DRAFT v0.1

Transforming the American digital experience

What's next for the U.S. Web Design System

January 14, 2021

U.S. Web Design System



A product of the U.S. General Services Administration





We conducted research across dozens of federal agencies to

- Understand how teams are using the U. S. Web Design System (USWDS) to build websites and digital services
- Develop insights into improving federal digital services as a whole for the American public
- Identify strategies for advancing the design system through collaboration with agencies and other government customer experience initiatives

What's in this report?

Key findings

We synthesized our research into five key findings that summarize what agency teams need to successfully adopt, use, and maintain the design system, as well as considerations for the USWDS team as they start to solve these challenges.

- Understand the value and benefits
- Know how to get started
- Find the right team and resources
- Feel engaged with the community
- Be able to iteratively improve digital services

Opportunity areas

In order for the design system to better support agencies in delivering exceptional digital services, we'll focus on the following opportunity areas.

- **01** Improve strategic communications and engagement with key audiences
- **02** Provide more robust guidance and support around getting started with the design system
- **03** Leverage related efforts within TTS and the broader government digital services community

Ways to get involved

This report also poses some questions to explore with colleagues as we look beyond the design system to improve government digital services for all.

- **01** Introduction
- **06** Findings
- 16 Conclusion
- **23** Citations

Introduction

It's time to transform the way we design and deliver a digital government with and for the American people.

For millions of Americans, access to digital services isn't a luxury — it's critical. And their experiences using government websites to find unemployment support, file taxes, apply for student loans, or get assistance with housing, childcare, or food can dramatically affect how they feel about the government.

Every moment an individual interacts with a government service is an opportunity to build their trust. Only 20 percent of U.S. adults report that they trust government "most of the time" or "just about always"[1]. Trust in government increases when the digital services people access are reliable, user-friendly, and consistently meet their needs. Customers are on average nine times more likely to trust a government agency if they're satisfied with its service [2].

How we deliver these services is just as important as what services we provide.

People are accustomed to intuitive, easy-to-use digital experiences in their day-to-day lives, and they increasingly expect the same from federal digital services. But we're coming up short on digital services that meet the needs of the public. For example, in the last 90 days there have been over 5 billion visits to federal websites, with over half coming from mobile phones [3] — but only six percent of these sites are rated "good" for mobile performance [4]. In order to improve, we have to take a more holistic look at the fragmented ecosystem of the thousands of federal websites that currently exist, all of which offer different experiences for the public to navigate.

We are at an exciting moment in the evolution of digital services in government to take this more holistic approach to improving the public's experience. The growth of GSA shared tools and services like the U.S. Web Design System, Federalist, and login.gov have baked in priorities like accessibility, continuity of experience, and designing for user needs. Teams like the U.S. Digital Service (USDS), 18F, Centers of Excellence, and the Lab at OPM have helped dozens of agencies deliver better digital services. Together we can rebuild public trust by scaling what works and continuing to invest in the design and technology capabilities of our federal workforce.



The more we can use the design system to provide standardized ways of building common pieces of information or types of pages will help improve how the federal web functions.

> - Digital modernization thought-leader Shared during user interview

Designing our way forward, together

With increasing momentum to transform the way our government provides its digital services, what can we do to deliver services in a way that best meets the needs of the American public?

- " I think the design system is probably the strongest place to spread best practices across government.
 - Manager

The U.S. Web Design System (USWDS) is just one piece of widespread federal efforts to improve the public's experience of government digital services. USWDS provides principles, guidance, and code base to help federal agencies deliver great digital experiences by making it easier to build accessible, mobile-friendly government websites.

Agencies across government shared that using the design system:

- Makes hard things easy by providing a starting point and solid foundation for building websites
- · Provides useful components and clear, well-written guidance that's backed by user research and UX best practices
- Helps them make more data-informed decisions using standardized, consistent, and accessible best practices, instead of relying on personal judgment
- Saves time and energy so they can focus on their mission and more of what their customers need
- Can help build trust with the public by providing continuity across federal websites, reducing existing fragmented and inconsistent experiences

Even given these benefits, only a minority of federal executive branch domains (approximately one out of four) are currently using any design system code in their websites [4].

This research was done to support emergency response efforts related to the COVID-19 pandemic. The research resulted in the release of 11 new components for emergency response, and surfaced a number of ways the design system can continue to support agencies now and into the future, summarized in this report.

- · What challenges are agencies facing when trying to adopt the design system?
- How can USWDS continue to grow and help agencies maintain a high level of design maturity across the federal government?
- How can the design system support other federal efforts to improve customer experience across government?

