

**10x**

# Project Lightning Talks

**JANUARY 2020**



**10x**

# About 10x

10x funds, supports, and develops ideas from federal employees about how technology can improve the public's experience with the government.

- Federal employees: submit an idea! All you need is an idea name, and 2-3 sentences.
- 10x will hire a team to investigate the idea, on your behalf
- Government gets better at serving the public

**Get started at [10x.gsa.gov!](https://10x.gsa.gov)**

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# Agenda

Quick 5-minute overviews of 10x's current projects, with information on the original pitch, work to-date, and current status. Projects to be covered:

- U.S. Data Federation
- Eligibility APIs Initiative
- DevOps for Privacy Offices
- Agile Budgeting and Oversight Handbook
- Federal Grant Reporting
- Machine Learning as a Service (MLaaS)
- Combating Bias in AI/ML Implementations
- Expanding USWDS to Promote Agency Adoption
- Site Scanning

# U.S. Data Federation

**PRESENTED BY:** Julia Lindpaintner, 18F



# The Original Idea

**There are many policies, initiatives, and citizen-facing products and services that depend on aggregating and harmonizing data from disparate government sources yet these efforts often re-invent much of the infrastructure to manage this federated approach and often struggle to achieve sufficient awareness of and participation in the federation.** The U.S. Data Federation Website will catalog these initiatives and provide a dashboard indicating the maturity and scale of implementation for each one. The Federation Toolkit will package the reusable components needed for a successful data federation strategy. This proposal is aimed at creating the initial website and facilitating a discovery sprint to develop the toolkit. The minimal functionality of the website includes highlighting federation efforts, documenting how to participate in each one, and tracking their development status.

Submitted by Phil A. – April 2016

# Work Conducted in Prior Phases



## PHASE ONE

Conducted SME interviews and synthesized learnings in a Data Federation Maturity Model and Playbook



## PHASE TWO

Began prototyping a reusable tool for data aggregation and validation and initiated partnership with USDA FNS as a use case



## PHASE THREE

Developed ReVAL in partnership with three agencies and continued to investigate opportunities for reusable tools and repeatable processes in federated data projects

# Current Status

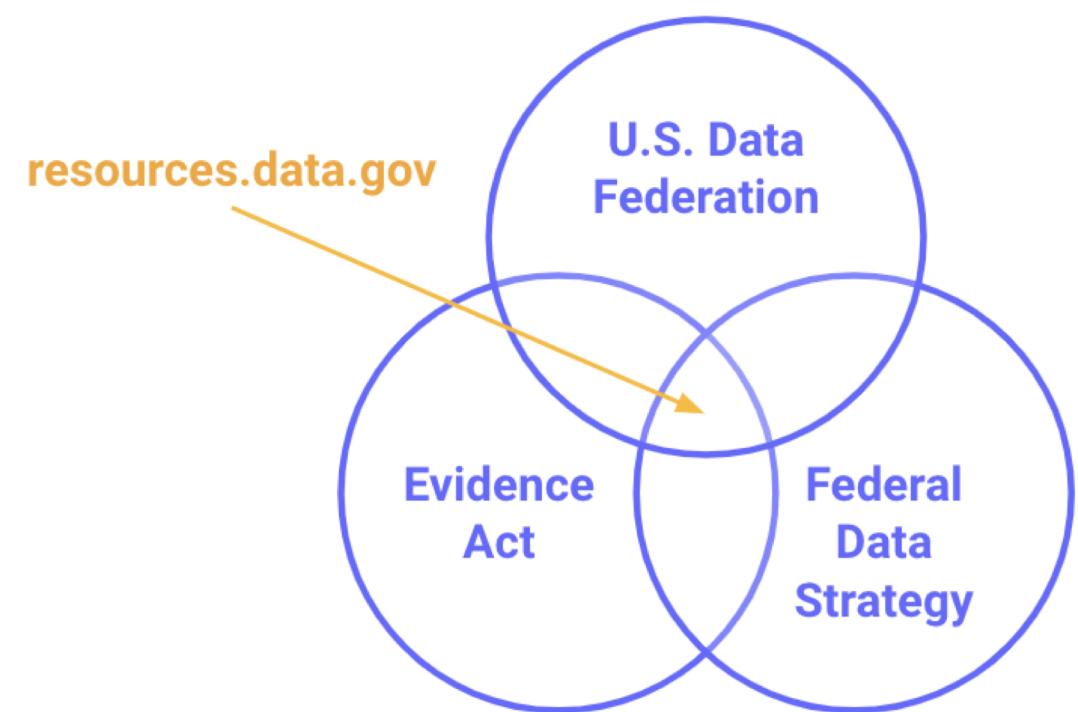
"We are seeking Phase 4 funding to leverage the **completion of ReVAL** and the momentum of the U.S. Data Federation work to support a **long-term vision and strategic plan for a user-centered, maximally-effective resources.data.gov.**"

