experience-directorate-this-month/>.

42. Edward Graham, "CX Lead at DHS Announces Departure from Government," *Nextgov/FCW*, March 31, 2025, <https://www.nextgov.com/people/2025/03/cx-lead-dhs-announces-departure-government/404189/>.

Examples include:

- “Our service team has CX goals that support the larger agency strategic plan.”
- “Our service team uses service blueprints as a basis for implementing service improvements.”
- “Our service team’s customers have a way to provide feedback.”

This workshop helped CXD understand what each individual service team was already doing and gave them a pathway for moving them from having an emerging CX practice toward an exemplary one. This revealing exercise gave CXD the foundational knowledge it needed for each service to expand its adoption of User Centricity (Level 3) and Service Design (Level 4).

Historically, the Department of Homeland Security had built up its acumen in Technical Foundations (Level 1) and Iterative Development (Level 2), with technical projects across the department adopting modern technologies and iterative best practices. CXD’s work brought it further along with its tailored and bespoke approach to supporting subagencies and services where they were.

Building the Team

To support this work, CXD needed to expand. The team used the Subject Matter Expert Qualification Assessments (SME-QA)⁴³ hiring format, which uses subject matter experts rather than generalist human resources reviewers to evaluate candidates. They received more than a thousand applications from human-centered designers and product managers in a single action, a model that others across the federal government have since looked to replicate.

The directorate also grew by combining forces with the Office of Accessible Systems and Technology (OAST) and reinforcing the connection between accessibility and human-centered design as complementary practices. The team also drew on detailees, designers, and researchers already working across the department to build early momentum while the directorate filled permanent, full-time positions.

CXD also invested in making the work itself visible as a recruitment signal. The public-facing recruitment page⁴⁴ was unusually candid about the stakes and variability of the work. Rather than standard government job language, it described the mission in terms of specific human moments, such as an Afghan refugee evacuation with five days’ notice, disaster survivors who give up before accessing benefits they are owed, or immigrants who cannot navigate a form. The page closed with a line that read less like a job posting than a statement of purpose: “We help the people that help the people that help people.” This kind of public visibility is itself a form of organizational culture work, one that shaped who applied and what they expected when they arrived.

43. U.S. Department of Homeland Security, *CX Skillsets—Recruitment and Hiring Options* (Washington, DC: U.S. Department of Homeland Security, 2024), <https://www.dhs.gov/sites/default/files/2024-06/CX%20Skillsets.pdf>.

44. U.S. Department of Homeland Security, “Meet CX at DHS,” accessed September 2, 2026, <https://www.dhs.gov/cx/meet-cx-at-dhs>.

The DHS case study illustrates both the transformative potential of institutionalizing human-centered design in government and the fragility of that investment when it becomes politically exposed, which is a lesson with direct implications for the scaling strategies outlined later in this report. In April 2025,⁴⁵ DHS reported workforce reductions inclusive of the CX Directorate.

Case Study: FAFSA and User Outcomes



Federal Student Aid (FSA) is undergoing a substantial transformation in its approach to the Free Application for The U.S. Department of Education Office of Federal Student Aid (FAFSA), which a very public failure helped catalyze.⁴⁶ Historically, and as is the case with many government services, policy officials have led design decisions and optimized for strict adherence to the statute, often resulting in a system that was legally compliant but practically unusable.

Interestingly, the FAFSA was the first large-scale citizen-facing form to go online in the mid-1990s. After many years of electronic use, in December 2020 Congress passed the FAFSA Simplification Act,⁴⁷ which aimed to overhaul the federal student aid process by reducing the application questions by more than half and pulling financial data directly from IRS records. College access professionals celebrated it as a long-overdue reform. The rollout, however, was not.

The 2024–25 FAFSA launched three months behind schedule and with many system errors. The GAO documented more than 40 separate technical issues⁴⁸ with the initial release: students found data they had entered deleted, received erroneous error messages, and the system showed them incorrect estimates of their aid eligibility. The system blocked students from mixed-status families, or those with at least one undocumented or noncitizen parent, from completing the form entirely for months. Processing errors required the department to reprocess tens of thousands of applications, pushing financial aid offer timelines to colleges so late that hundreds of institutions were forced to extend their enrollment decision deadlines past the standard May 1 date. When students called for help, 74 percent of calls to the department's call center went unanswered.

The consequences were measurable. FAFSA completion among the high school class of 2024 fell between 10 and 15 percent⁴⁹ from the year prior. Enrollment for fall 2024 was down five percent,⁵⁰ which many correlate to the mishap with the FAFSA.

45. Justin Doubleday, "DHS Plans to Slash HQ Workforce, Including AI Experts," *Federal News Network*, April 3, 2025, <https://federalnewsnetwork.com/management/2025/04/dhs-plans-to-slash-hq-workforce-including-ai-experts/>.

