

Technology, Data, and Design-Enabled Approaches for a More Responsive, Effective Social Safety Net

A LIVING REPORT BY THE
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About This Report

This living report — which we will update at regular intervals throughout 2020 — examines **data, design, technology, and innovation-enabled approaches that make it easier for eligible people to enroll in, and receive, federally-funded social safety net benefits.** Through our research, we seek to offer understanding of what tools and processes exist, which can be replicated, and what experts identify as overarching needs. We will work to present what new approaches are possible and can be widely scaled, especially if there is the political and popular will to drive a large federal investment in a tech-enabled social safety net in the wake of COVID-19. As public¹ and legislative² appetites to fix the social safety net increase, we anticipate this living report will be of particular interest to leaders able to take integrated, system-wide action including government executives, policy makers, and philanthropic organizations. We also hope it promotes aligned efforts between organizations and government agency leaders responsible for implementing social safety net benefits.

The information in this report was gathered and presented by Sara Soka and Chad Smith, fellows who are part of the [Digital Service Collaborative](#) at the [Beeck Center for Social Impact + Innovation at Georgetown University](#). This work is supported by the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the foundation. The Beeck Center gratefully acknowledges the efforts and insights of the organizations and government agencies that have been working in this ecosystem for years.

¹ For example, [a letter](#) dated March 26, 2020 from 11 Florida Congressional Representatives to Florida Governor Ron DeSantis states, “[W]e continue to hear from constituents that the website where all applications must be completed continues to malfunction, making it extremely difficult for individuals to even file a claim for unemployment benefits.... [W]e urge you to... investigate and mitigate challenges with the website.”

² “Living in the most technologically advanced and richest nation in history, SNAP online purchasing should have happened much sooner and much quicker,” said Salaam Bhatti, Staff Attorney at the Virginia Poverty Law Center, [in reference to a bill proposed by Minnesota Congressional Representative Ilhan Omar](#) in April 2020.

Introduction

“Build back better” is a phrase borrowed from disaster recovery. At its core, this means when a system is damaged (or exposed as being damaged), the optimal repair uses all available resources to build back a stronger, more effective, and more resilient system.

Social safety net programs provide basic economic, food, and housing support to millions of low-income Americans,³ but their eligibility, enrollment, and delivery processes are notoriously difficult to navigate.⁴ The federal government funds social safety net benefits and sets eligibility standards based on household size, income, work status, and other characteristics. Federal agencies send funds to states to deliver and administer benefits, and shares the administrative costs with states.

As demand for benefits grew with the economic impact of the COVID-19 pandemic, the insufficient capacity and burdensome processes of the social safety net became painfully apparent to more people.

For example, a record 36 million unemployment claims were filed in the United States between March and June 2020.⁵ Many newly unemployed people struggled to apply, facing overwhelmed call centers, websites, and physical lines outside of offices,⁶ then waited a month or more for necessary cash assistance. Along the way, they negotiated lengthy verification processes and broken delivery systems.⁷

The good news is that there are successful models for bringing social safety net benefit delivery up to contemporary standards. In the last decade, a number of nonprofits and public benefit corporations have worked closely with government

³ The Supplemental Nutrition Assistance Program (SNAP), previously known as food stamps, reached 38 million Americans in 2019, and federal rental assistance reached 10.4 million Americans according to recently available data.

Nchako and Cai. (2020). [A Closer Look at Who Benefits from SNAP: State-by-State Fact Sheets](#), Center for Budget and Policy Priorities; (2019). [Federal Rental Assistance Fact Sheets](#), Center for Budget and Policy Priorities.

⁴ Davis et al. (2020). [Blueprint for a Human-Centered Safety Net](#), Code for America.

⁵ Cohen and Hsu. (2020). [Rolling Shock' as Job Losses Mount Even With Reopenings](#), New York Times.

⁶ Marte and Sullivan. (2020). [Millions filed for U.S. unemployment - Many are Still Waiting for the Cash](#), Reuters.

⁷ Haag, M. (2020). [They Filed for Unemployment Last Month. They Haven't Seen a Dime.](#), New York Times.

agencies and benefit recipients to make it easier to apply for social safety net benefits using technology, data, and design. For instance:

- Nonprofits [One Degree](#) and [Alluma](#) teamed up to offer Bay Area and Los Angeles residents an integrated, human-centered Medicaid and food assistance screener and application. Both the mobile app and website also provide a directory of local support services.⁸
- The nonprofit [Code for America's GetCalFresh](#) grew from a small fellowship pilot to make SNAP applications faster and easier in one California county in 2014. Six years later, in Spring 2020, GetCalFresh served as the entry point for 70% of all SNAP applications statewide in California, serving an average of 10,000 new applicants each day.⁹
- The nonprofit design studio [Civilla](#) worked with benefit applicants and the Michigan Department of Health and Human Services to [combine five benefit applications into one](#). The new application is 80% shorter and takes half the time to process.¹⁰ The application is now available in a mobile-responsive, online format that allows users to manage changes to their benefits, upload documents and photos, and receive text notifications.¹¹
- [Benefits Data Trust](#) uses data and process innovation to reach people who are likely eligible for benefits but not yet enrolled. The nonprofit analyzes data with government agencies to understand who receives certain benefits, but not others for which they probably qualify.¹² Their benefits specialists and call centers help people enroll in multiple benefits online, over phone and text, and in-person. Similarly, [mRelief](#), a Chicago-based nonprofit, offers people multiple ways to assess their eligibility for benefits and enroll, including plain-language SMS text, mobile and online platforms, and voice-assisted technology.¹³
- To ensure policy informs benefit implementation and vice versa, these organizations and their peers frequently partner with research and policy institutes, think tanks, and academic centers, such as the [Center for Budget and Policy Priorities \(CBPP\)](#), [New America](#), and the [Beeck Center for Social Impact + Innovation](#). For example, the public benefit corporation [Nava](#), partnered with CBPP to issue [a report](#) investigating whether Remote Identity

⁸ [One Degree: Empowering People to Apply for Health Coverage and Food Assistance through a Program Referral Service](#), Alluma.

⁹ Patterson, T. (2020). Correspondence with author.

¹⁰ [Streamlining the longest assistance application in America](#), Civilla.

¹¹ Ray-Montañez, L. (2019). [Safety Net Services Built for Outcomes](#), Code for America.

¹² Zygmunt, E. (2020). Correspondence with author.

¹³ Elahi, A. (2020). [Are you eligible for food stamps? mRelief wants to help you find out](#), Chicago Tribune.

Proofing (RIDP) is legally required in online benefit applications, and explained the barriers that RIDP pose to people eligible for benefits.¹⁴

Federal government offices like the [U.S. Digital Service, 18F](#) and the [Lab at OPM](#) have demonstrated the power of using technology, data, and design-enabled approaches in government to investigate and improve social safety net benefit delivery.¹⁵ State and local governments are also gradually changing approach (see, for example, [Colorado's Digital Service](#),¹⁶ [California's Government Operations Agency](#),¹⁷ the [New Jersey State Office of Innovation](#),¹⁸ and [NYC Innovative Government](#)), yet challenges to implement modern software development and design practices, and leverage data to improve and shorten the benefit delivery process remain.

¹⁴ Wagner and Gaudet. (2020). [Removing Barriers to Access From Remote Identity Proofing](#), Center on Budget and Policy Priorities.

¹⁵ [Medicare Payment System Modernization](#), U.S. Digital Service.

¹⁶ Freed, B. (2019). [Colorado's New Digital Service Agency Aims at 'User-Centered' Projects](#), StateScoop.

¹⁷ Wood, C. (2020). [California Gov. Newsom appoints two former San Francisco tech chiefs](#), StateScoop.

¹⁸ [About the New Jersey Office of Innovation](#), Office of Innovation: State of New Jersey.

The Federally-Funded Social Safety Net

| | | |
|-------------------|---|--|
| Education | Federal Pell Grant Program | Assistance paying for undergraduate tuition and other higher education expenses for students with low incomes |
| | Head Start | Pre-school education for children in low income families |
| Energy | Low Income Home Energy Assistance Program (LIHEAP) | Energy assistance for people with low incomes |
| Food | Pandemic EBT (P-EBT) Temporary | Grocery electronic benefit transfer (EBT) cards for families with school-aged children eligible for free or reduced-price school meals |
| | Supplemental Nutrition Assistance Program (SNAP) | Grocery EBT cards for low income people to buy food at stores, farmers markets, and (where accessible) online |
| | The Emergency Food Assistance Program (TEFAP) | USDA commodity foods made available to people with low incomes at participating food pantries in their area |
| | Women, Infants and Children (WIC) | Food, nutrition education and counseling for pregnant women and women with children from birth to age five with low incomes |
| Healthcare | Affordable Care Act (ACA) | Subsidies to help pay for individual health insurance |
| | Children's Health Insurance Program (CHIP) | Assistance paying for children's health insurance for low income families who do not qualify for Medicaid |
| | Medicaid | Health insurance for low-income families and individuals; also Medicare premium and long term care support for low-income seniors and people with disabilities |
| | Medicare | Health insurance for people 65 or older, and some younger people who have specific disabilities or diseases |
| Housing | Housing Choice Vouchers, Section 8 Tenant Rental Assistance, and Public Housing | Rental assistance and housing provisions for people with low incomes |
| Internet | Lifeline | Internet and phone bill assistance for people with low incomes |
| Income | Earned Income Tax Credit (EITC) | Tax credit benefitting working people who have low to moderate income, especially families. |
| | Economic Impact Payment Temporary | Due to COVID-19, a cash payment of \$1,200 for individuals or \$2,400 for married couples and up to \$500 for each qualifying child |
| | Pandemic Unemployment Assistance Temporary | Cash assistance to eligible workers who have income negatively impacted by COVID-19 |
| | Social Security (SS) | Cash payments to retirees who have made SS contributions |
| | Social Security Disability Insurance (SSDI) | Cash payments to disabled people who have made contributions to Social Security |
| | Supplemental Security Income Program (SSI) | Cash assistance for elderly, blind, or disabled people with limited incomes who have made contributions to Social Security |
| | Temporary Assistance for Needy Families (TANF) | Cash and noncash (child care, transportation, etc.) assistance for low income families |
| | Unemployment Insurance | Cash assistance to eligible workers who become unemployed through no fault of their own |