## So far:

- Aligned our goals with those of the repository stakeholders
- Conducted user research for the repository
- Defined vision for U.S. Data Federation post-10x

## Next up:

- Develop and test content strategy for the repository, including sourcing and developing resources
- Complete ReVAL development and add to repository



# Get in Touch

## Emails:

Team: [data-federation@gsa.gov](mailto:data-federation@gsa.gov)

Project lead: [julia.lindpaintner@gsa.gov](mailto:julia.lindpaintner@gsa.gov)

## Public GitHub repos:

<https://github.com/18F/data-federation-project>

<https://github.com/18F/ReVAL>

## Websites:

<https://federation.data.gov>; <https://resources.data.gov>



# Eligibility APIs Initiative

**PRESENTED BY:** Mike Gintz, 18F



# The Original Idea / What It Is Now

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TTS will investigate how to best use technology to improve public access to government benefits. 18F has been involved with previous activity in this area, working with the United States Digital Service and others. This project will help 18F understand if it should continue this work and, if so, in what areas it should focus its efforts.

Submitted by **Alex P.** – 2017

# Work Conducted in Prior Phases

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## PHASE ONE

Explored the benefits eligibility space and identified potential value in exploring a rules web service for a non-Medicaid human services program



## PHASE TWO

Built a prototype rules-as-code API-powered solution with WIC



## PHASE THREE

Built and tested a prototype rules-as-code API-powered system with D-SNAP (Disasters Supplemental Assistance Program)

# Current Status

Phase 4 started with a search for new discovery partners to pilot an Eligibility API with. We've identified two partners and have begun active work with one!

## SO FAR:

- Created a proof of concept for a rules-as-code API with Head Start
- Arranged second discovery partnership with a new partner to be named later
- Experimented with OpenFisca framework as a possible accelerator

## NEXT UP:

- Explore Head Start problem space, seeking an appropriate use case for an API-powered application
- Project planning/coordination for next partner kickoff (👉 next month 👕)
- Continue recruiting new partners (3 or 4, in total, for the phase)

# Get in Touch

## Emails:

Team: [eligibility-apis-initiative@gsa.gov](mailto:eligibility-apis-initiative@gsa.gov)

Project lead: [mike.gintz@gsa.gov](mailto:mike.gintz@gsa.gov)

## Public GitHub repos:

<https://github.com/18F/eligibility-rules-service>



# DevOps for Privacy Offices

**PRESENTED BY:** Nikki Zeichner, 18F



# The Original Idea

Government technologists adopting a user-centered approach to service design will increasingly interact with and collect information from the public. This project will explore, in collaboration with the Federal Privacy Council, opportunities to help civil servants better understand and mitigate the risks that aggregations of personally identifiable information (PII) entail. For example, would a contextless, risk-based model be useful to government employees (or more useful than, say, a standard template for conducting privacy threshold assessment)?

Submitted by **Andrew M.** – November 2018

# Work Conducted in Prior Phases

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## PHASE ONE

Conducted research to understand the struggles faced by federal privacy offices



## PHASE TWO

Validated assumptions from phase one; prototyped a solution for the GSA privacy office and learned that it would provide them value