46. Cory Turner, "Watchdog Sheds Light on FAFSA Fiasco, From a Birthday Bug to Call Center Failures," NPR, September 24, 2024, <https://www.npr.org/2024/09/24/nx-s1-5121218/fafsa-college-financial-aid-gao>.

47. FAFSA Simplification Act, Pub. L. No. 116-260, div. FF, tit. VII, 134 Stat. 3137 (December 27, 2020), <https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf>.

48. U.S. Government Accountability Office, "Botched FAFSA Rollout Leaves Uncertainty for Students Seeking Financial Aid for College," September 24, 2024, <https://www.gao.gov/blog/botched-fafsa-rollout-leaves-uncertainty-students-seeking-financial-aid-college>.

49. Katharine Meyer, "FAFSA Rollout Means Fewer Students Will Enroll in College Next Year," Brookings Institution, May 7, 2024, <https://www.brookings.edu/articles/fafsa-rollout-means-fewer-students-will-enroll-in-college-next-year/>.

50. Katharine Meyer, "Fewer Freshmen Enrolled in College This Year Following Troubling FAFSA Cycle," Brookings Institution, October 28, 2024, <https://www.brookings.edu/articles/fewer-freshmen-enrolled-in-college-this-year-following-troubling-fafsa-cycle/>.

The crisis did something that years of internal advocacy for better service design had not. It made the cost of ignoring user experience undeniable and urgent. Congressional hearings, GAO investigations, and national press coverage transformed what had been an internal process problem into a public accountability moment. Urgency, when it arrives at sufficient scale and visibility, creates the conditions for design investment that more measured arguments rarely achieve. At FSA, the debacle opened a door. The question was whether the organization would walk through it.

Shifting the Mindset

The primary catalyst for change was shifting the mission from policy implementation to user outcomes. Aaron Lemon-Strauss, executive director of the FAFSA program, noted that “the key thing that I’ve found is shifting towards a focus on user outcomes instead of just policy implementation.... HCD then becomes a tool for better understanding how to reach the user outcomes.”

This shift allowed the team to challenge the “rules-as-written” when they created unnecessary friction while not meeting their intent. Lemon-Strauss emphasizes the underlying purpose and intent behind policies and laws as the motivator behind design decisions: “We’re here to enable more students to go to college.”

The FAFSA team threaded the needle between literal interpretation of laws and usable services by engaging directly with the congressional staff that had written the rules in the first place. By holding regular meetings with staff to explain the negative impact of specific legislative requirements, the team found that more often than not Congress was willing to accept alternative implementations that achieved the underlying intent with reduced administrative burden.

Demonstrating Value

The FAFSA team had to build trust and goodwill to enable this kind of engagement and the story of how that happened is instructive. When Lauren Gardner, a service designer, joined in November 2024, there were only two in-house designers, supplemented by contractors. Those first two designers, who for years worked in a policy-driven organization that had historically deprioritized user needs in favor of legislative requirements, had earned credibility the hard way. They showed up, solved concrete problems collaboratively, and built relationships across the agency before attempting anything ambitious. By the time Gardner arrived, design had a visible track record at FSA because of that groundwork.

The specific domain where this played out most clearly was the FSA Accounts team, or the login system underpinning studentaid.gov.⁵¹ FSA had historically deprioritized user pain points beneath legislative mandates and administration priorities. The earlier designers recognized this dynamic and worked around it strategically by building a prototype of a new system. The 2024–25 FAFSA debacle created a moment for this prototype to come to life. The visibility of the failure created the opportunity to flood the agency with new resources, new attention, and an influx of technologists who valued design. The Accounts team was able to use the prototype to conduct discovery work, map top login pain points, and build a prioritized backlog rapidly. Development work could start immediately, because the design groundwork had already

51. Federal Student Aid, “Federal Student Aid,” U.S. Department of Education, accessed September 2, 2026, <https://studentaid.gov/>.

been laid.

The structural conditions mattered too. FSA's flexible contracting model for design made it possible to conduct testing with users quickly without waiting for a new contract to be approved. They had designers whom managers could assign to different pieces of work as needed rather than tie to a single project. The Accounts team became only the second agile team at FSA, pairing front-end and back-end contractors on a single team with in-house engineering expertise to coordinate development with design work. That integration gave designers meaningful reach not just influence over the interface, but input into how systems behaved.

Gardner is candid that these gains are uneven. On the Accounts team, the conditions were right: agile structure, integrated engineering, leadership that values design. Elsewhere at FSA, many of the old dynamics persisted.

FSA is organized around systems rather than the experiences of users, which means that a designer can have significant input on a form but none on how that form is processed downstream. This gap would represent a substantial improvement if it could be closed. In terms of the Readiness Ladder, the Accounts team is operating at Level 3 (User-Centricity) while much of the rest of FSA is still climbing toward Level 2 (Iterative Development). Gardner draws a practical lesson from navigating that unevenness: "Don't be overly rigid on what design can look like. If someone is only okay with user testing, then just start there and demonstrate the value of that. Help them not feel underwater, but rather help solve problems for them even if it's not the big design thing you want to be doing."