This report focuses on innovations to deliver the social safety net benefits offered to people with low incomes, who are out of work, or working but struggling to afford basic needs. Making eligibility determination, enrollment, and delivery of these benefits less burdensome can help people already facing difficult financial trade-offs and demands on their time¹⁹ to eventually reach greater economic sufficiency and security.

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In response to the COVID-19, the federal government passed the [Families First Coronavirus Response Act](#) and the [Coronavirus Aid, Relief, and Economic Security \(CARES\) Act](#). These laws expanded the duration, amount, and eligibility requirements for some social safety net benefits, including income assistance (temporarily expanding the amount and length of unemployment insurance, and making funds available to self-employed and gig workers, who ordinarily wouldn't be eligible),²⁰ and food benefits (SNAP and P-EBT). Of particular interest in these pieces of legislation is the opportunity for states to request temporary waivers from federal regulatory requirements, which would allow states to change their processes for benefit enrollment and verification. For example, states were granted the option to make changes to SNAP that allow for faster application processing, waiving requirements for in-person interviews or certain recording requirements for telephonic signatures.²¹ These changes might become permanent if states demonstrate added effectiveness in benefit processing since their implementation. We will monitor and report on innovative practices spurred by these changes.

¹⁹ In 2019, Code for America published a microsite called "[Why Californians Need Food Assistance](#)" that detailed statistics about SNAP users alongside their quotes. One user illustrated the difficult decisions benefit applicants make: "I have a car payment that's \$336 every month and a weekly daycare bill of \$175. After rent, the phone bill, and gas, I have nearly nothing to spend on food. I often don't eat so that my child can eat."

²⁰ Parrott et al. (2020). [CARES Act Includes Essential Measures to Respond to Public Health, Economic Crises, But More Will Be Needed](#), Center on Budget and Policy Priorities; Stone C. (2020). [CARES Act Measures Strengthening Unemployment Insurance Should Continue While Need Remains](#), Center on Budget and Policy Priorities.

²¹ Rosenbaum et al. (2020). [USDA, States Must Act Swiftly to Deliver Food Assistance Allowed by Families First Act](#), Center on Budget and Policy Priorities; (2020). [Most States Are Using New Flexibility in SNAP to Respond to COVID-19 Challenges](#), Center on Budget and Policy Priorities.

Priorities for a Responsive, Effective Social Safety Net

This section of the living document presents both structural, overarching changes and smaller-scale, tactical improvements that can lead to a more responsive, effective social safety net. These insights have been gathered from findings published by leading organizations in the field, supporting conversations, and media articles about the social safety net. We will update these findings and include additional topics as we produce future installments of the document.

Investing in Modular and Linked Technological Systems

Government Technology Made of Modular, Linked Software Components, Rather than Monolithic Systems

Subject matter experts in government technology²² shared that the commonly used, monolithic systems that government agencies have historically used tend to be difficult to build and update without major risk and cost, creating prolonged obstacles to social safety net benefit delivery. In contrast, a network of individual software components or applications with specific purposes – created using modern API-driven software development techniques – can form an interoperable backend. It can be built, updated, shared, or replaced individually and with agility, without requiring major system interruptions or replacement of entire systems.

Technologists refer to this as service-based architecture.

While modular, linked systems are considered an ideal for many technologists working with governments, we've also heard that it's been difficult for states to attempt this because of constant pressure to deliver services (now exacerbated by the COVID-19 related economic crisis). Other barriers mentioned include not having enough staff with modern design and software engineering skills, the length and cost of existing vendor contracts, and antiquated procurement practices. Security is often a concern, too.

²² This includes technologists at [18F](#) and a former state chief data officer. Further validation of this theme will be explored in future installments of this document.

Recommendations and Opportunities to Scale

- One approach to test this priority could involve a pilot, involving several states with leadership that's committed to building a linked, modular backend, and leveraging current momentum to modernize the social safety net benefit system. State agency stakeholders and subject matter experts who understand this issue should be involved in deciding what's feasible.
- While certain states stand out as having technology teams or leadership that could be receptive to a pilot (such as California, Colorado, or Michigan), determining the states involved should involve a wider scan of readiness factors, similar to [Code for America's selection process for their Integrated Benefits pilots](#).²³ One step that was suggested and could help determine selection, or be done in parallel, is a 50-state scan of backend interoperability. This scan would extend to all state agencies involved in social safety net benefit delivery, in the style of [Code for America's 50 state scan of online, integrated, and mobile benefit applications](#).²⁴