# Work Conducted in Prior Phases

REDRESS NUMBER   KNOWN TRAVELER						
<u>E-PACS</u>	SORN	GSA/OMA-1	Office of Mission Assurance (OMA), Identity, Credential and Access Management	<p>PHOTO   PUBLIC KEY INFRASTRUCTURE (PKI) CERTIFICATE—(X509)</p> <p>CARD AUTHENTICATION KEY (CAK) CERTIFICATE   FULL NAME</p> <p>PERSON CLASSIFICATION   BADGE EXPIRATION DATE   CARD STATE</p> <p>USER PRINCIPAL NAME (UPN)</p> <p>FEDERAL AGENCY SMART CARD NUMBER (FASC-N)</p> <p>AND GLOBALLY UNIQUE IDENTIFIER (GUID).</p>	All the normal routine uses, plus the workspace and room scheduling system.	
<u>Enterprise Cloud Services</u>	SORN	GSA/CIO-3	Director, Office of Enterprise Solutions	<p>ABOVE/EMPLOYEE/CONTRACTOR/OTHER WORKER'S FULL NAME</p> <p>ORGANIZATION/OFFICE OF ASSIGNMENT   COMPANY/AGENCY NAME</p> <p>WORK ADDRESS   WORK TELEPHONE NUMBER</p> <p>SOCIAL SECURITY NUMBER   PERSONAL PHYSICAL HOME ADDRESS</p> <p>PERSONAL HOME OR MOBILE PHONE   PERSONAL EMAIL ADDRESSES</p> <p>INDIVIDUAL WORK RELATED RECORDS</p>	For use in Google Apps & Salesforce.com 3 years	All the normal routine uses.
<u>Enterprise Server Services (ESS)</u>	SORN	GSA/CIO-2	Program Manager, Center for Applied Solutions	<p>EMPLOYEE/CONTRACTOR/OTHER WORKER'S FULL NAME</p> <p>ORGANIZATION/OFFICE OF ASSIGNMENT   COMPANY/AGENCY NAME</p> <p>WORK ADDRESS   GSA ASSIGNED WORK TELEPHONE NUMBER</p> <p>PERSONAL HOME OR MOBILE PHONE   PERSONAL E-MAIL ADDRESSES</p>	2FA for Google Apps 3 years	All the normal routine uses.
<u>GSA Credential and Identity</u>			Program Manager, Identity, Credential and	<p>EMPLOYEE/CONTRACTOR/OTHER WORKER FULL NAME</p> <p>SOCIAL SECURITY NUMBER (SSN)   DATE OF BIRTH   PLACE OF BIRTH</p> <p>HEIGHT   WEIGHT   HAIR COLOR   EYE COLOR   SEX   CITIZENSHIP</p> <p>START PRINTED PAGE 47140   NON-US CITIZENS ONLY:</p> <p>PORT OF ENTRY CITY AND STATE   DATE OF ENTRY</p>	All the normal	

# Current Status

We'll be structuring compliance data for privacy offices and developing a dashboard that will enable them to search their systems more easily

## SO FAR:

- Workshopped with GSA's privacy office to understand how structured data will improve aspects of their work (gathered and prioritized use cases)

## NEXT UP:

- Liberating all of the GSA's privacy compliance data from PDFs
- Building a dashboard for our users' prioritized use cases; testing + iterating
- Outreach to the Federal Privacy Council to identify opportunities to scale

# Get in Touch

## Emails:

Team: [privacy\\_devops@gsa.gov](mailto:privacy_devops@gsa.gov)

Project lead: [nicole.zeichner@gsa.gov](mailto:nicole.zeichner@gsa.gov)

## Public GitHub repos:

<https://github.com/18F/privacy-tools/>



# Agile Budgeting and Oversight

**PRESENTED BY:** Alicia Rouault, 18F



# The Original Idea

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Every year, the federal government provides **billions of dollars of federal matching funds** to state and local governments to maintain and modernize IT systems used to implement federal programs (ie. Medicaid, child welfare benefits, housing, unemployment insurance). Efforts to modernize those legacy systems **fail at an alarmingly high rate and at great cost to the federal budget**, in part, because the officials who are responsible for designing, funding, implementing and overseeing these projects lack the technical knowledge needed to make effective decisions.

We want to save federal money as well as improve outcomes for the public by helping educate appropriate government employees about the ways to design and procure successful IT system improvements that lowers the federal cost and delivers better value to the public.

Submitted by Jessie P. – November 2017

# Work Conducted in Prior Phases

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## PHASE ONE

Investigation of a persuasion campaign for state budgeting. By combining outreach and education, could we improve how state employees make funding and procurement decisions on custom software projects?



## PHASE TWO

Evolution of a teaching approach for state leadership on how to budget for, and provide oversight of agile software procurement. Led to the Agile Budgeting and Oversight Handbook.

# De-risking custom technology projects

A handbook for state grantee budgeting and oversight

August 5, 2019

Robin Carnahan, robin.carnahan@gsa.gov

Randy Hart, randy.hart@gsa.gov

Waldo Jaquith, waldo.jaquith@gsa.gov

18F, Technology Transformation Services, General Services Administration

[github.com/18F/technology-budgeting](https://github.com/18F/technology-budgeting)



# Current Status

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We're piloting a future TTS offering on agile budgeting and oversight: educational curriculum, workshop and federal version of the handbook.