Innovative Talent Acquisition

The pattern at FSA mirrors a lesson from the DHS CX Directorate: bringing in the right talent quickly is itself a form of culture change. They had an urgent need for specialized technologists in short supply. They turned to another tool: Schedule A(r), supported by specific agency marketing materials.⁵²

Schedule A(r), formally codified at 5 CFR 213.3102(r),⁵³ is an excepted service hiring authority that agencies can use when limited applicant pools make open competition impracticable. The government originally conceived this authority for fellowship and similar programs, but digital service teams increasingly use it across the federal government to bring in designers, engineers, product managers, and researchers whom the standard USAJobs competitive examination process might not reach. Under Schedule A(r), agencies bypass competitive rating and ranking entirely, allowing them to identify and onboard qualified specialists in weeks rather than the months or years that traditional hiring timelines typically require. The U.S. Digital Service and GSA's Technology Transformation Services, the home of 18F, used the authority extensively. FSA followed suit in the wake of the 2024 FAFSA crisis, when the need for an influx of experienced technologists was both urgent and impossible to meet through conventional means.

52. Federal Student Aid, "FSA Careers," U.S. Department of Education, accessed September 2, 2026, <https://careers.studentaid.gov/>.

53. *Code of Federal Regulations*, title 5, § 213.3102(r), "Entire Executive Civil Service," accessed September 2, 2026, <https://www.ecfr.gov/current/title-5/chapter-I/subchapter-B/part-213/subpart-C/subject-group-ECFR2a2db745208d125/section-213.3102>.

These approaches mirror the broader practitioner framework documented by Marina Nitze, former chief technology officer of the Department of Veterans Affairs, and Nick Sinai in their book *Hack Your Bureaucracy* (2022).⁵⁴ Drawing on her experience transforming digital services for more than 20 million veterans, Nitze argues that bureaucracy itself can be the tool of reform. Change agents within large institutions succeed not by circumventing the system, but by finding and activating its internal levers, using allies, timing, and the rules of the institution itself to advance human-centered goals. The lesson is not only that creative hiring is possible, but that demonstrating that it is possible itself is an act of culture change.

Testing Institutional Durability

The durability of FSA's institutional capacity faced a test in early 2025. The Department of Government Efficiency (DOGE) proposed replacing FSA's call center of 1,625 contracted staff⁵⁵ answering more than 15,000 calls per day with a generative AI chatbot, as part of a broader effort to reduce federal spending by eliminating staffing contracts. This created tension that runs through every case study in this report: AI adoption without a human-centered design foundation tends to treat the human layer as cost rather than infrastructure.

The call center exists precisely because the FAFSA system generates confusion at scale. Seventy-four percent of calls went unanswered during the 2024 crisis,⁵⁶ not because call centers are inherently inefficient, but because the underlying system did not reduce the need for human intervention in the first place. A generative AI chatbot deployed into that same environment would inherit the same problem. If the information architecture is broken, then automating the front door does not fix the house.

In contrast, a virtual AI assistant for unemployment insurance at the State of Colorado's Department of Labor and Employment reduced agent-request rates from 80 to 55 percent⁵⁷ while maintaining a good user and staff experience. FSA's call center volume is, in part, a symptom of the design debt the 2024 crisis exposed. The HCD work of the Accounts team is exactly the kind of incremental rationalization that makes AI assistance viable rather than merely faster. Replacing the call center before that work is done risks compounding the original failure with a new one—in other words, automating confusion rather than resolving it.

Of course, the federal government is not the only game in town. Even with fewer resources, state and local governments are developing innovative ways to increase adoption of human-centered design and research practices by creating shared infrastructure and codified playbooks. Two examples, one at the state level in Colorado and one at the city level in Long Beach, California, illustrate different approaches to the same fundamental challenge: how do you make it structurally easier for people inside government to do human-centered work, even when design expertise is scarce?

54. Marina Nitze and Nick Sinai, *Hack Your Bureaucracy: Get Things Done No Matter What Your Role on Any Team* (New York: Balance, 2022), <https://www.hachettebookgroup.com/titles/marina-nitze/hack-your-bureaucracy/9780306827778/?lens=balance>.

55. Liam Knox, "Ed Department Mulls Replacing FAFSA Call Centers With AI," *Inside Higher Ed*, February 14, 2025, <https://www.insidehighered.com/news/quick-takes/2025/02/14/education-department-mulls-using-ai-chat-bot-fafsa-help>.