A vision for the future

The public deserves a trusted, seamless way to access government digital services that are easy to use, mobile-friendly, and accessible for all. In order to get there, we need to make good-forgovernment products (like the design system) an integrated part of agency service delivery. So how can we succeed in supporting agencies to improve their digital services amid the diverse challenges they all face?

Through our research, we looked to agency teams to help us define what that future looks like. We know that change takes time and have developed both a Near Star vision, which focuses on more immediate opportunities and potential next steps, and a longer-term North Star Vision that invites our colleagues and collaborators in the federal space to imagine how we can collectively move toward a high level of design system maturity and digital service delivery across government.

Research findings & what comes next

What we learned from agency teams is summarized into 5 key findings which directly inform the development of our Near Star vision. Throughout this report, you will see *How Might* We questions which reframe what we learned into opportunities for innovative solutions.

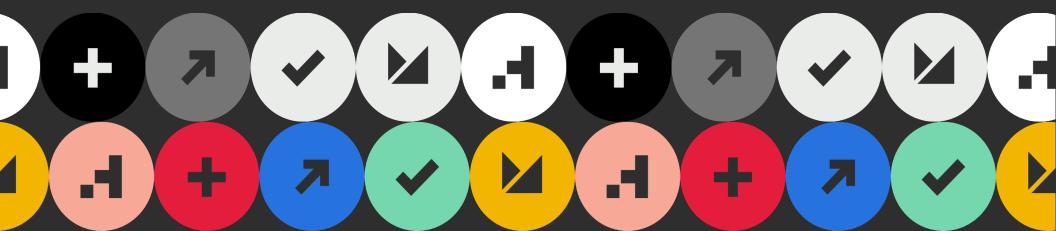
Near Star vision

Our Near Star vision takes what we learned and makes it actionable. Our goal here is to ensure all agencies have what they need in order to more easily adopt and effectively use the design system. Later in the report, our Next Steps and Opportunities outline a path to achieve this.

North Star vision

Accomplishing our Near Star vision will move us closer to our overarching North Star vision. This is the future state we are aiming for. Our North Star vision is to achieve and maintain a high level of design system maturity across the federal government. In doing so we create greater continuity, improved usability, and increase access of key digital services for the American public.

Findings



CURRENT STATE

10,000-foot view

We heard from agencies that it can be difficult to separate the specific challenges they face in adopting the U.S. Web Design System from the broader challenges they face in building or modernizing their web presence, since it's usually just one integrated piece of the work agencies are doing to improve their digital services.

Several common themes surfaced regarding system-level challenges they encounter when trying to improve digital experience, which complicate the efforts of USWDS and other shared services to scale more widely. Improving the design system and its adoption is just one part of creating better digital services across the government.

Having the right talent

Building websites is not a mission-oriented skill for most agency teams. It requires people with expensive, domain-specific skill sets like design and engineering, which many agencies don't have in-house and aren't used to hiring. It takes time to establish strong teams to do this work. The agencies that have seen notable success have taken years to develop a well-resourced team.

Designing for good experiences across services

The public wants to quickly complete their tasks on a site that's easy to use. However, because each agency is responsible for designing and delivering its own digital services, it creates a diverse landscape of website implementations that discourage efficient scalable solutions, resulting

in redundant work, unnecessary differentiation, and a fractured user experience. The public has to know what services belong to which agency to find what they need, while navigating a wide variety of agency-specific site structures, forms, and terminology. While promising progress has been made through sites like usa.gov and recreation.gov, decentralized implementation continues to make it difficult to prioritize good user experiences across government sites.

Scaling support of shared services

The current decentralized landscape also means that agencies are often piecing together support and tools from a combination of places, including digital services teams, and assorted tools and product offerings from government and vendors which is less-efficient in terms of time and budget. And while many of the available technology tools are useful for larger teams with in-house capacity, they don't always meet the needs of smaller agency teams who don't have the specialized engineering and design skills necessary to implement and use them.

We keep telling agencies to do all this stuff and fix your websites. But there's never any money for it. Particularly in the digital age of COVID-19, how can anything be more important than the presence of your website?

-Thought-leader

What we learned

Agencies are the primary users of design system principles, guidance, and code, so we've framed our findings as ways to better meet their needs as users — so that they, in turn, can continue to focus on their users' needs, those of the American public. Though agencies start with different goals and capabilities, we discovered they follow a common journey with similar needs when it comes to adopting and using the design system.



01 Understand the value and benefits

Agencies need to be able to quickly discern the design system's benefits and how it aligns with their goals for delivering better digital services.



02 Know how to get started

No matter where an agency starts from, it needs to be clear and easy for them to figure out their first steps and how to create a sustainable path forward in the long-run.