## SO FAR:

- Initial proof of concept for workshop, tailored to state budgeting processes and an ideal blueprint for stakeholder participants
- Identified 3 potential pilot states (MI, CO, TX) - Looking for more!

## NEXT UP:

- Lining up the first workshop to test this new model out in February
- Market research and user testing: gathering feedback from participants, refining the offering, designing a sustainable offering

# Get in Touch

## Emails:

[waldo.jaquith@gsa.gov](mailto:waldo.jaquith@gsa.gov)

[alicia.rouault@gmail.com](mailto:alicia.rouault@gmail.com)

[randy.hart@gsa.gov](mailto:randy.hart@gsa.gov)

## Public GitHub repos:

[github.com/18F/technology-budgeting/](https://github.com/18F/technology-budgeting/)



# Federal Grant Reporting

**PRESENTED BY:** Ben Peterson, 18F



# The Original Idea

This project is a discovery sprint to identify opportunities to improve the federal grant reporting process – by eliminating redundancies and creating efficiencies through improved technology – with the goal of generating a prototype that could be adapted across federal programs, thereby increasing federal grant programs' efficacy to those being served as well as taxpayers' return on investment. Working with DOL Region 6, who administers federal job training programs in AK, AZ, CA, NV, HI, OR, ID and WA (based in San Francisco) through grants to state and local workforce development systems, and JVS, a high-capacity San Francisco-based workforce development nonprofit with federal, state, city and private funding streams and associated complicated and administrative-heavy reporting requirements, 18F will research JVS's current reporting processes and burdens and ETA's reporting evaluation needs and then prototype a more efficient and streamlined reporting tool. By standardizing and simplifying reporting, this project will increase the amount of time JVS has available for serving its constituents. By creating a prototype that could be expanded across ETA and federal agencies more broadly, this initiative will improve federal grant program administration and efficacy, enhance the relationship between agencies and grantees, and lay a valuable foundation for outcomes-oriented data collection and analysis.

Submitted by Rhys F. – January 2017

# Work Conducted in Prior Phases



## PHASE ONE

The team observed the grant management processes and burdens from the perspectives of a grant recipient and a granting agency. Brainstormed and explored possibilities for a more efficient and streamlined reporting process.



## PHASE TWO

The team made a simple proof of concept that uses data from the SAM API to prepopulate the SF-425, also known as the FFR (the Federal Financial Report) to reduce duplicative data entry in a process where weeks of delay can be introduced by simple manual data errors.

# Current Status

**In Phase 3, we refined our vision of success to enable simpler, faster, easier, better resolution of single audit findings by agencies and grantees alike.**



[As an] agency user [I want to] know what other agencies have findings with the same grantee's that I have [so that] we don't duplicate work.

[As an] agency user [I want to] know if my grantees has a finding with other agencies [so that] I have a better understanding of grantee risk [and] can coordinate with that other agency if there is overlap.



[As a] grantee [I want to] know if there are any questions about an audit finding [and] who needs to know, by when [so I] prioritize my work [and] respond to the right person with the right information within the mandated timeframe.

[As a] grantee [I want to] streamline my communication with agencies [so I] avoid duplication of work [and] focus on delivering on grant outcomes.

# Current Status

## Priorities for grants modernization from prospective partner agencies.

Theme: Cross-agency collaboration	HOPES & GOALS	Theme: Cross-agency collaboration	HOPES & GOALS
Improve cross-agency data sharing		Improve (and involve) cross-agency communication & coordination	
<p><u>Representative quotes</u></p> <p><i>Hoping for connection to other databases (eg, USAspending) and (our) own system so that we can use that data to inform risk without having to redo what we have done.</i></p> <p><i>Hope: something that enables the sharing of machine-readable data across organizational boundaries</i></p> <p><i>Transparency of data; Machine readability of data; sharing Federal agencies actions for resolving findings &amp; questioned costs.</i></p>			<p><u>Representative quotes</u></p> <p><i>Goal - Solution is built collaboratively and in small segments. Hope that the system would be able to allow agencies to collaborate on cross-cutting findings.</i></p> <p><i>Goal - Platform allows communication and coordination between agencies. I hope whatever solution is chosen involves collaboration with the Federal Audit Clearinghouse early on.</i></p>
<p>10 responses from agencies including <b>NASA, DOJ, FTA, DHS, CNCS, OMB, ACL</b></p>			<p>7 responses from agencies including <b>FAC, CNCS, ACL, ED, HHS</b></p>

## Single Audit Finding Resolution tool (SAFR)

Quick access to findings relevant to agency grant management staff.