56. U.S. Government Accountability Office, "Botched FAFSA Rollout."

57. Julia Edinger, "A Better Govt. Experience Is Colorado IT's Goal, CIO Says," *Government Technology*, January 21, 2026, <https://www.govtech.com/workforce/a-better-govt-experience-is-colorado-its-goal-cio-says>.

Case Study: State of Colorado's Operational Toolbox



Governor Jared Polis launched Colorado Digital Service (CDS) in October 2019 as part of the Governor's Office of Information Technology (OIT).⁵⁸ Because CDS operates within and partners with the broader information technology infrastructure, it has access to the technical foundations needed to pursue larger service design referenced in the Readiness Ladder. Modeled on federal digital service teams like the U.S. Digital Service and 18F, CDS recruits senior technologists from the private sector for term-limited "tours of civic service," typically lasting six months to two years, and embeds them alongside career civil servants to modernize state services.

One of the team's distinctive characteristics⁵⁹ is its integration of human-centered design practices directly into its procurement processes as these are needed on projects it supports. CDS approaches every engagement by first understanding who the users are and what they need from the technology before any vendor selection begins.

Over its first five years, CDS has embedded teams in agencies across the state, including the Department of Motor Vehicles, the Department of Health Care Policy and Financing, the Behavioral Health Administration, and the Department of Personnel and Administration. Projects have included developing a more user-friendly benefits management system,⁶⁰ applying user-centered procurement for a new grant management system for the Division of Criminal Justice, and building a Colorado Energy Savings Navigator⁶¹ in partnership with the Colorado Public Utilities Commission and Colorado Energy Office.

Leadership Buy-In and the Operational Agenda

CDS's mandate comes directly from Governor Polis's 2025–2027 Operational Agenda,⁶² which is explicit about prioritizing resident experience and improved service delivery using human-centered design. It notably signals the importance of accountability.

Colorado measures success not by whether teams ship features but by how satisfied residents are with the experience, tracked through post-call surveys and completion rates. This outcome orientation of building a customer experience that inspires confidence and trust is precisely the kind of political cover that makes sustained investment in HCD infrastructure viable. It transforms user-centeredness from a values statement into a performance commitment.

58. Colorado Governor's Office of Information Technology, "Colorado Digital Service," accessed September 2, 2026, <https://oit.colorado.gov/colorado-digital-service>.

59. Joyce Bai, Michaela Caudill, and Ryan Powers, "Learning From the Colorado Digital Service," Beeck Center for Social Impact + Innovation, November 7, 2022, updated March 12, 2025, <https://beeckcenter.georgetown.edu/colorado-digital-service/>.

60. Colorado Governor's Office of Information Technology, "Colorado Digital Service."

61. Office of Governor Jared Polis, "Gov. Polis Announces New Actions for Coloradans to Access Money-Saving Clean Energy Resources," State of Colorado, 2025, <https://www.colorado.gov/governor/news/gov-polis-announces-new-actions-coloradans-access-money-saving-clean-energy-resources-and>.

62. Office of Governor Jared Polis, "The Governor's Operational Agenda," State of Colorado, accessed September 2, 2026, <https://operations.colorado.gov/the-governors-operational-agenda>.

Colorado does not have a direct equivalent of the federal Paperwork Reduction Act or OIRA, but it has developed comparable mechanisms at the state level. OIT maintains an active plain language standard⁶³ requiring residents to understand state communications the first time they read or hear them. Colorado House Bill 21-1110⁶⁴ established stringent digital accessibility requirements for state agencies. The state's Digital Government Strategic Plan⁶⁵ created an official framework to improve services for residents while also streamlining and bringing more services online. Together, these mechanisms create a regulatory floor that nudges agencies toward resident-centered design even absent a dedicated HCD mandate. CDS's work raises the ceiling on what agencies can achieve when they choose to go further.

The Toolbox: Lowering the Bureaucratic Burden to Use Design

CDS actualized the Operational Agenda's directives by building a statewide human-centered design toolbox, which CDS hopes to make public after an internal pilot. This infrastructure allows any state agency or office to access key design and research ingredients of user research tools, participant recruitment systems, participant compensation tools, feedback analysis systems, prototyping tools, and inclusive design experts, all without having to go through arduous procurement or approval processes. CDS's goal in creating these resources, guides, and tools was, in its words, to "lower the bureaucratic burden to use design methods."

As part of this toolbox, CDS leveraged innovative procurement rules and interagency agreements to provide broad access to a modern design tool stack. CDS also provides guidance and education to staff across the state on using these tools. This toolbox further provides access to skilled practitioners in journey mapping, prototyping, and inclusive design to any team across the state.

Similar to the DHS CX team, CDS actively chose to enable the voluntary adoption of design and research practices, rather than mandate their use. Sarah Tuneberg, chief information officer and executive director of the Governor's Office of Information Technology for the State of Colorado, notes: "There is incredible power in showing, not telling." This includes showing what these tools and processes look like in action, such as showing recordings of usability tests or user interviews. "Telling people they should do user research is not super useful. But when they see what's different about these methods, they get it," she adds.