03 Find the right team and resources

Agencies have several options to assemble a cross-functional team to implement the design system and they're looking for more support in identifying needed skills and assembling the right people.



04 Feel engaged with the community

It's a collaborative process to build a design system, so it's essential for agencies to feel like they have access to a support network and a sense of ownership to contribute back to it.



05 Be able to iteratively improve digital services

Adopting a design system is an ongoing process of design, development, and making iterative improvements and upgrades over time, which requires continued resources and support.

Research process

Over the course of 3 weeks, 60 individuals across 33 teams shared their stories and first-hand accounts of website implementation and their unique experiences with the design system. To ensure diverse perspectives were heard, interviews included six different user types across various roles and job functions within agencies:

Content managers

Designers

Engineers

Managers

Policy analysts

Thought-leaders

Their experiences, needs, pain points, and bright spots led directly to the development of a future vision for USWDS and helped identify opportunities for its role in supporting improved digital services across government as a whole.

Understand the value and benefits

While the benefits of using the design system become more clear to agency teams as they use it, communicating the value up front can be challenging, agencies can look to the design system for a common framework to quickly stand up a website.

Leveraging the benefits

Building a website or adding to an existing one can be a significant undertaking. While there's an initial investment, agencies save time and energy in the end, allowing them to focus on their mission instead.

In addition, when agency teams commit to using the design system, they don't have to worry about explaining every design decision to stakeholders. allowing teams to align on priorities and move forward quickly and confidently. Some teams are also looking for support and documentation to help them advocate with their leadership to use design system components and principles.

- This has already been developed and blessed by an interagency community so you don't have to just go on my opinion.
 - Manager
- By using these standard components, our design is less likely to be hijacked by some external stakeholder who has some new idea. We can say 'oh we're using the web design system.' While it gives us flexibility, it also gives us protection to do something testable and usable. Less likely for our designs to go off the rails.
 - Designer

Alleviating concerns

In order to grow the design system and improve our digital services, it's important to understand why some agency teams are hesitant to use it and find ways to alleviate their concerns.

Feeling limited

Some agency teams fear that adopting the design system means their website will look like every other government website. Many agencies have

pride in their brand and want their digital services to be recognizably their own. However, these efforts may not have the impact they're hoping for, as most members of the public value easy-to-use experiences over beautifully branded ones.

The design system team needs to do more to show agency teams that they can still customize the look and feel of their sites using the design system, while keeping the accessibility and UX best practices it provides. This involves balancing just the right amount of guidance without being overly prescriptive.

- The largest roadblock is that there is a very strong current of agencies wanting to have their own identity.
 - Manager
- Customization is a nice to have but we have bigger problems to solve, before we get to that.
 - Thought-leader

How USWDS measures up

GSA's Technology Transformation Services (TTS) recently conducted a customer satisfaction survey to identify customer perceptions of TTS services, including the U.S. Web Design System. On a scale of 1-10, the design system received an 8.8 for Loyalty and an 8.2 for Likely to use in the future, but only a 4.6 for Ease of acquiring. This echoes what we heard from our research participants — that it can be difficult to get started, but that the design system generates more and more value over time.



Thinking it's a replacement for designers

Another common misunderstanding is that USWDS is only for teams without a designer. Though the design system supports design and engineering processes, it's not a replacement for a designer or any of the other cross-functional skills necessary to bring it all together. Instead, using the design system allows designers and engineers to focus more on problem-solving for specific user needs and less time establishing the basics.

- My general opinion is that it's a great set of principles and tools for agencies that don't have designers. I've always had excellent designers and UX experts on staff so we didn't need the design system, per se.
 - Thought-leader
- I have a UX person on my team so I'm very lucky.
 - Manager

Needing more clarity on compliance

We also heard significant confusion around The 21st Century Integrated Digital Experience Act, otherwise known as 21st Century IDEA. Though the Act was signed into law over two years ago. agency teams are still trying to figure out what compliance looks like. It's unclear if using USWDS is required for all sites, or only new or redesigned ones. There are also questions of customization: can components or colors be customized, or do they have to be the default styles? Though the Act mentions eight specific standards for websites, including that they be accessible, mobile-friendly, and user-centered, agencies are having trouble determining what "good enough" looks like [5].

- So where it says 'the standards as issued by TTS', is that USWDS? And no one knew. 'Standards' has budgetary and workload prioritization meaning.
 - Thought-leader
- We weren't sure if it was a requirement by law or optional tool.
 - Designer

What comes next?

To help agencies understand the value of using USWDS and support them in gaining executive buy-in, we should explore a few different avenues.

- How might we communicate the value of the design system more effectively to new customers?
- How might we help agency champions advocate for the design system?
- How might we clarify common misperceptions or confusion around the design system?
- How might we better explain what 21st Century IDEA means for agencies and help them understand how they are performing?