An official website of the United States government [Here's how you know](#)

Single Audit Resolution Solution User Name

Assigned to me I'm watching All my agency's findings

Assigned	Finding #   Grantee	MDL due
GM	2018-15   Example Grantee QUESTIONED COSTS   REPEAT FINDING	Nov 13 3
JS	2018-01   Example Grantee QUESTIONED COSTS   REPEAT FINDING	Today

Tom Hammersmith

Single Audit Resolution Solution

Assigned to me I'm watching All my agency's findings

Assigned	Finding #   Grantee	MDL due
GM	2018-15   Example Grantee QUESTIONED COSTS   REPEAT FINDING	Nov 13 3
JS	2018-01   Example Grantee QUESTIONED COSTS   REPEAT FINDING	Today

My agency is:

cognizant

non-cognizant

Show finding types:

resolved

unresolved

NEW ACTIVITY

## Single Audit Finding Resolution tool (SAFR)

Increasing the visibility of finding resolution across agencies.

The image shows a screenshot of the Single Audit Finding Resolution tool (SAFR). It features two overlapping windows:

- Participants Settings Window:** This window is on top and contains fields for "Name" (Required) and "Role and/or Organization" (Required), both with red asterisks indicating they are required. A "Save changes" button is at the bottom. A cursor is hovering over this button.
- Notification Settings Window:** This window is overlaid on the main page. It has a title "NOTIFICATION SETTINGS" and a sub-section "DETAILS". It lists four notification options:
  - Not subscribed** (radio button selected)
  - Subscribed**: Description: "Receive notifications about this finding when there are comments, status changes and resolution."
  - Status Change**: Description: "Receive notification only when the status of this finding changes". A cursor is hovering over this option.
  - Resolved**: Description: "Receive a notification only when this issue has been resolved."A "Save changes" button is located at the bottom right of this window.

The main page background shows a finding titled "Information technology (IT) controls—access, configuration management, security, and contingency planning". It includes sections for "FINDING DETAILS", "ACTIVITY TIMELINE", and "CORRECTIVE ACTION". The "ACTIVITY TIMELINE" section shows auto-joined participants: John Smithfield, Robin Wordsmith, and Robert Walters, with a note from Robert Walter on 05/11/19.

# Current Status

## Single Audit Finding Resolution tool (SAFR)

Improved communication between grantees and affected agencies.

The screenshot shows a user interface for managing audit findings. On the left, there is a vertical navigation menu with four items: CAUSE, CRITERIA, EFFECT, and RECOMMENDATION, each preceded by a plus sign. To the right of this menu, the text '[Observer]' is displayed. Below the menu is a dark blue header bar with the text 'COMMUNICATION' and '0 COMMENTS'. Underneath this bar is a light gray box labeled 'New Comment' containing a large empty text area. At the bottom of this box are three buttons: 'Upload Files' with a file icon, 'Add Comment', and 'Comment and Resolve Finding'.

## Priorities for grants modernization from prospective partner agencies.

Theme: Cross-agency collaboration	HOPES & GOALS	HOPES/ & GOALS
<p>Display cross-agency grants lifecycle data</p> <p><u>Representative quotes</u></p> <p><i>Recipient Snapshot - easily see everything needed.</i></p> <p><i>System that has the ability to display all grants awarded across agencies will then alert again when single audit is required.</i></p>		<p>Theme: A solution that meets agencies' needs</p> <p>Reduce burden and save costs for people</p> <p><u>Representative quotes</u></p> <p><i>Reduce recipient burden.</i></p> <p><i>Reduce burden for government, auditors, auditees and save \$.</i></p> <p><i>Develop scalable solution; design program/system for majority of agencies; reduce burden/cost.</i></p>
<p>9 responses from agencies including OMB, DOJ, NSF, Energy, USDA, HHS</p>		<p>3 Responses from Agencies including NSF, OMB</p>

## Distiller

Streamlines the process of identifying audits that are relevant to specific agencies provide easier access to data - reducing processes from hours to minutes.