In addition to building this toolbox and providing hands-on support across the state, CDS also provides direct design and implementation services to offices across the state, but does so using an "I do, we do, you do" model that transfers knowledge to agency staff during these engagements. This creates lasting change and builds momentum on the adoption of these tools and best practices across the state.

63. Colorado Governor's Office of Information Technology, "Plain Language," accessed September 2, 2026, <https://oit.colorado.gov/standards-policies-guides/guide-to-accessible-web-services/plain-language>.

64. Colorado General Assembly, *HB21-1110: Colorado Laws for Persons With Disabilities*, 2021 Regular Session, signed June 30, 2021, <https://leg.colorado.gov/bills/hb21-1110>.

65. Colorado Governor's Office of Information Technology, *Colorado Digital Government Strategic Plan* (Denver: Colorado Governor's Office of Information Technology, 2022), <https://digitalgovernmenthub.org/wp-content/uploads/2025/01/Colorado-Digital-Government-Strategic-Plan.pdf>.

Former CIO David Edinger was explicit that CDS's human-centered design expertise is central to the state's approach to AI adoption.⁶⁶ Like the approach to digital services more broadly, it is "grounded in product management, user-centered design and analytics," with CDS embedded in agency efforts to ensure that agencies evaluate AI tools against the same standard as any other service intervention—for example, does it actually work better for the people using it?

Colorado OIT has built a structured intake process for AI projects guided by the National Institute of Standards and Technology (NIST) AI Risk Management Framework,⁶⁷ with a focus on how agencies would share user data with vendors. The Colorado Department of Labor and Employment deployed an AI virtual assistant for unemployment insurance claims that reduced the share of callers asking to speak with a live agent from 80 percent to 55 percent, cutting call center wait times by half, a measurable reduction in burden for both residents and staff.

Case Study: Long Beach and the Civic User Research Playbook



If Colorado's approach demonstrates what's possible when a state builds sustained HCD infrastructure from the top down, Long Beach, California, offers a different model: a city-level story of building design capacity from the inside out with limited resources and no dedicated design staff and through carefully constructed tooling, strategic external partnerships, and a community-first mandate. The city focused on putting in the foundational pieces first. Long Beach is a city of roughly 470,000 people, meaning it is large enough to face genuinely complex service delivery challenges, but without the resources of a state government or large federal agency. Its Technology and Innovation Department⁶⁸ operates multiple overlapping programs oriented around the same mission: "To provide a customer-focused environment that integrates people, processes, and technology to increase the efficiency and effectiveness of City services."

Smart Cities as a Frame for Human-Centered Design

Long Beach's HCD work is organized under its Smart City Initiative,⁶⁹ housed within the Technology and Innovation Department's Technology Planning and Partnerships Division. Smart Cities initiatives, broadly, are municipal programs that use technology and data to improve city operations and resident quality of life. The term has historically been associated with sensor networks, data dashboards, and infrastructure automation, but Long Beach's implementation is distinctive in that it explicitly centers community co-design as a foundational principle,⁷⁰ not an afterthought. This framing makes human-centered research not a luxury but a structural requirement of how the initiative operates.

66. Mickey McCarter, "NASCIO 2025: Q&A: Colorado CIO David Edinger Strives for the Right Mix of Solutions," *StateTech Magazine*, October 13, 2025, <https://statetechmagazine.com/article/2025/10/qa-colorado-cio-david-edinger-strives-right-mix-solutions>.

67. Elham Tabassi, *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*, NIST AI 100-1 (Gaithersburg, MD: National Institute of Standards and Technology, January 2023), <https://doi.org/10.6028/NIST.AI.100-1>.

68. City of Long Beach Technology and Innovation Department, "About Our Department," accessed September 2, 2026, <https://www.longbeach.gov/ti/about-our-department/>.

69. City of Long Beach, "Smart City Initiative," accessed September 2, 2026, <https://www.longbeach.gov/smartcity/>.

70. City of Long Beach, "Civic User Research," accessed September 2, 2026, <https://www.longbeach.gov/smartcity/projects/civic-user-research/>.

The Smart City Initiative includes two programs that operationalize this commitment in interesting ways. LB Co-Lab⁷¹ (Long Beach Collaboratory) is an immersive program that enables Long Beach residents themselves to design and deploy technologies in their neighborhoods, providing career skills alongside community impact. Its first cohort, which ran from March to October 2023, deployed four community projects in city parks and public spaces with over \$200,000 in investment and became a national blueprint for resident-driven technology implementation. Pitch Long Beach!⁷² invites external organizations to propose technologies for city piloting, with city staff and subject matter experts evaluating submissions against transparent criteria before implementation. These programs reflect a philosophy that community members are not just the recipients of smart city technology but also its co-designers and evaluators.