Know how to get started

Once an agency team is ready to adopt the design system, they want to quickly understand how it works, what capabilities it provides, and how to get started. Some agencies are beginning with a large-scale redesign while others are making incremental changes over time. No matter where an agency starts from, it needs to be clear and easy for them to figure out their first steps and how to create a sustainable path forward in the long-run.

Meeting them where they are

Each team has unique needs and is at a different starting point, and the tactical aspects of deploying the design system need to be approachable from many different angles and skill sets. Many people found the USWDS website relevant but overwhelming, and they expressed a wish for more "step-by-step" breakdowns of what they needed to do. While much of the content on the USWDS website is easy to understand for engineers and designers, it may be intimidating to others or limiting for those who are trying to build support at a leadership level.

- USWDS could support helping people wrap their heads around what the different models are and how to use USWDS based on what paradigm they are using (agencies with a central location vs subsites, etc.).
 - Manager
- Coming on to the home page of the USWDS site is a little bit overwhelming. But it depends on the audience. If you're showing it to devs and designers it's okay.
 - Designer
- Even 8 or 12 hours of support would be helpful for teams. Being able to troubleshoot or onboard new teams to discuss how to re-architect their website to your design system is critical.
 - Designer

Seeing it in action

In order to fully understand the design system's capabilities, agency teams want to see it in action and be able to compare it to other commonly used open-source frameworks. They want to see how other government websites use the design system so they can begin to visualize the full breadth of options it provides.

While many agency teams are used to how things look in the frameworks they're currently using, getting started with USWDS requires a bit of learning. Helping ease this transition by demonstrating how things work and what's actually different from other frameworks, instead of just describing them, will shorten the learning curve and make agencies feel more confident about using something new.

- Have examples of how components are being used, like a gallery. Not just a list of what sites are using it.
 - Designer
- A lot of people are just familiar with tools like Bootstrap and they've mastered it. Maybe USWDS could show 'Here's what x looks like in Bootstrap; here's what ours looks like.' Stuff like that can really put people's minds at ease.
 - Thought-leader



Addressing compatibility and integration hurdles

Sometimes USWDS isn't compatible with an organization's existing site framework, or teams may have committed to other systems preferred by their vendors. In these instances, developers must do significant work to retrofit and adopt USWDS for other content management systems or user interface libraries, which requires even more engineering time and expertise to work through.

Agency teams are finding workarounds and solutions to make their tech stacks and platforms compatible, but many indicated that it often requires routine or manual overrides and fixes. Agencies are willing to transition to something new, but given how widely-used content management systems are across the federal government, it will remain a key bottleneck for new customers.

- We don't know if your code will work inside our system.
 - Content manager
- Getting Drupal and USWDS to work together can be pretty energy intensive.
 - Manager
- Some things out of the box Bootstrap, sizes, colors, etc. - couldn't use anything that came with it. So we had to figure out all the values and override them and any time something changes we have to find out how to override it.
 - Engineer

Supporting scalability

Agency teams are also looking for a way to benchmark their current status and receive more support on how to scale with USWDS over time. It's hard for agencies to map implementation of USWDS against their own web modernization priorities: What's most important? What can be done in the near-term with limited resources?

Though USWDS has a maturity model, it doesn't currently provide the level of detail or direction agencies are looking for. While the design principles and maturity model provide a good vision for where agencies should be headed, that change can't happen all at once, and agencies want more support on how to balance trade-offs and priorities at different stages of adoption.

- We've been talking about the three levels of adoption of USWDS, but I don't really have a great understanding of the design system in general, figuring out how we get started.
 - Manager
- Doing some prioritization would be helpful — what would have the greatest impact — for agencies to start thinking about. For a smaller team to have some sense of prioritization would be really good.
 - Thought-leader
- It's important for agencies to have a free baseline
 - Manager

What comes next?

Giving agencies extra support as they get started with the design system is crucial to seeing adoption grow, and we should look for innovative ways to provide that.

- How might we tailor the website to be more approachable for different audiences and skill sets?
- How might we better support agencies in transitioning from other design systems or to support diverse web technologies?
- How might we better support agencies to understand where they are today and where they need to get to?

Find the right team and resources

To implement the design system, agencies need cross-functional design and engineering skills that they may not be familiar with or have in-house. Agencies have several options to assemble the right team: building their own skills, hiring new staff, acquiring through a vendor, or leveraging federal digital services teams. Agencies are looking for more support from USWDS to identify and plan for the staffing and management needs to successfully implement and maintain the design system.