Linkages Across Internal State Agency Datasets

One common inefficiency raised in social safety net benefit delivery is that applicants often need to fill out multiple benefit applications and submit income verification to separate state agencies.²⁵ This creates a clear burden for people who are already experiencing difficult circumstances, and incurs additional work for eligibility workers. When the state and local agencies that administer different benefits link their datasets at specific points, it allows benefit eligibility determination, enrollment, and delivery data to be shared and the process becomes streamlined. It also lays the groundwork for the creation or expansion²⁶ of integrated benefits applications, and other education opportunities that make people aware of benefits they are eligible to receive.²⁷ While many states already use cross-benefit linkages to varying degrees, the practice is not yet optimized. Future installments will investigate what's been learned from analyses of state agency linkages and data-sharing, such as Alluma's assessment of the California Department of Social Services.

²³ [Integrated Benefits Initiative](#), Code for America.

²⁴ (2019). [Bringing Social Safety Net Benefits Online](#), Code for America.

²⁵ [Simple Actions / Blueprint for a Human-Centered Safety Net](#), Code for America.

²⁶ Ambegaokar et al. (2017). [Opportunities to Streamline Enrollment Across Public Benefit Programs](#), Alluma.

²⁷ Lane, K. (2019). [Maximizing Linkages: A Policymaker's Guide to Data-Sharing](#), Alluma.

While many states already use cross-benefit linkages to varying degrees, the practice is not yet optimized.

Resources from Experts in the Field

- [Opportunities to Streamline Enrollment Across Public Benefit Programs](#) (Nov. 2017). Produced by Sonal Ambegaokar of Social Interest Solutions, now Alluma,²⁸ and Zoë Neuberger and Dorothy Rosenbaum of the Center on Budget and Policy Priorities.
- [Maximizing Linkages: A Policymaker's Guide to Data-Sharing](#) (April 2019). Produced by Khaliyl Lane of Social Interest Solutions, now Alluma.
- [The State Hub Roadmap: CDSS \[California Department of Social Sciences\] CalFresh and CalWORKs Streamlining Verifications](#) (Nov. 2018). Produced by Social Interest Solutions, now Alluma.

Recommendations and Opportunities to Scale

- Alluma and the Center on Budget and Policy Priorities [co-authored a white paper](#) that explains pathways to create linkages between specific social safety net benefits.²⁹ A [subsequent paper](#) from Alluma provides guidance on data-sharing agreements and privacy regulations.³⁰ Policymakers and administrators interested in expanding data sharing opportunities can review these papers for advice and best practices.

²⁸ Social Interest Solutions rebranded as Alluma in July 2019.

²⁹ Ambegaokar et al. (2017). [Opportunities to Streamline Enrollment Across Public Benefit Programs](#), Alluma.

³⁰ Lane, K. (2019). [Maximizing Linkages: A Policymaker's Guide to Data-Sharing](#), Alluma.

Activating Policymakers to Think Like Designers

In response to the economic crisis caused by the COVID-19 pandemic, policymakers issued mandates to government agencies to implement rapid relief measures. One widely-known relief measure is the Economic Impact Payment, issued in late March 2020 as part of the CARES Act. Intended to provide immediate cash relief to low- and middle-income U.S. citizens, the initial mechanism used to send relief — direct deposit into the bank accounts that payment recipients had on record with the IRS — categorically missed delivering funds to as many as 10 million low-income Americans who don't earn enough to typically be required to file taxes.³¹

“A ‘broken pipe’ moment is when policies do not meet their intended purpose because of difficulties in implementation.”

– Cecilia Muñoz, New America

Though policymakers were under extreme pressure to deliver the CARES Act funding quickly, this divergence between policy intent and delivery is common even in long-deliberated policies (think of the Affordable Care Act), and reduces the effectiveness of social safety net benefit delivery. Cecilia Muñoz, New America's Vice President for Public Interest Technology and Local Initiatives, calls instances like these, when policies do not meet their intended purpose because of difficulties in implementation, an example of a “broken pipe.” She notes that policymakers and advocates spend most of their effort and resources crafting and debating elements of policies, largely ignoring factors that affect implementation, and letting assumptions about implementation go untested.³² Code for America expands on this topic in a white paper published in November 2019 called *Delivery-Driven Policy*:

“... [The implementation] failure is not deliberate; it is the result, in part, of an outdated model that keeps policymaking and policy implementation as separate domains, with separate skills and incentives.... Code for America, the United States Digital Service, 18F, and many others have made the case that a user-centered, iterative, and data-driven approach can result in digital technology that provides [data and insights to improve government service

³¹ Maag, E. (2020). [Low-Income Workers Without Children May Miss Out On The Coronavirus Rebates](#), Tax Policy Center.