Civic User Research Playbook

The centerpiece of Long Beach's HCD infrastructure is its Civic User Research Playbook,⁷³ inspired by civic research work done in partnership with U.S. Digital Response (USDR).⁷⁴

The Playbook is organized around a “build with” rather than “build for” philosophy. It walks city staff through the complete lifecycle of a civic user research engagement from establishing the research goal and recruiting a diverse participant pool representative of the target audience, through designing scenario-based tasks, facilitating sessions, collecting and analyzing feedback, and translating findings into product improvements. Critically, it addresses the logistical and administrative realities that can make research feel inaccessible to non-designers, and specifically explains how to write research into contracts, compensate participants for their time, handle data privacy, and incorporate research into existing project timelines.

In practice, a city staff member in the permits office may want to improve an online form that residents routinely abandon halfway through. Without design expertise in-house, that person would traditionally either push the problem to the web team (which manages thousands of pages with minimal staffing) or accept the abandonment rate as a given. With the Playbook, the same staff member can structure a small usability study: Define the task scenario, recruit five to eight residents through the city's existing tester pool, observe them completing the form, and document the specific moments where they get stuck or confused. The Playbook tells them how to do each of those steps, in plain language, grounded in Long Beach's specific operational environment. The result is not a polished research report; it is actionable intelligence that can inform a targeted fix.

71. City of Long Beach, “City of Long Beach Publishes Technology Planning and Partnerships 2024 Annual Report,” April 4, 2025, <https://www.longbeach.gov/press-releases/city-of-long-beach-publishes-technology-planning-and-partnerships-2024-annual-report/>.

72. City of Long Beach, “Pitch Long Beach,” accessed September 2, 2026, <https://www.longbeach.gov/smartcity/pilot-programs/pitch-long-beach/>.

73. City of Long Beach Technology and Innovation Department, *Civic User Research Playbook*, <https://www.longbeach.gov/globalassets/smart-city/media-library/documents/civic-user-research-playbook>.

74. U.S. Digital Response, “U.S. Digital Response,” accessed September 2, 2026, <https://www.usdigitalresponse.org/>.

The Playbook also invokes what designers call the “curb cut effect,” meaning accessibility improvements designed for one group tend to benefit everyone. Closed captions were developed for those who are deaf or hard of hearing, but benefit anyone in a noisy environment. Civic user research, similarly, is designed to make services work for residents who face the most friction, including people with limited English proficiency, people navigating complex eligibility requirements, or people without broadband access, but the improvements it generates make services better for all residents. This framing helps city staff who do not think of themselves as designers understand why research is a core service delivery function, not a nice-to-have.

That same infrastructure is now being applied to emerging technology with instructive results. In 2024, Long Beach ran six civic user research projects in partnership with USDR volunteers, one of which evaluated Ask Elby,⁷⁵ the city’s generative AI chatbot pilot. The city first ran an internal test, then a structured one-month external pilot with ten residents that generated more than 15,000 queries. What the process revealed was not a success the city should scale, but a set of problems the city needed to address.⁷⁶ The chatbot frequently returned outdated information, broken links, and content from years prior.

Ryan Kurtzman, who oversees the Smart City Initiative, described resident satisfaction feedback as “very middle of the road.” Rather than proceeding to full implementation, Long Beach paused the rollout and refocused investment on the underlying website and search infrastructure, which was the foundation that the chatbot would need to work well. The city intends to return to the chatbot project, but only after validating the underlying problem more rigorously. The Ask Elby experience illustrates how the “build with” philosophy scales to emerging technology, not by guaranteeing good outcomes, but by creating the conditions to recognize suboptimal ones before they reach full deployment. The city has also published Generative AI Guidance⁷⁷ and a public use case registry⁷⁸ offering staff best practices for common AI applications.

Taken together, the Ask Elby pilot and the governance scaffolding around it show the same HCD infrastructure Long Beach built for web forms is now doing exactly what it was designed to do. It is stress-testing technology in service of the people who will use it and being honest about what it finds.

Long Beach’s approach to responsible AI governance extends beyond its own programs. Kurtzman sits on the board of the GovAI Coalition,⁷⁹ a cross-government body built around shared AI procurement standards and policy templates. The Coalition codifies human-centered design as one of its eight core governance principles and requires agencies to evaluate AI-powered services for their impact on the public before deployment.

75. City of Long Beach, “Introducing Ask Elby!, Our New AI-Powered Chatbot on the City Website!,” November 7, 2024, <https://www.longbeach.gov/ti/news/introducing-ask-elby-our-new-ai-powered-chatbot-on-the-city-website/>.

76. Skip Descant, “Chatbot Not Found: Long Beach Shares Lessons Learned From ‘Elby,’” *Government Technology*, November 13, 2025, <https://insider.govtech.com/california/news/chatbot-not-found-long-beach-shares-lessons-learned-from-elby>.