Finding the right talent

Finding the necessary talent can be difficult, especially when agencies aren't sure what they should be looking for. Many of the required skills are in specialized and constantly evolving fields such as service design, customer experience, and DevOps engineering.

Agencies face a number of obstacles trying to hire for these kinds of roles, which typically fall outside their typical position descriptions and can take months or longer to fill. Even when agencies contract with a vendor, they may lack the in-house expertise to effectively evaluate proposals and manage the work.

- It would be cool if it was like "Here are companies that offer services to government and are USWDS-savvy." Saying we know these people know USWDS — maybe a certification program, that would be amazing.
 - Manager

Building skills at all levels

Delivering a quality digital service requires a cross-functional set of skills, and many agencies are taking it into their own hands to build these in-house capabilities where they can. For example, some agencies might host weekly lunch-andlearns about using USWDS or attend events hosted by industry leaders, local meetup groups, and communities of practice. Willingness to learn provides an opportunity for the design system to encourage and support this kind of skill-building.

- Contractors are diving in deep, but on the other side it's less ownership. How do we empower our team to become owners of USWDS?
 - Manager

Prioritizing enough resources

The workforce capacity gap is compounded by limited resources. While there are many dedicated public servants trying to make it work with what they have, their efforts can unintentionally perpetuate the unreasonable expectation that this work be done well without the proper skills and investment.

- A lot of web teams aren't properly resourced. This stuff is hard. It's not easy and it takes a lot of work to build something that works well and is accessible.
 - Thought-leader
- In some places you have one poor person who is trying to do it all.
 - Thought-leader

What comes next?

We should find ways to help agencies plan for or connect with the right people to effectively implement the design system.

- · How might we help agencies anticipate and plan for the costs and staffing needs associated with design system adoption?
- How might USWDS coordinate with other parts of TTS and digital services teams throughout government to provide support for design system adoption?



Feel engaged with the community

Part of the value of the design system as an open-source, goodfor-government product comes from the community around it. Lessons learned by one agency can funnel back in and help other agencies down the road. It's essential for agencies to feel like they have access to a support network and a sense of ownership to contribute back to USWDS

Giving back to the design system

Agencies developing their own solutions, sharing them back to the community, and adding to the codebase is one of the most essential ways that USWDS continues to thrive. This extends to sourcing common challenges and needs that could lead to the development of new components.

Agency teams are already creating custom solutions to adapt or add on to the design system, but they're sometimes unsure how to contribute those ideas back to USWDS.

- 66 I think some teams want to contribute back. help with testing, etc. That would be a cool call for action — for people who want to work with USWDS on a component that agencies need.
 - Manager

Collaborating with others

Agency teams enjoy the USWDS monthly calls and Slack channel and are looking for more ways to hear from and collaborate with others using the design system. Given the relatively small size of the USWDS team, there are also opportunities to leverage the related work and reach of other partners and groups, including other digital.gov communities, Federal Web Council, and many more.

- It would be interesting to host breakout sessions where USWDS provides a space to have crossagency conversations.
 - Designer

Building momentum

In November 2020, the USWDS team presented a webinar hosted by the CIO Council's 508 subcommittee to share the purpose, value, and how-to's of the design system. After the webinar, the 326 attendees (from both in and outside of the federal government) were asked if they would seek additional information about the design system after having attended the event — 69 percent of them reported they strongly agreed or agreed. Hosting more webinars or events in connection with others working in digital fields across government will help to bolster engagement around the design system. (2020 Evaluation Summary, Section 508 Best Practices Webinar)

What comes next?

Increasing our efforts to better engage the community should include answering the following questions.

- How might we shift the culture around the design system to be more inclusive?
- · How might we better communicate a "by the people, for the people" mindset?
- How might we encourage and support more cross-agency collaboration?
- How might we keep up momentum with the current enthusiasm? Where can USWDS lean on others for additional support?



Be able to iteratively improve digital services

Adopting the design system is not a "one and done" thing. It's an ongoing process of design, development, and making iterative improvements and upgrades over time, which requires continued agency-level organizational support. Agency teams want reassurance that the design system and related support will continue to be there long into the future.

Cultivating internal support

Even if teams are able to get an initial deployment off the ground, they need to continue to corral support and resources from their organization to make ongoing improvements and respond to changing user needs. Government planning and budgeting processes tend to be oriented toward initial support to "launch" a new or updated website or service, rather than planning for long-term iterative delivery. We heard that decisions related to implementing USWDS are often spread across different roles and levels of authority, instead of sitting with one team. These bureaucratic challenges can create ongoing obstacles for teams wanting to follow the design principles and mature their digital delivery over time.