³² Talk delivered by Cecilia Muñoz to U.S. Digital Response volunteers, cited with permission of the speaker. (2020).

delivery], and at a far lower cost. The real benefit, however, is when those same practices — user-centered, iterative, and data-driven — are applied to the policymaking process as well.”³³

At Code for America’s 2016 Summit, Muñoz explained how she became a champion for this approach.³⁴ As the Director of the Domestic Policy Council under President Obama, her policy team took the opportunity to collaborate with digital and design professionals from the U.S. Digital Service. “Not only did they solve [our technological] problem,” she stated, “[they also] convinced the team to step back, talk to users, and design the service differently.”

The more that policymakers and government staff are able to work with design teams, and ultimately apply design skills themselves, the more they can effectively engage with the people who policies aim to serve and the people who understand implementation pipelines. [The New Practice of Public Problem Solving](#), published in the Stanford Social Innovation Review, spells out the process in actionable steps.³⁵ Most notably, it encourages policymakers to engage in user-centered design to make sure the objective of their policy, which is to affect people's lives, guides the design of their policy.

Our initial research revealed that two of the biggest barriers to developing multidisciplinary, design-savvy teams in government are resource strain and perceived cultural differences. Many state and federal agencies don’t yet have staff with modern design skills or resources to add staff with this skillset or build capacity among current staff. As a contact at 18F said, “When you do work with state staff, they get it. But they often don’t have the resources to change things because they’re under so much pressure to deliver.” Furthermore, many people working in policy and government don’t associate skills held by technical professionals as something that’s relevant to their work. Cecilia Muñoz explained it like this:

“Getting in the door is absolutely the hardest part because we’re not yet great at explaining what [a design based approach] is in a way that [policymakers and government staff] understand. We tend to show up in a crisis. A crisis turns out to be when it’s of greatest need, but it’s also a much harder time to get people to understand what’s possible. We’re asking people to change the ways they work using a vocabulary that they don’t know yet. So it’s like people who speak another language coming in to help, and you don’t know the language, and you don’t understand what tools they’re wielding.”³⁶

³³ (2019). [Delivery-Driven Policy](#), Code for America.

³⁴ [Jennifer Pahlka’s Opening Remarks with Cecilia Muñoz](#). (2016). Code for America Summit.

³⁵ McGuinness and Slaughter. (2019). [The New Practice of Public Problem Solving](#), Stanford Social Innovation Review.

³⁶ Talk delivered by Cecilia Muñoz to U.S. Digital Response volunteers, cited with permission of the speaker. (2020).

A third barrier is a lack of incentive to spend time investigating user needs and implementation pipelines closely because of the pace and quid pro quo nature of policy making. Future research could investigate precedents for policymaking and procurement standards that incentivize user-centered design, focused on social safety net benefit delivery.

Resources from Experts in the Field

- [Delivery-Driven Government](#) (May 2018). Produced by Code for America with inspiration from Mike Bracken, Jake Solomon, David Eaves, and Ben McGuire.
- [Delivery-Driven Policy](#) (Nov. 2019). Produced by Code for America with input by New America, and the Delivering Better Outcomes Working Group hosted by the Beeck Center for Social Impact and Innovation at Georgetown University.
- [The New Practice of Public Problem Solving](#) (Spring 2019). Produced by Tara McGuinness and Anne-Marie Slaughter of New America; published in the Stanford Social Innovation Review.
- [Helping Policy Makers Put People First: A Step-by-Step Tool for User-Centered Policy Making](#) (May 2020). Produced by Alberto Rodríguez Álvarez, Dana Chisnell, and Vivian Graubard of the Beeck Center for Social Impact + Innovation, the National Conference on Citizenship, and New America, respectively.
- [Rapid Implementation of Policy as Code](#) (May 2020). Produced by Alex Soble and Mike Gintz of 18F.

Recommendations and Opportunities to Scale

- While government innovation teams are becoming more common, it's still rare to have policy, technical, and design staff, and subject matter experts from inside and outside government come together at the beginning of policy processes. Future installments of this document will include examples of government agencies that are exploring this approach for policy development or implementation. We will also examine ways to invest resources in design, and what organizations may model or demonstrate it, like [Code for America](#),³⁷ [Nava](#), [18F](#), and the [Lab at OPM](#) (U.S. Office of Personnel Management).

³⁷ [Designing User-Centered Policy](#). (2018). Code for America.

- The professional cultural differences between policymakers, government staff, and technologists may not be as great as perceived. Design teams could explore ways to explain their methods in alignment with analog practices these groups know and can be highly skilled in, like constituent and community engagement. Related to this, policymakers and government staff who have engaged in design practices that have been successful tend to be the most persuasive champions for the process to their peers.

