2023
21st Century IDEA Report

Prepared for the Office of Management and Budget per the requirements of Section 3(d) of Public Law 115-336, "21st Century Integrated Digital Experience Act"

December 2023

Homeland Security

Executive Summary

The [21ˢᵗ Century Integrated Digital Experience Act](#) (21ˢᵗ Century IDEA) (P.L. 115-336) requires the heads of all federal executive branch agencies to report to the Director of the Office of Management and Budget on the agency's progress towards the modernization of new or redesigned websites and digital services.

Over the last five years, the Department of Homeland Security (DHS) has made this modernization of its websites and digital services a high priority. DHS continues to strive to provide our customers with an easy and efficient online experience and has taken considerable steps to further this goal and comply with the requirements of 21ˢᵗ Century IDEA.

2023 DHS 21st Century IDEA Report

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I. Legislative Language

This document has been compiled pursuant to the reporting requirements in the 21st Century Integrated Digital Experience Act (21st Century IDEA) (P.L. 115-336).

21st Century IDEA states in section 3(b)(2):

> (2) submit to Congress a report that includes—
>
> > (A) a list of the websites and digital services maintained by the executive agency that are most viewed or utilized by the public or are otherwise important for public engagement;
> >
> > (B) from among the websites and digital services listed under subparagraph (A), a prioritization of websites and digital services that require modernization to meet the requirements under subsection (a); and
> >
> > (C) an estimation of the cost and schedule of modernizing the websites and digital services prioritized under subparagraph (B).

21st Century IDEA states in section 3(d):

> (d) PUBLIC REPORTING.—Not later than 1 year after the date of enactment of this Act and every year thereafter for 4 years, the head of each executive agency shall—
>
> (1) report annually to the Director on the progress of the executive agency in implementing the requirements described in this section for the previous year; and
>
> (2) include the information described in paragraph (1) in a publicly available report that is required under another provision of law.

21st Century IDEA states in section 5:

> Not later than 180 days after the date of the enactment of this Act, the head of each executive agency shall submit to the Director and the appropriate congressional committees a plan to accelerate the use of electronic signatures standards established under the Electronic Signatures in Global and National Commerce Act (15 U.S.C. 7001 et seq.).

II.   Background

The [21st Century Integrated Digital Experience Act](#) (21st Century IDEA) (P.L. 115-336) requires the heads of all federal executive branch agencies to report annually (through 2023) to the Director of the Office of Management and Budget on the agency's progress towards the modernization of new or redesigned websites and digital services.

Sections 3(a) and 3(b) of the law define this modernization as requiring new or redesigned websites and digital services to:

- be accessible to individuals with disabilities in accordance with Section 508 of the Rehabilitation Act of 1973 (commonly called "Section 508 compliant" or "Section 508 conformant");
- have a consistent appearance;
- not overlap with or duplicate another agency website;
- contain an easily usable search function;
- provide an industry standard secure connection;
- be designed based on user needs determined by data-driven analysis;
- provide the option of a more customized digital experience; and
- be fully functional and usable on common mobile devices (commonly called "mobile responsive").

Section 3(e) requires that any website or digital service that is made available to the public after the date of enactment comply with the website standards developed by the General Service Administration's (GSA's) Technology Transformation Services (TTS).

Section 3(b)(2) also requires a review of all existing agency websites or digital services and a prioritized list of websites or digital services to be modernized, along with a cost estimate for said modernization. This information was provided in the Department of Homeland Security's 2019 21st Century IDEA report and is [available on DHS.gov](#).

In addition to the website and digital service modernization requirements found in Section 3, Section 4 requires the identification and digitization of paper-based or in-person Government services, along with a regular review of public-facing applications and services to ensure that they are made available to the public in a digital format to the greatest extent practicable.

Section 5 requires a plan to accelerate the use of electronic signatures and Section 6 requires the alignment and coordination of internal and external customer experience programs. Finally, Section 7 requires that, to the extent possible, all of this is done with an eye towards standardization, commonality, and coordination with other executive agencies to best enable future transitions to centralized shared services.

The information below details the efforts of the U.S. Department of Homeland Security (DHS) to modernize the agency's websites and digital services in 2023 and, while the Department's efforts along these lines will continue, is the Department's final report required by the law.

III. Website and Digital Service Modernization

DHS has made significant efforts toward ensuring that all websites created or redesigned after the passing of 21st Century IDEA meet the criteria outlined by the law. Specifically, all new or redesigned DHS websites must meet the following requirements:

A. Accessible

The 2015 DHS Public Web Strategic Plan required that all DHS public websites and digital services must meet DHS Accessibility standards prior to launch to the public. These standards are considerably more stringent than most other agencies as DHS continues to lead the US government in accessibility conformance. The DHS Accessibility standards also require Section 508 testing by a DHS Trusted Tester for every new or updated public-facing interface component prior to launch of a code update on a public website or digital service.