Agency:

Sub agency:  Audit year:

Accepted date start:  Accepted date end:

 OFFICE OF HUMAN RESOURCES AND ADMINISTRATION, EDUCATION, DEPARTMENT OF  
2018 audit year  
12/05/2019-01/30/2020

Auditee Name	Audit Number	Audit Year	FAC Accepted Date	Findings	Previous Findings	Material Weakness	Questioned Costs	Amount Expended	Docs
MILE HIGH KIDS AND COMMUNITY DEVELOPMENT INC.	<a href="#">245046</a>	2018	Jan. 9, 2020	<a href="#">2413404</a> <a href="#">2413403</a>	TODO	No	Yes	\$2,754,846	<a href="#">Form Report</a>
HINDS COUNTY MENTAL HEALTH	<a href="#">247758</a>	2018	Jan. 8,	<a href="#">2419598</a> <a href="#">2419600</a> <a href="#">2419601</a> <a href="#">2419602</a>	TODO	Yes	No	\$2,050,006	<a href="#">Form</a>

# Get in Touch

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## Emails:

[federal-grant-reporting@gsa.gov](mailto:federal-grant-reporting@gsa.gov) (team)

[benjamin.peterson@gsa.gov](mailto:benjamin.peterson@gsa.gov) (project lead)

## Public GitHub repos:

[github.com/18F/federal-grant-reporting/](https://github.com/18F/federal-grant-reporting/)

[github.com/18F/fac-distiller](https://github.com/18F/fac-distiller)

## Websites:

[fac-distiller.app.cloud.gov/](https://fac-distiller.app.cloud.gov/)



# Machine Learning as a Service (MLaaS)

**Presented By:** Tiffany Andrews, 18F



# The Original Idea

Each month, approximately 9,000 surveys are submitted through USA.gov and Gobierno.USA.gov and about 2,000 of these include open-ended comments. With current resources and manual methods, it's tough to take timely advantage of this qualitative data. We're seeking a product and/or process that is somewhat automated (using topic extraction, word/phrase frequencies, or other applications of text analysis) and can help us more quickly respond to users' complaints and suggestions. Thank you!

Submitted by **Marybeth M.** – November 2017

# Work Conducted in Prior Phases

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## PHASE ONE

Researched USA.gov's process for reviewing qualitative survey data and investigated some automation options.



## PHASE TWO

Worked with USA.gov to make process improvement by automating parts of the data management and built a prototype to filter survey results.

# Current Status

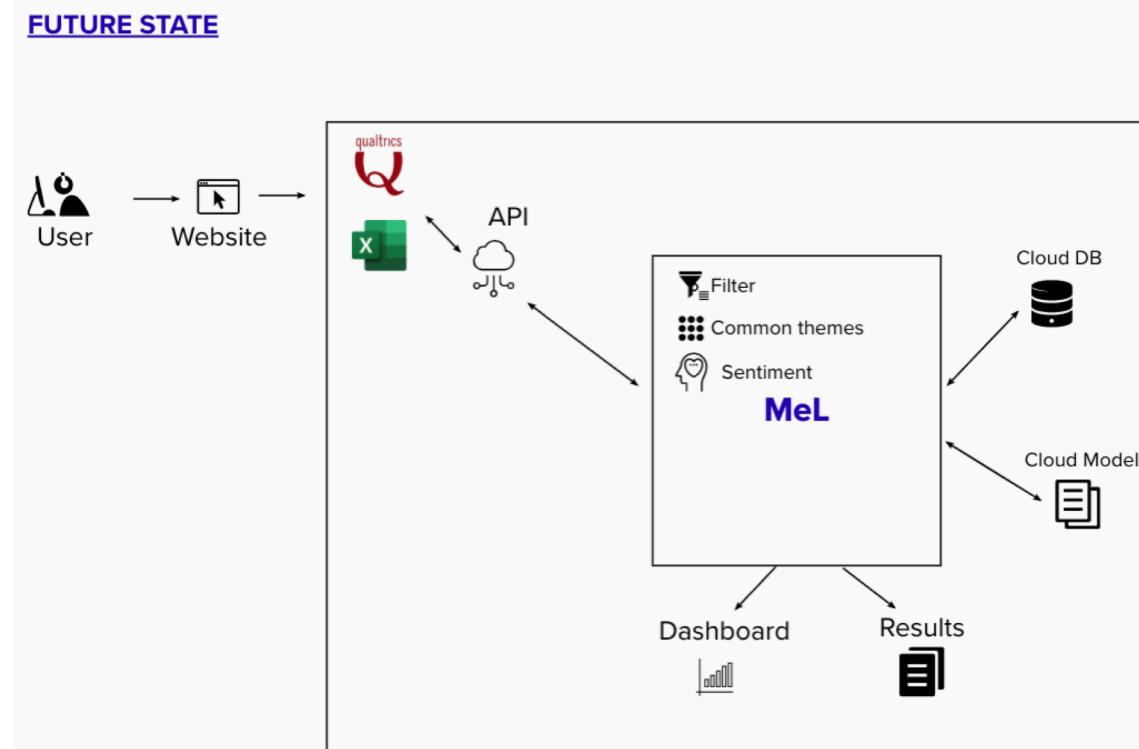
We are building a MVP that will use open text data to provide data insights, by using machine learning models to triage information, identify common themes and provide sentiment.