Accelerating Government Transformation for Benefit Delivery

States, municipalities, and federal government agencies are making technological, data, and design-enabled changes to their own internal structures and approaches, which can lead to organization-wide transformation. Establishing these skills and methods in-house, rather than solely relying on outside vendors or partners, allows governments to reimagine how they carry out their missions and provide services including safety net benefits. Many factors contribute to governments' rates of change. [One maturity model for public sector digital service teams](#) was developed in 2018 at a convening hosted by the Harvard Kennedy School,³⁸ informed by nine countries' digital service teams. It breaks down supports and barriers into six categories, summarized in brief here:

- **Political Environment.** Breadth of political sponsorship, level of involvement in top-priority projects, and codification (e.g., digital services department is enacted by executive branch decree or legislation).
- **Institutional Capacity.** Adoption of [Agile methodology](#) across departments with support from a centralized digital service agency, and sustainable funding.
- **Delivery Capability.** Adaptive capacity to use new tools and respond to public needs, and incorporate user feedback cycles (e.g. use beta versions).
- **Skills and Hiring.** Ability to hire technical positions in government (e.g., UX Designer), and training and pipeline programs in place in schools of public service.
- **User-Centered Design.** UX research and testing is expected in new service development and rollout, a design approach is used in policy development and agency rulemaking, product management roles are standard.
- **Cross-Government Platforms.** Public data is published with APIs, standard rules exist for data sharing across government departments, common needs are covered by shared platforms.

Similarly, Bloomberg Philanthropies' What Works Cities initiative published [criteria for data-driven local government](#) in a 2018 assessment.³⁹ It measures capacity and standards in data governance, evaluations, general management/political support, open data, performance and analytics, repurposing data, results-driven contracting/procurement, and stakeholder engagement.

While these collective factors can spur accelerated change to benefit delivery systems, there is not just one model for success, and the real measure is delivering

³⁸ Eaves and McGuire. (2018). [Part 2: Proposing A Maturity Model for Digital Services](#), Harvard Kennedy School.

³⁹ (2018). [What Works Cities Assessment Guide - What Works Cities Certification](#), Work Works Cities.

value to [residents].⁴⁰ As we interact with more experts in this space for future installments of this document, we will identify additional factors and explore whether certain factors accelerate or slow progress more in their estimation.

The element of urgency can act as a catalyst to accelerate change to benefit delivery. Whether that means policymakers are compelled to engage a technical team to deliver a service the president requests, which is what drove Cecilia Muñoz's team to work with the U.S. Digital Service for the first time under President Obama's administration,⁴¹ or that a sharp increase in SNAP demand during COVID-19 drives the need to process more applications faster, these events can create unified purpose and strip away systemic or cultural barriers to change.

Updates to this living document will include additional case studies of governments attempting to implement technology, data, and/or design-enabled changes to the social safety net. These case studies will illustrate supportive or opposing factors in motion.

Resources from Experts in the Field

- [Proposing a Maturity Model for Digital Services](#) (2018). By David Eaves and Ben McGuire in collaboration with multiple digital service teams.
- [What Works Cities Assessment Guide](#): Certification criteria for data-driven local government (2018). By What Works Cities Medium authors.

⁴⁰ Eaves and McGuire. (2018). [Part 2: Proposing A Maturity Model for Digital Services](#), Harvard Kennedy School.

⁴¹ [Jennifer Pahlka's Opening Remarks with Cecilia Muñoz](#). (2016). Code for America Summit.

Case Study: State of New Jersey Enables SNAP Document Upload Capacity⁴²

Problem: SNAP benefits applicants must submit documents that verify their identity and income. In the state of New Jersey, eligibility workers typically saw these documents during in-person interviews, which were required pre-COVID-19. Under modified regulation due to the pandemic, viewing documents in person was no longer an option, yet increased SNAP demand made processing by mail a lengthy process. New Jersey needed a fast approach that let applicants upload document files, which could then be received and viewed securely by county eligibility workers.

Who was involved: New Jersey state government appointees and employees, including its Chief Innovation Officer, Chief Technology Officer, staff from the Office of Innovation, and leaders from the Department of Human Services, in partnership with volunteers from [U.S. Digital Response](#) (USDR), including a subject-matter expert, an engineer, a UX designer, and a product manager.

How did they do it: The New Jersey Chief Innovation officer reached out to USDR to explain the problem and learn if the group of technologist volunteers at USDR could stand up a short-term solution. USDR volunteers met with state stakeholders to understand their current data, platforms, and security needs, then quickly identified an approach using Cognito Forms, a free, online form tool. They stood up a prototype for a secure upload process in three days, using no custom code, at minimal cost, and integrating into tools New Jersey's Department of Human Services already had.

Success factors:

- A champion with technology and design background.
- Resources to support a robust Office of Innovation, a CIO, and a CTO.
- A government team with skills and expertise across multiple subject areas.
- Shared urgency, spanning government departments, to solve the problem.
- A government team willing to think outside the box despite constraints.
- Resources to support a robust Office of Innovation, a CIO, and a CTO.
- Access to expert pro bono talent in partnership with USDR, with no consulting or development costs the state, and no procurement barriers.

⁴² "U.S. Digital Response Weekly Dispatch, Project Spotlight, Challenge: Simplify Online SNAP Application Processes," in press, U.S. Digital Response, <https://medium.com/u-s-digital-response>.