DHS continued to work with Federal Chief Information Officers Council (CIOC) Accessibility Community of Practice (ACOP) to refine and expand standardized Section 508 conformance testing processes, including the recently updated Section 508 ICT Baseline for Web Accessibility Version 3.0.1.

DHS also continued to use a combination of manual and automated testing methods to monitor conformance to the Section 508 standards for websites and digital services. DHS also continued to refine the DHS Trusted Tester Conformance Test Process and provided training, examination, and Trusted Tester certification to promote consistent use.

B. Consistent Appearance

The DHS Office of Public Affairs maintains both comprehensive branding standards for the Department and a DHS Digital Style Guide that outlines the use of a DHS version of the US Web Design System (which was built in coordination with the US Web Design System team within GSA's Technology Transformation Services). All new or recently modernized DHS public websites and digital services are required to follow both the branding standards and the digital style guide.

C. Authoritative

The DHS Office of Public Affairs requires that all public-facing DHS public websites and digital services follow the requirements outlined in the Information Quality Act and OMB's M-19-15, ensuring that information found on DHS public websites and digital services follows guidelines that ensure the quality, utility, objectivity, and integrity of information provided.

The DHS Office of Public Affairs also developed a comprehensive site review checklist to ensure that a new or redesigned website or digital service meets all known DHS and US government requirements before launch, including those in 21st Century IDEA. This checklist is also provided to the office/component before the start of development so all requirements are known before work begins.

DHS has also undertaken several initiatives over the past 15 years to ensure that DHS websites do not overlap or duplicate existing websites, including a process for evaluating and consolidating websites, maintaining a list of all active and retired DHS domains, and requiring that all content on a public-facing website be proactively published by a US government employee.

D.   Searchable

All DHS public websites provide search functionality, either using GSA's USA Search program or other commercially available solutions. The DHS Office of the Chief Information Officer (OCIO) is also continuously evaluating additional service offerings as further options for public-facing websites and digital services.

Public-facing DHS digital services use search functionality when appropriate and if it would be beneficial for the overall customer experience of the service.

E.   Secure

All DHS websites and digital services meet OMB's requirements for the use of secure connections (HTTPS), automatic redirection from HTTP to HTTPS, and use of HTTP Strict Transport Security (HSTS), including preloading. DHS also uses an edge content delivery network (CDN) to ensure security and availability of our public-facing websites and digital services.

F.   User-Centered

The DHS Public Web Strategic Plan, first issued in 2015, identifies a "customer-first" approach that has been the cornerstone of DHS public websites and digital services for the past 8 years, focusing on improved content, usability, reliability, presentation, and services that better meet the public's need as measured by metrics and direct customer feedback. Content is selected and organized to help the public accomplish their tasks (by topic vs. organizational structure) and aims to ensure that the content the public is looking for is easy to find, easy to read/digest, and easy for them to act upon.

DHS also requires that all public-facing websites and digital services be evaluated against the US Web Design System maturity model as outlined in the Website Standards provided by GSA's Technology Transformation Services.

G.   Customizable

For public-facing websites and digital services that require a login/account, the Department provide a customizable experience where appropriate within the account-authenticated service. Good examples of this include the myUSCIS immigration portal and the myOIDO detention Ombudsman portal.

H.   Mobile-Friendly

The 2015 DHS Public Web Strategic Plan required that all DHS public websites and digital services be mobile-friendly/responsive and all are tested on multiple platforms and resolutions before launch to the public (and on an ongoing basis per development cycle).

I.   Results

As of the end of 2023, all primary Tier 1 DHS websites (except for USCG.mil) have implemented the DHS US Web Design System and meet all of the requirements listed above. An additional five Tier 2 DHS websites have implemented the DHS US Web Design system and also meet all of the requirements listed above.