## Tactical Guide

A living “Zero to Hero” guide to building machine learning tools by leveraging government technology and open source libraries.

## Current Use Cases

- Employee Feedback Data (human resource)
- Customer Experience Data (customer service/ nonregulatory public comment)



# Get in Touch

**Emails:**

[tiffanyj.andrews@gsa.gov](mailto:tiffanyj.andrews@gsa.gov)

**Public GitHub repos:**

<https://github.com/18F/10x-MLaaS>



# Combating Bias in AI/ML Implementations

**PRESENTED BY:** Shaudi Hosseini, Census xD



# The Original Idea

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Implementations of AI/ML often suffer from systematic bias created when algorithms are trained on insufficiently diverse datasets that don't match the variety of phenomena the system encounters in practice. This project will institutionalize corrective measures by critically reviewing the datasets used in \*previously funded\* projects for potential biasing mismatches.

Submitted by **Elizabeth G.** – March 2017

# Work Conducted in Prior Phases



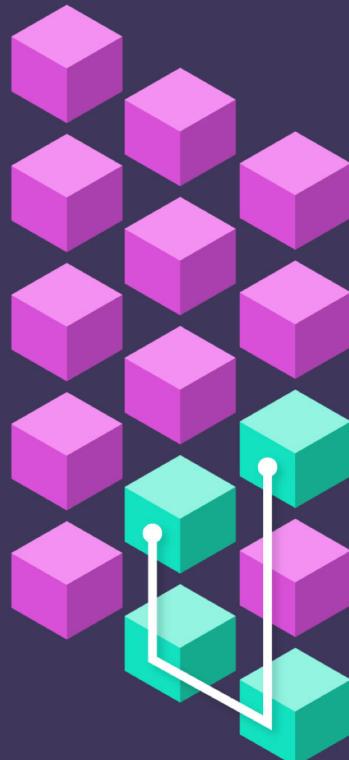
## PHASE ONE

In the first phase, our project team:

- Confirmed the need for developing tools to identify and mitigate bias along the entire ML pipeline
- Identified research partners and validated our approach with them; started tool research and development; and devised a strategy for creating a set of research-based, user-friendly tools.

# Current Status

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**We're building a toolkit to help people combat data and algorithmic bias in government contexts**

## Practical Tools

Toolkit to identify and mitigate data quality issues and bias

## Workshops

Host workshop(s) to introduce govt stakeholders to data/ML bias

## Long-term Goals

Automated tools for bias identification/data auditing; interactive tools that offer suggestions of model choice; tools that allow auditing of the biases of black-box tools built outside the government for federal applications

# Get in Touch

**Emails:**

[inquiries@xd.gov](mailto:inquiries@xd.gov)

**Website:**

<https://www.xd.gov/projects/combating-bias-in-ai/>



# Expanding USWDS to Promote Agency Adoption

**PRESENTED BY:** Corey Nelson, Flexion Inc.



# The Original Idea

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In less than one second, users make unconscious decisions about of the trustworthiness, usability, and content of a website based on visual appearance alone. While the USWDS does provide many features making websites more usable, responsive, and accessible, the basic styles provided may not meet the needs of all agencies' unique mission and brand. With the passing of the IDEA Act, we expect that even more agencies will be turning to the USWDS for guidance. 10x investment would support new features and guidance that helps agencies more easily meet their branding needs within the USWDS, and reduces the need for customization and deviation from the system.

Submitted by **Christine B.** – February 2019

# Work Conducted in Prior Phases

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## PHASE ONE

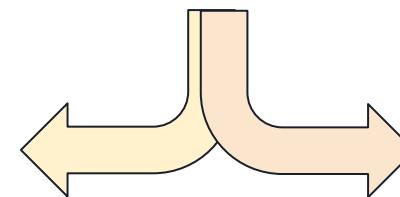
Interviews were conducted with 18F, vendor designers for the U.S. Tax Court and CMS, and the USWDS product owner, as well as stakeholders inside TTS; also reviewed USWDS user research.