Process Delivery Improvements

Voice-Based Applications

Voice-based applications, which rely on the use of a landline or cellular phone, remove the requirements for applicants to use the internet, mail documents, visit a physical location, or speak with someone face to face. These requirements can be significant obstacles to application. Postal mail can be slower and less reliable, and mobile application technology is not yet fully available and often requires data or internet access. Office visits can be challenging for people who cannot take time off from work, those who live in rural areas, people with transportation issues, and now, people complying with COVID-19 social distancing and state-sponsored stay-at-home orders.

It is important to prioritize voice-based delivery solutions for people who do not have internet access.

Voice-based applications support people who are newly-eligible and also those who have previously received benefits and need to recertify. A [2014 study](#) in Alabama, Maryland, and Michigan found that nearly as many low-income people want assistance by telephone as in person, and almost twice as many want help over the phone compared to those who want help online.⁴³

Our research has noticed a common push for internet-based applications. Although all states have online applications for Medicaid, and 46 states have online applications for SNAP, it is important to prioritize voice-based delivery solutions for people who do not have internet access. According to the [Digital Divide report](#) from the Public Policy Institute of California, only about 53% of Californians with incomes below \$40,000 per year have broadband internet access.⁴⁴

As many as one in five CalFresh applications originates from someone who had previously been enrolled in CalFresh in the last 90 days.⁴⁵ Missed documents

⁴³ Cahill, R. M. (2013). [Telephonic Signatures: An Essential Tool for Enrollment](#), American Bar Association.

⁴⁴ Justin Goss et al. (2019). [California's Digital Divide](#), Public Policy Institute of California.

⁴⁵ Defrank, S. P. (2017). [E-Signatures for CalFresh Recertification: Reducing Churn with a PIN](#), Alliance to Transform CalFresh.

overwhelmingly attribute to benefit cancellations⁴⁶ and are reviewed as pain points in a customer's eligibility and enrollment experience.⁴⁷ Statewide data suggests an opportunity in streamlining and simplifying the semi-annual and annual renewal process exist, so that recipients do not stop receiving benefits for which they will ultimately need to reapply.⁴⁸

Resources from Experts in the Field

- [Improving Customer Service in Health and Human Services Through Technology](#) (2018). Produced by the Center on Budget and Policy Priorities.

Recommendations and Opportunities to Scale

- Organizations capable of delivering technology innovation, such as Benefits Data Trust, Nava, Code for America (CFA) and Alluma, or government call center operations transformations, such as [Change & Innovation Agency's role in transforming Nevada Department of Health and Human Services](#), can bring voice-based applications to scale.

Telephonic Signatures

Telephonic signatures are exemplary voice-based solutions that are currently utilized by states to enable enrollment and recertification retention on benefits. A telephonic signature uses an individual's recorded verbal assent in place of an inked signature, saving application processing time, decreasing in-office administration, and simplifying the recertification process.⁴⁹

In 2016, the California Department of Social Services, in partnership with the [Alliance to Transform CalFresh \(ATC\)](#), introduced [an initiative](#) to bring telephonic signatures to every county in California. They worked to understand the barriers of conducting telephonic signature processes for CalFresh and/or CalWORKs, and developed recommendations for their counties and County Welfare Directors Association of California (CWDA), California Department of Social Services (CDSS), USDA/FNS and ATC.

⁴⁶ Aron-Dine et al. (2020). [Larger, Longer-Lasting Increases in Federal Medicaid Funding Needed to Protect Coverage](#), Center on Budget and Policy Priorities.

⁴⁷ Khan and Ruskin. (2017). [Redesigning the journey to critical benefits for Americans in poverty](#), Medium.

⁴⁸ DeFrank, S. P. (2017). [SF- Marin Food Bank: Churn White Paper](#), Alliance to Transform CalFresh.

⁴⁹ (2019). [Best Practices for SNAP Telephonic Signatures](#), Food Research & Action Center.

Though the telephonic signature process relies heavily on having the right technology, knowing how to integrate that technology into a county's eligibility system ensured a successful process in California's implementing counties. Proper integration also allows for saving telephonic signature recordings to case files (or some other retrievable location),⁵⁰ and, if necessary, the secure transmission of recorded signatures between community and county agencies.

On March 26, 2020, the Food and Nutrition Services (FNS), as authorized by section 2302 of the Families First Coronavirus Response Act, allowed all states to lift their in-person requirements, introducing an opportunity for the widespread use of voice-based telephonic signatures. The new waiver allowed all states to take SNAP applications by phone and allow eligible workers to document their household's attestation to the collected information on the client's behalf, without requiring a recorded signature.⁵¹ FNS' temporary procedural change emphasizes the significant opportunity to help states process applications virtually and ensure a more suitable experience for enrollees through voice-based, rather than online, application and enrollment processes.⁵²

Resources from Experts in the Field

- [*Facilitating Remote Application Assistance for SNAP During COVID-19: Recommendations for States and Application Assisters*](#) (2020). Produced by Benefits Data Trust.
- [*Telephonic Signatures: An Essential Tool for Enrollment*](#) (2013). Produced by Benefits Data Trust.
- [*Improving Customer Service in Health and Human Services Through Technology*](#) (2018). Produced by the Center on Budget and Policy Priorities.
- [*States Can Make Applications More Accessible During COVID-19 Crisis*](#) (2020). Produced by the Center on Budget and Policy Priorities.