77. City of Long Beach Technology and Innovation Department, *Generative AI Guidance*, version 1.1 (2024), <https://longbeach.gov/globalassets/smart-city/media-library/documents/generative-ai-guidance-v1-1>.

78. City of Long Beach Technology and Innovation Department, “Generative AI Use Case Registry,” accessed September 2, 2026, <https://longbeach.gov/smartcity/projects/generative-ai-use-case-registry/>.

79. City of San José, “Government AI Coalition,” accessed September 2, 2026, <https://www.sanjoseca.gov/your-government/departments-offices/information-technology/ai-reviews-algorithm-register/govai-coalition>.

Building Infrastructure Without a Design Team

Cassia Gray, a designer and Coding it Forward (CiF)⁸⁰ Fellow embedded with the City of Long Beach, has been doing the kind of foundational infrastructure work that makes future design adoption sustainable. When Gray started her fellowship with Long Beach, the city tasked her with building a website to communicate transparently the work that the Long Beach Smart Cities Initiative is doing with artificial intelligence. She soon realized that there were more foundational elements that needed support, though, and got to work advancing the city up the Readiness Ladder.

One of Gray's valuable contributions is a design system for the city, which is a shared library of reusable visual components, interaction patterns, typographic standards, and asset templates that simplify the process of building web pages on the city's existing content management infrastructure. A design system is, in essence, a set of tools to simplify and unify design decisions. It ensures consistency across city properties, reduces the time to make basic layout and visual changes, and encodes accessibility standards into the default building blocks rather than requiring each team to solve them independently. Gray built her system with inspiration from the U.S. Web Design System (USWDS) and adapted it to Long Beach's specific brand, content, and community context.

The connection to administrative burden reduction is direct. Without a design system, every time a city department needs to create a new web form or update a resident-facing page, the staff member responsible must make dozens of individual decisions about fonts, colors, button placement, form field labels, error messages, and reading level. These are decisions they are not otherwise trained to make well, and which frequently produce inconsistent, inaccessible, or confusing results. Furthermore, for any given content management system a city is using, translating design decisions into usable assets for that system can be a complex and arduous process without the use of components and templates. The design system already makes many of these decisions.

Designers can use a pre-built library of components that are already accessible and already consistent with the city brand. The infrastructure itself embeds the design expertise and is ready to plug into the existing technical infrastructure. With Gray's design system, the City of Long Beach can build designs faster and redirect time toward further progress up the Readiness Ladder.

Gray has also introduced city staff to modern design tools, which allow non-designers to view, comment on, and collaborate in design files in real time. She developed internal guidance on plain language, accessibility standards, and reading level targets, building the kind of written infrastructure that extends her individual expertise to the entire organization. Gray describes the orientation of the work clearly: her focus is on information architecture, establishing the hierarchy of what residents need to know and guiding them through it.

Gray worked under the city's AI and Data Governance lead, a supportive and engaged program manager who, while lacking a design background, still made space for Gray's work. Long Beach's design function exists not in a standalone design office but embedded within technology governance, serving the city's transparency and public trust mission. In a city where there is essentially no other formal user experience design capacity,⁸¹ infrastructure investments like the design system and the Playbook are not supplementary resources; rather, they are the design program.

80. Coding it Forward, "Coding it Forward," accessed September 2, 2026, <https://www.codingitforward.com/>.

81. City of Long Beach Technology and Innovation Department, "About Our Department."

Scaling Human-Centered Design



Successful adoption of HCD practices requires navigating the realities of public sector bureaucracy. In analyzing these case studies, researching existing models, and speaking with industry experts, this report identifies several factors relevant to successfully scaling human-centered research and design in the public sector.

The Necessity of Aircover

Adopting new ways of working benefits significantly from high-level leadership support, or “aircover.” This can come from political leadership, senior agency leaders, executive declarations, or even particular program leaders who value design. Aircover is essential for protecting HCD initiatives from competing and often misaligned incentives that might otherwise dismantle human-centered programs without considering user impact.

But aircover is not sufficient on its own. The cases examined here suggest that the HCD initiatives most likely to survive political transitions are those that have built outcome clarity. They have measurable and public-facing results that transcend partisan framing. They have broad internal alliances with career staff and organizational embeddedness that does not depend on a single champion or externally positioned innovation team. The vulnerability to cuts at the CX Directorate at DHS is a reminder that visibility and high-level support, without those deeper roots, can disappear as quickly as it arrived.

Cooperation and Building Alliances

Successful research and design teams avoid top-down mandates, which risk turning design into a “check-the-box” compliance exercise. Instead, they focus on building a coalition of the willing by solving real and urgent problems. Demonstrating value early and often makes the larger cultural shift easier for non-design partners to imagine and embrace.