# Current Status

**During our research, we uncovered two distinct areas with a direct impact on the design system's adoption and focused our attention on:**

## The Product

*The components of the design system as well as the information architecture and content of designsystem.digital.gov.*



## Knowledge and Guidance

*Communication to agencies; how the USWDS is positioned and marketed; and necessary resources regarding 21C.*

## Process

Our interviews with Secret Service, OIG, FEMA, DHS, TSA, US Tax Court, CMS, HUD, and external vendors partnering with agencies including Treasury, HUD, and USDA shed light on the most requested missing elements needed in future releases. We've compiled these in a handoff document for the USWDS team to include in their product roadmap. These interviews also gave us ideas on how agencies could interact with and take part in the USWDS growth and development through a contribution model.

## Results

Our team also worked closely with the Innovation Portfolio team to draft 21C communications, establish tracking parameters for accurate campaign attribution and analytics, and add digital.gov resources in support of the "USWDS Maturity Model" and newly announced 21C website standards.

# Get in Touch

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## Emails:

[tts10x@flexion.us](mailto: tts10x@flexion.us)

## Websites:

Website standards | United States Web Design System

<https://designsystem.digital.gov/website-standards/>

USWDS maturity model | United States Web Design System

<https://designsystem.digital.gov/maturity-model/>

21st Century IDEA – Digital.gov

<https://digital.gov/topics/21st-century-idea/>



# Site Scanning

**PRESENTED BY:** Eleni Gesch-Karamanlidis, 18F



# The Original Idea

TTS drives the adoption of digital best practices and policy, from mobile-friendliness to online privacy and security - but we currently lack comprehensive, timely data to measure our success. This proposal builds on prior art to create a scanning service that discovers federal websites, then analyzes and presents actionable intelligence for more than 30,000 federal websites on the presence of web trackers and customer feedback tools, USWDS adoption, and security best practices. Data is collected at regular intervals and stored in the cloud, and accessible via a web-based interface that enables staff from any government agency to see information about their programs.

Submitted by **Eric M.** – July 2018

# Work Conducted in Prior Phases

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## PHASE ONE

Determined that the idea was good and achievable.



## PHASE TWO

Identified stakeholders and built an MVP for them.

# Current Status

**The site scanner is fully operationalized in cloud.gov with an API and a simple UI!**

Analysis Count Filter: 100		Sort by Score		all versions		Scan Date							
All Agencies				All Branches									
<b>Scan Results:</b>													
<a href="#">JSON Export</a> <a href="#">CSV Export</a>													
Hits Per Page: 50 Page 1 of 1.													
Domain	Analysis Version	USWDS Agency	Organization	Branch	Analysis Details								
<a href="#">forestsandrangelands.gov</a> :	150 v1.6.3	U.S. Department of Agriculture	US Forest Service	Federal Agency - Executive	<a href="#">/api/v1/scans/uswds2/forest</a>								
<a href="#">fca.gov</a> :	147 v1.4.1	Farm Credit Administration	Farm Credit Administration	Federal Agency - Executive	<a href="#">/api/v1/scans/uswds2/fca.go</a>								
<a href="#">digitalgov.gov</a> :	147 v2.3.1	General Services Administration	Office of Citizen Services and Innovative Technologies	Federal Agency - Executive	<a href="#">/api/v1/scans/uswds2/digital</a>								

Domains Viewset

```
GET /api/v1/domains/18f.gov/
HTTP 200 OK
Allow: GET, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

[
  {
    "domain": "18f.gov",
    "scantype": "pagedata",
    "domaintype": "Federal Agency - Executive",
    "agency": "General Services Administration",
    "data": {
      "id": "18f.gov"
    }
  }
]
```



## Next steps!

- Full-featured customizable frontend UI built on the API.
- Refine existing scans.
- Expand number of scans and stakeholders served.
- Expand from scanning top level domains to subdomains.
- End with at least one stakeholder using our data in production!

# Get in Touch

10x

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**Public GitHub repo:**

<https://github.com/18F/site-scanning>

**Website:**

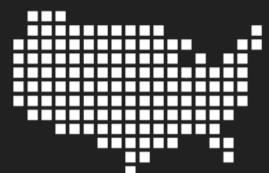
<https://site-scanning.app.cloud.gov/>



# Thanks for attending!

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**10x**