Recommendations and Opportunities to Scale

- Social services departments able to learn from other departments having successfully integrated telephonic signatures into programs such as SNAP

⁵⁰ The USDA already requires that states administering SNAP and using telephonic signatures save those recordings, though this requirement was temporarily waived under the Families First Coronavirus Response Act to allow for faster processing of a high volume of applications.

⁵¹ Wagner, J. (2020). [*States Can Make Applications More Accessible During COVID-19 Crisis*](#), Center on Budget and Policy Priorities.

⁵² (2020.) [*Most States Are Using New Flexibility in SNAP to Respond to COVID-19 Challenges*](#), Center on Budget and Policy Priorities.

and Medicaid will enable telephonic signatures to scale. California Department of Social Services telephonic signature initiative is a good example as it proved success is heavily tied to knowing where to start to properly align processes across stakeholders.

Updated EBT Authorization Requirements

Home grocery delivery has become essential during the COVID-19 pandemic. For SNAP and WIC recipients, EBT authorization requirements have caused significant barriers to home grocery delivery options. Prior to COVID-19, most SNAP and WIC recipients were required to conduct all EBT transactions in-store. Approximately 34% of SNAP recipients do not own a car,⁵³ and recipients often borrow cars from neighbors or friends, walk, bike, or use public transportation to complete their grocery shopping. These limitations mean many low-income families have an added burden of higher risk of exposure to COVID-19 due to the inability to stay at home measures to buy food during the pandemic. Benefits that can only be used outside home jeopardize the social safety net's ability to keep people economically afloat through sudden and prolonged financial crises, and keep targeted groups protected during a global health pandemic.

Benefits that can only be used outside the home jeopardize the social safety net's ability to keep people economically afloat.

In 2014, USDA piloted an EBT authorization tool for online grocery vendors, which was designed to electronically verify purchasers of EBT-eligible grocery items. Modern retailers and vendors are now reporting challenges integrating and implementing the EBT authorization tool because of its antiquated authentication requirements. According to New America, there have been limited updates to integration requirements set during this six-year-old pilot. Changing EBT authorization requirements effectively requires federal legislation, rather than exemptions.

⁵³ (2020). [SNAP Use for Online Food Purchases: A Pilot Program](#), Hunter College New York Food Policy Center.

Resources from Experts in the Field

- [*SNAP Use for Online Food Purchases: A Pilot Program*](#) (2020) by Hunter College New York City Food Policy Center.
- [*Eligibility Requirements for SNAP Retailers: Balancing Access, Nutrition, and Integrity*](#) (2018) by USDA's Economic Research Service.

Recommendations and Opportunities to Scale

- As described above, changing EBT Authorization requirements effectively requires federal legislation, rather than exemptions. The existing narrow SNAP Retailer requirements will need to consider new and emerging lifestyles for target demographics (e.g. elderly) to ensure benefits are conceived and implemented with end-users experience considered.
- Fresh Direct, an online grocer that delivers to residences and offices in the New York City metropolitan area, is currently operating an EBT Pilot program serving two Zip Codes in the Bronx. It's worthwhile to learn from and work towards open sourcing solutions from small retailers that are successfully working within the EBT Authorization rules for online groceries for opportunities to scale.

Conclusion

With heightened focus on the social safety net benefit delivery system in this time of increased demand and system stress, there is no shortage of technology, data, and design-enabled approaches to highlight in future installments of this report. We will add new findings to the topics presented already, and examine new ones, such as how data are being used to personalize the benefit enrollment process. We intend to update the document with new installments over the next several months, and publish a final compilation later in 2020.

About the Authors

[Chad Smith](#) and [Sara Soka](#) are Fellows-in-Residence at the Beeck Center for Social Impact + Innovation researching how technology, data, and design are being used to simplify social safety net benefit enrollment and delivery.

Chad researches the operational, technological, and ethical practices of integrating continuous client data into programs offered by Social Services Departments and Providers. He is the founder of YourSeat, a data platform for collecting, measuring and reporting behavior change in Family First Prevention Services Act (FFPSA) programs. Prior to YourSeat, Chad led Human Centered Design engagements for Accenture's Public, Healthcare, Telecommunication, and Financial Services clients undergoing internal system modernization efforts.

Sara is an advocate for human-centered policy, implementation, and service design. Sara has a background in applied qualitative research and network leadership spanning public health issues, plus substantial experience in community engagement and strategic communication. She managed Berkeley, California's successful soda tax campaign, the first to pass in the US, with resident-led policymaking, locally resonant messaging, and participatory budgeting as guiding principles. As a consultant and a Vice President of Policy for a national public health nonprofit, she monitored iterations of this policy and its implementation, the related impacts, and implications for equity.

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