Iterative Implementation of Practice

The adoption of human-centered practices in an agency or office is, in and of itself, an iterative process. This may start with a single person or a small pilot, but successful implementations iteratively build over time as they demonstrate value. The path to human-centered design adoption is rarely linear. Teams often take steps backward to adjust their methods to the specific organizational context, meeting the organization where it is and working to bring people along with them.

Senior Talent

Scaling HCD requires senior, experienced design talent to lead programs and mentor junior staff. Having this talent in-house, as opposed to solely relying on external vendor support for design needs, ensures that reporting structures and power dynamics remain aligned with the mission. Leaders will need to use creative tactics to build these teams at the start, such as flexible hiring authorities, fellowship programs, and high-visibility recruitment materials that describe the work honestly and attract practitioners who understand the stakes.

Risk Management

When pushing for the adoption of design practices, it is critical to have a leader with a sophisticated understanding of risk. Traditional understandings of risk include communications and reputational risk management, such as avoiding damaging headlines. Having a leader pushing these methods forward requires someone who understands risks around harm, ethics, legal violations, and other areas of real risk, not just perceived risks. While human-centered research and design practices may sound risky in terms of reputational risk, leaders with an advanced understanding of risk are able to frame HCD as a tool to mitigate the most harmful risks by identifying failures before they reach the public.



Conclusions and Strategic Recommendations

The case studies in this report point to specific steps, not merely general ones. Human-centered design works in government not as a values statement, but as a prerequisite and a means to help improve services and reduce administrative burden. The sequence matters.

The emergence of generative AI as a government technology priority makes this work more urgent, not less. The cases examined here suggest a principle that deserves explicit attention: AI adoption without a human-centered design foundation tends to treat the human layer as a cost rather than infrastructure.

Government leaders can adopt multiple strategies to scale HCD and reduce administrative burden:

- **Move Through the Readiness Ladder in Order.** Ensure that technical foundations and iterative workflows are in place to support design practices, rather than attempting large-scale service redesign from the start.
- **Invest in Operational Toolboxes.** Lower the bureaucratic burden of using design by creating shared infrastructure for research operations, such as participant recruitment systems, compensation mechanisms, tool access, and plain-language guidance.
- **Focus on Outcomes Over Policy Implementation.** Empower teams to prioritize user results over strict adherence to rules-as-written—for example, more students in college, faster access to unemployment benefits, and clearer paths through immigration services. Measure success through resident satisfaction and completion rates, not delivery of features. Where rules create unnecessary friction, engage directly with the people who write them and co-create and iterate.
- **Build for Durability, Not Just Visibility.** Design initiatives that depend on a single champion, an externally positioned innovation team, or emergency-funded urgency are vulnerable to the next transition. The investments most likely to survive are those with clear outcome metrics that transcend partisan framing, broad alliances with career staff who understand and value the work, and organizational embeddedness.
- **Hire Senior Talent and Use Alternative Pathways.** Use flexible hiring authorities, fellowship and volunteer programs, and peer-evaluated assessment processes to bring in experienced design and research leaders who can lead teams and build internal capacity. Make the recruitment materials honest about the stakes.

The successes documented in this report demonstrate that even the most complex government agencies can transform their relationship with the public. The failures document what it costs when they do not. Human-centered design, practiced in sequence and built into durable institutional infrastructure, is among the most effective tools government has for strengthening public trust and reducing administrative burden—not by making government feel friendlier, but by making it actually work better for the people it serves.

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Acknowledgment

We'd like to thank the following individuals for their contributions to this report:

Aayat Ali, Katherine Benjamin, Daniel Chenok, Dana Chisnell, Janell Cody, Erin Elzi, Lauren Gardner, Margaret Graves, Cassia Gray, Ryan Kurtzman, Aaron Lemon-Strauss, Chizobam Nwagwu, and Sarah Tuneberg

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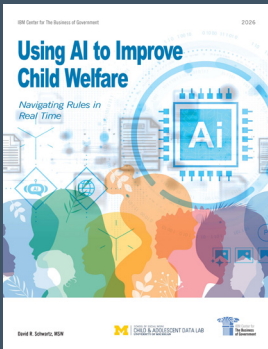
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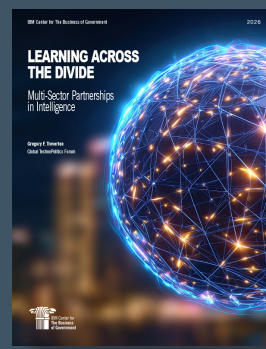
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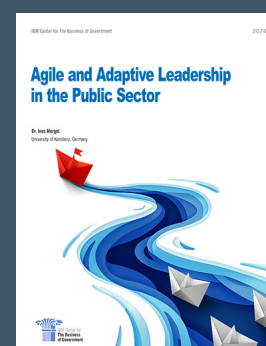
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