- We want to do things that are right, but have to wait until they say "thou shalt," so to speak.
 - Content manager
- There's often a large separation between the IT org (with the contractors who own website updates) and the people who are thinking about the information their website should have (contact centers, county offices, etc.) We should be able to put websites in the hands of the actual agencies that own them.
 - Thought-leader

Continuing to improve

The design system plays an important role in supporting agency website maintenance and governance, but it's still finding the right balance between centralized management and individual agency responsibility.

Because design system implementation is decentralized, ongoing development and updates to the core product happen agency by agency, project by project. The cost of making updates to the design system needs to be balanced by the relative cost for each agency to make those changes. On the other side, agency teams need to have the right processes and work streams to stay current as the design system continues to evolve and improve.

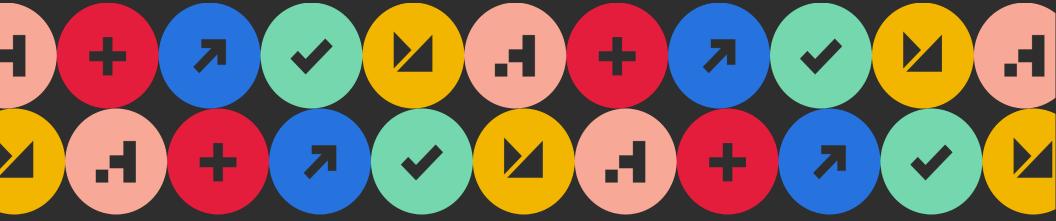
- When you're maintaining a design system at a platform level with other teams and vendors in this space, how do you be a good custodian of that without it tipping over?
 - Designer
- 16 Treat the system like a product and like a service. Look at continuity and investment. How responsive are we to our customers? Support, training, communication.
 - Thought-leader

What comes next?

In order for the design system to be successful in the long term, we need to explore how we can better help agencies scale and maintain it within their sites.

- · How might we support a shared understanding of governance and maintenance?
- · How might we provide more extensive customer-support to USWDS users?
- How might we support stronger collaboration and processes between roles involved in website maintenance?

Conclusion



Looking ahead

Though we started out with the question, "How might we increase adoption of USWDS across the government?," our interviews with agency teams and thought-leaders raised other thought-provoking questions, such as: "Should agencies even be responsible for building and maintaining all of their own websites?" "Is scaling the design system across about 1,200 domains and 9,000 federal websites [6] the right goal, or could we provide an improved public experience with fewer, better websites overall?"

These questions prompted us to start thinking about a blue-sky vision for how USWDS continues to evolve over time as part of a changing digital services landscape, which we've captured in our North Star vision.

In the meantime, there are also clear opportunities for TTS to continue investing in being a good partner to agencies and providing USWDS and other shared services that support an accessible, useful, and continuous digital experience for the public. This is our Near Star vision, which we've broken down into clear, achievable goals with some initial ideas for how to achieve them.

Near Star vision & next steps

Vision: Agency teams have what they need in order to more easily adopt and effectively use the design system. In this Near Star vision, all agencies...

- Rely on and have confidence in the design system as the go-to trusted resource for helping them create exceptional digital experiences
- Can quickly and easily start using the design system and understand how its capabilities and features integrate into their unique contexts
- Can identify and access the right team, skill sets, and resources to successfully increase their design maturity
- Are active participants in building and growing the design system as contributors, not bystanders
- Are well-equipped to iteratively develop and sustain ongoing design and development of their digital services over time

How do we get there?

We've identified specific opportunity areas that will move us closer to a design system that meets the needs of teams across every agency. Working toward this vision is our way of ensuring the design system continues to change over time and stays connected to the teams that are using it.

- Opportunity area 01: Strategic communications and engagement with key audiences
- Opportunity area 02: Provide more robust guidance and support around getting started
- Opportunity area 03: Leverage related efforts within TTS and the broader government digital services community

Strategic communications and engagement with key audiences

USWDS is a product with significant customer service and community aspects. To meet agency teams where they are, the design system needs to be easily understood by a variety of audiences. There are opportunities to develop outreach initiatives and website content that more effectively communicate the value of the design system, while continuing to invest in the community that's essential for the design system's growth as a good-for-government resource.