- https://www.dhs.gov
  Tier 1 | U.S. Department of Homeland Security Headquarters
- https://www.cisa.gov
  Tier 1 | Cybersecurity and Infrastructure Security Agency (CISA)
- https://www.disasterassistance.gov
  Tier 1 | Federal Emergency Management Agency (FEMA)
- https://www.fema.gov
  Tier 1 | Federal Emergency Management Agency (FEMA)
- https://www.ready.gov
  Tier 1 | Federal Emergency Management Agency (FEMA)
- https://www.fletc.gov
  Tier 1 | Federal Law Enforcement Training Centers (FLETC)
- https://www.tsa.gov
  Tier 1 | Transportation Security Administration (TSA)
- https://www.uscis.gov
  Tier 1 | U.S. Citizenship and Immigration Services (USCIS)
- https://www.cbp.gov
  Tier 1 | U.S. Customs and Border Protection (CBP)
- https://www.ice.gov
  Tier 1 | U.S. Immigration and Customs Enforcement (ICE)
- https://www.secretservice.gov
  Tier 1 | U.S. Secret Service (USSS)
- https://egov.uscis.gov
  Tier 2 | U.S. Citizenship and Immigration Services (USCIS)
- https://e-verify.gov
  Tier 2 | U.S. Citizenship and Immigration Services (USCIS)
- https://my.uscis.gov
  Tier 2 | U.S. Citizenship and Immigration Services (USCIS)
- https://ace.cbp.gov
  Tier 2 | U.S. Customs and Border Protection (CBP)
- https://help.cbp.gov
  Tier 2 | U.S. Customs and Border Protection (CBP)

In total, these sites represent over 70% of all traffic to DHS public websites and digital services. The remaining 11 Tier 2 sites, which represent an additional 26% of all traffic to DHS public websites and digital services, were modernized before the DHS USWDS was established or are currently in process.

IV.   Digitization of Government Services and Forms

As required in Section 3(a) and 4(b), DHS and its components regularly review their public facing websites and digital services to ensure that those applications that include forms are made available to the public in digital format to the greatest extent practicable.

Public websites and/or digital services that launched digital-format forms in 2023 include:

- https://caadi-7001.dhs.gov
  DHS Office for Civil Rights and Civil Liberties
- https://engage.dhs.gov/crcl-complaint
  DHS Office for Civil Rights and Civil Liberties
- https://myoido.dhs.gov
  DHS Office of the Immigration Detention Ombudsman
- https://engage.dhs.gov/stevents
  DHS Science and Technology Directorate
- https://safetyact.gov
  DHS Science and Technology Directorate

In 2021, DHS began deploying public-facing Customer Relationship Management (CRM) software to accelerate the digitization of forms and provide automated workflows within the department to speed processing. In 2023, the DHS Office of Public Affairs established a USWDS template for public-facing DHS CRM applications, allowing these sites to have a consistent and unified look with other DHS (and US government) sites using the USWDS. This action unified the requirements for standardization and digitization of forms found in 21st Century IDEA.

V.   Electronic Signatures

As required in Section 5, DHS developed a plan and subsequent guidance to accelerate the use of electronic signatures established under the Electronic Signatures in Global and National Commerce Act (15 U.S.C. 7001 et seq.). Released on March 21, 2022 as part of DHS Policy Directive 4300A (Information Technology System Security Program, Sensitive Systems), the Electronic Signature Use, Acceptance, and Implementation Guidance requires that DHS and its components use electronic signature collection methods whenever it is practicable, except where handwritten signatures are required by law, regulation, Executive Order, or other requirement.

The guidance also dictates that, where applicable, an electronic signature should also contain a means for a signer to indicate they are using a translator to understand the content.

VI.   Customer Experience and Digital Service Delivery

A.   Identifying Customer Needs and Expectations

On DHS public websites and digital services, DHS currently uses a mix of qualitative and quantitative metrics to evaluate the customer satisfaction and identify customer needs/expectations of any given website or digital services. For public websites, site-wide and page-level survey tools are used to evaluate customer satisfaction over time, and quality assurance tools are used to ensure usability, readability, and information quality.

DHS also uses focused usability studies to evaluate customer needs and expectations on high impact/traffic websites and digital services. Beginning in 2016, DHS has partnered with Mercer University's School of Engineering, Department of Technical Communication to perform small audience, in-person usability studies on focused areas of DHS websites and digital services. In addition, programs often do their own user research and usability testing of products and services.

B.   Building Capacity

In addition to creating a new Customer Experience Directorate within the Office of the Chief Information Officer in 2023, the DHS workforce has improved customer experience (CX) and reduces public burden in a variety of ways, including:

- Embedding CX throughout the Department by hiring over 70 CX professionals who are working across DHS Components to build and scale CX capacity.
- People applying for immigration benefits with USCIS no longer need to call in or fill out a paper form to take care of most basic tasks. Most customers can now go online to reschedule biometric appointments, update addresses, and track personalized processing times on select forms.
- Echoing the kind of interview you might have with a helpful human, disaster survivors will have an easier, quicker, and more streamlined digital way of applying for individual assistance at disasterassistance.gov now that FEMA has redesigned registration and intake based on user research and feedback. With this new and improved website, disaster survivors need only to provide information relevant to their individual needs.
- Noncitizens now have a central place to manage and track their responsibilities at a new ICE Portal where they can schedule appointments, update their address, and check immigration court hearing information, as part of ICE's efforts to modernize, streamline, and encourage compliance with immigration enforcement processes.

C.   Digital Service Delivery and Shared Services

Established in 2012, DHS Web Content Management as-a-Service (WCMaaS) is a shared services platform which hosts 22 websites built on a FedRAMP-compliant cloud hosting platform.

The DHS Enterprise Content Delivery as-a-Service (ECDaaS), which leverages a content delivery network (CDN), provides website security and delivery services to the sites hosted on the WCMaaS platform and over 500 other DHS websites and digital services hosted outside the WCM hosting platform. 55 websites/digital services were integrated in 2021, 69 were integrated in 2022, and 51 were integrated in 2023, with an additional 23 in-process for 2024.

Tenants of the WCMaaS and ECDaaS platforms also benefit from a robust suite of additional shared services:

- A web-based wiki used to host shared information and files
- A support request ticketing queue for bug tracking, issue tracking, and agile project management
- A vulnerability management system that combines and correlates the results generated by static and dynamic testing tools
- A software package used to develop, secure, and operate software prior to moving into production environments
- A static application security testing (SAST) analyzer used to identify security issues in developer code
- A web-based tool used for searching, monitoring, and analyzing machine-generated data for security and issue resolution
- Software for application monitoring and reporting
- A cloud-based tool for website governance, quality assurance, monitoring, and reporting

In 2021, DHS began deploying public-facing Customer Relationship Management (CRM) software to accelerate the digitization of forms and provide automated workflows within the department to speed processing. DHS is currently using CRM solutions provided and centrally hosted by several companies.

VII.   Standardization and Coordination

DHS coordinates both internally (between DHS headquarters and operational components) and externally with other federal agencies to encourage standardization with an eye towards use of shared services.

A.   Internal Coordination

The DHS Public Web Council, established in 2011, coordinates department-wide policy and governance for all DHS public-facing websites and digital services. The Council is chaired by the Director of Web Communications in the DHS Office of Public Affairs and has both Public

Affairs and Information Technology representation from all operational DHS components. The goals of the Council generally align with the goals of 21st Century IDEA, and are to:

- Unify and simplify web systems at DHS by consolidating component sites, integrating stove-piped programmatic sites, and eliminating duplicative sites.
- Identify and promote best practices for effective, customer-focused content management throughout the Department.
- Identify and research new technology and propose pilot tests to evaluate their possible adoption by the department.
- Provide a forum for web and digital managers to share skills, knowledge, best practices, ideas and solutions.
- Provide DHS leadership with an accurate accounting of the scope of all component public-facing websites and extranets and the technology and resources supporting them, along with financial and operational transparencies, including usage metrics.
- Provide DHS with a cross-component forum to address high-level web policy issues that affect all DHS components.
- Promote cross-agency collaboration through information and resource sharing.
- Communicate our successes and challenges with stakeholders, to bring greater recognition and support for our work and the DHS web community.

The DHS Director of Web Communications, working with DHS Public Web Council, sets the requirements and policy for DHS public websites and digital services (including those related to modernization and others found in 21st Century IDEA) and then uses the DHS Public Web Council to coordinate implementation across all public DHS websites and digital services – both at headquarters and DHS components.

B.   External Collaboration

DHS frequently consults, coordinates, and collaborates with other federal agencies to share best practices and establish as much standardization and commonality as possible in implementing the requirements of 21st Century IDEA.

At a staff and executive level, DHS participates in all Digital.gov Communities of Practice coordinated by GSA's Technology Transformation Services, including (but not limited to) the Web Content Managers Forum, Plain Language, Social Media, User Experience, Web Analytics, Open Data, and Artificial Intelligence.

The DHS Director of Web Communications has also been the co-chair of the Federal Web Council since 2016 and, in the absence of implementation guidance provided by OMB, has been instrumental in the government-wide coordination of 21st Century IDEA requirements. The DHS Director of Web Communications worked directly with GSA's Technology Transformation Services (TTS) to establish and maintain the website standards found on USWDS: The United States Web Design System as well as the checklist of requirements for federal websites and digital services found on Digital.gov, and then helped lead the government-wide implementation of these standards and requirements.

For customer service in particular, the Customer Experience Directorate (CXD) regularly consults with an informal network of heads of CX, as well as the OMB CX team to share best practices and experiences around standing up new CX programs. To date, there is no formalized government-wide CX council.

VIII.   Conclusion

Over the past five years, considerable progress has been made at DHS towards modernizing its websites and digital services. The DHS Enterprise Web Council, made up of representatives from the Office of Public Affairs and the Office of the Chief Information Officer for both headquarters and each DHS operational component, will continue to spearhead this effort.

Leveraging the latest technology and customer experience guidance, DHS will continue to execute the requirements of 21st Century IDEA for years to come to provide the public with an ever improving and exemplary digital experience.