To accomplish this, we recommend increasing outreach and targeted communications to new customers and agency leadership by:

- · Creating specific resources geared toward an executive audience that help teams get buy-in and communicate the value to their agency leadership
- Developing new content and communications materials that proactively address the common questions and misconceptions of potential customers
- · Providing even more detail on the research behind each component to encourage data-driven design and help agency teams understand and explain why decisions were made

We could also expand engagement with existing customers and empower them to grow with the design system over time by:

- Creating opportunities beyond individual consults, monthly calls, and the USWDS public Slack channel with things like design critiques, ideating in small groups, meet-ups or lunch-and-learns, etc.
- Conducting research to understand agency needs and inform the development of new components, similar to the recent emergency response research that led to the release of 8 new components. For example: support for syndicated content came up as a need that could be addressed with a new component
- Adopting more procedural learnings from communities of practice such as setting participation rules and expectations and focusing events on certain topics or questions (how to assemble the right team, ensuring a smooth design system upgrade, etc.)
- Providing better guidance about how to contribute customizations back in to the community, and exploring ways to get agencycreated components approved by USWDS
- Looking into creating a certification program or cohort/residency as an outlet for agency teams that want to expand on the design system
- Providing shared benchmarks to help agencies identify strengths and areas of improvement

Provide more robust guidance and support around getting started

Getting started is a key sticking point for agencies since it creates so much friction right out of the gate. There's an opportunity to make it easier for agencies to find the right information and guidance to start implementing the design system regardless of where they're starting from or their skill level. This guidance should also include better explanations of how to customize the look and feel of agency sites, as well as provide a clearer path for scaling over time.

It's particularly difficult for agencies using existing content management systems or user interface frameworks to incorporate the design system into their sites. The design system could do more to help ease the transition by demonstrating how it's different from other frameworks and sharing additional tips for integrating it into commonly used systems.

It's also critical to help equip agencies to build the right teams as they implement the design system, whether that's through hiring individuals, partnering with other agencies, or acquiring through vendors.

To help agencies begin using the design system, we can reduce barriers to getting started by:

- Providing more guidance and examples around how to customize the design system, perhaps through a series of feature stories about how agencies are using USWDS to meet their unique needs
- Providing targeted guidance for agencies transitioning from another open-source framework to USWDS, including providing a side-by-side comparison to other frameworks and outlining the unique value the design system provides
- Exploring ways to support and share component variations created by the community that are specific to different content management systems or frameworks
- Sharing general information around recommended team composition and expected costs to help agency teams plan for staffing and budgeting needs, which could include guidance on what skills to look for, or sample performance profiles
- Creating tools that let agency teams who are brand new to the design system try it out in a sandbox environment with quick themeable templates for easy testing, experimentation, and exploration
- Continue being intentional and transparent about the design principles, USWDS product values, and the research and processes that go into USWDS components and guidance

Leverage related efforts within TTS and the broader government digital services community

The design system is part of an ecosystem of collective efforts to steward good design practices, transformation, and resilience across government. There's opportunity for more collaboration and coordination to help agencies navigate and benefit from the multitude of shared services and collective knowledge available to them.

We see opportunities for USWDS to work with other government transformation efforts by:

- Establishing a more formalized referral system within and beyond TTS to seamlessly connect agencies to the various services and products that might be useful for them. This might include:
 - Partners like GSA's 18F. Centers of Excellence, and Presidential Innovation Fellows as well as the U.S. Digital Service (USDS), who are staffed by federal employees and work with agencies to fix technical problems, build products, and improve how government serves the public through technology
 - Lab at OPM, and Open Opportunities
 - Technology purchasing programs, including GSA's Multiple Award Schedules for Information Technology and Governmentwide Acquisition Contracts to buy technology products and services

- Mapping existing federal digital services offerings to needed areas of support or create new joint offerings as agencies need them
- Leveraging GSA's acquisition expertise, such as focusing on outreach efforts to connect with non-traditional vendors
- Compiling assorted agile contracting guides, including sample contract language for 21st Century IDEA and the De-Risking Government Technology field guide, and making them easily findable by agencies
- Continuing to expand the design system's usage to more enterprise-level applications or other government systems

North Star vision: thinking beyond agency adoption

Empowered agency digital teams share solutions and use effective human-centered design practices. The federal government consistently provides trusted, exceptional digital experiences to the public.

The federal government should be a leader in user-centered, service-focused digital tools, capabilities, and delivery. While making it easier for agencies to adopt the design system will create value in the near-term, there are some larger strategic decisions to be made about the most effective operating model for federal websites and the design system that supports them. Even with improved guidance and support, the design system and the agencies using it will continue to run up against challenges of getting the necessary talent and resources in place. Decentralized implementation will continue to make it difficult to scale design capabilities and create continuity for good customer experiences across the federal government.

Building on the ideas of the individuals we spoke with, we wanted to put forth a couple of "what if" questions for further exploration and discussion with colleagues across government.

What if the federal government provided even more robust technology shared services to reduce the burden on individual agencies?

Most teams don't have a mission that requires designers and engineers, in the same way that most teams shouldn't require their own payroll and real estate specialists. So instead of every agency trying to build and manage all aspects of their own sites, the federal government could provide an option of a true turnkey service, building on existing offerings. By transferring the specific technology burden to a specialized team, agency resources would be freed up to focus on the mission-related activities that are part of website management, such as communicating their mission and domain, understanding their audience, developing appropriate content, and stewarding the service over time. Using shared services could be less expensive and more effective, while also enabling smaller sites to launch and maintain their content more efficiently using the common online public services site.

What if key content and functionality of government websites was consolidated into a single or fewer public services websites, like usa.gov and recreation.gov?

Scaling a consistently exceptional experience for the public may mean thinking beyond improving the individual services and sites of each agency. Members of the public are navigating among over 9,000 federal websites (including subdomains and microsites), which places more burden on the public to know where to look as they seek to accomplish specific tasks. More consolidated online public services website (a true "federal front door") could provide a better, more reliable user experience, while promoting more efficient efforts, research, and content. Even some intermediate level of consolidation, with highimpact services remaining more independent, could go a long way toward improving public experience. Building independent sites with tight coupling to GSA's common government products and services (cloud, search, analytics, design, and implementation) would also promote improved continuity, security, trust, and long-term maintainability for their sites, and address some of the persistent infrastructure challenges of decentralized implementation.



When thinking about the design system, it should be, 'These are the glasses you can see the world with, rather than the blinders you have to use.'

- Thought-leader

What can you do today?

Many of the ideas in this report are big-picture thinking, requiring time, collaboration, and strategies to come to fruition. But there are some things that agencies can do right now to use the design system to deliver better digital services.

Here are just a few ideas about what you can start doing to support your agency in adopting and using USWDS.

Leadership can:

- Develop a plan for how your agency could adopt USWDS, timelines, budget, etc.
- Make sure website has ongoing funding and resource support

Content managers can:

- Review USWDS guidelines around content and its organization
- Become familiar with the USWDS components and proactively think about how you can use them to highlight and present content on your site

Designers can:

- Review existing websites to see how you could better integrate USWDS principles and components
- Investigate what kinds of customizations USWDS provides for future design work
- Download the design assets and work to incorporate them into your regular design process

Engineers can:

- Review existing websites to see how you could better integrate USWDS principles and components
- Review existing sites for accessibility improvements
- Learn more about how tokens with USWDS make it easier to customize sites in the future.

Policy analysts can:

- Better define what 21 Century Idea compliance is
- Think about how shared digital services can be better used throughout government and how policy could support that

Thought-leaders can:

 Be vocal advocates of USWDS and the benefits it provides

What comes next?

Improving how the public interacts with government digital services will be a collective effort and won't happen overnight.

To improve USWDS as a product, we'll begin refining and implementing the next steps outlined in this report, incorporating additional research and input from the USWDS community as we go. Agencies interested in participating in this process — or simply in learning more about the design system — can join us in our public Slack channel (#uswds-public), for our monthly calls, and in the digital.gov communities of practice.

We also look forward to collaborating with our digital services colleagues in TTS and beyond to explore new ways of providing shared value for government and articulate a more defined path toward our North Star vision of empowered digital teams and trusted experiences.

We thank everyone who shared their time, feedback, and ideas throughout this research effort and invite you — our collaborators and colleagues — to join us in further exploring these big-picture questions by joining our community and attending our events.

- The first workshop for federal employees will be in Spring 2021, and we hope to hold ad hoc workshops in the future as well.
- We also hold regular monthly calls that are open to everyone on the third Thursday at 2:30 p.m. ET. Register at digital.gov/events/.
- Share your feedback on this report.

CITATIONS

- Americans' Views of Government: Low Trust, but Some Positive Performance Ratings. Pew Research Center. (September 14, 2020). Retrieved from https://www.pewresearch.org/politics/2020/09/14/americans-views-of-government-low-trust-but-some-positive-performance-ratings/
- 2. D'Emidio, T., Greenberg, S., Heidenreich, K., Klier, J., Wagner, J., & Weber, T. (2019). The global case for customer experience in government (Public Sector Practice, Rep.). McKinsey & Company.
- 3. The US government's web traffic. (n.d.). Retrieved January 06, 2021, from https://analytics.usa.gov/
- 4. Digital Dashboard. (n.d.). Retrieved January 06, 2021, from https://digitaldashboard.gov/
- 21st Century Integrated Digital Experience Act. (2020, August 31). Retrieved January 06, 2021, from https://digital.gov/resources/21st-century-integrated-digital-experience-act/
- 6. Dotgov Data-List of federal .gov domains. (n.d.). Retrieved January 06, 2021, from https://home.dotgov.gov/data/





A product of the U.S. General Services Administration

designsystem.digital.gov uswds@support.digitalgov.gov

